



WAGO Power Supply Systems

Edition 2025/1



WAGO Full Line Catalogs



WAGO Installation Connectors

- Splicing Connectors with Levers
- Inline Splicing Connectors with Levers
- Lighting Connectors
- PUSH WIRE® Splicing Connectors
- PUSH WIRE® Inline Splicing Connectors
- Luminaire Disconnect Connectors
- Gelboxes for Splicing Connectors
- Junction Box
- Cable Repair Set
- Splicing Connector Sets
- Accessories and Tools



WAGO TOPJOB® S Rail-Mount Terminal Block Systems

- Rail-Mount Terminal Blocks TOPJOB® S
- Rail-Mount Terminal Blocks with a Pluggable Connector X-COM®-SYSTEM
- Installation Rail-Mount Terminal Blocks TOPJOB® S
- Miniature Rail-Mount Terminal Blocks TOPJOB® S
- High-Current Rail-Mount Terminal Blocks
- Accessories and Tools



WAGO Rail-Mount Terminal Blocks Classic

- Rail-Mount Terminal Blocks Classic
- Rail-Mount Terminal Blocks with a Pluggable Connector X-COM®-SYSTEM
- Patchboard Systems
- Busbar Terminal Blocks
- Rail-Mount Terminal Blocks Mini
- Modular Terminal Blocks and WAGO Terminal Strips
- Chassis-Mount Terminal Strips
- Field-Wiring Terminal Blocks



WAGO PCB Terminal Blocks and Connectors

- PCB Terminal Blocks (THT; THR; SMD)
- *MULTI CONNECTION SYSTEM (MCS)*
- *picoMAX®; picoMAX® eCom*
- Pluggable PCB Terminal Blocks
- Feedthrough Terminal Strips
- Special Connectors
- Modular Empty Housing
- Accessories and Tools



WAGO Pluggable Connection System WINSTA®

- Pluggable Connectors
- Snap-In Device Connectors
- Pluggable PCB Connectors
- Distribution Connectors
- Cable Assemblies
- Flat Cable Systems
- Distribution Boxes
- Accessories and Tools



WAGO Automation Technology

Edition 2023/1



WAGO Automation Technology

- Solutions & Software
- Operating & Monitoring
- Controllers, Edge Devices
- Modular I/O-SYSTEM IP20, I/O-SYSTEM IP67
- Industrial Switches
- Radio Technology
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors



WAGO Interface Electronics

Edition 2023/1



WAGO Interface Electronics

- Coupler Relays
- Solid-State Relays
- Signal Conditioners and Isolation Amplifiers
- Energy Measurement Technology
- System Wiring
- Component Modules
- Empty Housing
- Protective Devices and Protective Electronics
- Accessories and Tools



WAGO Power Supply Systems

Edition 2023/1



WAGO Power Supply Systems

- Power Supplies; 1-Phase
- Power Supplies; 3-Phase
- Special Supplies
- Circuit Protection
- DC/DC Converters
- UPS-Charger and Controllers and Capacitive Buffer Modules
- Redundancy Modules
- Energy Measurement Technology
- Potential Distribution
- Accessories and Tools



WAGO Marking

Edition 2023/1



WAGO Marking

- Thermal Transfer Smart Printer
- Digital Engineering – Smart Data
- Products for the Smart Printer
- Printed Products
- Plain Products
- Marker Carries

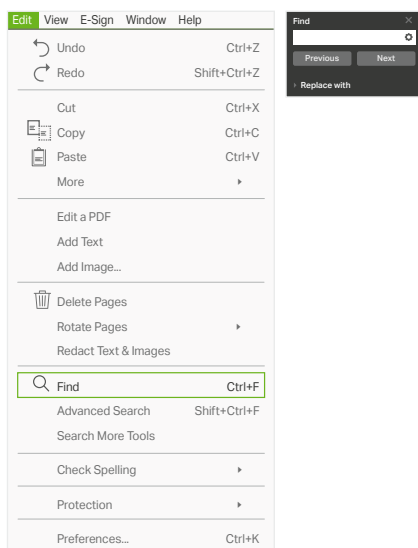
About This Catalog

Our digital catalogs provide several search and navigation features to help you quickly find the information you need. This page introduces the key functions of the catalog.

Searching the Catalog

To search for specific terms within the catalog, follow these steps:

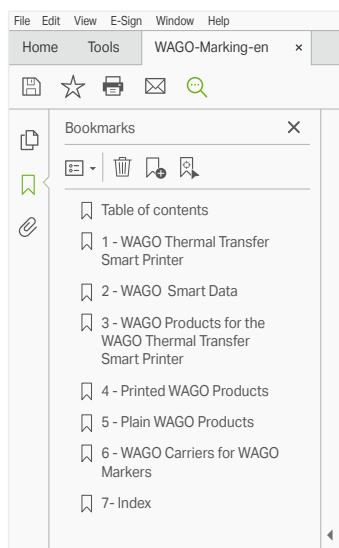
- Open the search dialog via **Edit > Find** or by clicking the **magnifying glass icon**. Alternatively, use the **Ctrl + F** keyboard shortcut.
- Enter your search term in the search field.
- Click **Next** to move to the next search result.



Navigating with Bookmarks

This PDF includes bookmarks to help you quickly and easily find specific sections. With a single click, you can jump directly to a chapter in the catalog.

- Open the bookmark panel by clicking the **bookmark icon**.
- To navigate to a chapter, click the relevant bookmark in the bookmark panel. The corresponding catalog page will then be displayed.



Navigating with the Table of Contents

Our table of contents includes clickable page numbers, allowing you to jump directly to the corresponding catalog page.

WAGO Marking Accessories

	Page
 WAGO Thermal Transfer Smart Printer	5
 Digital Engineering with WAGO	21
 WAGO Products for the WAGO Thermal Transfer Smart Printer	29
 Printed WAGO Products	49
 Plain WAGO Products	75
 WAGO Marker Carriers	83
 Index	101

You can also find additional clickable page numbers in the selection guides and the item number index.

Links

To help you access additional information easily, this catalog includes links to various websites. These links may provide further product details, installation notes or quick access to important documents such as data sheets.

One example is our **item numbers**, which contain links to the corresponding product detail pages on our website. Simply click an item number to open the relevant product detail page.

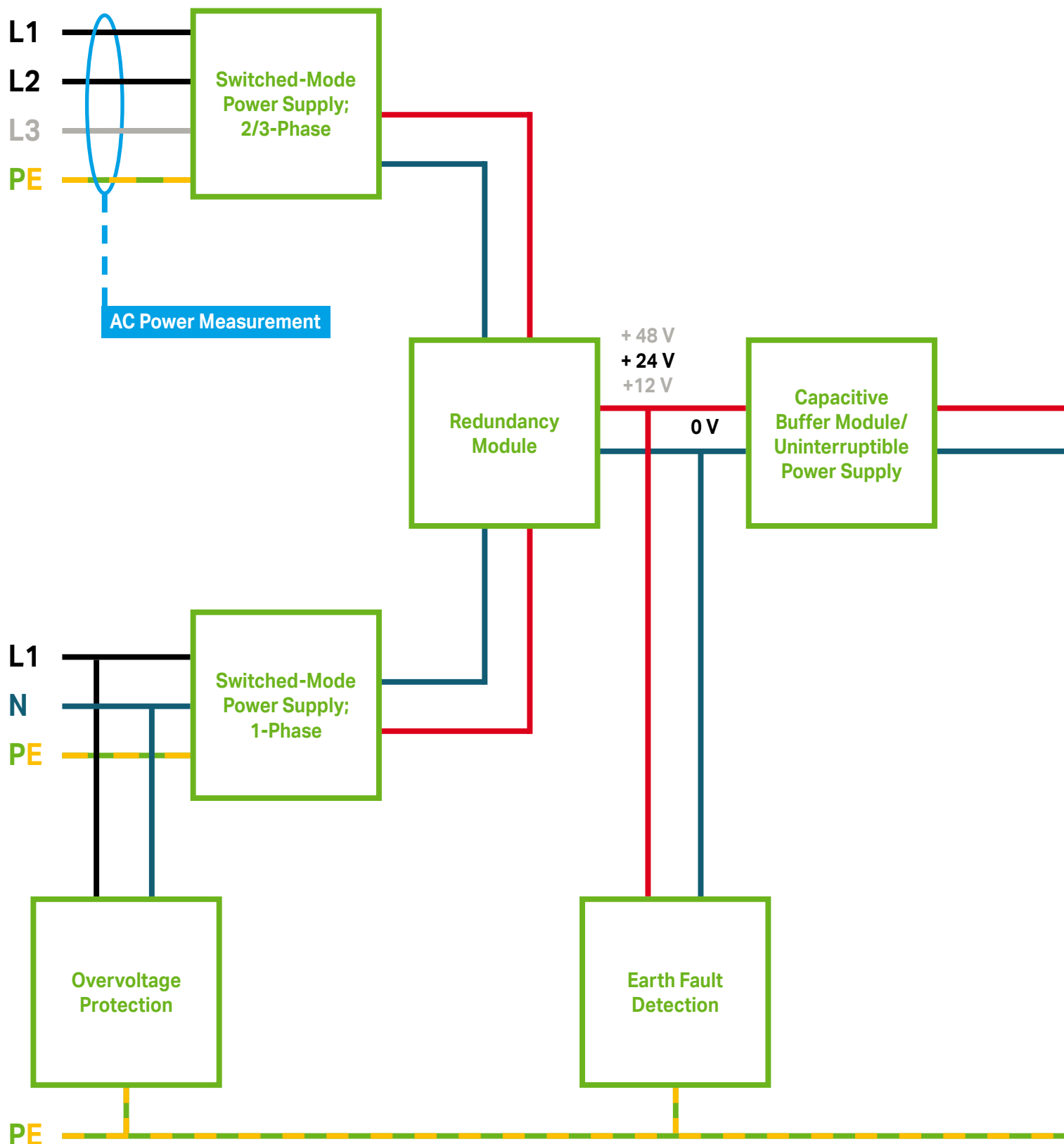


You can identify links in this catalog by the pre-sence of a URL in the link text (e.g., www.wago.com). In most cases, links are also underlined for easy recognition.

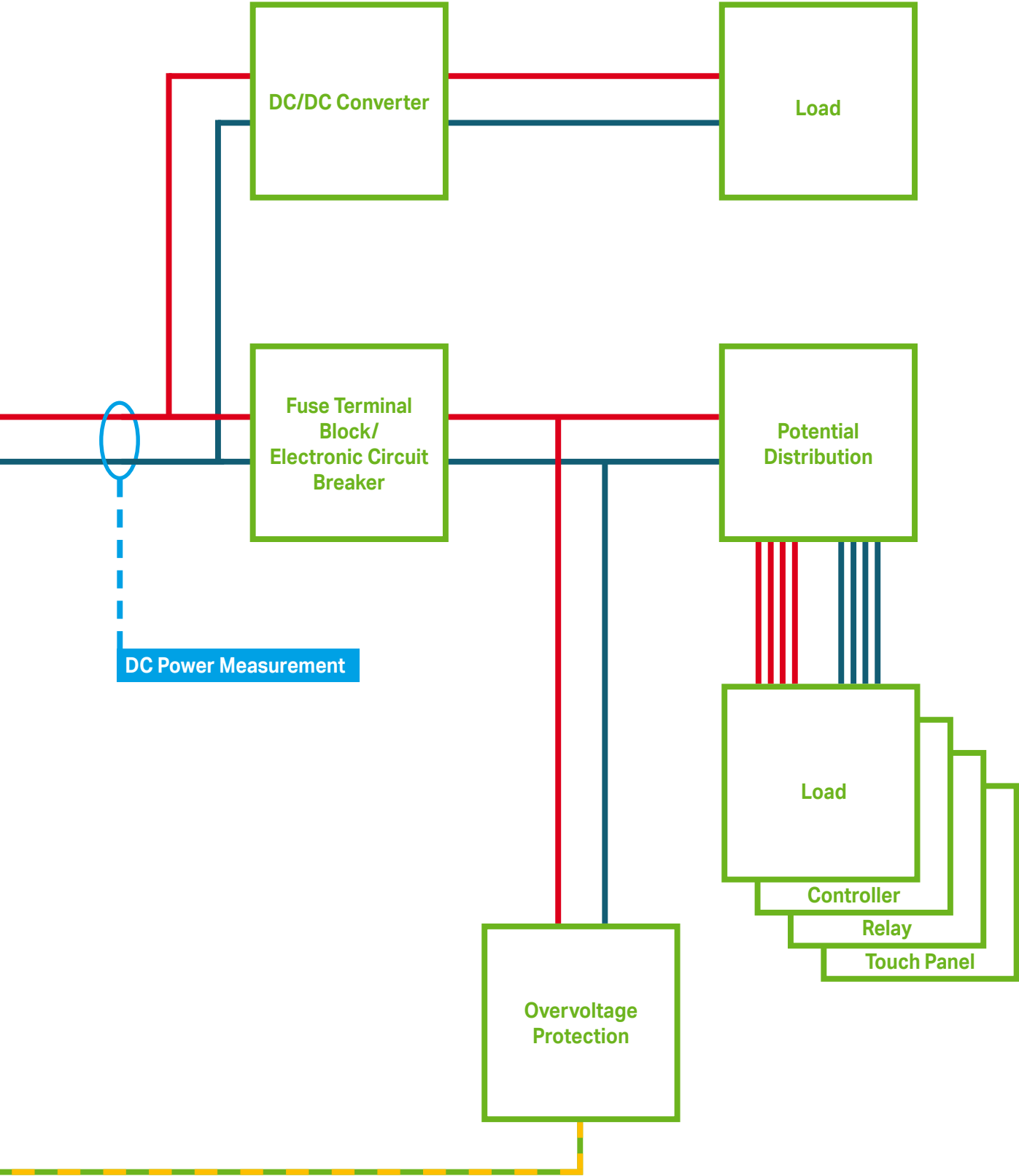
WAGO Power Supply Systems 2025/1

		Page	
	WAGO Power Supplies; 1-Phase	8	1
	WAGO Power Supplies; 3-Phase	102	2
	Special WAGO Power Supplies	152	3
	WAGO Circuit Protection	162	4
	WAGO DC/DC Converters	176	5
	WAGO UPS-Charger and Controllers and WAGO Capacitive Buffer Modules	192	6
	WAGO Redundancy Modules	216	7
	WAGO Energy Measurement Technology	226	8
	WAGO Potential Distribution	248	9
	WAGO Accessories and WAGO Tools	264	10
	Index	296	11

WAGO Power Supply Systems System Overview



WAGO Power Supply Systems
System Overview



WAGO Power Supply Systems



WAGO Power Supplies Pro 2

New Generation of Professional Power Supplies for Applications Requiring High Performance, Efficiency and Reliability

WAGO's Pro 2 Power Supplies offer tremendous added value thanks to flexible configuration and comprehensive monitoring via optional communication interface (WAGO USB Communication Cable and IO-Link Communication Module).

Advantages:

- TopBoost function: Up to 600% output current for 15 ms
- PowerBoost function: 150% output power for 5 s
- High efficiency thanks to a CCFL inverter topology
- Single- and three-phase power supplies with output voltages of 24 VDC and nominal output currents from 5 to 40 A
- Communication interface for configuring threshold values, overload and DI/DO behavior, as well as monitoring output variables, warning and error messages
- Permanent communication via IO-Link through an optional pluggable communication module



WAGO Power Supplies Pro

Applications with high output requirements call for professional power supplies capable of reliably handling power peaks. WAGO's Pro Power Supplies are ideally suited for such applications.

- TopBoost function: Multiplies the nominal current for up to 50 ms
- PowerBoost function: Provides 200% of output power for four seconds
- Single- and three-phase power supplies with output voltages of 12/24/48 VDC and nominal output currents from 5 to 40 A for nearly every application
- LineMonitor (option): Easy parameter setting and input/output monitoring
- Potential-free contact/stand-by input: Switch off output with no wear and minimize power consumption
- Serial RS-232 interface (option): Communicate with PC or PLC



WAGO Power Supplies Classic

Classic is the robust power supply with optional TopBoost integration. A wide input range and extensive list of international approvals open up WAGO's Classic Power Supplies to a wide variety of applications.

- TopBoost: cost-effective, secondary-side fusing via standard circuit breakers (≥ 120 W)
- Nominal output voltage: 12, 24, 30.5 and 48 VDC
- DC OK signal/contact for easy remote monitoring
- Wide input voltage range and UL/GL approvals for worldwide applications
- CAGE CLAMP® Connection Technology: maintenance-free and time-saving
- Slim, compact design saves valuable cabinet space

WAGO Power Supply Systems



WAGO Power Supplies Eco

Many applications only require 24 VDC. Here, WAGO's ECO Power Supplies are the economical solution.

- Output current: 1.25 ... 40 A
- Wide input voltage range for use internationally: 90 ... 264 VAC
- Economically supports basic applications
- CAGE CLAMP® Connection Technology: maintenance-free and time-saving
- LED status indication: output voltage availability (green), overcurrent/short circuit (red)
- Flexible mounting on DIN-rail and variable installation via screw-mount clips – perfect for every application
- Flat, rugged metal housing: compact and stable design



WAGO Power Supplies Eco 2

The Eco line of power supplies now includes WAGO Eco 2 Power Supplies with push-in technology and integrated WAGO levers. The new devices' compelling features include fast, reliable and tool-free lever connections, as well as an excellent price/performance ratio. At 25 mm and 38 mm wide, the power supplies are slim and compact. The devices are also extremely durable and reliable with their high efficiency of $\geq 88\%$ (2687-2142) and lower thermal generation.

- Power supplies with a wide input voltage range of 90 ... 264 VAC (100 ... 373 VDC) Output voltage: 24 VDC, adjustable; Output power: 30 W (2687-2142) and 120 W (2687-2144)
- Integrated, tool-free lever-actuated push-in connection technology
- Slim design, high efficiency, good price/performance ratio
- Reliability, long service life (high MTBF)
- Quick, easy, maintenance- and tool-free connection technology



WAGO Power Supplies Compact

WAGO's compact, high-performance Compact Power Supplies in DIN-rail-mount housings are available with output voltages of 5, 12, 18 and 24 VDC, as well as nominal output currents up to 6.5 A.

- Wide input voltage range for use internationally: 85 ... 264 VAC
- Flexible mounting on DIN-rail and variable installation via screw-mount clips
- Push-in CAGE CLAMP® Connection Technology (option): maintenance-free and time-saving
- Improved cooling due to a removable front plate: ideal for alternative mounting positions
- Dimensions per DIN 43880: suitable for installation in distribution and meter boards

WAGO Power Supply Systems



WAGO Power Supply Base

The WAGO Power Supply Base with the industry-proven Push-in CAGE CLAMP® connection provides essential functionality during operation and stands out for its cost-effectiveness. The new devices offer quick, reliable and tool-free connections, along with good efficiency.

- **Reliable Spring Pressure Connections:** The Push-in CAGE CLAMP® connection technology ensures stable input and output connections, even under vibration. Toolfree installation and maintenance simplify operation.
- **High Efficiency:** With an efficiency of up to 94% (at 20 A), the Base series contributes to reducing long-term operational costs.
- **Robust and Durable:** The 2587 Series is designed for continuous operation, even in extreme conditions within control cabinets. Temperature range: -30 ... +70 °C
- **Reliable Operation:** With a Mean Time Between Failures (MTBF) exceeding 1,000,000 hours, the product ensures long life and reduced operating costs. The DC OK LED allows easy monitoring of the operating status.
- **Compact Design:** The 20 A model, with a width of just 56 mm, provides valuable space-saving in your control cabinet.



Uninterruptible Power Supply (UPS)

Consisting of a 24 V UPS charger and controller with one or more connected batteries, WAGO's Uninterruptible Power Supply reliably powers an application for several hours. Trouble-free machine or system operation is guaranteed – even in the event of brief power supply failures.

- Slim charging and control units save control cabinet space
- Integrated display and RS-232 interface (option) simplify visualization and configuration
- Pluggable CAGE CLAMP® Connection Technology: maintenance-free and time-saving
- Battery control technology for predictive maintenance that extends battery life



Capacitive Buffer Modules

In addition to reliably ensuring trouble-free machine and system operation – even through brief power failures – WAGO's Capacitive Buffer Modules offer power reserves that may be required when starting heavy motors or triggering a fuse.

Decoupled output: integrated diodes for decoupling buffered loads from unbuffered loads

- Maintenance-free and time-saving connections via pluggable connectors equipped with CAGE CLAMP® Connection Technology
- Unlimited parallel connections possible
- Adjustable switching threshold
- Maintenance-free, high-energy gold caps

WAGO Power Supply Systems



Redundancy Modules

WAGO's Redundancy Modules are ideal for reliably increasing power supply availability. These modules decouple two parallel-connected power supplies and are ideal for applications where an electrical load must be reliably supplied – even in the event of a power supply failure.

- Integrated power diodes with overload capability: suitable for Top-Boost or PowerBoost
- Potential-free contact (option) for input voltage monitoring
- Reliable connection via pluggable connectors equipped with CAGE CLAMP® or terminal strips with integrated operating levers: maintenance-free and time-saving
- Solutions for 12, 24 and 48 VDC supply, up to 76 A supply: suitable for nearly every application



Electronic Circuit Breakers (ECBs)

WAGO's ECBs are the space-saving and precision solution for fusing DC voltage circuits.

- 1-, 2-, 4- and 8-channel ECBs with fixed or adjustable currents ranging from 0.5 to 12 A
- High switch-on capacity: >50,000 μ F
- Communication capability: remote monitoring and reset
- Pluggable CAGE CLAMP® Connection Technology (option): maintenance-free and time-saving
- Comprehensive range of approvals: many applications



DC/DC Converters

Instead of using an additional power supply, WAGO's DC/DC Converters are ideal for specialty voltages, allowing sensors and actuators to be reliably supplied.

DC/DC Converters can be used instead of an additional power supply for applications with specialty voltages.

- Slim design: "True" 6.0 mm (0.23 inch) width maximizes panel space
- Wide operating temperature range
- Ready for worldwide use in many industries, thanks to UL listing
- Common profile with 857 and 2857 Series Signal Conditioners and Relays: Enables full commoning of the supply voltage



WAGO Power Supplies; 1-Phase

WAGO Power Supplies; 1-Phase

		Seite
	Pro/Pro 2 Switched Mode Power Supply; 787 / 2787 Series	12
	Classic Switched Mode Power Supply; 787 Series	44
	Eco/Eco 2 Switched Mode Power Supply; 787 / 2687 Series	64
	Compact Switched Mode Power Supply; 787 Series	80
	Base Switched Mode Power Supply; 2587 Series	98

WAGO Power Supplies; 1-Phase Selection Guide

1

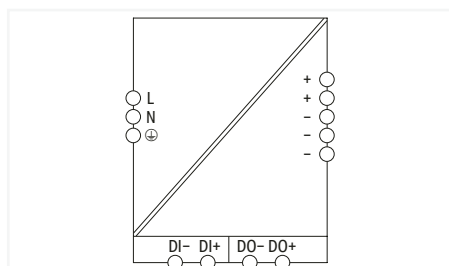
Product Family	Nominal voltage (output)	SELV / PELV	Nominal current (output) [ACD]	Input, 1-phase	Input, 2-phase	Standards/Approvals						DC OK LED	DC OK signal	DC OK contact	Communication capability	TopBoost	PowerBoost with protective coating	Efficiency typ.	Surrounding air temperature	Item No.
						EN 60335	UL 60950	UL 508	UL 61010	DNV	ANSI/SA 12.12.1									
Compact	5 V	■	5.5 A	■		■	■			■		■						75 %	-25 ... +60 °C	787-1020
Compact	12 V	■	2 A	■		■	■			■								80 %	-25 ... +60 °C	787-1001
Eco	12 V	■	2 A	■		■						■						80 %	-20 ... +60 °C	787-1701
Classic	12 V	■	2 A	■		■	■	■		■			■					82 %	-25 ... +70 °C	787-1601
Compact	12 V	■	2.5 A	■		■		■				■						88 %	-25 ... +70 °C	787-1201
Compact	12 V	■	4 A	■			■	■		■								85 %	-25 ... +60 °C	787-1011
Eco	12 V	■	4 A	■		■						■						80 %	-20 ... +60 °C	787-1711
Classic	12 V	■	4 A	■		■	■	■		■			■					86 %	-25 ... +70 °C	787-1611
Compact	12 V	■	5 A	■		■	■	■				■						88.5 %	-25 ... +70 °C	787-1211
Compact	12 V	■	6.5 A	■			■	■		■								87 %	-25 ... +60 °C	787-1021
Classic	12 V	■	7 A	■		■	■	■		■			■					86 %	-25 ... +70 °C	787-1621
Compact	12 V	■	8 A	■		■		■				■						91.5 %	-25 ... +70 °C	787-1221
Eco	12 V	■	8 A	■		■						■						80 %	-20 ... +60 °C	787-1721
Pro 2	12 V	■	10 A	■					■					■	■	■		93.8 %	-25 ... +70 °C	2787-2134
Classic	12 V	■	15 A	■			■	■		■				■	■			90 %	-25 ... +70 °C	787-1631
Pro 2	12 V	■	15 A	■					■					■	■	■		95.3 %	-25 ... +70 °C	2787-2135
Compact	18 V	■	1.25 A	■						■		■						88 %	-25 ... +70 °C	787-2857
Compact	18 V	■	2.4 A	■			■	■										84 %	-25 ... +60 °C	787-1017
Compact	24 V	■	0.5 A	■		■		■				■						83 %	-25 ... +70 °C	787-1200
Classic	24 V	■	1 A	■		■	■	■		■			■					86 %	-25 ... +70 °C	787-1602
Compact	24 V	■	1.25 A	■						■								88 %	-25 ... +70 °C	787-2850
Eco	24 V	■	1.25 A	■		■	■	■				■						87 %	-20 ... +60 °C	787-1702
Eco 2	24 V	■	1.25 A	■					■			■						88 %	-25 ... +70 °C	2687-2142
Compact	24 V	■	1.3 A	■			■	■		■								82 %	-25 ... +60 °C	787-1002
Compact	24 V	■	1.3 A	■		■	■	■		■								87 %	-25 ... +70 °C	787-1202
Classic	24 V	■	2 A	■		■	■	■		■			■					89 %	-25 ... +70 °C	787-1606
Compact	24 V	■	2.5 A	■			■	■		■								88 %	-25 ... +60 °C	787-1012
Compact	24 V	■	2.5 A	■		■	■	■				■						89 %	-25 ... +70 °C	787-1212
Eco	24 V	■	2.5 A	■							■	■						86 %	-10 ... +70 °C	787-712
Eco	24 V	■	2.5 A	■		■	■	■				■						88 %	-20 ... +60 °C	787-1712
Pro	24 V	■	3 A	■			■	■						■		■		87.8 %	-25 ... +70 °C	787-818
Classic	24 V	■	3.8 A	■		■	■	■		■			■					87 %	-25 ... +70 °C	787-1616/000-1000
Compact	24 V	■	4 A	■			■	■		■								88 %	-25 ... +60 °C	787-1022
Classic	24 V	■	4 A	■		■	■	■					■			■		89 %	-25 ... +70 °C	787-1616/000-070
Classic	24 V	■	4 A	■		■	■	■		■			■					89 %	-25 ... +70 °C	787-1616
Pro	24 V	■	5 A	■			■	■						■		■		87.8 %	-25 ... +70 °C	787-822
	24 V	■	4 A	■				■								■		92.3 %	-40 ... +85 °C	787-6716
Compact	24 V	■	4.2 A	■		■	■	■				■						90 %	-25 ... +70 °C	787-1216
Base	24 V	■	5 A	■					■			■						88 %	-30 ... +70 °C	2587-2144
Eco	24 V	■	5 A	■					■			■						86 %	-10 ... +60 °C	787-722
Eco	24 V	■	5 A	■		■	■	■				■						88 %	-20 ... +60 °C	787-1722
Eco 2	24 V	■	5 A	■					■					■				90 %	-25 ... +70 °C	2687-2144
Classic	24 V	■	5 A	■		■	■	■		■					■			89 %	-25 ... +70 °C	787-1622
Classic	24 V	■	5 A	■	■		■	■		■			■					89 %	-25 ... +70 °C	787-1628
Pro 2	24 V	■	5 A	■					■					■	■	■		93.8 %	-25 ... +70 °C	2787-2144
Pro 2	24 V	■	5 A	■					■	■				■	■	■		93.8 %	-25 ... +70 °C	2787-2144/000-030
Pro 2	24 V	■	5 A	■					■	■				■	■	■	■	93.8 %	-25 ... +70 °C	2787-2144/000-070
Compact	24 V	■	6 A	■		■	■	■				■						90 %	-25 ... +70 °C	787-1226
Base	24 V	■	10 A	■					■			■						91 %	-30 ... +70 °C	2587-2146
Eco	24 V	■	10 A	■					■			■						86 %	-10 ... +70 °C	787-732
Eco	24 V	■	10 A	■		■	■	■				■						91 %	-20 ... +60 °C	787-1732
Eco 2	24 V	■	10 A	■					■					■				93 %	-25 ... +70 °C	2687-2146
Classic	24 V	■	10 A	■			■	■						■		■		91 %	-25 ... +70 °C	787-1632/000-070
Classic	24 V	■	10 A	■			■	■						■				91 %	-25 ... +70 °C	787-1632
Classic	24 V	■	10 A	■	■		■	■		■				■				89 %	-25 ... +70 °C	787-1638
Pro	24 V	■	10 A	■			■	■						■		■		90 %	-25 ... +70 °C	787-832
Pro 2	24 V	■	10 A	■					■					■	■	■		95.2 %	-25 ... +70 °C	2787-2146
Pro 2	24 V	■	10 A	■					■	■				■	■	■		95.2 %	-25 ... +70 °C	2787-2146/000-030
Pro 2	24 V	■	10 A	■					■	■				■	■	■	■	95.2 %	-25 ... +70 °C	2787-2146/000-070
Base	24 V	■	20 A	■					■			■						94 %	-30 ... +70 °C	2587-2147
Eco	24 V	■	20 A	■			■	■						■				90 %	-25 ... +70 °C	787-734
Classic	24 V	■	20 A	■			■	■		■				■				92 %	-25 ... +70 °C	787-1634

WAGO Power Supplies; 1-Phase

Selection Guide

Product Family	Nominal voltage (output)	SELV / PELV	Nominal current (output) [ACD]	Input, 1-phase	Input, 2-phase	Standards/Approvals						DC OK LED	DC OK signal	DC OK contact	Communication capability	TopBoost	PowerBoost	with protective coating	Efficiency typ.	Surrounding air temperature	Item No.
						EN 60335	UL 60950	UL 508	UL 61010	DNV	ANSI/SA 12.12.1										
Pro	24 V	■	20 A	■		■	■							■		■	■		91 %	-25 ... +70 °C	787-834
Pro 2	24 V	■	20 A	■					■						■	■	■		95.4 %	-25 ... +70 °C	2787-2147
Pro 2	24 V	■	20 A	■					■	■					■	■	■		95.4 %	-25 ... +70 °C	2787-2147/000-030
Pro 2	24 V	■	20 A	■						■					■	■	■	■	95.4 %	-25 ... +70 °C	2787-2147/000-070
Eco	24 V	■	40 A	■			■	■						■					90 %	-25 ... +70 °C	787-736
Pro 2	24 V	■	40 A	■					■						■	■	■		96 %	-25 ... +70 °C	2787-2448
Pro 2	24 V	■	40 A	■					■	■					■	■	■		96 %	-25 ... +70 °C	2787-2448/000-030
Pro 2	24 V	■	40 A	■					■	■					■	■	■	■	96 %	-25 ... +70 °C	2787-2448/000-070
Classic	48 V	■	2 A	■		■	■	■		■			■						86 %	-25 ... +70 °C	787-1623
Pro 2	48 V	■	2.5 A	■					■						■	■	■		95.3 %	-25 ... +70 °C	2787-2154
Classic	48 V	■	5 A	■			■	■		■				■		■			92 %	-25 ... +70 °C	787-1633
Pro	48 V	■	5 A	■			■	■						■		■	■		91 %	-25 ... +70 °C	787-833
Classic	48 V	■	10 A	■			■	■						■		■	■	■	93 %	-25 ... +70 °C	787-1635/000-070
Classic	48 V	■	10 A	■			■	■		■				■		■			93 %	-25 ... +70 °C	787-1635
Pro	48 V	■	10 A	■			■	■						■		■	■		91 %	-25 ... +70 °C	787-835
Pro 2	48 V	■	10 A	■					■						■	■	■		95.3 %	-25 ... +70 °C	2787-2157

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 12 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2134	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 1.3 A
Inrush current	≤ 9.6 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 40 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	12 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (12 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 1.6 W (no load); ≤ 10 W (230 VAC; nominal load)
Efficiency (typ.)	93.8 %

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

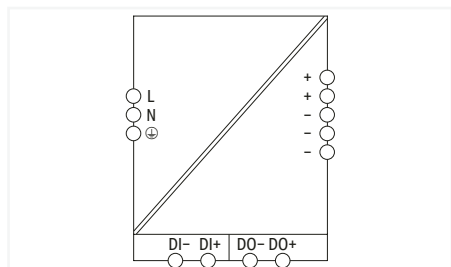
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,200,000$ h (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70$ °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	35 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 12 V ▶ Nominal output current: 15 A ▶ TopBoost ▶ PowerBoost



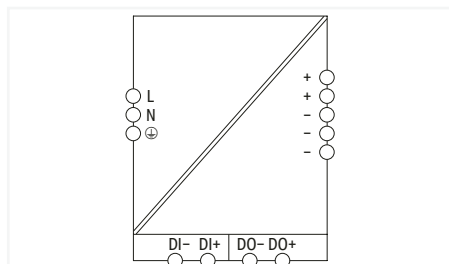
	Item No.	PU
	2787-2135	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 2 A (240 VAC; nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 40 ms (230 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	12 VDC (SELV)
Nominal output current $I_{o, \text{nom}}$	15 A (12 VDC)
Nominal output power	180 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 22.5 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 2.3 W (no load); ≤ 14 W (230 VAC; nominal load)
Efficiency (typ.)	95.3 %
Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 1,200,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost



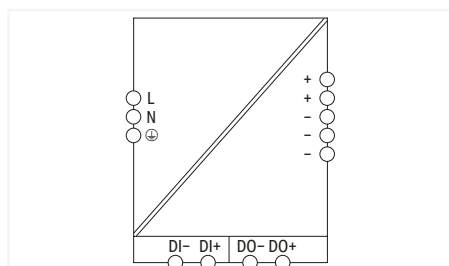
Item No.	PU
2787-2144	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 1 A (240 VAC; nominal load); ≤ 1.8 A (100 VAC; nominal load)
Inrush current	≤ 9 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 7.5 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	≤ 1 W (standby); ≤ 2 W (no load); ≤ 10 W (230 VAC; nominal load)
Efficiency (typ.)	93.8 % (230 VAC; 5 A; 25 °C)
Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	35 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2144/000-030	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 1 \text{ A}$ (240 VAC; nominal load); $\leq 1.8 \text{ A}$ (100 VAC; nominal load)
Inrush current	$\leq 9 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 7.5 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	$\leq 1 \text{ W}$ (standby); $\leq 2 \text{ W}$ (no load); $\leq 10 \text{ W}$ (230 VAC; nominal load)
Efficiency (typ.)	93.8 % (230 VAC; 5 A; 25 °C)

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

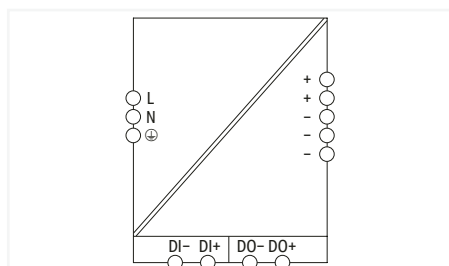
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	35 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



Item No.	PU
2787-2144/000-070	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 1 A (240 VAC; nominal load); ≤ 1.8 A (100 VAC; nominal load)
Inrush current	≤ 9 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 7.5 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 1 W (standby); ≤ 2 W (no load); ≤ 10 W (230 VAC; nominal load)
Efficiency (typ.)	93.8 % (230 VAC; 5 A; 25 °C)

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

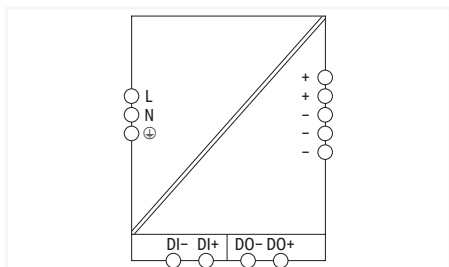
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	35 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; ISA S71.04:1985; G3 Group A; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost



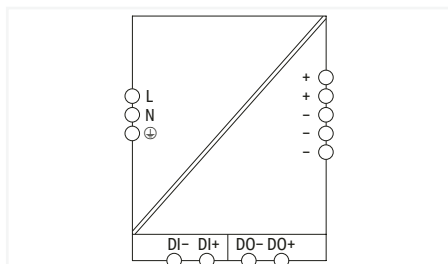
	Item No.	PU
	2787-2146	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 1.2 \text{ A}$ (240 VAC; nominal load); $\leq 2.7 \text{ A}$ (100 VAC; nominal load)
Inrush current	$\leq 11 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 25 \text{ ms}$ (230 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	$\leq 1 \text{ W}$ (standby); $\leq 2.2 \text{ W}$ (no load); $\leq 12 \text{ W}$ (230 VAC; nominal load)
Efficiency (typ.)	95.2 % (230 VAC; 10 A; 25 °C)
Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,200,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> 55 \text{ °C}$ and $U_i < 230 \text{ VAC}$); -3 %/K ($> 60 \text{ °C}$ and $U_i \geq 230 \text{ VAC}$)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost



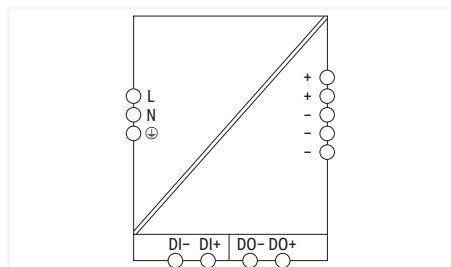
Item No.	PU
2787-2146/000-030	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 1.2 A (240 VAC; nominal load); ≤ 2.7 A (100 VAC; nominal load)
Inrush current	≤ 11 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	≤ 1 W (standby); ≤ 2.2 W (no load); ≤ 12 W (230 VAC; nominal load)
Efficiency (typ.)	95.2 % (230 VAC; 10 A; 25 °C)
Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,200,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 55 °C and $U_i < 230$ VAC); -3 %/K (> 60 °C and $U_i \geq 230$ VAC)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



Item No.	PU
2787-2146/000-070	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 1.2 \text{ A}$ (240 VAC; nominal load); $\leq 2.7 \text{ A}$ (100 VAC; nominal load)
Inrush current	$\leq 11 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 25 \text{ ms}$ (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	$\leq 1 \text{ W}$ (standby); $\leq 2.2 \text{ W}$ (no load); $\leq 12 \text{ W}$ (230 VAC; nominal load)
Efficiency (typ.)	95.2 % (230 VAC; 10 A; 25 °C)

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

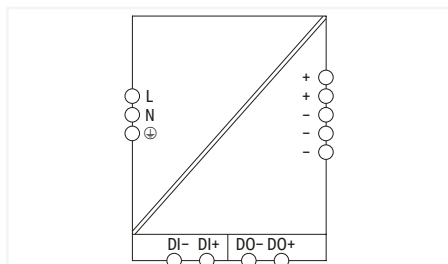
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,200,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ °C}$ (device starts at -40 °C (type-tested))
Ambient temperature (storage)	$-40 \dots +85 \text{ °C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> 55 \text{ °C}$ and $U_i < 230 \text{ VAC}$); -3 %/K ($> 60 \text{ °C}$ and $U_i \geq 230 \text{ VAC}$)
Operating altitude (max.)	5000 m

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; ISA S71.04:1985; G3 Group A; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2147	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 2.2 A (240 VAC; nominal load); ≤ 5.9 A (100 VAC; nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor	≥ 0.98 (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 1.3 W (standby); ≤ 2.6 W (no load); ≤ 24 W (230 VAC; nominal load)
Efficiency (typ.)	95.4 % (230 VAC; 20 A; 25 °C)

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1 %/V (> 40 °C and $U_i < 100$ VAC); -3 %/K (> 55 °C and $U_i < 230$ VAC); -3 %/K (> 60 °C and $U_i \geq 230$ VAC); -5 %/V ($U_o > 24$ VDC)
Operating altitude (max.)	5000 m

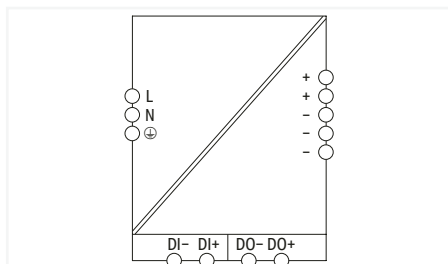
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	SEMI F47; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



Item No.	PU
2787-2147/000-070	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 2.2 A (240 VAC; nominal load); ≤ 5.9 A (100 VAC; nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor	≥ 0.98 (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 1.3 W (standby); ≤ 2.6 W (no load); ≤ 24 W (230 VAC; nominal load)
Efficiency (typ.)	95.4 % (230 VAC; 20 A; 25 °C)

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1 %/V (> 40 °C and $U_i < 100$ VAC); -3 %/K (> 55 °C and $U_i < 230$ VAC); -3 %/K (> 60 °C and $U_i \geq 230$ VAC); -5 %/V ($U_o > 24$ VDC)
Operating altitude (max.)	5000 m

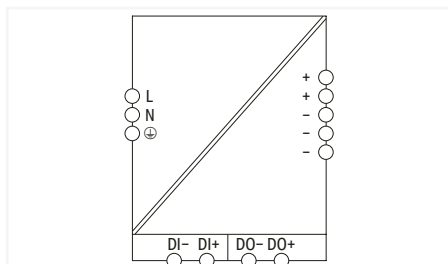
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating

Standards and specifications	
Conformity marking	CE
Standards/specifications	SEMI F47; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; ISA S71.04:1985; G3 Group A

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2147/000-030	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 2.2 A (240 VAC; nominal load); ≤ 5.9 A (100 VAC; nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor	≥ 0.98 (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 1.3 W (standby); ≤ 2.6 W (no load); ≤ 24 W (230 VAC; nominal load)
Efficiency (typ.)	95.4 % (230 VAC; 20 A; 25 °C)

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1 %/V (> 40 °C and $U_i < 100$ VAC); -3 %/K (> 55 °C and $U_i < 230$ VAC); -3 %/K (> 60 °C and $U_i \geq 230$ VAC); -5 %/V ($U_o > 24$ VDC)
Operating altitude (max.)	5000 m

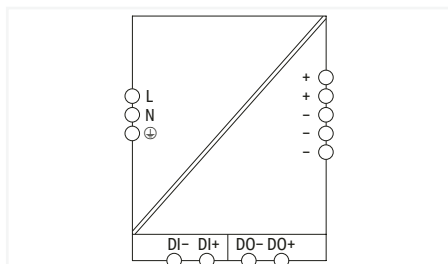
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	SEMI F47; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2448	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 200 ... 240 VAC
Input voltage range	1 x 180 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 4.3 A (240 VAC; nominal load); ≤ 5.1 A (200 VAC; nominal load)
Inrush current	≤ 10 A (after 1 ms)
Power factor	≥ 0.98 (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 60 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 1.5 W (standby); ≤ 2.4 W (no load); ≤ 40 W (230 VAC; nominal load)
Efficiency (typ.)	96 % (230 VAC; 40 A; 25 °C); 96.3 % (230 VAC; 30 A; 25 °C)

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 900,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 55 °C)
Operating altitude (max.)	5000 m

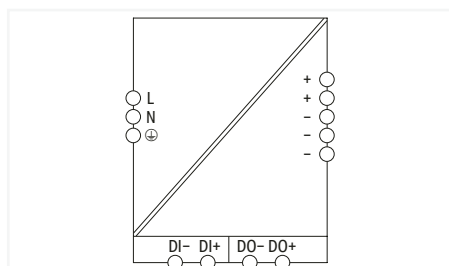
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	120 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2448/000-030	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 200 ... 240 VAC
Input voltage range	1 x 180 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 4.3 A (240 VAC; nominal load); ≤ 5.1 A (200 VAC; nominal load)
Inrush current	≤ 10 A (after 1 ms)
Power factor	≥ 0.98 (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 60 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 1.5 W (standby); ≤ 2.4 W (no load); ≤ 40 W (230 VAC; nominal load)
Efficiency (typ.)	96 % (230 VAC; 40 A; 25 °C); 96.3 % (230 VAC; 30 A; 25 °C)

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 900,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 55 °C)
Operating altitude (max.)	5000 m

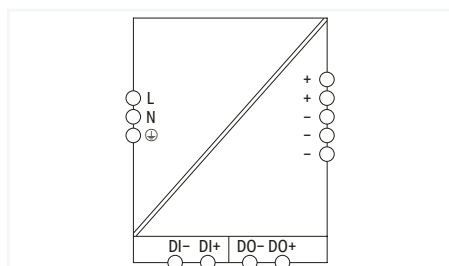
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	120 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



Item No.	PU
2787-2448/000-070	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 200 ... 240 VAC
Input voltage range	1 x 180 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 4.3 A (240 VAC; nominal load); ≤ 5.1 A (200 VAC; nominal load)
Inrush current	≤ 10 A (after 1 ms)
Power factor	≥ 0.98 (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 60 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	≤ 1.5 W (standby); ≤ 2.4 W (no load); ≤ 40 W (230 VAC; nominal load)
Efficiency (typ.)	96 % (230 VAC; 40 A; 25 °C); 96.3 % (230 VAC; 30 A; 25 °C)

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 900,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 55 °C)
Operating altitude (max.)	5000 m

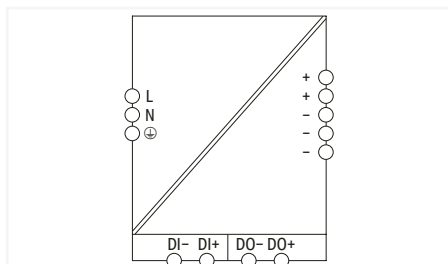
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	120 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; ISA S71.04:1985; G3 Group A; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 2.5 A ▶ TopBoost ▶ PowerBoost



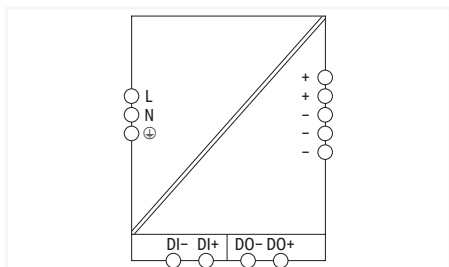
Item No.	PU
2787-2154	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 1.3 A (240 VAC; nominal load)
Inrush current	≤ 11 A (after 1 ms)
Power factor correction (PFC)	Active
Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	48 ... 56 VDC (adjustable)
Nominal output current $I_{o, nom}$	2.5 A (48 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 7.5 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 1.7 W (no load); ≤ 9 W (230 VAC; nominal load)
Efficiency (typ.)	95.3 %
Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 900,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	35 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 1 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2157	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 5.9 \text{ A}$ (240 VAC; nominal load)
Inrush current	$\leq 12 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 24 \text{ ms}$ (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	48 VDC (SELV)
Output voltage range	48 ... 56 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	$\leq 1.3 \text{ W}$ (standby); $\leq 2.6 \text{ W}$ (no load); $\leq 24 \text{ W}$ (230 VAC; nominal load)
Efficiency (typ.)	95.3 %

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ °C}$ (device starts at -40 °C (type-tested))
Ambient temperature (storage)	$-40 \dots +85 \text{ °C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Communication module ► EtherNet/IP™



1

	Item No.	PU
	2789-9023	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- EtherNet/IP™ + MQTT
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Integrated ETHERNET switch for convenient wiring
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage $U_{I, nom}$	5 VDC (SELV)
Nominal input current at U_N	250 mA (max.)
Signaling and communication	
Signaling	1 x ERR LED (red); 1 x COM OK LED (green); 1 x LED LNK/ACTx (green) ; 1 x LED SPEEDx (orange)
Communications	EtherNet/IP™
ETHERNET protocols	HTTP(S); BootP; DHCP; SNTP; MQTT
Configuration options	Web-Based Management
Visualization	Web-Visu
Transmission rate	100 MBd (ETHERNET: 10/100 Mbit/s)
Transmission medium (communication/ fieldbus)	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Safety and protection/Environmental requirements	
Test voltage (fieldbus)	0.775 kVAC; 50 Hz; 1 min
Protection class/Protection type	III / IP20; per EN 60529
Insulation type	Functional insulation
Overvoltage category	III
Pollution degree	2
Ambient temperature (operation)	-40 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Connection type	EtherNet/IP™
Pluggable connector	2 x RJ-45
Cable length (max.)	100 m
Transmission medium	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 80 mm x 22 mm
Note (dimensions)	Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Communication module ► IO-Link



	Item No.	PU
	2789-9080	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- IO-Link device supports IO-Link specification 1.1
- Suitable for configuring and monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Pluggable connection technology
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage $U_{in\,nom}$	24 VDC (SELV; via IO-Link Master)
Input voltage range	18 ... 30 VDC (SELV; via IO-Link Master)
Signaling and communication	
Signaling	1 x COM OK LED (green); 1 x ERR LED (red)
Communications	IO-Link
IO-Link version	1.1
Transmission rate	230.4 kBd (COM 3)
Data width	5 bytes
Data update rate	25 ms
Safety and protection/Environmental requirements	
Isolation	0.63 kVDC
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	20 m (IO-Link)
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 95 mm x 22 mm
Note (dimensions)	Height with connector; Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; UL HazLoc

Communication module ► Modbus (TCP, UDP)



	Item No.	PU
	2789-9052	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- Modbus TCP/UDP
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Integrated ETHERNET switch for convenient wiring
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage U_{nom}	5 VDC (SELV)
Nominal input current at U_N	250 mA (max.)
Signaling and communication	
Signaling	1 x ERR LED (red); 1 x COM OK LED (green); 1 x LED LNK/ACTx (green) ; 1 x LED SPEEDx (orange)
Communications	Modbus (TCP, UDP)
ETHERNET protocols	HTTP(S); BootP; DHCP; SNTP
Configuration options	Web-Based Management
Visualization	Web-Visu
Transmission rate	100 MBd (ETHERNET: 10/100 Mbit/s)
Transmission medium (communication/ fieldbus)	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Safety and protection/Environmental requirements	
Test voltage (fieldbus)	0.775 kVAC; 50 Hz; 1 min
Protection class/Protection type	III / IP20; per EN 60529
Insulation type	Functional insulation
Overvoltage category	III
Pollution degree	2
Ambient temperature (operation)	-40 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Modbus TCP/UDP
Pluggable connector	2 x RJ-45
Cable length (max.)	100 m
Transmission medium	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 80 mm x 22 mm
Note (dimensions)	Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Communication module ► Modbus RTU via RS-485



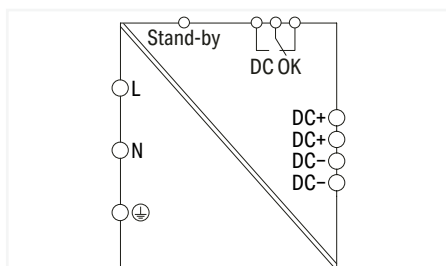
	Item No.	PU
	2789-9015	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- Modbus RTU (RS-485)
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Pluggable connection technology
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips
- Requires RJ-45 terminating resistor (120 Ω) for long cables (2789-9915)

Input	
Nominal input voltage U _{nom}	5 VDC (SELV)
Input voltage range	4.5 ... 5.5 VDC (SELV)
Signaling and communication	
Signaling	1 x LED PWR (green); 1 x LED RxD (yellow); 1 x LED TxD (yellow)
Communications	Modbus RTU via RS-485
Transmission rate	4.8 ... 115.2 kBd
Number of devices (max.)	247
Transmission medium (communication/fieldbus)	Shielded copper cable
Safety and protection/Environmental requirements	
Test voltage (input/output)	AC 2 kV; 50 Hz; 1 min
Test voltage (input/output/shield)	1 kVAC; 50 Hz; 1 min
Protection class/Protection type	III / IP20; per EN 60529
Insulation type	Functional insulation
Pollution degree	2
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Pluggable connector	2 x RJ-45
Transmission medium	Shielded copper cable
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 80 mm x 22 mm
Note (dimensions)	Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; UL HazLoc

Power supply ▶ Pro ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 3 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



Item No.	PU
787-818	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-5 %/V (< 95 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 0.51 A (240 VAC; 3 ADC)
Inrush current	≤ 30 A (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 70 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	3 A (24 VDC)
Nominal output power	72 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 6 A (4 s); DC 4.5 A (8 s)
TopBoost	14 ADC (25 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 0.5 W (standby); ≤ 3 W (no load); ≤ 8.8 W (nominal load)
Efficiency (typ.)	87.8 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

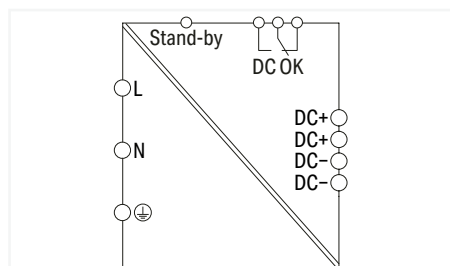
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 163 mm x 163 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



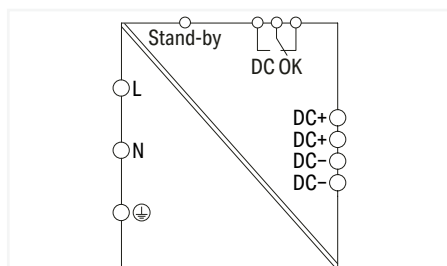
	Item No.	PU
	787-822	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 0.97 A (240 VAC; 5 ADC)
Inrush current	≤ 30 A (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 35 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 10 A (4 s); DC 7.5 A (8 s)
TopBoost	21 ADC (25 ms)
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)
Efficiency/power losses	
Power loss P_i	≤ 0.5 W (standby); ≤ 5 W (no load); ≤ 14.6 W (nominal load)
Efficiency (typ.)	87.8 %
Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 163 mm x 163 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



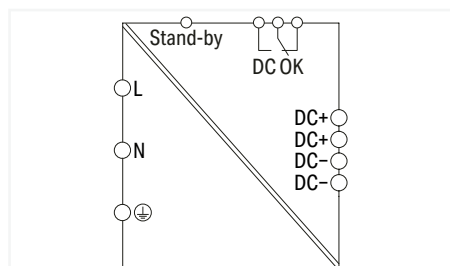
Item No.	PU
787-832	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 1.2 A (240 VAC; 10 ADC)
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 20 A (4 s); DC 15 A (8 s)
TopBoost	60 ADC (25 ms)
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)
Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 3.8 W (no load); ≤ 24 W (nominal load)
Efficiency (typ.)	90 %
Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 163 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



Item No.	PU
787-834	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-1.5 %/V (< 110 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 2.3 A (230 VAC; 20 ADC)
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 30 A (4 s); DC 25 A (8 s)
TopBoost	80 ADC (25 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 4.8 W (no load); ≤ 43.2 W (nominal load)
Efficiency (typ.)	91 %

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

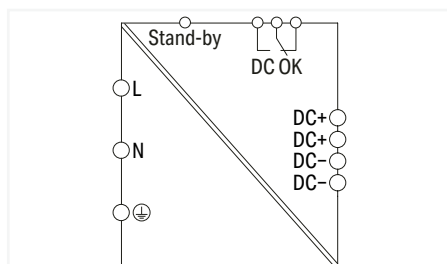
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	97 mm x 171 mm x 187 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 1 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



Item No.	PU
787-833	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-1.5 %/V (< 110 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 1.2 A (230 VAC; 5 ADC)
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	33 ... 52 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (48 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 10 A (4 s); DC 7.5 A (8 s)
TopBoost	30 ADC (25 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 7.4 W (no load); ≤ 21.6 W (nominal load)
Efficiency (typ.)	91 %

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

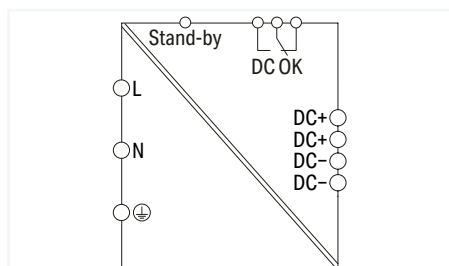
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 163 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 1 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



Item No.	PU
787-835	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-1.5 %/V (< 110 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 2.3 A (230 VAC; 10 ADC)
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	33 ... 52 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 17.5 A (4 s); DC 15 A (8 s)
TopBoost	60 ADC (25 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 4.8 W (no load); ≤ 43.2 W (nominal load)
Efficiency (typ.)	91 %

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

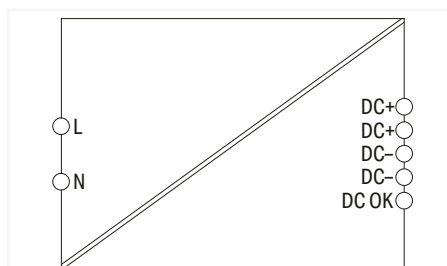
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

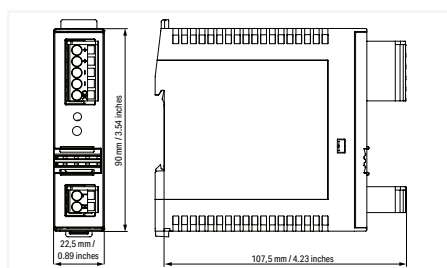
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	97 mm x 171 mm x 187 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 2 A ► DC OK signal



Item No.	PU
787-1601	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.29 A (240 VAC); ≤ 0.5 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	2 A (12 VDC); 2.1 A (< 40 °C)
Nominal output power	24 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (12 VDC; 40 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.7 W; ≤ 5.3 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	5.7 W (100 VAC / 12 VDC; 2 A)
Efficiency (typ.)	82 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

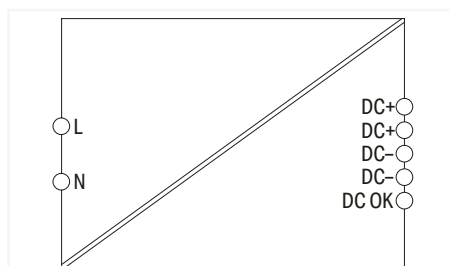
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

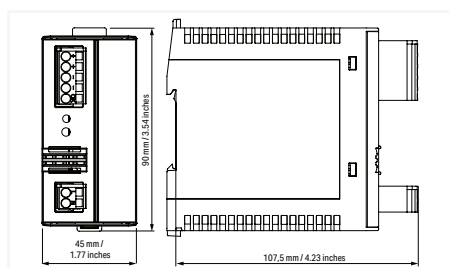
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	22.5 mm x 90 mm x 107.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 4 A ► DC OK signal



Item No.	PU
787-1611	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.46 A (240 VAC); ≤ 0.86 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	4 A (12 VDC); 4.2 A (< 40 °C)
Nominal output power	48 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (12 VDC; 40 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 8 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	9.1 W (100 VAC / 12 VDC; 4 A)
Efficiency (typ.)	86 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

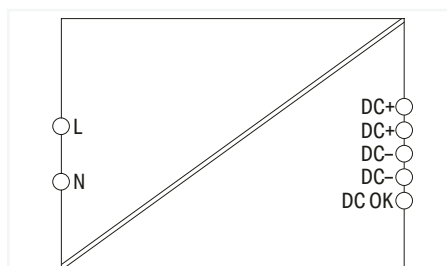
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 35 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

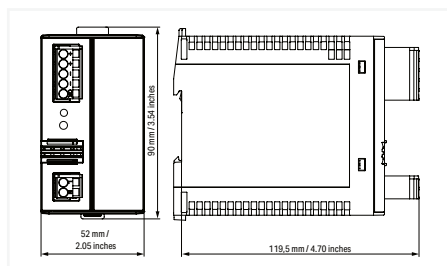
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	45 mm x 90 mm x 107.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 7 A ► DC OK signal



Item No.	PU
787-1621	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.9 A (240 VAC); ≤ 1.66 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	7 A (12 VDC); 7.5 A (< 40 °C)
Nominal output power	84 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (12 VDC; 40 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 16.2 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	19.8 W (100 VAC / 12 VDC; 7 A)
Efficiency (typ.)	86 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

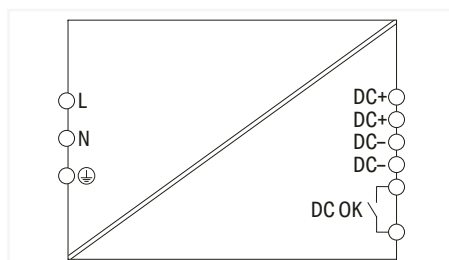
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 32 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	52 mm x 90 mm x 119 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 15 A ► TopBoost ► DC OK contact



	Item No.	PU
	787-1631	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.93 A (240 VAC); ≤ 2.05 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 28 ms (230 VAC); ≥ 28 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	11.5 ... 15 VDC (adjustable)
Nominal output current $I_{o, nom}$	15 A (12 VDC)
Nominal output power	180 W
Residual ripple	≤ 35 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 4.4 W; ≤ 21.8 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	24.7 W (100 VAC / 12 VDC; 15 A)
Efficiency (typ.)	90 %

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

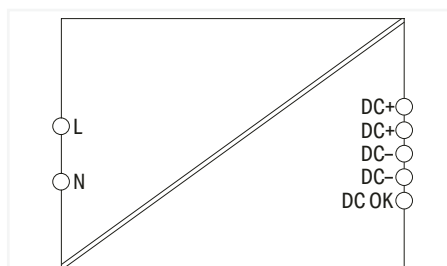
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 20 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

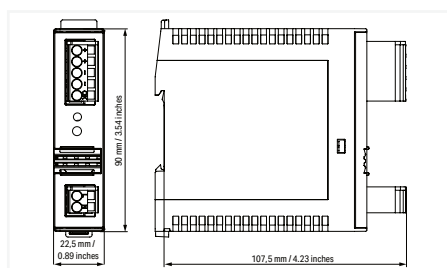
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 127 mm x 172 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 1 A ► DC OK signal



Item No.	PU
787-1602	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.28 A (240 VAC); ≤ 0.49 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 20 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	1 A (24 VDC); 1.2 A (< 40 °C)
Nominal output power	24 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	5 W (100 VAC / 24 VDC; 1 A)
Efficiency (typ.)	86 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

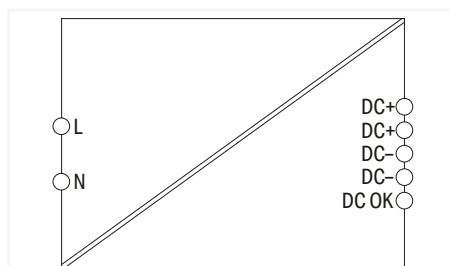
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 39 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

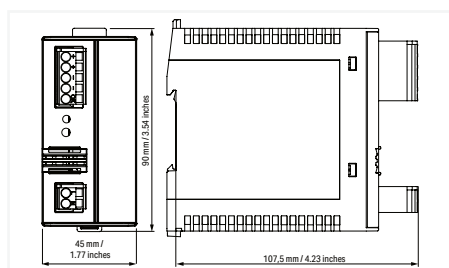
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	22.5 mm x 90 mm x 107.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 2 A ► DC OK signal



Item No.	PU
787-1606	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.48 A (240 VAC); ≤ 0.82 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 20 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	2 A (24 VDC); 2.2 A (< 40 °C)
Nominal output power	48 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 6 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max.}$	7 W (100 VAC / 24 VDC; 2 A)
Efficiency (typ.)	89 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

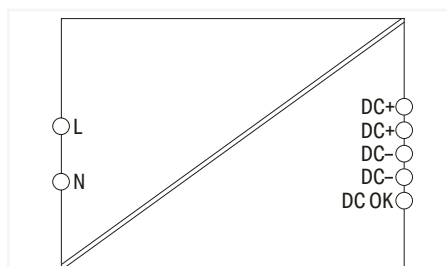
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 37 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

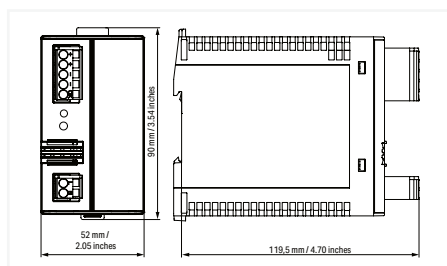
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	45 mm x 90 mm x 107.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 3.8 A ► DC OK signal



Item No.	PU
787-1616/000-1000	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.95 A (240 VAC); ≤ 1.73 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	3.8 A (24 VDC)
Nominal output power	91.2 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	3.8 A (3.2 A at $U_o > 25$ VDC); LPS per NEC Class 2
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 2.8 W; ≤ 14 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	20 W (100 VAC / 91 W)
Efficiency (typ.)	87 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

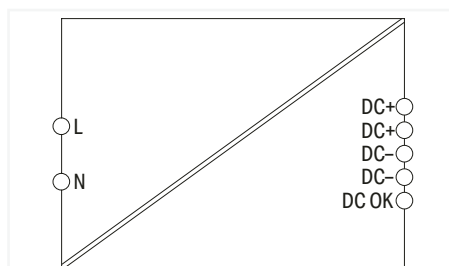
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

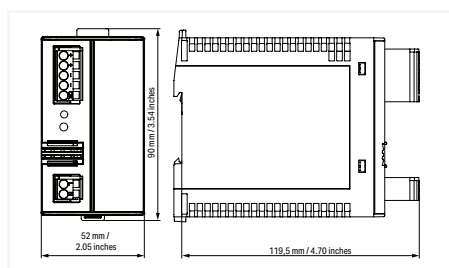
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	52 mm x 90 mm x 119 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; UL 1310; DNV

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 4 A ► DC OK signal



Item No.	PU
787-1616	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.98 A (240 VAC); ≤ 1.82 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	4 A (24 VDC); 4.2 A (< 40 °C)
Nominal output power	96 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 12.4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	15 W (100 VAC / 24 VDC; 4 A)
Efficiency (typ.)	89 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

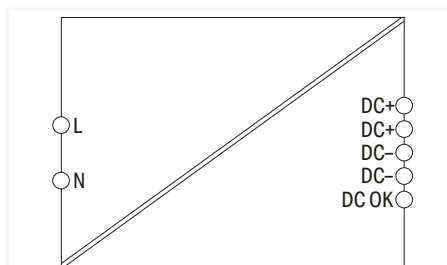
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	52 mm x 90 mm x 119.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

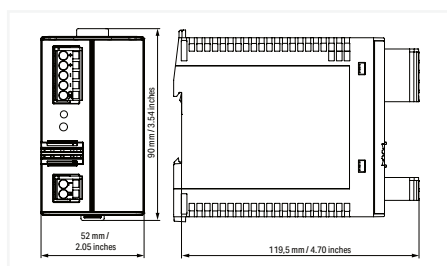
Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 4 A ► DC OK signal ► Protective coating



Similar to illustration



Item No.	PU
787-1616/000-070	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.98 A (240 VAC); ≤ 1.82 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	4 A (24 VDC); 4.2 A (< 40 °C)
Nominal output power	96 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 12.4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	15 W (100 VAC / 24 VDC; 4 A)
Efficiency (typ.)	89 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

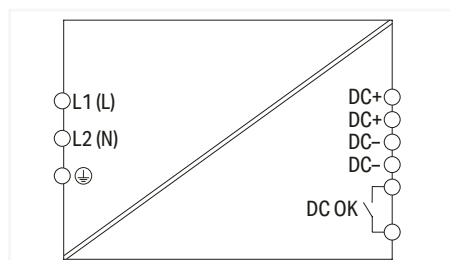
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (Coated PCB, no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	52 mm x 90 mm x 119.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508

Power supply ► Classic ► Phases: 1; 2 ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A ► DC OK contact



	Item No.	PU
	787-1628	1

Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Phases	1 / 2
Nominal input voltage $U_{i, nom}$	(1 / 2) x 200 ... 500 VAC
Input voltage range	(1 / 2) x 180 ... 550 VAC; 254 ... 780 VDC
Input voltage derating	-0.5 %/V (< 200 VAC); -0.4 %/V (< 280 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.25 A (200 VAC); ≤ 0.67 A (500 VAC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.52
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 126 ms (500 VAC); ≥ 15 ms (200 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 30 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.94 W; ≤ 16.36 W (230 VAC; nominal load); ≤ 14.55 W (400 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	18.2 W (200 VAC / 24 VDC; 5 A)
Efficiency (typ.)	89 %

Circuit protection	
Internal fuse	T 3.15 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

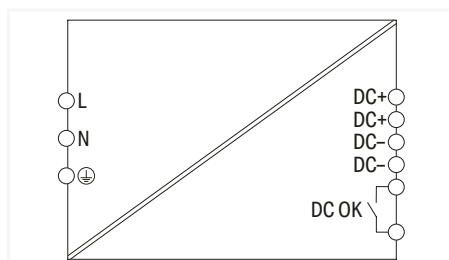
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overtoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overtoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-2.5 %/K (> 55 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	42 mm x 127 mm x 143.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A ► TopBoost ► DC OK contact



	Item No.	PU
	787-1622	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 97 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.24 A (230 VAC); ≤ 2.3 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); ≥ 10 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 30 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1.2 W; ≤ 14.6 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	19.4 W (100 VAC / 24 VDC; 5 A)
Efficiency (typ.)	89 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

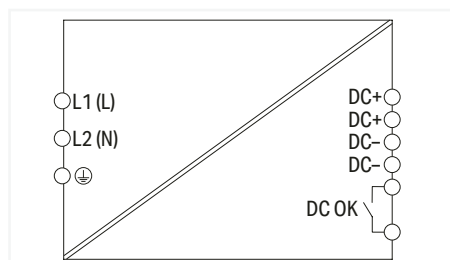
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 41 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	42 mm x 127 mm x 137.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1; 2 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► DC OK contact



	Item No.	PU
	787-1638	1

Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Phases	1 / 2
Nominal input voltage $U_{i, nom}$	(1 / 2) x 200 ... 500 VAC
Input voltage range	(1 / 2) x 180 ... 550 VAC; 254 ... 780 VDC
Input voltage derating	-0.5 %/V (< 200 VAC); -0.4 %/V (< 280 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.975 A (230 VAC); ≤ 1.36 A (230 VAC)
Inrush current	≤ 30 A (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 78 ms (400 VAC); ≥ 20 ms (200 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 30 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1.3 W; ≤ 27.8 W (230 VAC; nominal load); ≤ 20.3 W (400 VAC; nominal load)
Power loss (max.) $P_{i, max.}$	27.8 W (230 VAC / 24 VDC; 10 A)
Efficiency (typ.)	89 % (230 VAC); 92.5 % (400 VAC)

Circuit protection	
Internal fuse	T 6.3 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

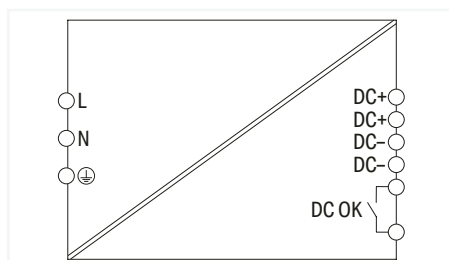
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-2.5 %/K (> 55 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 127 mm x 146.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► TopBoost ► DC OK contact



	Item No.	PU
	787-1632	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 100 ... 300 VDC
Input voltage derating	-2.5 %/V (< 100 VAC); -1 %/V (< 130 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.25 A (230 VAC); ≤ 2.74 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 17 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 50 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 6.6 W; ≤ 24.4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	31.3 W (100 VAC / 24 VDC; 10 A)
Efficiency (typ.)	91 %

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

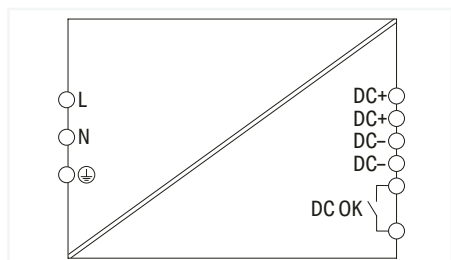
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 127 mm x 172 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ▶ Classic ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ DC OK contact ▶ Protective coating



Similar to illustration



Item No.	PU
787-1632/000-070	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- Coated PCBs (with Bectron PL 1104 or Voltatex 2010), resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 100 ... 300 VDC
Input voltage derating	-2.5 %/V (< 100 VAC); -1 %/V (< 130 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.25 A (230 VAC); ≤ 2.74 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 17 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 50 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 6.6 W; ≤ 24.4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	31.3 W (100 VAC / 24 VDC; 10 A)
Efficiency (typ.)	91 %

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

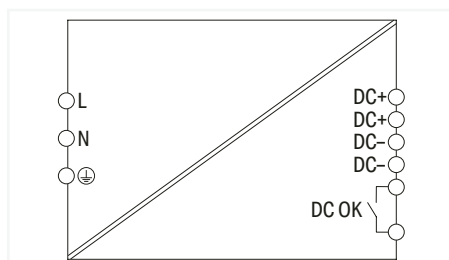
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 127 mm x 172 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A ► TopBoost ► DC OK contact



	Item No.	PU
	787-1634	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-1.8 %/V (< 105 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 2.23 A (230 VAC); ≤ 5.56 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC); ≥ 8 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 7.2 W; ≤ 42.4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	68.3 W (100 VAC / 24 VDC; 20 A)
Efficiency (typ.)	92 %

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

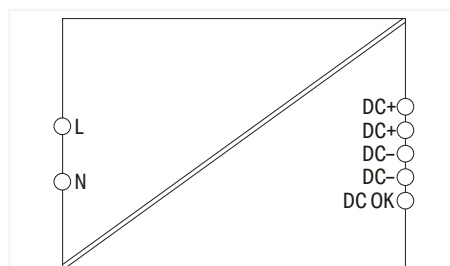
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

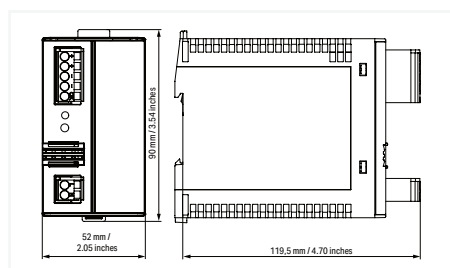
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	95 mm x 127 mm x 170 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 48 V ► Nominal output current: 2 A ► DC OK signal



Item No.	PU
787-1623	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.97 A (240 VAC); ≤ 1.84 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); ≥ 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	40 ... 53 VDC (adjustable)
Nominal output current $I_{o, nom}$	2 A (48 VDC); 2.1 A (< 40 °C)
Nominal output power	96 W
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Active signal output DC OK (48 VDC; 10 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 16.2 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	19.8 W (100 VAC / 48 VDC; 2 A)
Efficiency (typ.)	86 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

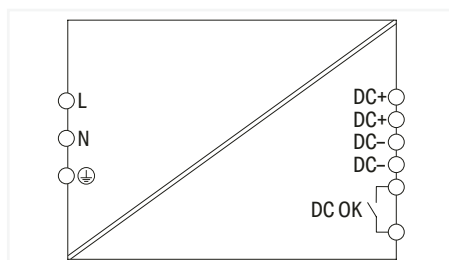
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 60 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	52 mm x 90 mm x 119 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 48 V ► Nominal output current: 5 A ► TopBoost ► DC OK contact



	Item No.	PU
	787-1633	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 1.25 \text{ A}$ (230 VAC); $\leq 2.74 \text{ A}$ (100 VAC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 21 \text{ ms}$ (230 VAC); $\geq 21 \text{ ms}$ (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	48 VDC (SELV)
Output voltage range	40 ... 56 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5 A (48 VDC)
Nominal output power	240 W
Residual ripple	$\leq 30 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 7 \text{ W}$; $\leq 40.8 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	26.5 W (100 VAC / 48 VDC; 5 A)
Efficiency (typ.)	92 %

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

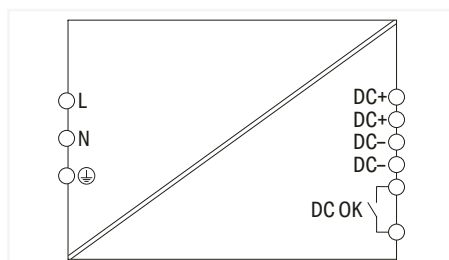
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; $\leq 60 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection technology	Push-in CAGE CLAMP®

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 127 mm x 172 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 48 V ► Nominal output current: 10 A ► TopBoost ► DC OK contact



	Item No.	PU
	787-1635	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 2.23 A (230 VAC); ≤ 5.56 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC); ≥ 20 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	40 ... 56 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 80 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 11.7 W; ≤ 36.3 W (230 VAC; nominal load)
Power loss (max.) $P_{i(max)}$	64.9 W (100 VAC / 48 VDC; 10 A)
Efficiency (typ.)	93 %

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 60 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

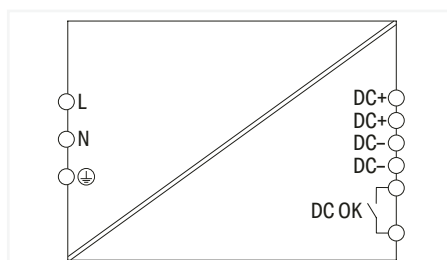
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	95 mm x 127 mm x 170 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 1 ► Nominal output voltage (DC): 48 V ► Nominal output current: 10 A ► TopBoost ► DC OK contact ► Protective coating



Similar to illustration



Item No.	PU
787-1635/000-070	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- Coated PCBs (with Bectron PL 1104 or Voltatex 2010), resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 2.23 A (230 VAC); ≤ 5.56 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC); ≥ 20 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	40 ... 56 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 80 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 11.7 W; ≤ 36.3 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	64.9 W (100 VAC / 48 VDC; 10 A)
Efficiency (typ.)	93 %

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

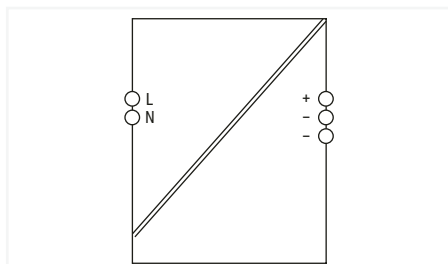
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 60 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)

Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	95 mm x 127 mm x 170 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508

Power supply ► Eco 2 ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 1.25 A ► DC OK LED



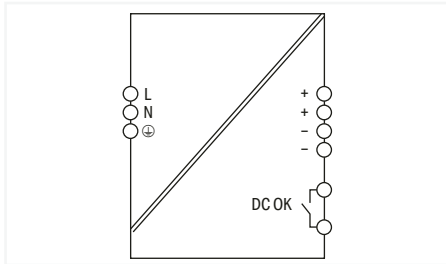
Item No.	PU
2687-2142	1

Features:

- Optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot (2789-1223, not included) for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 0.3 A (230 VAC; nominal load); ≤ 0.6 A (100 VAC; nominal load)
Inrush current	≤ 10 A (after 1 ms)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 15 ms (110 VAC)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	22 ... 29 VDC (adjustable)
Nominal output current $I_{o\text{nom}}$	1.25 A (24 VDC)
Nominal output power	30 W
Residual ripple	≤ 30 mV (peak-to-peak, at 230 VAC)
Overload behavior	Constant power up to 125 %; shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green)
Efficiency/power losses	
Power loss P_i	≤ 0.2 W (no load); ≤ 4.3 W (nominal load)
Efficiency (typ.)	88 %
Circuit protection	
Internal fuse	T 1 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m.a.s.l.); II (> 2000 m.a.s.l.)
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000$ h (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70$ °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	Siehe Typenschild/Handbuch
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 4 mm ² / 0.2 ... 4 mm ² / 24 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	25 mm x 100 mm x 90 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ► Eco 2 ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A ► DC OK contact



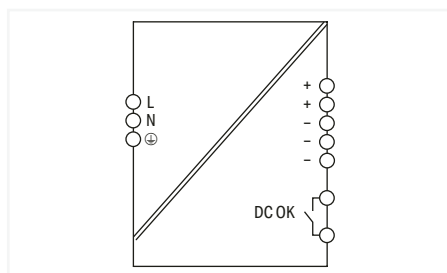
	Item No.	PU
	2687-2144	1

Features:

- Signal output, optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot (2789-1233, not included) for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 0.8 \text{ A}$ (230 VAC; nominal load); $\leq 1.5 \text{ A}$ (100 VAC; nominal load)
Inrush current	$\leq 20 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (230 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	$\leq 75 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power up to 125 %; shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	Optical status indication (overload); Optical status indication (DC OK); Digital signal output (DO)
Efficiency/power losses	
Power loss P_i	$\leq 3 \text{ W}$ (no load); $\leq 12 \text{ W}$ (nominal load)
Efficiency (typ.)	90 %
Circuit protection	
Internal fuse	T 3.15 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m a.s.l.}$); II ($> 2000 \text{ m a.s.l.}$)
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$ (type-tested))
Ambient temperature (storage)	$-40 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2.5 \text{ }^\circ\text{C/K}$; $> 55 \text{ }^\circ\text{C}$; $-10 \text{ }^\circ\text{C/V}$; $> 24 \text{ V}$
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output/signaling
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 4 mm² / 0.2 ... 4 mm² / 24 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	38 mm x 130 mm x 130 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ► Eco 2 ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► DC OK contact



	Item No.	PU
	2687-2146	1

Features:

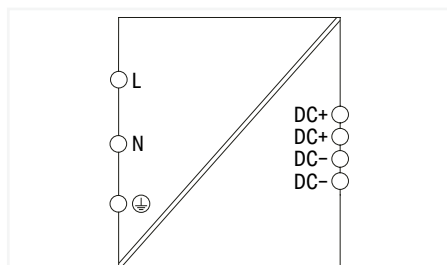
- Signal output, optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot (2789-1233, not included) for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 1.1 A (230 VAC; nominal load); ≤ 2.7 A (100 VAC; nominal load)
Inrush current	≤ 25 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	23 ... 28 VDC (adjustable)
Nominal output current $I_{o\text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 75 mV (peak-to-peak)
Overload behavior	Constant current up to 105 ... 110 %; shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	Optical status indication (overload); Optical status indication (DC OK); Digital signal output (DO)
Efficiency/power losses	
Power loss P_i	≤ 3 W (230 VAC; no load); ≤ 13 W (230 VAC; nominal load)
Efficiency (typ.)	93 %
Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m a.s.l.); II (> 2000 m a.s.l.)
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output/signaling
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 4 mm² / 0.2 ... 4 mm² / 24 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 130 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 2 A ► DC OK LED



Similar to illustration



	Item No.	PU
	787-1701	1

Features:

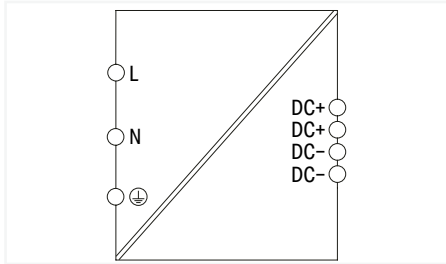
- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.7 A (100 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	2 A (12 VDC; 110 ... 240 VAC); 1.6 A (12 VDC; 100 ... 240 VAC)
Nominal output power	24 W
Residual ripple	≤ 150 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 6 W (230 VAC; 12 VDC; 2 A)
Efficiency (typ.)	80 % (230 VAC; 2 ADC)
Circuit protection	
Internal fuse	F 1 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: B6, B10
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 300,000 h (per IEC 61709)
Ambient temperature (operation)	-20 ... +60 °C
Ambient temperature (storage)	-25 ... +75 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> 45 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	30 mm x 90 mm x 99 mm
Mounting type	DIN-35 rail; Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 61558-2-6; EN 62368-1; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 4 A ► DC OK LED



Similar to illustration



	Item No.	PU
	787-1711	1

Features:

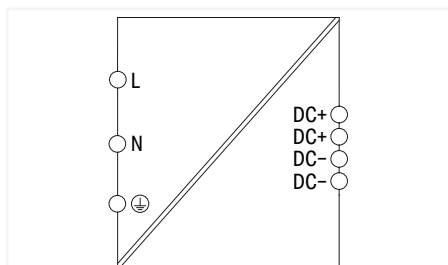
- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.8 A (100 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	4 A (12 VDC; 110 ... 240 VAC); 3.2 A (12 VDC; 100 ... 240 VAC)
Nominal output power	48 W
Residual ripple	≤ 150 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 9.6 W (230 VAC; 12 VDC; 4 A)
Efficiency (typ.)	80 % (230 VAC; 4 ADC)
Circuit protection	
Internal fuse	F 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: B6, B10
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 300,000 h (per IEC 61709)
Ambient temperature (operation)	-20 ... +60 °C
Ambient temperature (storage)	-25 ... +75 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> 45 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 90 mm x 99 mm
Mounting type	DIN-35 rail; Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 61558-2-6; EN 62368-1; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 8 A ► DC OK LED



Similar to illustration



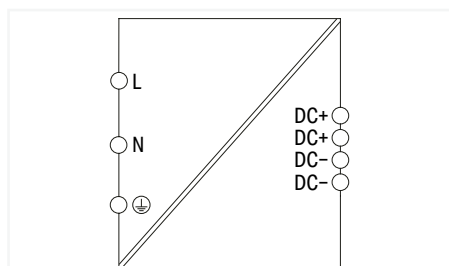
Item No.	PU
787-1721	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 3 A (100 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	8 A (12 VDC; 110 ... 240 VAC); 6.4 A (12 VDC; 100 ... 240 VAC)
Nominal output power	96 W
Residual ripple	≤ 150 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 20 W (230 VAC; 12 VDC; 8 A)
Efficiency (typ.)	80 % (230 VAC; 8 ADC)
Circuit protection	
Internal fuse	F 3.15 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: B6, B10
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 300,000 h (per IEC 61709)
Ambient temperature (operation)	-20 ... +60 °C
Ambient temperature (storage)	-25 ... +75 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-3 %/K (> 40 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	60 mm x 130 mm x 99 mm
Mounting type	DIN-35 rail; Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 61558-2-6; EN 62368-1; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 1.25 A ► DC OK LED



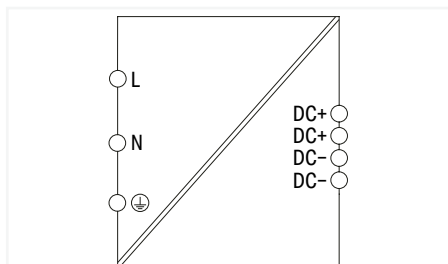
	Item No.	PU
	787-1702	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.3 A (230 VAC); ≤ 0.6 A (115 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	1.25 A (24 VDC; 110 ... 240 VAC); 1 A (24 VDC; 100 ... 240 VAC)
Nominal output power	30 W
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 6 W (230 VAC; 24 VDC; 1.25 A)
Efficiency (typ.)	87 % (230 VAC; 1.25 ADC)
Circuit protection	
Internal fuse	F 1 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: B6, B10
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 300,000 h (per IEC 61709)
Ambient temperature (operation)	-20 ... +60 °C
Ambient temperature (storage)	-25 ... +75 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> 45 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	30 mm x 90 mm x 99 mm
Mounting type	DIN-35 rail; Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 2.5 A ► DC OK LED



Item No.	PU
787-712	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 90 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.7 A (230 VAC); ≤ 1.2 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.5 (230 VAC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	2.5 A (24 VDC)
Nominal output power	60 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red)
Operation status indicator	Green LED (24 VDC OK); Red LED (overload)

Efficiency/power losses	
Power loss P_i	≤ 8.3 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	11.5 W (110 VAC / 24 VDC; 2.75 A)
Efficiency (typ.)	86 % (230 VAC)

Circuit protection	
Internal fuse	F 2.5 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

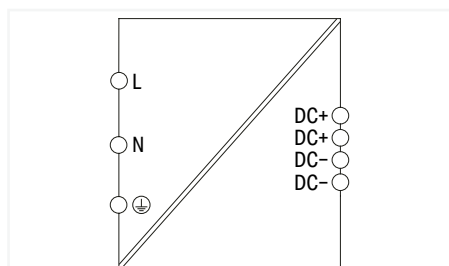
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	480,000 h (per IEC 61709)
Ambient temperature (operation)	-10 ... +70 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-3.3 %/K (> 50 °C; 230 VAC)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 4 mm² / 0.08 ... 4 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 92 mm x 136 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61204-3; cURus 60950-1; cULus 508; ANSI/ISA 12.12.01 (Class I Div. 2); ATEX; IECEx; SEMI F47; UL HazLoc

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 2.5 A ► DC OK LED



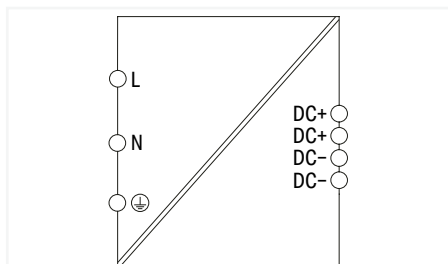
	Item No.	PU
	787-1712	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A (230 VAC); ≤ 1.2 A (115 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	2.5 A (24 VDC; 110 ... 240 VAC); 2 A (24 VDC; 100 ... 240 VAC)
Nominal output power	60 W
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 12 W (230 VAC; 24 VDC; 2.5 A)
Efficiency (typ.)	88 % (230 VAC; 2.5 ADC)
Circuit protection	
Internal fuse	F 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: B6, B10
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	$> 300,000$ h (per IEC 61709)
Ambient temperature (operation)	$-20 \dots +60$ °C
Ambient temperature (storage)	$-25 \dots +75$ °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> 45 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 90 mm x 99 mm
Mounting type	DIN-35 rail; Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A ► DC OK LED



Item No.	PU
787-722	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 61010-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 110 ... 240 VAC
Input voltage range	1 x 100 ... 264 VAC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.7 A (230 VAC); ≤ 1.6 A (115 VAC)
Power factor correction (PFC)	Active

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red)
Operation status indicator	Green LED (24 VDC OK); Red LED (overload)

Efficiency/power losses	
Power loss P_i	≤ 19.5 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	23.5 W (110 VAC / 24 VDC; 5.5 A)
Efficiency (typ.)	86 % (230 VAC)

Circuit protection	
Internal fuse	F 3.15 A / 250 VAC
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

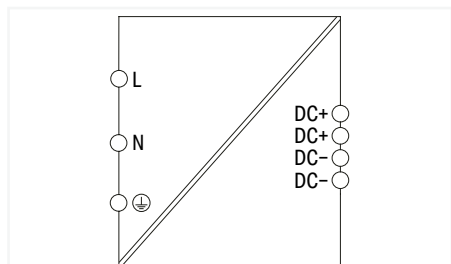
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3000 V
Isolation voltage (pri.-PE, AC)	1500 V
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
Ambient temperature (operation)	-10 ... +60 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	10 ... 96 % (no condensation permissible)
Derating	-4 %/K (> 40 °C; 230 VAC)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 4 mm² / 0.08 ... 4 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	75 mm x 92 mm x 136 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE; UKCA
Standards/specifications	EN 61010-1; EN 61204-3; UL 61010-1; SEMI F47; UL 121201; EN IEC 61010-2-201; UL 61010-2-201

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A ► DC OK LED



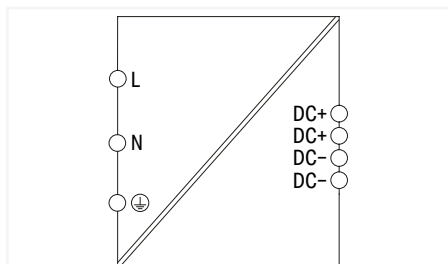
	Item No.	PU
	787-1722	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1 A (230 VAC); ≤ 2 A (115 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC; 110 ... 240 VAC); 4 A (24 VDC; 100 ... 240 VAC)
Nominal output power	120 W
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 19 W
Efficiency (typ.)	88 % (230 VAC; 5 ADC)
Circuit protection	
Internal fuse	F 2.5 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: B6, B10
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 300,000 h (per IEC 61709)
Ambient temperature (operation)	-20 ... +60 °C
Ambient temperature (storage)	-25 ... +75 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	60 mm x 130 mm x 99 mm
Mounting type	DIN-35 rail; Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► DC OK LED



	Item No.	PU
	787-732	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 110 ... 240 VAC
Input voltage range	1 x 100 ... 264 VAC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.2 A (230 VAC); ≤ 3.2 A (115 VAC)
Power factor correction (PFC)	Active

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red)
Operation status indicator	Green LED (24 VDC OK); Red LED (overload)

Efficiency/power losses	
Power loss P_i	≤ 37.5 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	53 W (110 VAC / 24 VDC; 11 A)
Efficiency (typ.)	86 % (230 VAC)

Circuit protection	
Internal fuse	F 5 A / 250 VAC
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

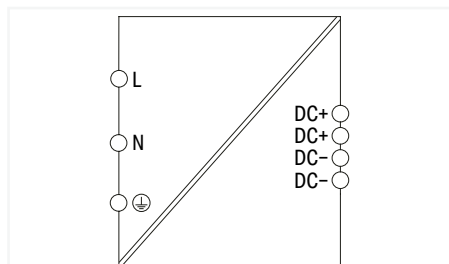
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3000 V
Isolation voltage (pri.-PE, AC)	1500 V
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
Ambient temperature (operation)	-10 ... +70 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2.33 %/K (> 40 °C; 230 VAC)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 4 mm² / 0.08 ... 4 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	110 mm x 136 mm x 92 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE; UKCA
Standards/specifications	EN 61010-1; EN 61204-3; UL 61010-1; UL 61010-2-201; UL 121201; SEMI F47; EN IEC 61010-2-201

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► DC OK LED



	Item No.	PU
	787-1732	1

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 2 A (230 VAC); ≤ 4 A (115 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC; 110 ... 240 VAC); 8 A (24 VDC; 100 ... 240 VAC)
Nominal output power	240 W
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 38 W (230 VAC; 24 VDC; 10 A)
Efficiency (typ.)	91 % (230 VAC; 10 ADC)

Circuit protection	
Internal fuse	F 3.15 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: B6, B10

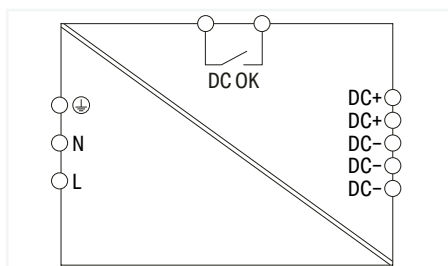
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 300,000 h (per IEC 61709)
Ambient temperature (operation)	-20 ... +60 °C
Ambient temperature (storage)	-25 ... +75 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 165 mm x 99 mm
Mounting type	DIN-35 rail; Screw mount

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A ► DC OK contact



	Item No.	PU
	787-734	1

Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 110 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 3 A (230 VAC); ≤ 6.3 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.94 (230 VAC); ≥ 0.98 (115 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
Operation status indicator	Green LED (24 VDC OK); Red LED (overload)

Efficiency/power losses	
Power loss P_i	≤ 65 W (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	107 W (110 VAC / 24 VDC; 23 A)
Efficiency (typ.)	90 %

Circuit protection	
Internal fuse	T 10 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

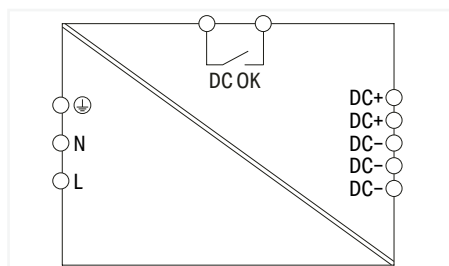
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 250,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	See instruction manual

Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm² / 0.5 ... 6 mm² / 20 ... 10 AWG
Connection type	Output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	1.5 ... 16 mm² / 1.5 ... 16 mm² / 16 ... 6 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	115 mm x 136 mm x 144 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61204-3; EN 61000-6-2; EN 61000-6-4; UL 60950-1; UL 508; SEMI F47

Power supply ► Eco ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 40 A ► DC OK contact



	Item No.	PU
	787-736	1

Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 110 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC; 130 ... 373 VDC
Input voltage derating	-2 %/V (< 100 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 6 A (230 VAC); ≤ 12 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.94 (230 VAC); ≥ 0.98 (115 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 17 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
Operation status indicator	Green LED (24 VDC OK); Red LED (overload)

Efficiency/power losses	
Power loss P_i	≤ 107 W (230 VAC; nominal load)
Efficiency (typ.)	90 %

Circuit protection	
Internal fuse	T 20 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 13 A, 16 A, 20 A; Tripping characteristic: B or C

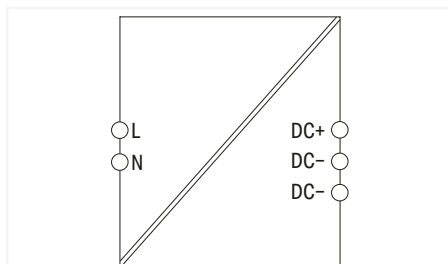
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 250,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> 55 °C)

Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm² / 0.5 ... 6 mm² / 20 ... 10 AWG
Connection type	Output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	1.5 ... 16 mm² / 1.5 ... 16 mm² / 16 ... 6 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	170 mm x 136 mm x 150 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61204-3; EN 61000-6-2; EN 61000-6-4; UL 60950-1; UL 508; SEMI F47

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 0.5 A ► DC OK LED



Item No.	PU
787-1200	1

Features:

- Switched-mode power supply
- Stepped profile, ideal for distribution boards/boxes
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Series operation
- Electrically isolated output voltage (SELV) per EN 62368/UL 62368 and EN 60335-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Input voltage derating	-2 %/V (< 100 VAC)
Nominal mains frequency range	47 ... 63 Hz
Input current I_i	≤ 0.27 A (100 VAC; 0.5 ADC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	None
Mains failure hold-up time	≥ 100 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Nominal output current $I_{o, nom}$	0.5 A
Nominal output power	12 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.2 W
Power loss (max.) $P_{i(max)}$	2.5 W (100 VAC / 24 VDC; 0.5 A)
Efficiency (typ.)	83 % (230 VAC; nominal load); 82 % (110 VAC; nominal load)

Circuit protection	
Internal fuse	T 1 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

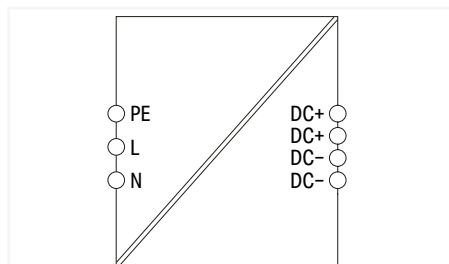
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Reverse voltage protection	Yes
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	≤ 31 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	No/Yes, for 2 devices of the same type
MTBF	> 700,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-2.6 %/K (> 55 °C)

Connection data	
Connection type	Input
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm² / 0.2 ... 1.5 mm² / 24 ... 14 AWG
Cable length (max.)	30 m

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	18 mm x 90 mm x 52.5 mm
Mounting type	DIN-35 rail; Screw mount (back/side)

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368; UL 62368; UL 508

Power supply ▶ Compact ▶ Phases: 1 ▶ Nominal output voltage (DC): 12 V ▶ Nominal output current: 2.5 A ▶ DC OK LED



	Item No.	PU
	787-1201	1

Features:

- Stepped profile for installation in standard distribution boards
- Removable front panel and screw mounts for alternative installation in distribution boxes or devices
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC; 140 ... 340 VDC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-1.5 %/V (< 100 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A (100 VAC; 2.5 ADC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 1000 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	2.5 A
Nominal output power	30 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.5 W
Power loss (max.) $P_{i, (max.)}$	4.5 W (100 VAC / 12 VDC; 2.5 A)
Efficiency (typ.)	88 % (230 VAC; nominal load); 87.5 % (110 VAC; nominal load)

Circuit protection	
Internal fuse	T 1 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A or higher; Tripping characteristic: B

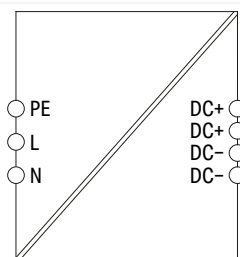
Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 20 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes, for devices of the same type/Yes, for 2 devices of the same type
MTBF	> 3,500,000 h (at 25 °C; per IEC 61709); > 800,000 h (at 40 °C; per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-0.8 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG
Cable length (max.)	30 m

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	54 mm x 90 mm x 52.5 mm
Note (dimensions)	Depth: 48 mm (without cover)
Mounting type	DIN-35 rail; Screw mount (back/side)

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 5 A ► DC OK LED



Item No.	PU
787-1211	1

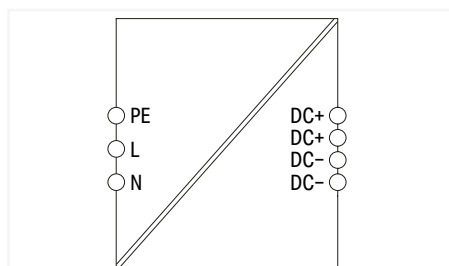
Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Removable front panel and screw mounts for alternative installation in distribution boxes or devices
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC; 140 ... 340 VDC
Input voltage range	1 x 85 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (< 100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 600 ms (230 VAC); ≥ 12 ms (110 VAC)
Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A
Nominal output power	60 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.22 ... 1.7 \times I_{o, nom}$); Hiccup in the event of a short circuit or permanent overload
Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 0.6 W
Power loss (max.) $P_{i, (max.)}$	9 W (100 VAC / 12 VDC; 2.5 A)
Efficiency (typ.)	88.5 % (230 VAC; nominal load); 87.5 % (110 VAC; nominal load)
Circuit protection	
Internal fuse	T 3.15 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A or higher; Tripping characteristic: B
Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Reverse voltage protection	Yes
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 20 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes, for devices of the same type/Yes, for 2 devices of the same type
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-3 %/K (> 45 °C and $U_o = 90$ VAC); -2.3 %/K (> 50 °C and $U_o = 230$ VAC)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG
Cable length (max.)	30 m
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 90 mm x 52.5 mm
Note (dimensions)	Depth: 48 mm (without cover)
Mounting type	DIN-35 rail; Screw mount (back/side)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 8 A ► DC OK LED

1



	Item No.	PU
	787-1221	1

Features:

- Stepped profile for installation in standard distribution boards
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC; 140 ... 340 VDC
Input voltage range	1 x 90 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (< 100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.6 A (100 VAC; 8 ADC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 50 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	8 A
Nominal output power	96 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.7 W
Power loss (max.) $P_{i, (max)}$	11.8 W (100 VAC / 12 VDC; 8 A)
Efficiency (typ.)	91.5 % (230 VAC; nominal load); 90 % (110 VAC; nominal load)

Circuit protection	
Internal fuse	T 3.15 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A or higher; Tripping characteristic: B

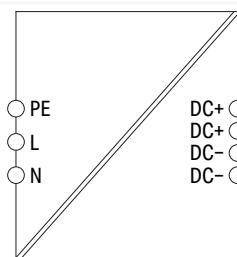
Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 20 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 1,300,000 h (at 25 °C; per IEC 61709); > 250,000 h (at 40 °C; per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-2 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG
Cable length (max.)	30 m

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	108 mm x 90 mm x 52.5 mm
Mounting type	DIN-35 rail; Screw mount (back)

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 1.3 A ► DC OK LED



Item No.	PU
787-1202	1

Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Removable front panel and screw mounts for alternative installation in distribution boxes or devices
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (< 100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 70 ms

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	1.3 A
Nominal output power	31.2 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.43 W
Power loss (max.) $P_{i, (max.)}$	5.5 W (100 VAC / 24 VDC; 1.3 A)
Efficiency (typ.)	87 % (230 VAC); 82 % (110 VAC)

Circuit protection	
Internal fuse	T 1 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

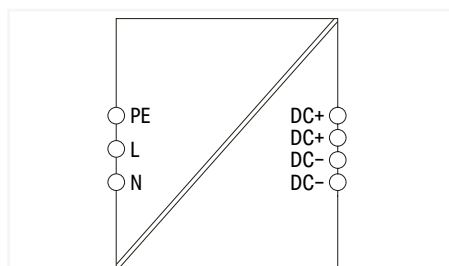
Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 31 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 700,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> 55 °C)

Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	54 mm x 90 mm x 52.5 mm
Note (dimensions)	Depth: 48 mm (without cover)
Mounting type	DIN-35 rail; Screw mount (back/side)

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 2.5 A ► DC OK LED



	Item No.	PU
	787-1212	1

Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Removable front panel and screw mounts for alternative installation in distribution boxes or devices
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (< 100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.5 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 60 ms

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	2.5 A; 2 A (< 110 VAC)
Nominal output power	60 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.6 W
Power loss (max.) $P_{i, (max.)}$	9 W (100 VAC / 24 VDC; 2.5 A)
Efficiency (typ.)	89 % (230 VAC); 87 % (110 VAC)

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 31 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> 55 °C)

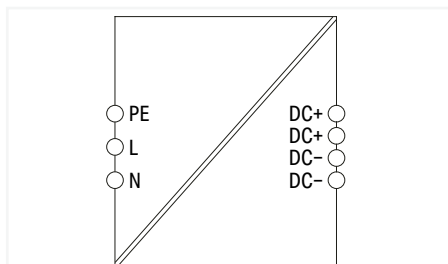
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 90 mm x 52.5 mm
Note (dimensions)	Depth: 48 mm (without cover)
Mounting type	DIN-35 rail; Screw mount (back/side)

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 4.2 A ► DC OK LED

1



	Item No.	PU
	787-1216	1

Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Screw mounts for alternative installation in distribution boxes or devices
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (< 100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 2.5 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 50 ms

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	4.2 A; 3.3 A (< 110 VAC)
Nominal output power	100 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.7 W
Power loss (max.) $P_{i, (max.)}$	15 W (100 VAC / 24 VDC; 4.2 A)
Efficiency (typ.)	90 % (230 VAC); 87 % (110 VAC)

Circuit protection	
Internal fuse	T 3.15 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

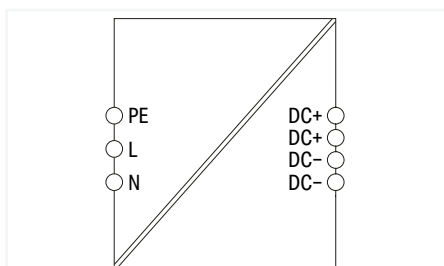
Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 31 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> 55 °C)

Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	108 mm x 90 mm x 52.5 mm
Note (dimensions)	Depth: 48 mm (without cover)
Mounting type	DIN-35 rail; Screw mount (back/side)

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 6 A ► DC OK LED



	Item No.	PU
	787-1226	1

Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Screw mounts for alternative installation in distribution boxes or devices
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1 and UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 120 VAC; 200 ... 240 VAC
Input voltage range	1 x 90 ... 132 VAC; 180 ... 264 VAC; 250 ... 375 VDC
Input voltage derating	-2 %/V (< 100 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 3.8 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 30 ms

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 27 VDC (adjustable)
Nominal output current $I_{o, nom}$	6 A; 4.8 A (< 110 VAC)
Nominal output power	150 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and communication	
Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 0.4 W
Power loss (max.) $P_{i, (max.)}$	16.5 W (100 VAC / 24 VDC; 6 A)
Efficiency (typ.)	90 % (230 VAC); 89 % (110 VAC)

Circuit protection	
Internal fuse	T 3.15 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

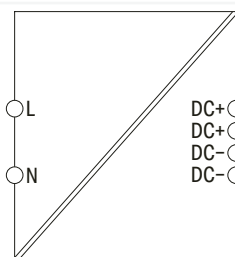
Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 31 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> 55 °C)

Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG

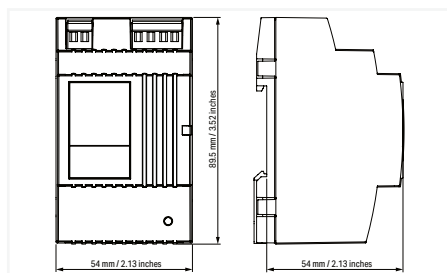
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	144 mm x 90 mm x 52.5 mm
Note (dimensions)	Depth: 48 mm (without cover)
Mounting type	DIN-35 rail; Screw mount (back)

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 2 A



Item No.	PU
787-1001	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	$I_o \leq 1.5 \text{ A}$ (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.4 \text{ A}$ (230 VAC); $\leq 0.6 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $\geq 10 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10.5 ... 18 VDC (adjustable)
Nominal output current $I_{o, nom}$	2 A (12 VDC); 1.4 A (12 VDC; in any mounting position); 0.75 A (18 VDC)
Nominal output power	24 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 2.6 \text{ W}$; $\leq 6 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, (max)}$	6 W (100 VAC / 12 VDC; 2 A)
Efficiency (typ.)	80 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

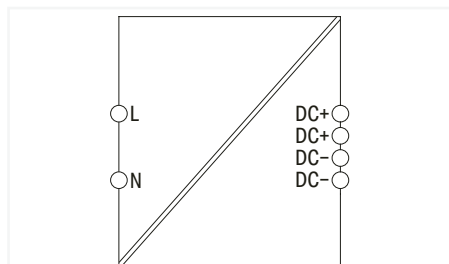
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 30 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +60 °C (device starts at -40 °C (type-tested))
Ambient temperature UL (operation at U_o)	-25 ... +55 °C
Ambient temperature (storage)	-25 ... +80 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

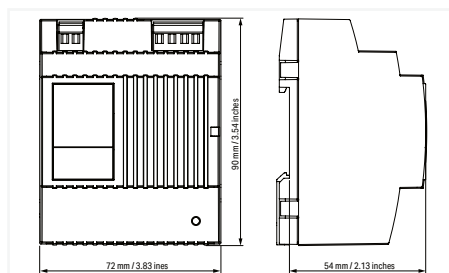
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	54 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 4 A



Item No.	PU
787-1011	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	$I_o \leq 3.5 \text{ A} (< 100 \text{ VAC})$
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.5 \text{ A} (230 \text{ VAC}); \leq 0.9 \text{ A} (110 \text{ VAC})$
Inrush current	$\leq 30 \text{ A} (NTC)$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms} (230 \text{ VAC}); \geq 10 \text{ ms} (110 \text{ VAC})$

Output	
Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	10.5 ... 15.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	4 A (12 VDC); 2.4 A (in any mounting position)
Nominal output power	48 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 2.2 \text{ W}; \leq 8.5 \text{ W} (230 \text{ VAC}; \text{nominal load})$
Power loss (max.) $P_{i, (max.)}$	9 W (100 VAC / 12 VDC; 4 A)
Efficiency (typ.)	85 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

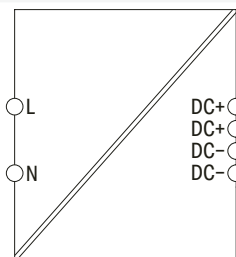
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 30 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$ (type-tested))
Ambient temperature UL (operation at U_o)	$-25 \dots +55 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-25 \dots +80 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ }^\circ\text{C/K}$ ($> 45 \text{ }^\circ\text{C}$)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

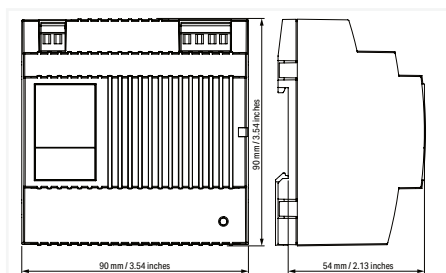
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 12 V ► Nominal output current: 6.5 A



Item No.	PU
787-1021	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	$I_o \leq 6 \text{ A}$ (< 100 VAC); $I_o \leq 5.5 \text{ A}$ (< 90 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 0.9 \text{ A}$ (230 VAC); $\leq 1.6 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 100 \text{ ms}$ (230 VAC); $\geq 15 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	12 VDC (SELV)
Output voltage range	10.5 ... 15.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	6.5 A (12 VDC); 3.9 A (12 VDC; in any mounting position)
Nominal output power	78 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 1 \text{ W}$; $\leq 15 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	15 W (100 VAC / 12 VDC; 6.5 A)
Efficiency (typ.)	87 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

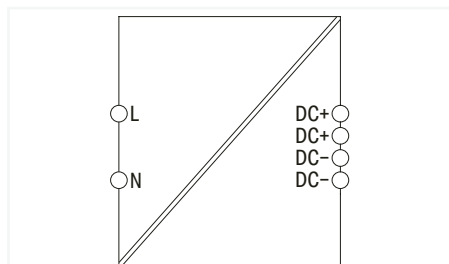
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 30 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +60 °C (device starts at -40 °C (type-tested))
Ambient temperature UL (operation at U_n)	-25 ... +55 °C
Ambient temperature (storage)	-25 ... +80 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

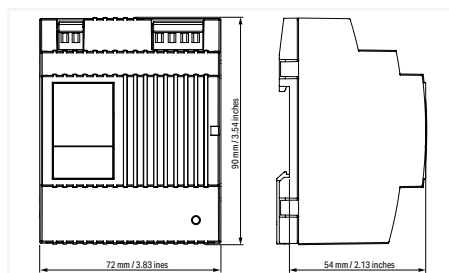
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	90 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 18 V ► Nominal output current: 2.4 A



Item No.	PU
787-1017	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	$I_o \leq 2 \text{ A}$ (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.5 \text{ A}$ (230 VAC); $\leq 0.9 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 10 \text{ ms}$ (230 VAC); $\geq 10 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, nom}$	18 VDC (SELV)
Output voltage range	15 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	2.4 A (18 VDC); 2 A (24 VDC; in horizontal mounting position)
Nominal output power	43 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 2.6 \text{ W}$; $\leq 8.1 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	8.2 W (100 VAC / 18 VDC; 2.4 A)
Efficiency (typ.)	84 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

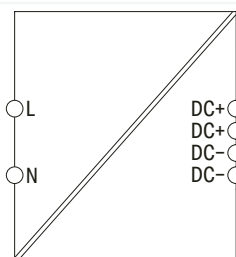
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 40 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +60 °C (device starts at -40 °C (type-tested))
Ambient temperature UL (operation at U_o)	-25 ... +55 °C
Ambient temperature (storage)	-25 ... +80 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

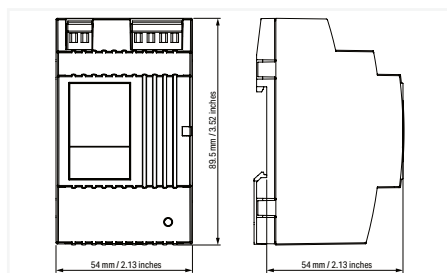
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 1.3 A



Item No.	PU
787-1002	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	$I_o \leq 1 \text{ A}$ (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.5 \text{ A}$ (230 VAC); $\leq 0.7 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $\geq 10 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	1.3 A (24 VDC); 0.9 A (in any mounting position)
Nominal output power	31.2 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 2.6 \text{ W}$; $\leq 7 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	7.3 W (100 VAC / 24 VDC; 1.3 A)
Efficiency (typ.)	82 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

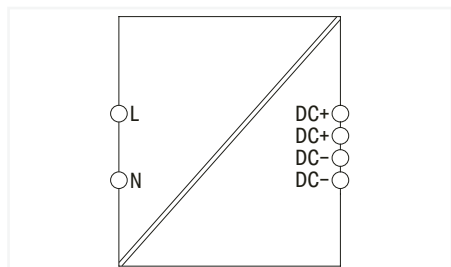
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 40 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +60 °C (device starts at -40 °C (type-tested))
Ambient temperature UL (operation at U_o)	-25 ... +55 °C
Ambient temperature (storage)	-25 ... +80 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

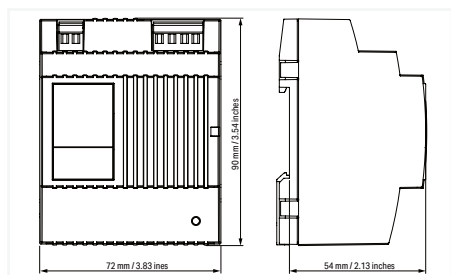
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	54 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 2.5 A



Item No.	PU
787-1012	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	$I_o \leq 2 \text{ A}$ (< 100 VAC); $I_o \leq 1.8 \text{ A}$ (< 90 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.6 \text{ A}$ (230 VAC); $\leq 1.4 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $\geq 10 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, nom}$	2.5 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	60 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 2.2 \text{ W}$; $\leq 8.5 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	10.5 W (100 VAC / 24 VDC; 2.5 A)
Efficiency (typ.)	88 %

Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

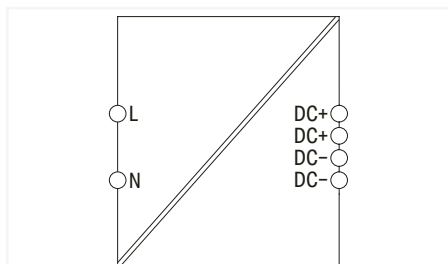
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 40 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +60 °C (device starts at -40 °C (type-tested))
Ambient temperature UL (operation at $U_{i, n}$)	-25 ... +55 °C
Ambient temperature (storage)	-25 ... +80 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

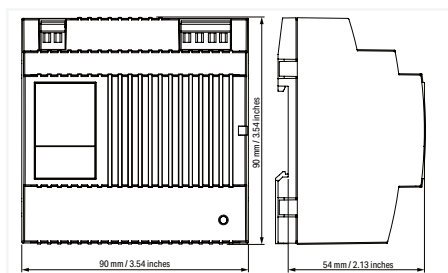
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 4 A



Item No.	PU
787-1022	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	Upon request
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.9 \text{ A}$ (230 VAC); $\leq 1.6 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 100 \text{ ms}$ (230 VAC); $\geq 15 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	4 A (24 VDC); 2.4 A (in any mounting position)
Nominal output power	96 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 0.8 \text{ W}$; $\leq 13.1 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	14.8 W (264 VAC / 24 VDC; 4 A)
Efficiency (typ.)	88 %

Circuit protection	
Internal fuse	T 4 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

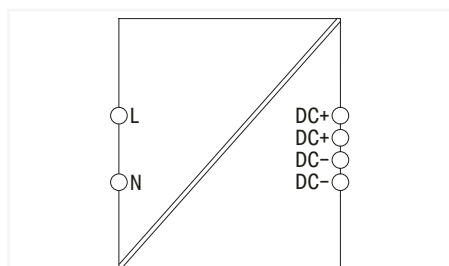
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 40 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$ (type-tested))
Ambient temperature UL (operation at U_n)	$-25 \dots +55 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-25 \dots +80 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ }^\circ\text{C}/\text{K}$ ($> 45 \text{ }^\circ\text{C}$)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

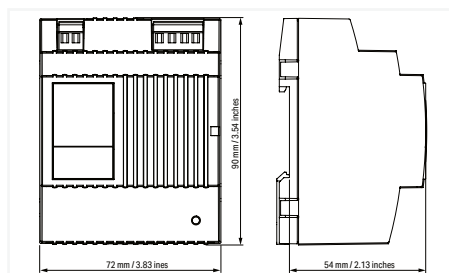
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	90 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV

Power supply ▶ Compact ▶ Phases: 1 ▶ Nominal output voltage (DC): 5 V ▶ Nominal output current: 5.5 A ▶ DC OK signal



Item No.	PU
787-1020	1

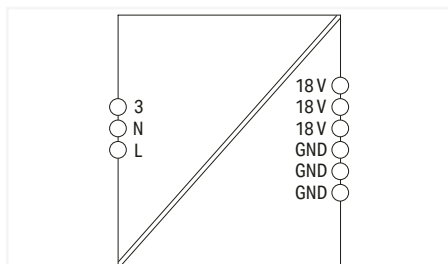


Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.29 \text{ A}$ (230 VAC); $\leq 0.56 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $\geq 10 \text{ ms}$ (110 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	5 VDC (SELV)
Output voltage range	4.5 ... 8.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5.5 A (5 VDC); 3.5 A (in any mounting position)
Nominal output power	27.5 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current
Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	$\leq 2.4 \text{ W}$; $\leq 9.4 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	9.9 W (264 VAC / 5 VDC; 5.5 A)
Efficiency (typ.)	75 %
Circuit protection	
Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	$\leq 16 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$ (type-tested))
Ambient temperature UL (operation at U_o)	$-25 \dots +55 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-25 \dots +80 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ }^\circ\text{C/K}$ ($> 45 \text{ }^\circ\text{C}$)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV

Power supply ► Compact ► Phases: 1 ► Nominal output voltage (DC): 18 V ► Nominal output current: 1.25 A ► DC OK LED



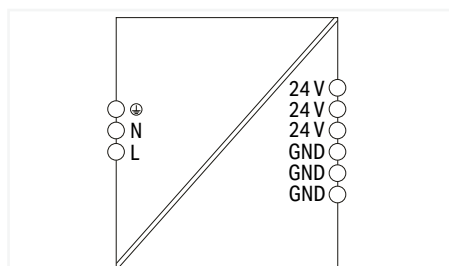
Item No.	PU
787-2857	1

Features:

- WAGO's 787-2857 Switched-Mode Power Supply is specially designed to supply the 753-647 DALI Multi-Master Module.
- Several DALI Multi-Master Modules can be supplied in parallel.
- Stepped profile for installation in standard distribution boards
- Connection technology with Push-in CAGE-CLAMP®
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN/UL 61010-1 or EU/UL 61010-2-201

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 100 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 0.4 A (100 VAC); ≤ 0.2 A (240 VAC)
Inrush current	≤ 24 A (NTC)
Mains failure hold-up time	≥ 95 ms (230 VAC)
Output	
Nominal output voltage $U_{o, nom}$	18 VDC (SELV)
Nominal output current $I_{o, nom}$	1.25 A (18 VDC)
Nominal output power	22 W
Residual ripple	≤ 60 mV (peak-to-peak)
Overload behavior	Hiccup
Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	≤ 0.5 W (230 VAC; no load); ≤ 4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	5 W (110 VAC / 24 VDC; 1.35 A)
Efficiency (typ.)	88 %
Circuit protection	
Internal fuse	T 1.25 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3920 V
Isolation voltage (pri.-PE, AC)	2470 V
Isolation voltage (sec.-PE)	0.5 VDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m.a.s.l.); II (> 2000 m.a.s.l.)
Pollution degree	2
Overvoltage protection; secondary	≤ 32 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 2,500,000$ h (per EN/IEC 61709 at $+40$ °C)
Ambient temperature (operation)	$-25 \dots +70$ °C (nominal mounting position); $-25 \dots +55$ °C (in any mounting position)
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1.7 %/K (> 55 °C)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.25 ... 2.5 mm ² / 0.25 ... 2.5 mm ² / 20 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 16 AWG
Cable length (max.)	30 m
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	36 mm x 90 mm x 55 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 61010-1; EN 61010-2-201; cULus 61010-1; cULus 61010-2-201; DNV

Power supply ▶ Compact ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 1.25 A



Item No.	PU
787-2850	1

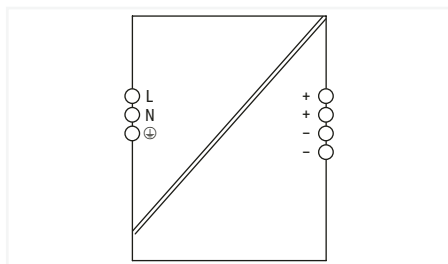
Features:

- Stepped profile for installation in standard distribution boards
- Connection technology with Push-in CAGE CLAMP®
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201

Input	
Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x 110 ... 240 VAC
Input voltage range	1 x 100 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 0.55 \text{ A}$ (110 VAC); $\leq 0.33 \text{ A}$ (240 VAC)
Inrush current	$\leq 24 \text{ A}$ (NTC)
Mains failure hold-up time	$\geq 95 \text{ ms}$ (230 VAC)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 24 VDC (fixed setting)
Nominal output current $I_{o\text{nom}}$	1.25 A (24 VDC)
Nominal output power	30 W
Residual ripple	$\leq 60 \text{ mV}$ (peak-to-peak)
Overload behavior	Hiccup
Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	$\leq 0.5 \text{ W}$; $\leq 4 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i\text{(max.)}}$	5 W (110 VAC / 24 VDC; 1.35 A)
Efficiency (typ.)	88 %
Circuit protection	
Internal fuse	T 1.25 A / 250 VAC
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3920 V
Isolation voltage (pri.-PE, AC)	2470 V
Isolation voltage (sec.-PE)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III
Pollution degree	2
Overvoltage protection; secondary	$\leq 32 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 2,500,000 \text{ h}$ (per EN/IEC 61709 at +40 °C)
Ambient temperature (operation)	-25 ... +70 °C (nominal mounting position; -25 ... +55 °C (in any mounting position))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1.7 %/K ($> 55 \text{ °C}$)
Connection data	
Connection type	Input
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.25 ... 2.5 mm² / 0.25 ... 2.5 mm² / 20 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm² / 0.2 ... 1.5 mm² / 24 ... 16 AWG
Cable length (max.)	30 m
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	36 mm x 90 mm x 55 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61204-3; EN 61010-1; EN 61010-2-201; cULus 61010-1; cULus 61010-2-201; DNV; SEMI F47

Power supply ► Base ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A ► DC OK LED

1



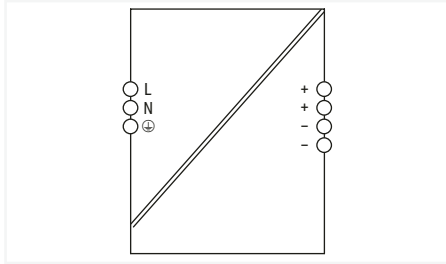
Item No.	PU
2587-2144	1

Features:

- Optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination
- Electrically isolated output voltage (SELV) per EN 62368-1/UL 61010-1

Input	
Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC (Derating -1 %/V for voltage < 100 VAC)
Nominal mains frequency range	50 Hz / 60 Hz
Input current I_i	≤ 4 A
Inrush current	≤ 35 A (at 230 VAC / 25 °C)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 50 ms (230 VAC)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	23.5 ... 28 VDC (adjustable)
Nominal output current $I_{o\text{nom}}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	Optical status indication (DC OK)
Efficiency/power losses	
Power loss P_i	≤ 5 W (standby); ≤ 16.8 W (Full load)
Efficiency (typ.)	88 %
Circuit protection	
Internal fuse	T 5 A / 250 V
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2210 V
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m); II (> 2000 m)
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000$ h (at 25 °C; per IEC 61709; SN 29500)
Ambient temperature (operation)	-30 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-2.4 W/°C (> 45 °C and < 200 V); -2.4 W/°C (> 50 °C and ≥ 200 V)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 6 mm ² / 0.2 ... 6 mm ² / 24 ... 10 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	35 mm x 125 mm x 110 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 55032; EN 55035; EN IEC 61000-3-2; EN 61000-3-3; EN IEC 61000-6-4; EN IEC 61000-6-2; UL 61010-1; UL 61010-2-201

Power supply ► Base ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► DC OK LED



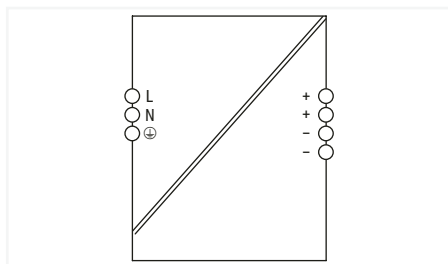
Item No.	PU
2587-2146	1

Features:

- Optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination
- Electrically isolated output voltage (SELV) per EN 62368-1/UL 61010-1

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC (Derating -1 %/V for voltage < 100 VAC)
Nominal mains frequency range	50 Hz / 60 Hz
Input current I_i	≤ 3.5 A
Inrush current	≤ 15 A (at 230 VAC / 25 °C)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 22 ms (230 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23.5 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	Optical status indication (DC OK)
Efficiency/power losses	
Power loss P_i	≤ 5 W (230 VAC; no load); ≤ 24.6 W (230 VAC; nominal load)
Efficiency (typ.)	91 %
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2210 V
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m); II (> 2000 m)
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 1,000,000 h (at 25 °C; per IEC 61709; SN 29500)
Ambient temperature (operation)	-30 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-4.8 W/°C (> 45 °C and < 200 V); -4.8 W/°C (> 50 °C and ≥ 200 V)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 6 mm² / 0.2 ... 6 mm² / 24 ... 10 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	52 mm x 125 mm x 117 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 55032; EN 55035; EN IEC 61000-3-2; EN 61000-3-3; EN IEC 61000-6-4; EN IEC 61000-6-2; UL 61010-1; UL 61010-2-201

Power supply ► Base ► Phases: 1 ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A ► DC OK LED



	Item No.	PU
	2587-2147	1

Features:

- Optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination
- Electrically isolated output voltage (SELV) per EN 62368-1/UL 61010-1

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC (Derating -1 %/V for voltage < 100 VAC)
Nominal mains frequency range	50 Hz / 60 Hz
Input current I_i	≤ 7 A
Inrush current	≤ 20 A (at 230 VAC / 25 °C)
Power factor	≥ 0.98 (230 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 16 ms (230 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23.5 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A
Nominal output power	480 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	Optical status indication (DC OK)
Efficiency/power losses	
Power loss P_i	≤ 5 W (no load); ≤ 32.5 W (Full load)
Efficiency (typ.)	94 %
Circuit protection	
Internal fuse	T 8 A / 250 V
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2210 V
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m); II (> 2000 m)
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000$ h (at 25 °C; per IEC 61709; SN 29500)
Ambient temperature (operation)	-30 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-9.6 W/°C (> 45 °C and < 200 V); -9.6 W/°C (> 50 °C and ≥ 200 V)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 10 mm² / 0.2 ... 10 mm² / 24 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	56 mm x 125 mm x 138 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 55032; EN 55035; EN IEC 61000-3-2; EN 61000-3-3; EN IEC 61000-6-4; EN IEC 61000-6-2; UL 61010-1; UL 61010-2-201



WAGO Power Supplies; 3-Phase

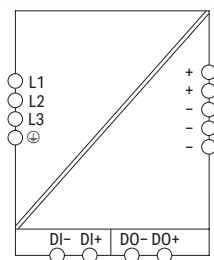
WAGO Power Supplies; 3-Phase

		Page
	Pro/Pro 2 Power Supplies; Switched-Mode Power Supplies; 787 / 2787 Series	106
	Classic Switched-Mode Power Supplies; 787 Series	140
	Eco/Eco 2 Switched-Mode Power Supplies; 787 / 2687 Series	144

WAGO Power Supplies; 3-Phase Selection Guide

Product Family	Nominal voltage (output)	SELV / PELV	Nominal current (output) [ACD]	Input, 2-phase	Input, 3-phase	Standards/Approvals					DC OK LED	DC OK signal	DC OK contact	Communication capability	TopBoost	PowerBoost	with protective coating	Efficiency typ.	Surrounding air temperature	Item No.
						UL 60950	UL 508	UL 61010	DNV	ANSI/SA 12.12.1										
Pro 2	24 V	■	5 A	■	■			■					■	■	■		92.5 %	-25 ... +70 °C	2787-2344	
Pro 2	24 V	■	5 A	■	■			■	■				■	■	■		92.5 %	-25 ... +70 °C	2787-2344/000-030	
Pro 2	24 V	■	5 A		■			■	■				■	■	■	■	92.5 %	-25 ... +70 °C	2787-2344/000-070	
Eco	24 V	■	6.25 A	■	■	■	■					■					87 %	-25 ... +70 °C	787-738	
Eco	24 V	■	10 A	■	■	■	■					■					89 %	-25 ... +70 °C	787-740	
Eco 2	24 V	■	10 A		■			■				■					92.5 %	-25 ... +70 °C	2687-2346	
Classic	24 V	■	10 A	■	■	■	■					■					90 %	-25 ... +70 °C	787-1640	
Pro	24 V	■	10 A	■	■	■	■					■		■	■		91.7 %	-25 ... +70 °C	787-840	
Pro	24 V	■	10 A	■	■	■	■				■		■	■	■		91.7 %	-25 ... +70 °C	787-850	
Pro 2	24 V	■	10 A		■			■					■	■	■		94.1 %	-25 ... +70 °C	2787-2346	
Pro 2	24 V	■	10 A		■			■	■				■	■	■		94.1 %	-25 ... +70 °C	2787-2346/000-030	
Pro 2	24 V	■	10 A		■			■	■				■	■	■	■	94.1 %	-25 ... +70 °C	2787-2346/000-070	
Eco	24 V	■	20 A	■	■	■	■					■					90 %	-25 ... +70 °C	787-742	
Eco	24 V	■	20 A	■	■							■					92 %	-20 ... +70 °C	787-2742	
Classic	24 V	■	20 A	■	■	■	■					■					92 %	-25 ... +70 °C	787-1642	
Pro	24 V	■	20 A	■	■	■	■					■		■	■		92.9 %	-25 ... +70 °C	787-842	
Pro	24 V	■	20 A	■	■	■	■				■		■	■	■		92.9 %	-25 ... +70 °C	787-852	
Pro 2	24 V	■	20 A		■			■					■	■	■		95.9 %	-25 ... +70 °C	2787-2347	
Pro 2	24 V	■	20 A		■			■	■				■	■	■		95.9 %	-25 ... +70 °C	2787-2347/000-030	
Pro 2	24 V	■	20 A		■			■	■				■	■	■	■	95.9 %	-25 ... +70 °C	2787-2347/000-070	
Eco	24 V	■	40 A	■	■							■					92.3 %	-20 ... +70 °C	787-2744	
Classic	24 V	■	40 A	■	■	■	■					■					92 %	-25 ... +70 °C	787-1644	
Pro	24 V	■	40 A	■	■	■	■					■		■	■		93.6 %	-25 ... +55 °C	787-844	
Pro	24 V	■	40 A	■	■	■	■					■		■	■		93.6 %	-25 ... +55 °C	787-844/000-002	
Pro	24 V	■	40 A	■	■	■	■				■		■	■	■		93.6 %	-25 ... +55 °C	787-854	
Pro 2	24 V	■	40 A		■			■					■	■	■		96.1 %	-25 ... +70 °C	2787-2348	
Pro 2	24 V	■	40 A		■			■	■				■	■	■	■	96.1 %	-25 ... +70 °C	2787-2348/000-070	
Pro 2	24 V	■	40 A		■			■	■				■	■	■		96.1 %	-25 ... +70 °C	2787-2348/000-030	
Eco 2	24 V	■	5 A		■			■				■					88 %	-25 ... +70 °C	2687-2344	
Pro	48 V	■	10 A	■	■	■	■					■		■	■		93 %	-25 ... +70 °C	787-845	
Pro 2	48 V	■	10 A	■	■			■					■	■	■		95 %	-25 ... +70 °C	2787-2357	
Pro	48 V	■	20 A	■	■	■	■					■		■	■		94.4 %	-25 ... +70 °C	787-847	
Pro 2	48 V	■	20 A		■			■					■	■	■		96 %	-25 ... +70 °C	2787-2358	

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2344	1

Features:

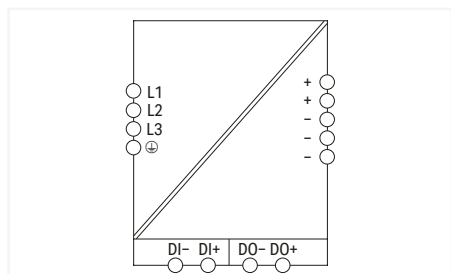
- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.4 \text{ A}$ (400 VAC; 24 VDC / 5 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 7.5 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Efficiency (typ.)	92.5 % (230 VAC; 5 A; 25 °C)
Circuit protection	
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,400,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost



Similar to illustration



Item No.	PU
2787-2344/000-030	1

Features:

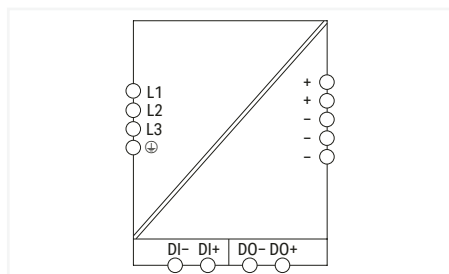
- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.4 \text{ A}$ (400 VAC; 24 VDC / 5 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 7.5 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Efficiency (typ.)	92.5 % (230 VAC; 5 A; 25 °C)
Circuit protection	
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,400,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 5 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



Similar to illustration



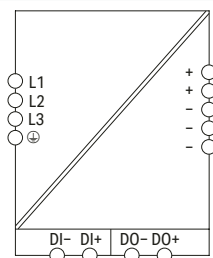
Item No.	PU
2787-2344/000-070	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.4 \text{ A}$ (400 VAC; 24 VDC / 5 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 7.5 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Efficiency (typ.)	92.5 % (230 VAC; 5 A; 25 °C)
Circuit protection	
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,400,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; ISA S71.04:1985; G3 Group A; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2346	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (400 VAC; 24 VDC / 10 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	$\leq 3 \text{ W}$ (standby); $\leq 3 \text{ W}$ (no load); $\leq 18 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	94.1 % (400 VAC; 10 A; 25 °C)

Circuit protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m

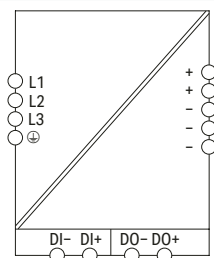
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2346/000-030	1

Features:

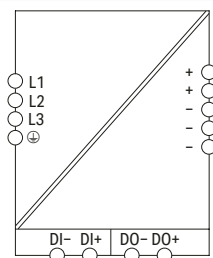
- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i\text{nom}}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (400 VAC; 24 VDC / 10 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o\text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	$\leq 3 \text{ W}$ (standby); $\leq 3 \text{ W}$ (no load); $\leq 18 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	94.1 % (400 VAC; 10 A; 25 °C)
Circuit protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



Item No.	PU
2787-2346/000-070	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i\text{nom}}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (400 VAC; 24 VDC / 10 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o\text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	$\leq 3 \text{ W}$ (standby); $\leq 3 \text{ W}$ (no load); $\leq 18 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	94.1 % (400 VAC; 10 A; 25 °C)

Circuit protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 1,000,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m

Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail

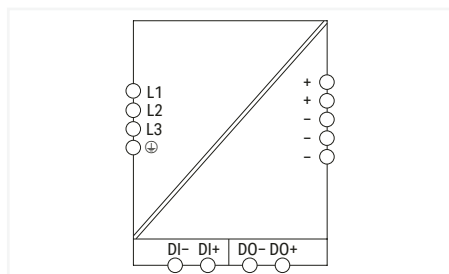
Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; ISA S71.04:1985; G3 Group A; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost



Similar to illustration



Item No.	PU
2787-2347	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 24 VDC / 20 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %

Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)

Efficiency/power losses	
Power loss P_i	$\leq 3.6 \text{ W}$ (standby); $\leq 4.4 \text{ W}$ (no load); $\leq 21 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	95.9 % (400 VAC; 20 A; 25 °C)

Circuit protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)

Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m

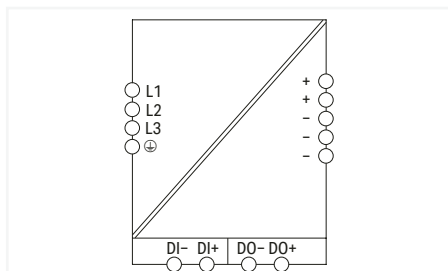
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



Item No.	PU
2787-2347/000-070	1

Features:

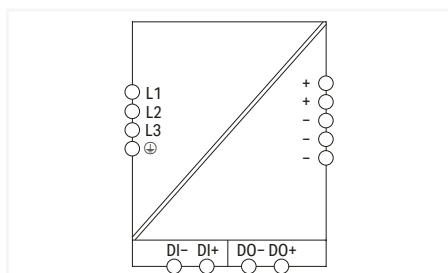
- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 24 VDC / 20 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	$\leq 3.6 \text{ W}$ (standby); $\leq 4.4 \text{ W}$ (no load); $\leq 21 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	95.9 % (400 VAC; 20 A; 25 °C)
Circuit protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; ISA S71.04:1985; G3 Group A; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost



Item No.	PU
2787-2347/000-030	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i\text{nom}}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 24 VDC / 20 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o\text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	$\leq 3.6 \text{ W}$ (standby); $\leq 4.4 \text{ W}$ (no load); $\leq 21 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	95.9 % (400 VAC; 20 A; 25 °C)
Circuit protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail

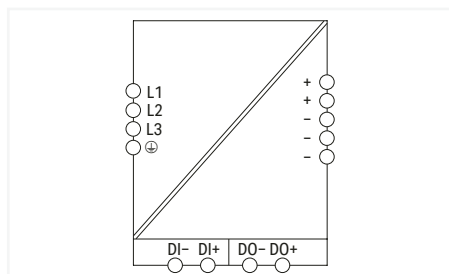
Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost



Similar to illustration



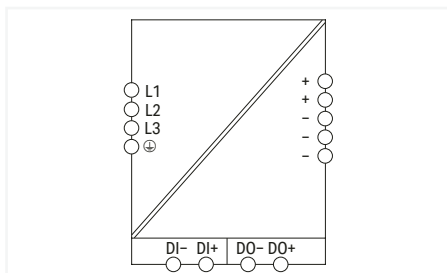
Item No.	PU
2787-2348	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 1.7 \text{ A}$ (400 VAC; 24 VDC / 40 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 60 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Efficiency (typ.)	96.1 % (400 VAC; 40 A; 25 °C)
Circuit protection	
Internal fuse	3 x T 3.2 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	120 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost



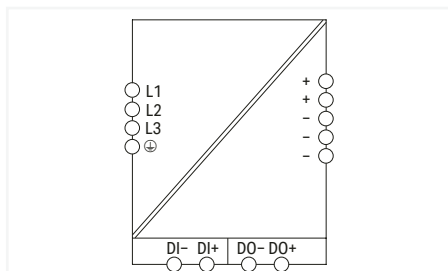
Item No.	PU
2787-2348/000-030	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, \text{nom}}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 1.7 \text{ A}$ (400 VAC; 24 VDC / 40 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 60 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Efficiency (typ.)	96.1 % (400 VAC; 40 A; 25 °C)
Circuit protection	
Internal fuse	3 x T 3.2 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	120 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost ▶ Protective coating



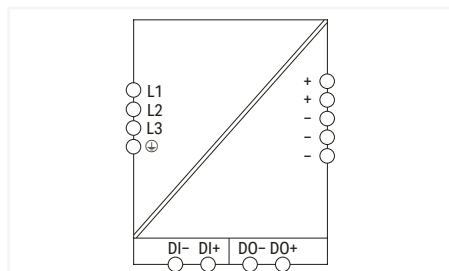
Item No.	PU
2787-2348/000-070	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 1.7 \text{ A}$ (400 VAC; 24 VDC / 40 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 60 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Efficiency (typ.)	96.1 % (400 VAC; 40 A; 25 °C)
Circuit protection	
Internal fuse	3 x T 3.2 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	120 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; DNV; UL HazLoc; ISA S71.04:1985; G3 Group A; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost



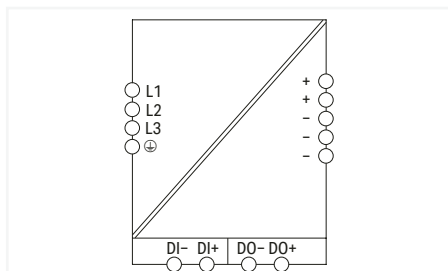
	Item No.	PU
	2787-2357	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.8$ A (400 VAC; 48 VDC / 10 A)
Inrush current	≤ 15 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Nominal output current $I_{o, nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Power loss P_i	≤ 3.6 W (standby); ≤ 4.4 W (no load); ≤ 21 W (nominal load)
Efficiency (typ.)	95 %
Circuit protection	
Internal fuse	3 x T 3.15 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m ü. N. N.); II (> 2000 m ü. N. N.)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 900,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	70 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ▶ Pro 2 ▶ Phases: 3 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost



	Item No.	PU
	2787-2358	1

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Phases	3
Nominal input voltage $U_{i\text{nom}}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 1.6 \text{ A}$ (400 VAC; 48 VDC / 20 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o\text{nom}}$	48 VDC (SELV)
Output voltage range	48 ... 56 VDC (adjustable)
Nominal output current $I_{o\text{nom}}$	20 A (48 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %
Signaling and communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communications	USB (750-923 Communication Cable); EtherNet/IP™ (2789-9023 Communication Module); IO-Link (2789-9080 Communication Module); Modbus RTU (Communication Module 2789-9015); Modbus TCP (2789-9052 Communication Module)
Efficiency/power losses	
Efficiency (typ.)	96 %
Circuit protection	
Internal fuse	2 x T 5 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x 16 A (for USA/Canada: 3 x 15 A)
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III ($\leq 2000 \text{ m ü. N. N.}$); II ($> 2000 \text{ m ü. N. N.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 800,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ °C}$ (device starts at -40 °C (type-tested))
Ambient temperature (storage)	$-40 \dots +85 \text{ °C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Operating altitude (max.)	5000 m
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	120 mm x 130 mm x 130 mm
Note (dimensions)	Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Communication module ► EtherNet/IP™



2

	Item No.	PU
	2789-9023	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- EtherNet/IP™ + MQTT
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Integrated ETHERNET switch for convenient wiring
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage $U_{in, nom}$	5 VDC (SELV)
Nominal input current at U_N	250 mA (max.)
Signaling and communication	
Signaling	1 x ERR LED (red); 1 x COM OK LED (green); 1 x LED LNK/ACTx (green) ; 1 x LED SPEEDx (orange)
Communications	EtherNet/IP™
ETHERNET protocols	HTTP(S); BootP; DHCP; SNTP; MQTT
Configuration options	Web-Based Management
Visualization	Web-Visu
Transmission rate	100 MBd (ETHERNET: 10/100 Mbit/s)
Transmission medium (communication/ fieldbus)	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Safety and protection/Environmental requirements	
Test voltage (fieldbus)	0.775 kVAC; 50 Hz; 1 min
Protection class/Protection type	III / IP20; per EN 60529
Insulation type	Functional insulation
Overvoltage category	III
Pollution degree	2
Ambient temperature (operation)	-40 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Connection type	EtherNet/IP™
Pluggable connector	2 x RJ-45
Cable length (max.)	100 m
Transmission medium	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 80 mm x 22 mm
Note (dimensions)	Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Communication module ► IO-Link



	Item No.	PU
	2789-9080	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- IO-Link device supports IO-Link specification 1.1
- Suitable for configuring and monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Pluggable connection technology
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage $U_{in\,nom}$	24 VDC (SELV; via IO-Link Master)
Input voltage range	18 ... 30 VDC (SELV; via IO-Link Master)
Signaling and communication	
Signaling	1 x COM OK LED (green); 1 x ERR LED (red)
Communications	IO-Link
IO-Link version	1.1
Transmission rate	230.4 kBd (COM 3)
Data width	5 bytes
Data update rate	25 ms
Safety and protection/Environmental requirements	
Isolation	0.63 kVDC
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	20 m (IO-Link)
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 95 mm x 22 mm
Note (dimensions)	Height with connector; Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; UL HazLoc

Communication module ► Modbus (TCP, UDP)



2

	Item No.	PU
	2789-9052	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- Modbus TCP/UDP
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Integrated ETHERNET switch for convenient wiring
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage U_{nom}	5 VDC (SELV)
Nominal input current at U_N	250 mA (max.)
Signaling and communication	
Signaling	1 x ERR LED (red); 1 x COM OK LED (green); 1 x LED LNK/ACTx (green) ; 1 x LED SPEEDx (orange)
Communications	Modbus (TCP, UDP)
ETHERNET protocols	HTTP(S); BootP; DHCP; SNTP
Configuration options	Web-Based Management
Visualization	Web-Visu
Transmission rate	100 MBd (ETHERNET: 10/100 Mbit/s)
Transmission medium (communication/fieldbus)	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Safety and protection/Environmental requirements	
Test voltage (fieldbus)	0.775 kVAC; 50 Hz; 1 min
Protection class/Protection type	III / IP20; per EN 60529
Insulation type	Functional insulation
Overvoltage category	III
Pollution degree	2
Ambient temperature (operation)	-40 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Connection type	Modbus TCP/UDP
Pluggable connector	2 x RJ-45
Cable length (max.)	100 m
Transmission medium	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 80 mm x 22 mm
Note (dimensions)	Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Communication module ► Modbus RTU via RS-485



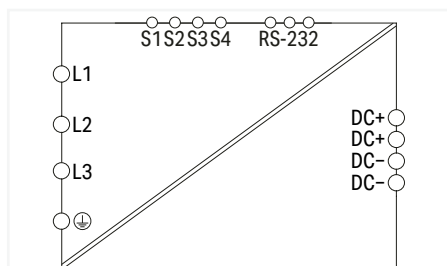
	Item No.	PU
	2789-9015	1

Features:

- WAGO's communication module snaps onto a Pro 2 Power Supply's communication interface.
- Modbus RTU (RS-485)
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Pluggable connection technology
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips
- Requires RJ-45 terminating resistor (120 Ω) for long cables (2789-9915)

Input	
Nominal input voltage U _{nom}	5 VDC (SELV)
Input voltage range	4.5 ... 5.5 VDC (SELV)
Signaling and communication	
Signaling	1 x LED PWR (green); 1 x LED RxD (yellow); 1 x LED TxD (yellow)
Communications	Modbus RTU via RS-485
Transmission rate	4.8 ... 115.2 kBd
Number of devices (max.)	247
Transmission medium (communication/fieldbus)	Shielded copper cable
Safety and protection/Environmental requirements	
Test voltage (input/output)	AC 2 kV; 50 Hz; 1 min
Test voltage (input/output/shield)	1 kVAC; 50 Hz; 1 min
Protection class/Protection type	III / IP20; per EN 60529
Insulation type	Functional insulation
Pollution degree	2
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	5000 m
Connection data	
Pluggable connector	2 x RJ-45
Transmission medium	Shielded copper cable
Physical data/Mechanical data/Material Data	
Width x Height x Depth	35 mm x 80 mm x 22 mm
Note (dimensions)	Depth in mounted state
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; UL HazLoc

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ DC OK signal



	Item No.	PU
	787-850	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- LineMonitor for parameter setting and monitoring
- RS-232 serial interface
- Four signal outputs

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6$ A (340 VAC; 10 ADC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	≥ 22 ms (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	adjustable (constant current/fuse mode)
PowerBoost	DC 20 A (4 s); DC 15 A (16 s)
TopBoost	70 ADC (50 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 4 x Signal output (24 VDC; max. 25 mA); 1 x RS-232 interface
Communications	RS-232 serial interface
Operation status indicator	Green LED (DC OK); Yellow LED (warning); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 7.8 W; ≤ 19.9 W (nominal load)
Efficiency (typ.)	91.7 %

Circuit protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 1.6 A; Setting range: 1.6 ... 2.5 A

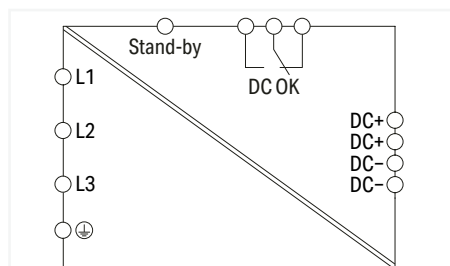
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 163 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



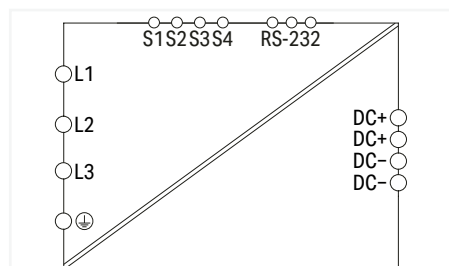
	Item No.	PU
	787-840	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6$ A (340 VAC; 10 ADC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 22 ms (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 20 A (4 s); DC 15 A (16 s)
TopBoost	70 ADC (50 ms)
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)
Efficiency/power losses	
Power loss P_i	≤ 7.8 W; ≤ 19.9 W (nominal load)
Efficiency (typ.)	91.7 %
Circuit protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 1.6 A; Setting range: 1.6 ... 2.5 A
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 163 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ DC OK signal



Item No.	PU
787-852	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- LineMonitor for parameter setting and monitoring
- RS-232 serial interface
- Four signal outputs

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.1$ A (340 VAC; 20 ADC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	≥ 13 ms (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	adjustable (constant current/fuse mode)
PowerBoost	DC 40 A (4 s); DC 30 A (16 s)
TopBoost	80 ADC (50 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 4 x Signal output (24 VDC; max. 25 mA); 1 x RS-232 interface
Communications	RS-232 serial interface
Operation status indicator	Green LED (DC OK); Yellow LED (warning); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 8.3 W; ≤ 34.1 W (nominal load)
Efficiency (typ.)	92.9 %

Circuit protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 2.5 A; Setting range: 2.5 ... 4 A

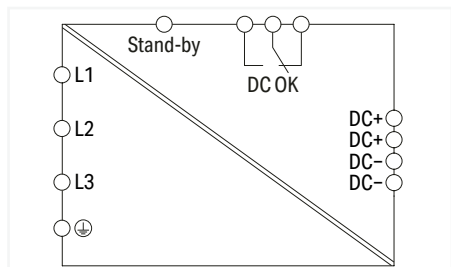
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	77 mm x 171 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



	Item No.	PU
	787-842	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.1$ A (340 VAC; 20 ADC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 13 ms (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 40 A (4 s); DC 30 A (16 s)
TopBoost	80 ADC (50 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 8.3 W; ≤ 34.1 W (nominal load)
Efficiency (typ.)	92.9 %

Circuit protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 2.5 A; Setting range: 2.5 ... 4 A

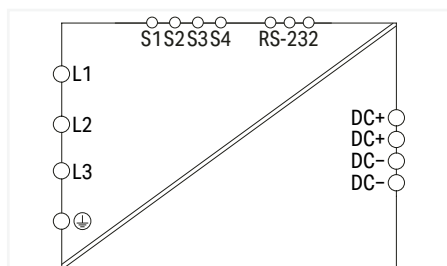
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	77 mm x 171 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost ▶ DC OK signal



Item No.	PU
787-854	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- LineMonitor for parameter setting and monitoring
- RS-232 serial interface
- Four signal outputs

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	adjustable (constant current/fuse mode)
PowerBoost	DC 60 A (4 s); DC 50 A (16 s)
TopBoost	100 ADC (50 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 4 x Signal output (24 VDC; max. 25 mA); 1 x RS-232 interface
Communications	RS-232 serial interface
Operation status indicator	Green LED (DC OK); Yellow LED (warning); Red LED (error)

Efficiency/power losses	
Power loss P_i	$\leq 7 \text{ W}$; $\leq 61.5 \text{ W}$ (nominal load)
Efficiency (typ.)	93.6 %

Circuit protection	
Internal fuse	3 x T 3.2 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 3.2 A; Setting range: 2.5 ... 4 A

Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +55 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 45 °C)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

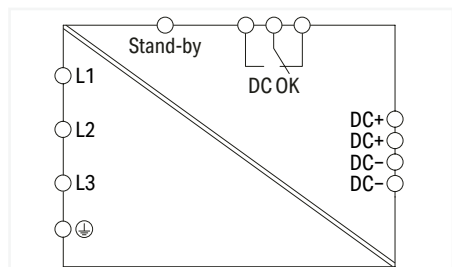
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	128 mm x 171 mm x 205 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 40 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



Similar to illustration



Item No.	PU
787-844/000-002	1
787-844	1

Features:

- Switched-mode power supply with PowerBoost and Top-Boost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC; 40 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 60 A (4 s); DC 50 A (16 s)
TopBoost	100 ADC (50 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	$\leq 7 \text{ W}$; $\leq 61.5 \text{ W}$ (nominal load)
Efficiency (typ.)	93.6 %

Circuit protection	
Internal fuse	3 x T 3.2 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 3.2 A; Setting range: 2.5 ... 4 A

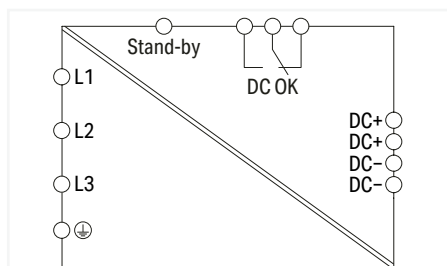
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	-25 ... +55 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K ($> 45 \text{ °C}$)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	128 mm x 171 mm x 205 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 10 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



	Item No.	PU
	787-845	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.1$ A (340 VAC; 10 ADC)
Inrush current	≤ 30 A (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 12 ms (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	39 ... 53 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 15 A (4 s); DC 12.5 A (16 s)
TopBoost	55 ADC (50 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	≤ 0.8 W (standby); ≤ 8.2 W (no load); ≤ 38 W (nominal load)
Efficiency (typ.)	93 %

Circuit protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 2.5 A; Setting range: 2.5 ... 4 A

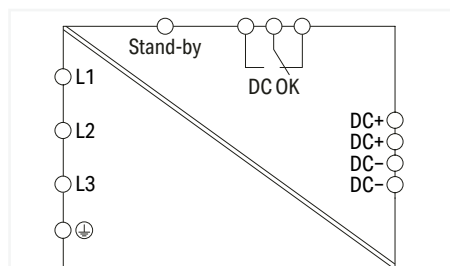
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	77 mm x 171 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ▶ Pro ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 48 V ▶ Nominal output current: 20 A ▶ TopBoost ▶ PowerBoost ▶ DC OK contact



Item No.	PU
787-847	1

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC; 20 ADC)
Inrush current	$\leq 30 \text{ A}$ (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	39 ... 53 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (48 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 30 A (4 s); DC 25 A (16 s)
TopBoost	80 ADC (25 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK); Red LED (error)

Efficiency/power losses	
Power loss P_i	$\leq 0.8 \text{ W}$ (standby); $\leq 5.2 \text{ W}$ (no load); $\leq 59.2 \text{ W}$ (nominal load)
Efficiency (typ.)	94.4 %

Circuit protection	
Internal fuse	3 x T 3.2 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 3.2 A; Setting range: 2.5 ... 4 A

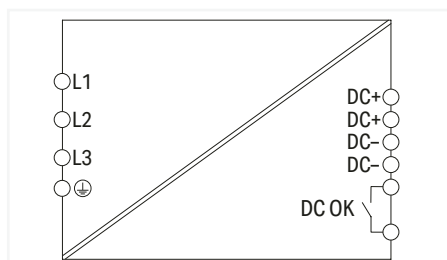
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 45 °C)

Connection data	
Connection type	Input
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	128 mm x 171 mm x 205 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Power supply ► Classic ► Phases: 2; 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► DC OK contact



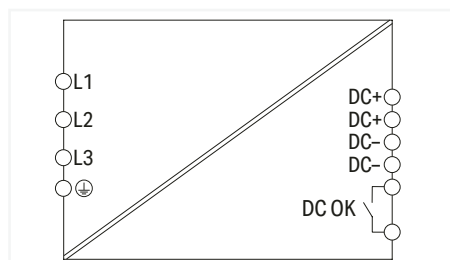
	Item No.	PU
	787-1640	1

Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 320 ... 575 VAC; 450 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.73 \text{ A}$ (400 VAC); $\leq 3 \times 0.66 \text{ A}$ (500 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 50 \text{ ms}$ (500 VAC); $\geq 21 \text{ ms}$ (400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 50 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC / DC; 1 A)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	$\leq 2.1 \text{ W}$; $\leq 27.9 \text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	28.3 W (500 VAC / 24 VDC; 10 A)
Efficiency (typ.)	90 %
Circuit protection	
Internal fuse	No
Backup fusing (required)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C, 20 A (max.); Alternative: motor circuit breaker; An external DC fuse is required for the DC input voltage.
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; $\leq 41 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$ (type-tested))
Ambient temperature (storage)	$-25 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2.5 \text{ }^\circ\text{C/K}$ ($> 55 \text{ }^\circ\text{C}$)
Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 127 mm x 171 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 2; 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A ► DC OK contact



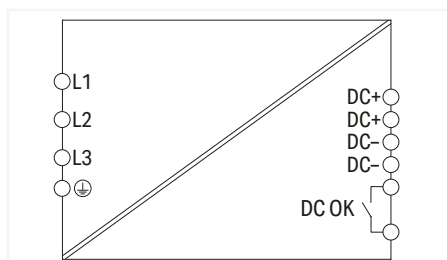
	Item No.	PU
	787-1642	1

Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 320 ... 575 VAC; 450 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.21 \text{ A}$ (400 VAC); $\leq 3 \times 1.03 \text{ A}$ (500 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 25 \text{ ms}$ (500 VAC); $\geq 15 \text{ ms}$ (400 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 15 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC / DC; 1 A)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	$\leq 5.8 \text{ W}$; $\leq 42.8 \text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	47.6 W (500 VAC / 24 VDC; 20 A)
Efficiency (typ.)	92 %
Circuit protection	
Internal fuse	No
Backup fusing (required)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C, 20 A (max.); Alternative: motor circuit breaker; An external DC fuse is required for the DC input voltage.
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; $\leq 40 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$ (type-tested))
Ambient temperature (storage)	$-25 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2.5 \text{ }^\circ\text{C/K}$ ($> 55 \text{ }^\circ\text{C}$)
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	80 mm x 127 mm x 180 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Classic ► Phases: 2; 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 40 A ► DC OK contact



	Item No.	PU
	787-1644	1

Features:

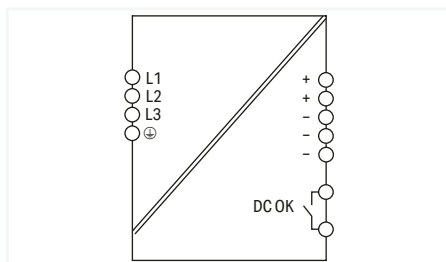
- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 320 ... 575 VAC; 450 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2.15 \text{ A}$ (400 VAC); $\leq 3 \times 1.82 \text{ A}$ (500 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 25 \text{ ms}$ (500 VAC); $\geq 15 \text{ ms}$ (400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 30 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x DC OK contact (make contact; max. 30 VAC / DC; 1 A)
Operation status indicator	Green LED (U_o)
Efficiency/power losses	
Power loss P_i	$\leq 4.2 \text{ W}$; $\leq 83.9 \text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{i, (max.)}$	83.9 W (500 VAC / 24 VDC; 40 A)
Efficiency (typ.)	92 %
Circuit protection	
Internal fuse	No
Backup fusing (required)	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C, 20 A (max.); Alternative: motor circuit breaker; An external DC fuse is required for the DC input voltage.
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; $\leq 40 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-2.5 %/K (> 55 °C)
Connection data	
Connection type	Input/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	126 mm x 127 mm x 198 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV; SEMI F47

Power supply ► Eco 2 ► Phases: 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A ► DC OK contact



Similar to illustration



	Item No.	PU
	2687-2344	1

Features:

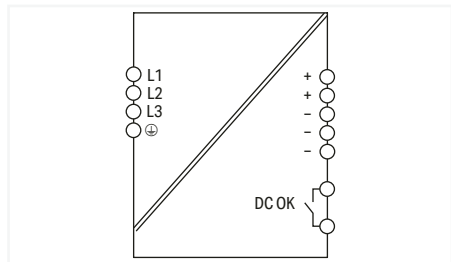
- Signal output, optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot (Item No. 2789-1233, not included) for WAGO's marking cards (WMB) and WAGO's marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	47 ... 63 Hz
Inrush current	≤ 20 A (after 1 ms)
Power factor	≥ 0.5 (400 VAC; nominal load)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV/PELV)
Output voltage range	24 ... 26.4 VDC
Nominal output current $I_{o, nom}$	5 A
Nominal output power	120 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current up to 125 %; shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	Optical status indication (overload); Optical status indication (DC OK); Digital signal output (DO)
Efficiency/power losses	
Power loss P_l	≤ 3 W (400 VAC; no load)
Efficiency (typ.)	88 %
Safety and protection/Environmental requirements	
Protection class/Protection type	I
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 600,000 h (at 25 °C)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≤ -3 %/K at $T_U \geq 50$ °C
Operating altitude (max.)	2000 m
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 0.4 mm² / 0.2 ... 0.4 mm² / 24 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	59.6 mm x 130 mm x 130 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-2; UL 61010-1; UL 61010-2-201

Power supply ► Eco 2 ► Phases: 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A ► DC OK contact



Similar to illustration



	Item No.	PU
	2687-2346	1

Features:

- Signal output, optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot (Item No. 2789-1233, not included) for WAGO's marking cards (WMB) and WAGO's marking strips

Input	
Phases	3
Nominal input voltage $U_{i, nom}$	3 x 400 ... 500 VAC
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 0.68 A (400 VAC; nominal load); ≤ 0.58 A (500 VAC; nominal load)
Inrush current	≤ 25 A (after 1 ms)
Power factor	≥ 0.5 (400 VAC; nominal load)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 20 ms (400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current up to 110 %; shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	Optical status indication (DC OK, green LED); Optical status indication (overload, red LED); Signal output (DC OK)

Efficiency/power losses	
Power loss P_i	≤ 1.1 W (no load); ≤ 20 W (nominal load)
Efficiency (typ.)	92.5 %

Circuit protection	
Internal fuse	No
Backup fusing (required)	16 A (for USA/Canada: 15 A)

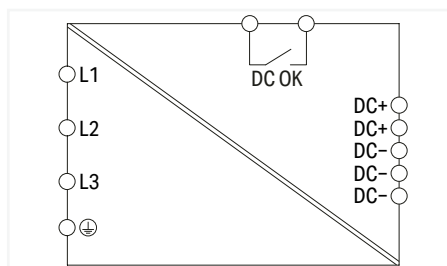
Safety and protection/Environmental requirements	
Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	III (≤ 2000 m.a.s.l.); II ($<gt; 2000$ m.a.s.l.)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 700,000$ h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)
Operating altitude (max.)	5000 m

Connection data	
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 0.4 mm² / 0.2 ... 0.4 mm² / 24 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 130 mm x 130 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; SEMI F47

Power supply ► Eco ► Phases: 2; 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 6.25 A ► DC OK contact



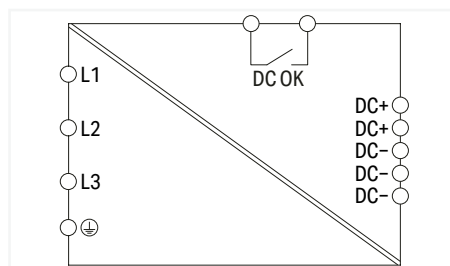
Item No.	PU
787-738	1

Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 340 ... 500 VAC
Input voltage range	(2 / 3) x 306 ... 550 VAC; 500 ... 650 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (400 VAC; 24 VDC / 6.25 A)
Inrush current	$\leq 25 \text{ A}$
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 17 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	6.25 A (24 VDC)
Nominal output power	150 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
Operation status indicator	Green LED (U_o); Red LED (overload)
Efficiency/power losses	
Power loss P_i	$\leq 18.5 \text{ W}$
Power loss (max.) $P_{i, max}$	20 W
Efficiency (typ.)	87 %
Circuit protection	
Internal fuse	3 x T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker $\geq 6 \text{ A}$; Tripping characteristic: B or C; Alternative: motor circuit breaker
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	> 250,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2.5 %/K (> 50 °C; 400 VAC)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Connection type	Signaling
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 92 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61204-3 (Class A); UL 60950-1; UL 508; SEMI F47

Power supply ▶ Eco ▶ Phases: 2; 3 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 10 A ▶ DC OK contact



	Item No.	PU
	787-740	1

Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 500 VAC; 500 ... 650 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.2 \text{ A}$ (400 VAC; 24 VDC / 10 A)
Inrush current	$\leq 25 \text{ A}$
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 17 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
Operation status indicator	Green LED (U_o); Red LED (overload)

Efficiency/power losses	
Power loss P_i	$\leq 32.5 \text{ W}$
Power loss (max.) $P_{i, (max)}$	36 W
Efficiency (typ.)	89 %

Circuit protection	
Internal fuse	3 x T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker $\geq 6 \text{ A}$; Tripping characteristic: B or C; Alternative: motor circuit breaker

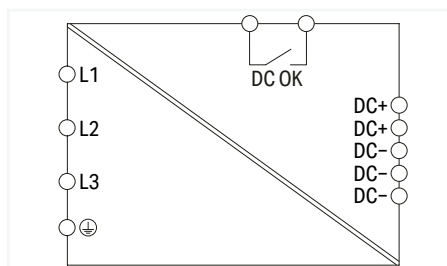
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 250,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-40 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	$-1.25 \text{ }^\circ\text{C/K}$ ($> 50 \text{ }^\circ\text{C}$; 400 VAC)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm² / 0.5 ... 6 mm² / 20 ... 10 AWG
Connection type	Signaling
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm² / 0.2 ... 1.5 mm² / 24 ... 14 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	65 mm x 130 mm x 130 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61204-3 (Class A); UL 60950-1; UL 508; SEMI F47

Power supply ► Eco ► Phases: 2; 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A ► DC OK contact



Item No.	PU
787-742	1

Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 360 ... 575 VAC; 500 ... 650 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (400 VAC; 24 VDC / 20 A)
Inrush current	$\leq 30 \text{ A}$
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 17 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
Operation status indicator	Green LED (U_o); Red LED (overload)

Efficiency/power losses	
Power loss P_i	$\leq 50 \text{ W}$
Power loss (max.) $P_{i, max}$	55 W
Efficiency (typ.)	90 %

Circuit protection	
Internal fuse	3 x T 5 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker $\geq 6 \text{ A}$; Tripping characteristic: B or C; Alternative: motor circuit breaker

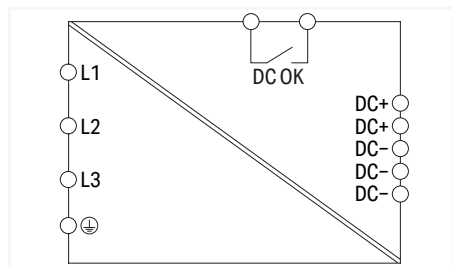
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 250,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-40 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	$-2 \text{ }^\circ\text{C/K}$ ($> 50 \text{ }^\circ\text{C}$; 400 VAC)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Connection type	Signaling
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	110 mm x 130 mm x 151 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61204-3 (Class A); UL 60950-1; UL 508; SEMI F47

Power supply ► Eco ► Phases: 2; 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A ► DC OK contact



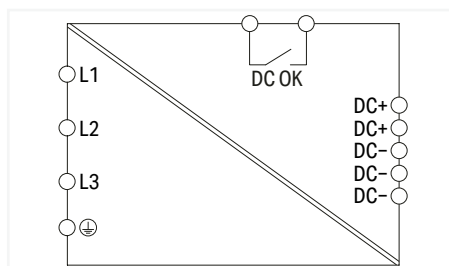
	Item No.	PU
	787-2742	1

Features:

- Economical power supply for standard applications
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated terminal blocks with push-in connection technology
- DC OK signal output
- Parallel operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204-1

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 480 VAC
Input voltage range	(2 / 3) x 325 ... 575 VAC; 560 ... 700 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.2$ A (400 VAC)
Inrush current	≤ 30 A (400 VAC)
Power factor	≥ 0.7 (400 VAC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 150 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red); 1 x DC OK signal output (PhotoMOS as make contact; can be loaded with max. 31.2 V / 100 mA)
Operation status indicator	Green LED (U_o); Red LED (overload)
Efficiency/power losses	
Power loss P_i	≤ 2.15 W (400 VAC; no load); ≤ 42.5 W (400 VAC; nominal load)
Efficiency (typ.)	92 %
Circuit protection	
Internal fuse	3 x T 3.15 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker ≥ 10 A; Tripping characteristic: B or C
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/2 devices (max.)
MTBF	$> 1,800,000$ h (per IEC 61709)
Ambient temperature (operation)	-20 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2 %/K (> 45 °C)
Resistance to shock and vibration	Shock: 15g (per EN 60068-2-27); Vibration: 1g (per EN 60068-2-6)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm² / 0.5 ... 6 mm² / 20 ... 10 AWG
Connection type	Signaling
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm² / 0.2 ... 1.5 mm² / 24 ... 14 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	80 mm x 130 mm x 170 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE; EAC
Standards/specifications	EN 61204-3; EN 62368-1; cURus 60950-1; cURus 62368-1; cULus 508; CSA C22.2; SEMI F47

Power supply ► Eco ► Phases: 2; 3 ► Nominal output voltage (DC): 24 V ► Nominal output current: 40 A ► DC OK contact



	Item No.	PU
	787-2744	1

Features:

- Economical power supply for standard applications
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated terminals with push-in connection technology
- DC OK signal output
- Parallel operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204-1

Input	
Phases	2 / 3
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 480 VAC
Input voltage range	(2 / 3) x 325 ... 575 VAC; 560 ... 700 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2.5 \text{ A}$ (400 VAC)
Inrush current	$\leq 30 \text{ A}$ (400 VAC)
Power factor	≥ 0.7 (400 VAC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 10 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 150 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red); 1 x DC OK signal output (PhotoMOS as make contact; can be loaded with max. 31.2 V / 100 mA)
Operation status indicator	Green LED (U_o); Red LED (overload)

Efficiency/power losses	
Power loss P_i	$\leq 6.2 \text{ W}$ (400 VAC; nominal load); $\leq 64.3 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	92.3 %

Circuit protection	
Internal fuse	3 x T 6.3 A / 500 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker $\geq 10 \text{ A}$; Tripping characteristic: B or C

Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/2 devices (max.)
MTBF	$> 1,300,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-20 \dots +70 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-40 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2 %/K ($> 45 \text{ }^\circ\text{C}$)
Resistance to shock and vibration	Shock: 15g (per EN 60068-2-27); Vibration: 1g (per EN 60068-2-6)

Connection data	
Connection type	Input
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Connection type	Output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.75 ... 16 mm ² / 0.75 ... 25 mm ² / 18 ... 4 AWG
Connection type	Signaling
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	140 mm x 130 mm x 170 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE; EAC
Standards/specifications	EN 61204-3; EN 62368-1; cURus 60950-1; cURus 62368-1; cULus 508; CSA C22.2; SEMI F47

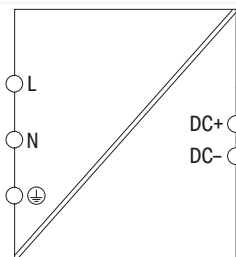


Special WAGO Power Supplies

Special WAGO Power Supplies

		Page
	IP 67 Switched-Mode Power Supply; 787 Series	144
	Accessories for IP67 Power Pluggable Connector	146
	Accessories for IP67 Power Supply Cable	148
	Transformer Power Supply 787 Series	150

Power supply ▶ IP67 ▶ Phases: 1 ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 4 A ▶ PowerBoost



Item No.	PU
787-6716	1

Features:

- Switched-mode power supply with PowerBoost
- Low-profile, compact design
- Extremely robust, fully encapsulated housing (IP67)
- Active power factor correction
- High efficiency up to 92.3 %
- Surrounding air temperature up to 85 °C
- Suitable for both parallel and series operation

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	100 ... 240 VAC/VDC
Input voltage range	90 ... 265 VAC/VDC
Nominal mains frequency range	47 ... 63.6 Hz; 0 Hz
Input current I_i	≤ 0.5 A (250 VAC); ≤ 1.1 A (100 VAC)
Inrush current	≤ 9 A
Power factor	≥ 0.98
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 45 ms

Output	
Nominal output voltage $U_{o, nom}$	24 VDC
Output voltage range	± 2 %
Nominal output current $I_{o, nom}$	4 A
Nominal output power	96 W
Residual ripple	≤ 100 mV (peak-to-peak); ≤ 20 mV (rms)
Overload behavior	Constant current
PowerBoost	DC 6 A (5 s; without voltage drop)

Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Overload LED (red)
Operation status indicator	Green LED (24 VDC OK); Red LED (overload)

Efficiency/power losses	
Power loss P_i	≤ 1 W; ≤ 7.9 W (nominal load)
Efficiency (typ.)	92.3 % (230 VAC)

Circuit protection	
Internal fuse	T 6.3 A
Backup fusing (recommended)	Circuit breaker: 4 ... 20 A; Characteristic: C; T 20 A in building installations

Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP67
Overvoltage protection; secondary	≤ 30 VDC (per IEC 61131)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	3 devices (max.)/2 devices (max.)
MTBF	$> 960,000$ h
Ambient temperature (operation)	-40 ... +85 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	4 ... 100 %
Derating	-3.84 W/K (> 60 °C)

Connection data	
Connection type	Input
Connection technology	7/8"; 3-pole plug
Connection type	Output
Connection technology	7/8"; 5-pole socket

Physical data/Mechanical data/Material Data	
Width x Height x Depth	111 mm x 141 mm x 54 mm
Mounting type	Screw mount

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204; UL 508

Accessories for IP67 Power Pluggable Connector 787 Series



Operating data	
Operating voltage	600 VAC/VDC
Operating current	9 A
Safety and protection/Environmental requirements	
Rated surge voltage	4 kV
Protection type	IP67
Ambient temperature (operation at U _N)	-25 ... +80 °C
Connection data	
Sheathed cable diameter	7.4 mm

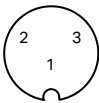
- Features:
- 7/8" screw connection: Industry-proven connection technology for a large selection of different conductors
 - High protection class for safe field applications
 - Vibration- and shock-resistant via integrated locking mechanism
 - PUR coating



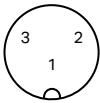
Similar to pictured device

Pluggable connector ▶ 7/8 inch ▶ 3-pole ▶ Socket, angled		
	Item No.	PU
	787-6716/9400-000	1

Pluggable connector ▶ 7/8 inch ▶ 3-pole ▶ Plug, straight		
	Item No.	PU
	787-6716/9100-000	1



7/8" socket



7/8" plug

Accessories for IP67 Power Pluggable Connector 787 Series



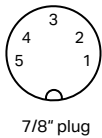
Pluggable connector ▶ 7/8 inch ▶ 5-pole ▶ Plug, straight		
	Item No.	PU
	787-6716/9500-000	1



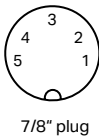
Pluggable connector ▶ 7/8 inch ▶ 5-pole ▶ Plug, angled		
	Item No.	PU
	787-6716/9600-000	1



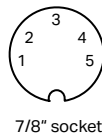
Pluggable connector ▶ 7/8 inch ▶ 5-pole ▶ Socket, straight		
	Item No.	PU
	787-6716/9700-000	1



7/8" plug



7/8" plug



7/8" socket



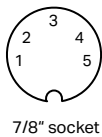
Pluggable connector ▶ 7/8 inch ▶ 5-pole ▶ Socket, angled		
	Item No.	PU
	787-6716/9800-000	1



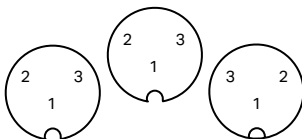
Pluggable connector ▶ 7/8 inch ▶ 3-pole		
	Item No.	PU
	787-6716/9000-1000	1



Pluggable connector ▶ 7/8 inch ▶ 3-pole ▶ Socket, straight		
	Item No.	PU
	787-6716/9300-000	1



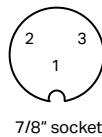
7/8" socket



7/8" socket

7/8" socket

7/8" plug



7/8" socket

Accessories for IP67 Power

Supply Cable

787 Series



- Features:
- 7/8" screw connection: Industry-proven connection technology for a large selection of different conductors
 - High protection class for safe field applications
 - Vibration- and shock-resistant via integrated locking mechanism
 - PUR coating

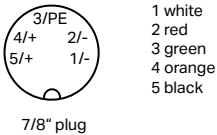
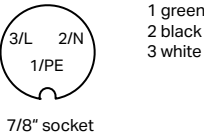
Operating data	
Operating voltage	600 VAC/VDC
Operating current	9 A
Safety and protection/Environmental requirements	
Rated surge voltage	4 kV
Protection type	IP67
Ambient temperature (operation at U _N)	-25 ... +80 °C
Connection data	
Sheathed cable diameter	7.4 mm



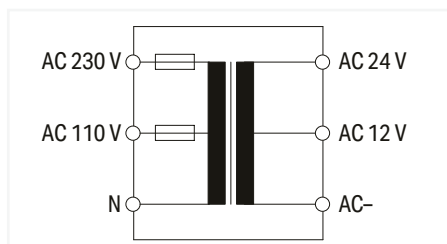
Similar to pictured device

Supply cable, pre-assembled ▶ 7/8 inch ▶ 3-pole ▶ Socket, straight		
Length	Item No.	PU
3 m	787-6716/9310-030	1
5 m	787-6716/9310-050	1
10 m	787-6716/9310-100	1

Supply cable, pre-assembled ▶ 7/8 inch ▶ 5-pole ▶ Plug, straight		
Length	Item No.	PU
1,5 m	787-6716/9510-015	1
3 m	787-6716/9510-030	1
5 m	787-6716/9510-050	1



Transformer power supply ► Input voltage (AC): 230 V ► Nominal output voltage (AC): 12 V; 24 V ► Nominal output power: 40 VA



	Item No.	PU
	787-974	1

Features:

- Maintenance-free, DIN-rail-mount safety transformer for 12 / 24 VAC
- Center tap-off modules provide variable input/output voltage.
- Enables brief performance peaks
- Peak output power of 45 VA for 1 min/h

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x 115 VAC; 230 VAC
Input voltage range	1 x 0 ... 230 VAC
Nominal mains frequency range	50 ... 60 Hz

Output	
Nominal output voltage $U_{o, \text{nom}}$	12 / 24 VAC
Nominal output current $I_{o, \text{nom}}$	3.3 A (12 VAC); 1.67 A (24 VAC)
Nominal output power	40 VA
Overload behavior	Safety fuse in the primary circuit

Efficiency/power losses	
Power loss P_i	$\leq 0.6 \text{ W}$

Circuit protection	
Internal fuse	T 1.25 A / 250 VAC; T 0.63 A / 250 VAC

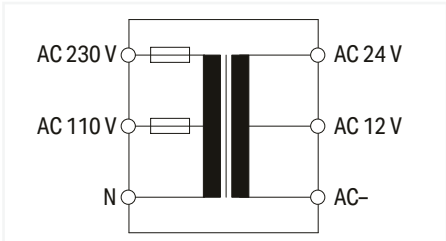
Safety and protection/Environmental requirements	
Isolation voltage (AC)	4.2 kVAC
Overvoltage category	III
Pollution degree	2
Ambient temperature (operation)	-25 ... +55 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	$\leq 90 \%$

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	UL 5085; EN 61558-2-6

Transformer power supply ▶ Input voltage (AC): 230 V ▶ Nominal output voltage (AC): 12 V; 24 V ▶ Nominal output power: 63 VA



	Item No.	PU
	787-976	1

- Features:**
- Maintenance-free, DIN-rail-mount safety transformer for 12 / 24 VAC
 - Center tap-off modules provide variable input/output voltage.
 - Enables brief performance peaks
 - Peak output power of 70 VA for 1 min/h

Input	
Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x 115 VAC; 230 VAC
Input voltage range	1 x 0 ... 230 VAC
Nominal mains frequency range	50 ... 60 Hz
Output	
Nominal output voltage $U_{o\text{nom}}$	12 / 24 VAC
Nominal output current $I_{o\text{nom}}$	5.2 A (12 VAC); 2.6 A (24 VAC)
Nominal output power	63 VA
Overload behavior	Safety fuse in the primary circuit
Efficiency/power losses	
Power loss P_i	≤ 0.8 W
Circuit protection	
Internal fuse	T 2 A / 250 VAC; T 1.6 A / 250 VAC
Safety and protection/Environmental requirements	
Isolation voltage (AC)	4.2 kVAC
Overvoltage category	III
Pollution degree	2
Ambient temperature (operation)	-25 ... +55 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	≤ 90 %
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	UL 5085; EN 61558-2-6



WAGO Protective Devices and Electronics

WAGO Protective Devices and Electronics

		Page
	TOPJOB® S Fuse Terminal Blocks; 2002 / 2006 Series	164
	Classic Fuse Terminal Blocks; Fuse Plugs; 281 / 282 / 811 Series	166
	Electronic Circuit Breaker (ECBs) 787 Series	168
	Rail-Mount Terminal Blocks with Overvoltage Protection 792 Series	172
	Component Terminal Block; with Surge Arrester 280 Series	174

Fuse Terminal Blocks; TOPJOB® S

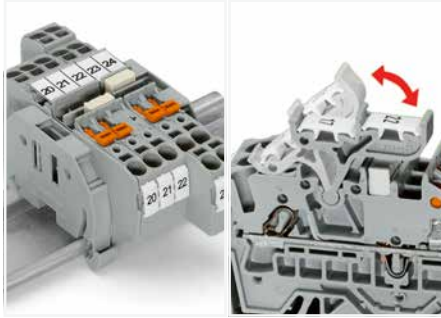
Description and Installation

Fuse terminal blocks



Fuse plug with blown fuse indication on a 2-conductor carrier terminal block

Commoning and marking



Dual jumper slots, in the same position as the 2002 Series terminal blocks. Commoning options in front of or behind the knife disconnect, depending on the power supply direction; additional marking option via pivoting marker carriers.

Fuse replacement 1



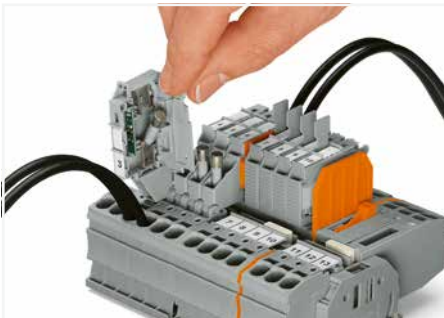
Before replacing the fuse, pivot the fuse holder into the locked open position.

Commoning



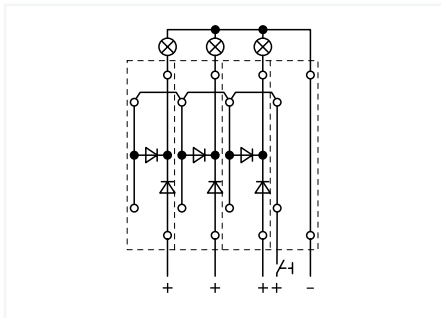
Custom circuit design via push-in type jumper bars. Example shows "lamp test circuit."

Fuse replacement 2



One end of the fuse is automatically ejected from the holder when opening the cover.

Application



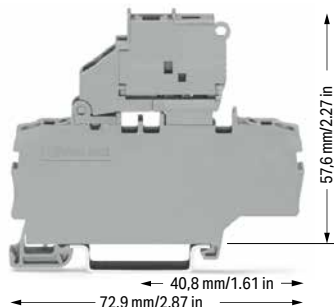
Lamp test circuit

Fused Disconnect Terminal Block with Pivoting Fuse Holder TOPJOB® S ► for 5 x 20 mm, 5 x 30 mm and ¼" x 1¼" Miniature Metric Fuse

TOPJOB® S; 2.5 (4) mm²; 2002 Series; 6 (10) mm²; 2006 Series

Technical data

0.25 ... 2.5 (4) mm² ①	22 ... 12 AWG
250 V / 6 kV / 3 ③	30 V, 6.3 A ②
I _N 6.3 A	
Terminal block width: 6.2 mm / 0.244 inch	
10 ... 12 mm / 0.39 ... 0.47 inch	



2-conductor fused disconnect terminal block with a pivoting fuse holder ► with additional jumper slot ► for (5 x 20) mm miniature metric fuse ► without blown fuse indication

Electrical ratings are given by the fuse

Color	Item No.	Pack. Unit
gray ⑤	2002-1911 ⑥	50

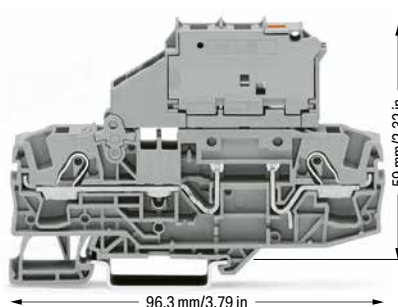
2-conductor fused disconnect terminal block with a pivoting fuse holder ► with additional jumper slot ► for (5 x 20) mm miniature metric fuse ► with blown fuse indication by LED ► gray

Electrical ratings are given by the fuse and blown fuse indication. Leakage current in case of a blown fuse: LED 2 mA

	Item No.	Pack. Unit
12 ... 30 V ⑤	2002-1911/1000-541 ⑥	50
30 ... 65 V ⑤	2002-1911/1000-542 ⑥	50
120 V ⑤	2002-1911/1000-867 ⑥	50
230 V ⑤	2002-1911/1000-836 ⑥	50

Technical data

0.5 ... 6 (10) mm² ②	20 ... 8 AWG
800 V / 8 kV / 3 ④	30 V, 15 A ②
I _N 10 A	30 V, 15 A ②
Terminal block width: 7.5 mm / 0.295 inch	
13 ... 15 mm / 0.51 ... 0.59 inch	



2-conductor fused disconnect terminal block with a pivoting fuse holder ► gray ► with blown fuse indication by LED Electrical ratings are given by the fuse and blown fuse indication. Leakage current in case of a blown fuse: LED 2 mA

for (5 x 20) mm miniature metric fuse

	Item No.	Pack. Unit
12 ... 30 V	2006-1611/1000-541	25
30 ... 65 V	2006-1611/1000-542	25
120 V	2006-1611/1000-867	25
230 V	2006-1611/1000-836	25

for (5 x 30) mm miniature metric fuse

	Item No.	Pack. Unit
12 ... 30 V	2006-1621/1000-541	25
30 ... 65 V	2006-1621/1000-542	25
120 V	2006-1621/1000-867	25
230 V	2006-1621/1000-836	25
380 ... 500 V	2006-1621/1000-859	25

for ¼" x 1¼" miniature metric fuse

	Item No.	Pack. Unit
12 ... 30 V	2006-1631/1000-541	25
30 ... 65 V	2006-1631/1000-542	25
120 V	2006-1631/1000-867	25
230 V	2006-1631/1000-836	25
380 ... 500 V	2006-1631/1000-859	25

Accessories; item-specific

End plate for fuse terminal blocks; 2 mm thick

orange	2002-992	100 (25)
gray	2002-991	100 (25)

Staggered jumper; insulated; I_N 25 A; light gray

2-way	2002-472	25
...		
12-way	2002-482	25

Adjacent jumper for continuous commoning; insulated; I_N 25 A; light gray

2-way	2002-400	25
1 to 3	2002-423	25

Push-in type jumper bar; insulated; I_N 25 A; light gray

2-way	2002-402	25
...		
10-way	2002-410	25

Marking strip; plain; 11 mm wide; 50 m reel

white	2009-110	1
-------	----------	---

Accessories; item-specific

End plate for fuse terminal blocks; 2 mm thick

orange	2006-992	100 (25)
gray	2006-991	100 (25)

Push-in type jumper bar; insulated; I_N 41 A; light gray

2-way	2006-402	25
3-way	2006-403	25
4-way	2006-404	25
5-way	2006-405	25

Push-in type jumper bar; insulated; I_N 41 A; light gray

1 to 3	2006-433	25
1 to 4	2006-434	25
1 to 5	2006-435	25

Star point jumper; insulated; I_N = I_N terminal block; light gray

1-3-5	2006-405/011-000	25
-------	------------------	----

WMB marking card; white; 10 strips with 10 markers/card; 5 ... 5.2 mm stretchable

plain	793-5501	5
-------	----------	---

① Conductor range: 0.25 ... 4 mm² "s+f-st"; Push-in termination: 1 ... 4 mm² "s" and 1 ... 2.5 mm² "insulated ferrules; 12 mm" Depending on the conductor characteristic, a conductor with a smaller cross section can also be inserted via push-in termination.

② Conductor range: 0.5 ... 10 mm² "s+f-st"; Push-in termination: 2.5 ... 10 mm² "s" and 2.5 ... 6 mm² "insulated ferrules; 12 mm" Depending on the conductor characteristic, a conductor with a smaller cross section can also be inserted via push-in termination.

③ 250 V = rated voltage
6 kV = rated impulse voltage
3 = pollution degree

④ 800 V = rated voltage
8 kV = rated impulse voltage
3 = pollution degree

⑤ Terminal blocks with an Ex mark are suitable for Ex ec IIc applications.

Approvals and corresponding ratings, visit www.wago.com

Glass cartridge fuses 5 x 20

Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
Fuse terminal blocks				
2002-1911	1.6 W	1.6 W	2.5 W	2.5 W
2002-1911/.....	1.6 W	1.6 W	2.5 W	2.5 W

Glass cartridge fuses

Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
Fused disconnect terminal blocks				
2006-1611	7.5	1.6 W	1.6 W	2.5 W
2006-1621	7.5	1.6 W	1.6 W	2.5 W
2006-1631	7.5	1.6 W	1.6 W	2.5 W
2006-1631 /099-...	10.4	2.5 W	2.5 W	2.5 W
2006-1631 /1099-...	10.4	2.5 W	2.5 W	2.5 W

When selecting miniature metric fuses, make sure that the maximum power loss listed below is not exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23°C. The temperature rise of the terminal blocks must be checked according to their application and mounting. Higher ambient temperatures represent an additional impact on miniature fuses. Therefore, in such applications, the rated current must be reduced if necessary. More details are available from the manufacturers.

Fuse Terminal Blocks and Fuse Plugs; Classic Description and Installation

Fuse terminal blocks



Blown fuse indication by LED or neon lamp

Fuse plug



Fuse plug with blown fuse indication on a 3-conductor carrier terminal block.

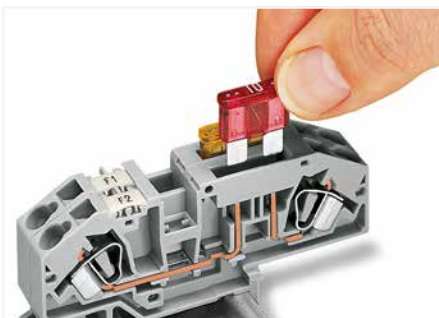


Conductor termination:
Open the clamping unit via integrated lever.

Commoning



Distributing current to several fuse-protected circuits via insulated touch-proof jumpers.



Inserting a fuse.

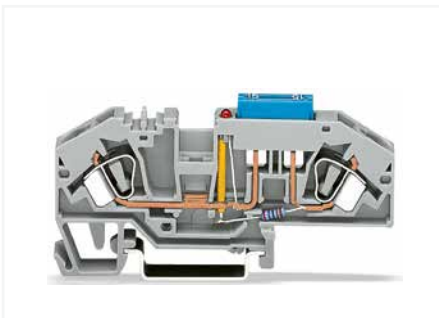


Open and close lever via screwdriver.

Fuse replacement 1



Before replacing the fuse, pivot the fuse holder into the locked open position.



2-conductor fuse terminal block with mini-automotive blade-style fuse



Jumper bar for quick and convenient commoning

Fuse replacement 2



One end of the fuse is automatically ejected from the holder when opening the cover.



Blown fuse indication by LED



Inserting a fuse.

Fuse Terminal Blocks and Fuse Plugs

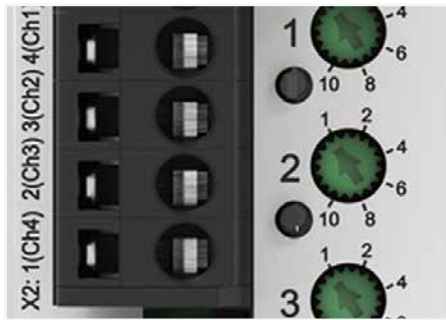
Classic; 281 / 282 / 811 Series

Image	Description	Miniature Fuse	Nominal Current	Nominal Voltage	Blown Fuse Indication	Color	Item No.	PU
		5 x 20 mm				gray	281-611	50
		5 x 20 mm				orange	281-616	50
		5 x 25 mm				gray	281-612	50
		5 x 30 mm				gray	281-622	50
		1/4" x 1"				gray	281-613	50
		1/4" x 1 1/4"				gray	281-623	50
		5 x 20 mm			15 ... 30 V	gray	281-611/281-541	50
		5 x 20 mm			30 ... 65 V	gray	281-611/281-542	50
		5 x 25 mm			15 ... 30 V	gray	281-612/281-541	50
		5 x 25 mm			30 ... 65 V	gray	281-612/281-542	50
		5 x 30 mm			15 ... 30 V	gray	281-622/281-541	50
		5 x 30 mm			30 ... 65 V	gray	281-622/281-542	50
		1/4" x 1"			15 ... 30 V	gray	281-613/281-541	50
		1/4" x 1"			30 ... 65 V	gray	281-613/281-542	50
		5 x 20 mm			230 V	gray	281-611/281-417	50
		5 x 20 mm			120 V	gray	281-611/281-418	50
		5 x 25 mm			230 V	gray	281-612/281-417	50
		5 x 25 mm			120 V	gray	281-612/281-418	50
		5 x 30 mm			230 V	gray	281-622/281-417	50
		5 x 30 mm			120 V	gray	281-622/281-418	50
		1/4" x 1"			230 V	gray	281-613/281-417	50
		1/4" x 1"			120 V	gray	281-613/281-418	50
		1/4" x 1 1/4"			230 V	gray	281-623/281-417	50
		1/4" x 1 1/4"			120 V	gray	281-623/281-418	50
	Adjacent jumper, insulated, I _N = I _N terminal block					gray	281-402	200
	End and intermediate plate, 2.5 mm thick					orange	281-309	100
						gray	281-311	100
	Fuse plugs on carrier terminal blocks	for 5 x 20 mm and 5 x 25 mm miniature metric fuses	6.3 A	250 V		gray	281-511	50
					LED, 48 VDC	gray	281-512/281-414	50
					LED, 24 V AC/DC	gray	281-512/281-501	50
					Neon lamp, 120 V AC/DC	gray	281-512/281-418	50
					Neon lamp, 230 V AC/DC	gray	281-512/281-417	50
	Fuse terminal blocks for mini-automotive, blade-style fuses; 0.2 ... 6 mm² / 24 ... 10 AWG		25 A	400 V	12 V; LED; circuit I	gray	282-698/281-429	25
					12 V; LED; circuit II	gray	282-698/281-449	25
					24 V; LED; circuit I	gray	282-698/281-413	25
					24 V; LED; circuit II	gray	282-698/281-434	25
					Without blown fuse indication	gray	282-696	25
	Adjacent jumper, insulated, I _N 41 A					gray	282-402	100
	3-conductor through terminal block		41 A	800 V		gray	282-699	25
						blue	282-694	25
	End and intermediate plate, 2 mm thick					orange	282-333	100
						gray	282-334	100
	Fuse terminal block for cylindrical fuses	10 x 38 mm	32 A	DC 1000 V	Without blown fuse indication, 1-pole	light gray	811-316	12
					Blown fuse indication, 1-pole	light gray	811-317	12
	Fuse terminal block for cylindrical fuses; 2.5 ... 16 mm² / 16 ... 6 AWG	10 x 38 mm	32 A	AC 690 V; DC 1000 V	Without blown fuse indication, 1-pole	light gray	811-310	12
					Without blown fuse indication, 2-pole	light gray	811-320	6
					Without blown fuse indication, 3-pole	light gray	811-330	4
					Blown fuse indication, 1-pole	light gray	811-311	12
					Blown fuse indication, 2-pole	light gray	811-321	6
					Blown fuse indication, 3-pole	light gray	811-331	4
					Blown fuse indication, 24 V, 1-pole	light gray	811-314	12
	Fuse terminal block for class CC fuses; 2.5 ... 16 mm² / 16 ... 6 AWG				Without blown fuse indication, 1-pole	light gray	811-410	12
					Without blown fuse indication, 2-pole	light gray	811-420	6
					Without blown fuse indication, 3-pole	light gray	811-430	4
					Blown fuse indication, 1-pole	light gray	811-411	12
					Blown fuse indication, 2-pole	light gray	811-421	6
					Blown fuse indication, 3-pole	light gray	811-431	4
					Blown fuse indication, 24 V, 1-pole	light gray	811-414	12
	Push-in type jumper bar, I _N 63 A, 1000 V	2-way				light gray	811-472	50
		12-way				light gray	811-482	20

WAGO Electronic Circuit Breakers

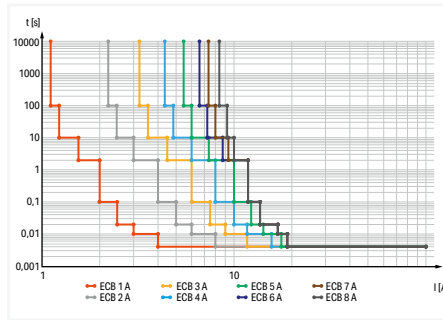
Selection Guide

Input/ Output	Output			Communication							Standards/ specifications				Dimensions and Environmental Requirements				Item no.
Nominal voltage	Channels	Nominal current [ADC]	Active current limitation	Signal, high-side switching	Signal, low-side switching	Potential-free Signal	Manchester Protocol	Remote control input	IO-Link	NEC Class 2	UL 61010-2-201	UL 2367	UL 508	DNV	Width	Height	Depth from upper-edge of DIN-rail	Surrounding air temperature	
12 VDC	4	2 ... 10 A		■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/000-100
24 VDC	1	0,5 ... 4 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/004-020
24 VDC	1	0,5 ... 4 A		■				■		■	■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/004-1020
24 VDC	1	0,5 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/050-000
24 VDC	1	0,5 A		■				■		■	■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/050-1000
24 VDC	1	1 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/100-000
24 VDC	1	1 A		■				■		■	■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/100-1000
24 VDC	1	1 ... 8 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/108-020
24 VDC	1	2 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/200-000
24 VDC	1	2 A		■				■		■	■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/200-1000
24 VDC	1	4 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/400-000
24 VDC	1	4 A		■				■		■	■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/400-1000
24 VDC	1	6 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/600-000
24 VDC	1	8 A		■				■			■	■		■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-3861/800-000
24 VDC	1	0,5 A		■				■			■			■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2861/050-000
24 VDC	1	1 A		■				■			■			■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2861/100-000
24 VDC	1	1 ... 8 A		■				■			■			■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2861/108-020
24 VDC	1	2 A		■				■			■			■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2861/200-000
24 VDC	1	4 A		■				■			■			■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2861/400-000
24 VDC	1	6 A		■				■			■			■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2861/600-000
24 VDC	1	8 A		■				■			■			■	6 mm	94 mm	97.8 mm	-25 ... +65 °C	787-2861/800-000
24 VDC	2	2 ... 10 A		■			■	■				■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1662
24 VDC	2	2 ... 10 A		■		■		■				■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1662/000-054
24 VDC	2	3,8 A / 3,2 A	■	■			■	■		■		■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1662/004-1000
24 VDC	2	0,5 ... 6 A	■	■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1662/006-1000
24 VDC	2	1 ... 6 A		■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1662/106-000
24 VDC	4	2 ... 10 A		■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664
24 VDC	4	2 ... 10 A		■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/000-004
24 VDC	4	2 ... 10 A			■		■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/000-011
24 VDC	4	2 ... 10 A		■		■		■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/000-054
24 VDC	4	1 ... 10 A							■		■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/000-080
24 VDC	4	3,8 A / 3,2 A	■	■			■	■		■		■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/004-1000
24 VDC	4	0,5 ... 6 A	■	■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/006-1000
24 VDC	4	0,5 ... 6 A	■	■		■		■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/006-1054
24 VDC	4	1 ... 6 A		■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/106-000
24 VDC	4	1 ... 6 A			■		■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/106-011
24 VDC	4	2 ... 12 A	■	■			■	■			■	■	■		45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/212-1000
24 VDC	8	2 ... 10 A		■			■	■			■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668
24 VDC	8	2 ... 10 A		■			■	■			■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/000-004
24 VDC	8	2 ... 10 A		■		■		■			■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/000-054
24 VDC	8	1 ... 10 A							■		■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/000-080
24 VDC	8	0,5 ... 6 A	■	■			■	■			■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/006-1000
24 VDC	8	0,5 ... 6 A	■	■			■	■			■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/006-1054
24 VDC	8	1 ... 6 A		■			■	■			■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/106-000
24 VDC	8	1 ... 6 A		■		■		■			■	■	■		42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/106-054
48 VDC	2	2 ... 10 A		■			■	■				■	■	■	45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1662/000-250
48 VDC	4	2 ... 10 A		■			■	■				■	■	■	45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/000-200
48 VDC	4	2 ... 10 A		■			■	■				■	■	■	45 mm	90 mm	115.5 mm	-25 ... +70 °C	787-1664/000-250
48 VDC	8	2 ... 10 A		■			■	■				■	■	■	42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/000-200
48 VDC	8	2 ... 10 A		■			■	■				■	■	■	42 mm	127 mm	142.5 mm	-25 ... +70 °C	787-1668/000-250



Intuitive status display

- Output channels with backlit buttons for on/off switching and acknowledgement
- Integrated, multi-color LEDs indicate the operating status of each channel



Trip characteristics

- Reliable, precise disconnection in case of overcurrent or short circuit
- Nominal currents can be set separately for each channel in 1 A, 2 A, 4 A, 6 A and 10 A increments
- Parallel connection of channels for higher nominal currents of 11, 12, 14 and 16 A



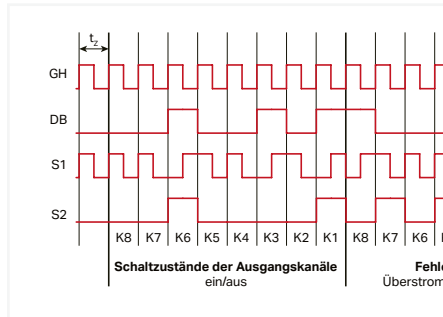
Rotary switch

- Nominal current can be individually adjusted for each channel 1 ... 16 A
- The setting is visible even when no voltage is applied
- Switchable electronic key lock protects against incorrect operation



Communication 1.0

- Remote digital input DI for switching and resetting all tripped channels
- Digital output DO as a group message indicating whether one of the channels was tripped by an overcurrent



Communication 2.0

- Remote digital input MDI (S1) for switching specific channels on and off via pulse sequence (Manchester protocol)
- Digital output MDO (S2) for transmitting the current status (on/off/tripped/overcurrent) of each individual channel
- Optional transmission of input voltage and output/nominal current value for each channel



Communication 3.0

- Modbus RTU or IO-Link interface
- Readout of status, nominal current setting, current voltage values and current values for each channel
- Setting the nominal current, as well as switch-on/off and reset of individual channels

Overvoltage Protection

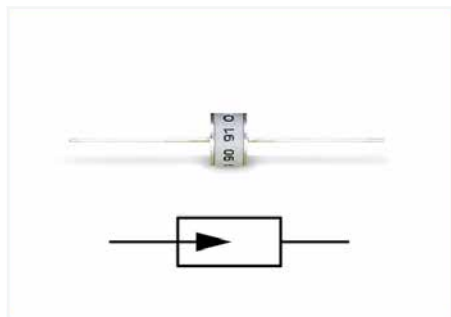
Overvoltage Protection for Increased Safety and Longer On-Line Operation

On-the-line overvoltages cause most operating failures for measuring, control, data and power lines. Failure of electronic and semiconductor components due to surges can cause operating interruptions. The overvoltage (also called transients) can be generated by switching electrical equipment on or off or by lightning discharges. Depending on the application, protective measures for systems and devices can be broken down into:

- Coarse protection
- Medium protection
- Fine protection

The boundaries between these levels of protection may not be sharply defined. To implement the appropriate protection measures, various components are used for discharging transient overvoltage, depending on the protection type. The following components have proven performance in these applications:

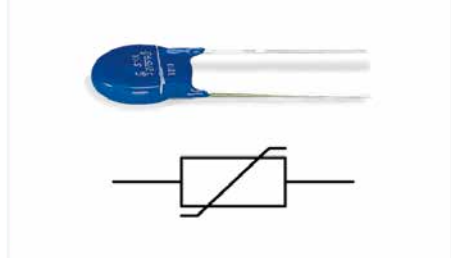
Gas-Filled Surge Arrester



The gas filled surge arrester is comprised of two electrodes in a ceramic or glass tube filled with a pressurized inert gas.

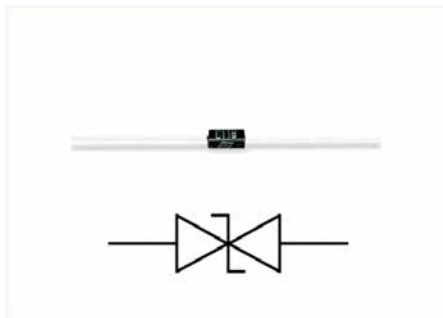
Once the ignition voltage is reached, resistance drops due to ionization and current begins to flow. The resistance of the device drops from high to low as it conducts. The voltage across the device after the arc is struck is typically 10 ... 30 V. Therefore, the current will continue to flow until the voltage drops below this level. As this is not a guaranteed occurrence in typical power situations, a fuse must precede the device to ensure disconnection from the supply. This is always the case if the nominal voltage of the protected network is greater than 12 VDC and the nominal voltage of the power supply and the protected circuit is greater than 100 mA.

Varistor



A varistor is a voltage-dependent resistor, in which the resistance becomes low after their "nominal voltage" is exceeded and for the voltage range above it, and can thus cut off any overvoltages through high discharge currents. Varistors can age with continued surge conduction, resulting in lower impedance even in the lower voltage range. However, this normally only occurs when a varistor frequently discharges transients. In this case, they must be replaced and specific time intervals.

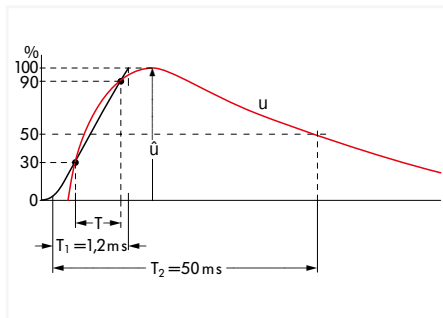
Suppressor Diode



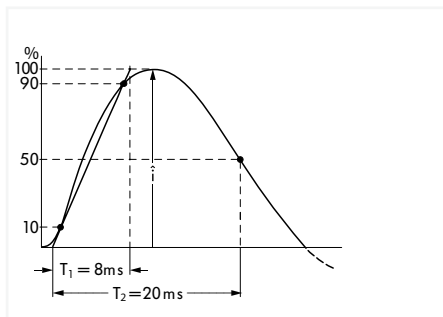
Suppressor diodes have electrical characteristics similar to Zener diodes, but are rated for surge currents. Once the rated breakdown voltage is exceeded (in the non-conductive direction), the diode becomes a conductor. The suppressor diode differs from a Zener in its higher current carrying capability and faster response time (in the picosecond range).

Test Impulse

Surge arresters are subject to standardized test pulses in order to classify capabilities; the effectiveness of protection measures with reference to dissipation capacity and voltage arresting. The form and level of the test pulses are defined by IEC 60060-1 and EN 62475:2010. Preference is given to voltage pulses of 1.2/50 and current pulses of 8/20.



Voltage pulses 1.2/50 per IEC 60060-1



Current pulses 8/20 per EN 62475:2010

Application Recommendations

The advantages of gas-filled surge arresters lie in their high current carrying capacity, making them ideal for coarse protection. One disadvantage, particularly in the medium protection range, is the relatively long response time, as well as the power follow current.

Varistors have a considerably shorter response time; however they also have lower leakage currents. This makes them more suitable for medium protection as they offer limited applications for coarse protection.

If the connection lines of electronic equipment are already "fine" protected, general coarse and medium protection measures are sufficient. If this is not the case, suppressor diodes with a very short response time may be employed as fine protection. WAGO offers a complete range of modular terminal blocks with integrated surge arresters for coarse, medium and fine protection.

Depending on the application, one can choose the appropriate type from the previously mentioned surge arresters. These are electrically connected in the modular terminal blocks between the connection point and mounting rail. Snapping the terminal block onto the grounded (earthed) mounting rail automatically ensures the required overvoltage protection.



Double-deck terminal block, with varistor direct connection to DIN-35 rail

Frequently, only one surge arrester is fitted for cost reasons. However, due to the fact that one surge arrester alone cannot optimally ensure several protection functions, combinations are recommended. Care must be taken to ensure that the single-stage protection devices are decoupled sufficiently by inductors or resistors.

Overvoltage Protection

Interference suppression modules are a special category here.

In addition to overvoltage protection, a high frequency interference filter can be added to the circuitry. This filter cannot only protect the equipment from high frequency energy transmitted by connecting wires, but also prevents a transmission of disturbances to the supply lines. The main component of a filter is an LC network, which produces a mismatch between the filter impedance and the impedance of the disturbance path. This reflects any disturbance back to its source.

Definition of Several Important Technical Terms

Nominal Operating Voltage (U_{BN})

The nominal operating voltage corresponds to the voltage which may be permanently connected to the appropriate connection terminals of the overvoltage protection module. Alternating voltages are quoted as effective values.

Max. Operating Voltage (U_{Bmax})

The maximum operating voltage corresponds to the voltage which may be permanently connected to the appropriate connection terminals without the operating properties changing or activating the individual module's protection elements.

Nominal Current (I_N)

The nominal current corresponds to the current which may permanently flow through the connection terminals of the overvoltage protection device.

Nominal Discharge Current (I_{SN})

The nominal discharge current is the maximum value of a current having the 8/20 μ s waveform, which can flow through the surge arrester five times within a time period of 30 seconds (VDE) without destroying it.

Max. Surge Current (I_{Smax})

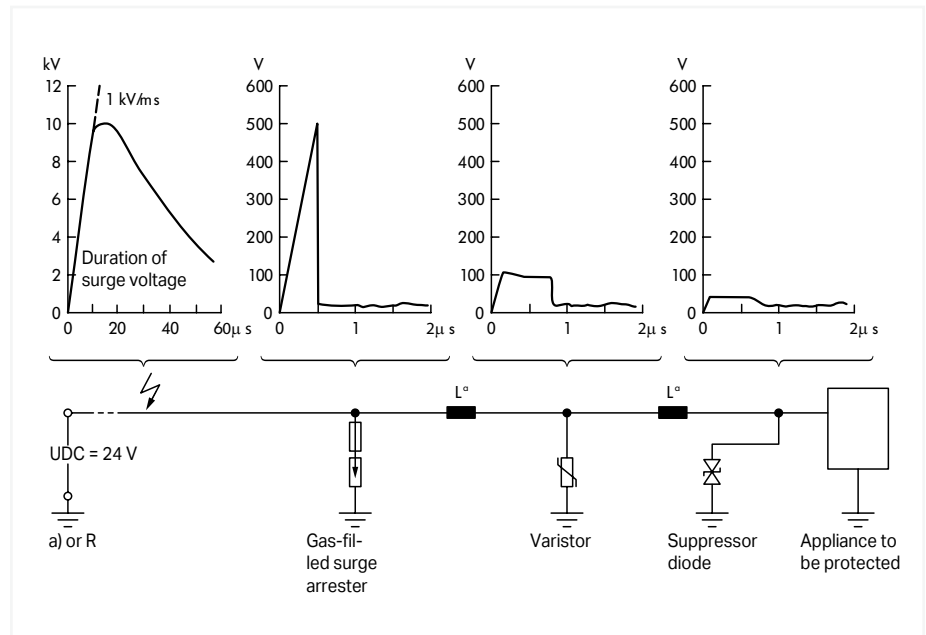
The maximum surge current I_{Smax} defines the maximum value of a current having the 8/20 μ s waveform, which can flow through the surge arrester once without destroying it.

Protection Level (U_p)

The protection level is the value of the residual voltage occurring on the "protected" side of the surge arrester when applying the rated discharge current.

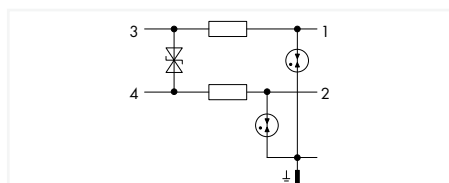
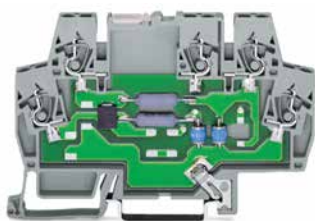
Response Time (t_{resp})

The response time is primarily based on the physical properties of the surge arresters and is dependent upon the wave front duration of the surge voltage. WAGO's data refers to a voltage rise 1kV/ μ s.

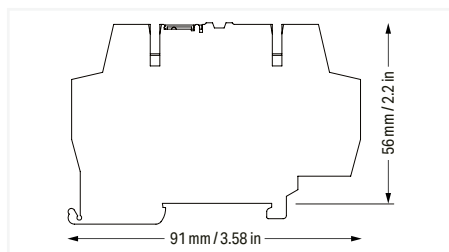


Function diagram of a multi-stage surge voltage protection module

Surge suppression module for signal technology ▶ Nominal operating voltage: 24 VDC ▶ for 2 signal paths with common surge arrester; for symmetric interfaces; Two-stage ▶ Width: 6 mm



	Item No.	PU
	792-801	1



Short description:

Provides surge protection for IT systems and devices in the voltage range up to 60 V (except custom solutions, e.g., telephone systems with ringing voltage). Overvoltage protection is also possible for DIN-35 rail-mount terminal blocks. Multi-stage surge arresters in rail-mount terminal blocks (792-80x Series) of just 6 mm width ensure cost-effective protection for control and bus technology (e.g., LON® network, PROFIBUS network, binary signals).

Features:

- Protect your system against overvoltage
- Slim, space-saving design
- Control operational costs by preventing expensive, unplanned downtime
- High operational reliability and system uptime

Safety Information

- Installation must be carried out by qualified personnel only.
- The DIN-rail must be grounded.
- The input current must be protected by a suitable fuse.
- Protection against contact with stored charges must be ensured.
- Do not plug in/unplug pluggable modules when energized.
- The IP20 protection type must be maintained in the assembled state or when using an end/intermediate plate that matches the rail-mount terminal block.

Note

The coordination characteristics of the surge arrester provide information about its discharge capacity and protection capability.

Electrical data

Nominal operating voltage	24 VDC
Maximum continuous voltage	23 VAC / 33 VDC
Nominal current	0.5 A
Nominal discharge current (8/20 µs) (line)	5 kA
Nominal discharge current (8/20 µs) (total)	10 kA
Protection level (line/line) (cat. C2 at I _N)	≤ 50 V
Protection level (line/protected ground) (cat. C2 at I _N)	≤ 750 V
Protection level (line/line) (cat. C3 at I _N)	≤ 45 V
Protection level (line/protected ground) (cat. C3 at I _N)	≤ 650 V
Response time (line/protected ground)	≤ 100 ns
Limit frequency (line/line)	6 MHz
Limit frequency (line/protected ground)	6 MHz
Impedance	1.8 Ω
Capacitance (line/line)	≤ 10 nF
Capacitance (line/protected ground)	≤ 5 pF

Safety and protection/Environmental requirements

Protection type	IP00; IP20 with end and intermediate plate
Ambient temperature (operation)	-40 ... +80 °C
Ambient temperature (storage)	-40 ... +80 °C

Connection data

Connections (number)	5
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches

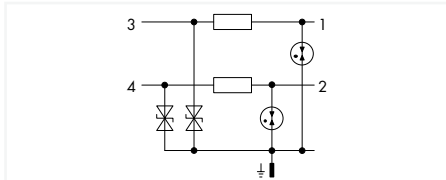
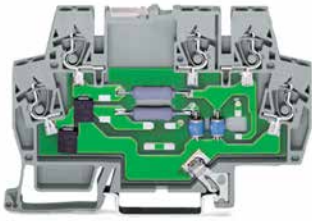
Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	6 mm x 91 mm x 56 mm
Mounting type	DIN-35 rail

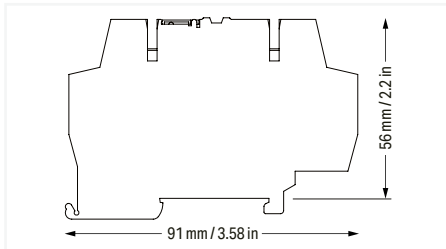
Standards and specifications

Standards/specifications	IEC 61643-21
--------------------------	--------------

Surge suppression module for signal technology ▶ Nominal operating voltage: 24 VDC ▶ for 2 signal paths with common surge arrester; for unbalanced interfaces; Two-stage ▶ Width: 6 mm



	Item No.	PU
	792-800	1



Short description:

Provides surge protection for IT systems and devices in the voltage range up to 60 V (except custom solutions, e.g., telephone systems with ringing voltage). Overvoltage protection is also possible for DIN-35 rail-mount terminal blocks. Multi-stage surge arresters in rail-mount terminal blocks (792-80x Series) of just 6 mm width ensure cost-effective protection for control and bus technology (e.g., LON® network, PROFIBUS network, binary signals).

Features:

- Protect your system against overvoltage
- Slim, space-saving design
- Control operational costs by preventing expensive, unplanned downtime
- High operational reliability and system uptime

Safety Information

- Installation must be carried out by qualified personnel only.
- The DIN-rail must be grounded.
- The input current must be protected by a suitable fuse.
- Protection against contact with stored charges must be ensured.
- Do not plug in/unplug pluggable modules when energized.
- The IP20 protection type must be maintained in the assembled state or when using an end/intermediate plate that matches the rail-mount terminal block.

Note

The coordination characteristics of the surge arrester provide information about its discharge capacity and protection capability.

Electrical data

Nominal operating voltage	24 VDC
Maximum continuous voltage	23 VAC / 33 VDC
Nominal current	0.5 A
Nominal discharge current (8/20 μs) (line)	5 kA
Nominal discharge current (8/20 μs) (total)	10 kA
Protection level (line/line) (cat. C2 at I _N)	≤ 110 V
Protection level (line/protected ground) (cat. C2 at I _N)	≤ 65 V
Protection level (line/line) (cat. C3 at I _N)	≤ 90 V
Protection level (line/protected ground) (cat. C3 at I _N)	≤ 45 V
Response time (line/protected ground)	≤ 1 ns
Limit frequency (line/line)	6 MHz
Limit frequency (line/protected ground)	6 MHz
Impedance	1.8 Ω
Capacitance (line/line)	≤ 5 nF
Capacitance (line/protected ground)	≤ 1 nF

Safety and protection/Environmental requirements

Protection type	IP00; IP20 with end and intermediate plate
Ambient temperature (operation)	-40 ... +80 °C
Ambient temperature (storage)	-40 ... +80 °C

Connection data

Connections (number)	5
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches

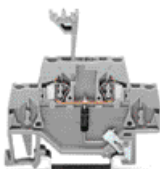
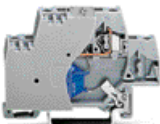
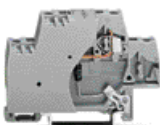
Physical data/Mechanical data/Material Data

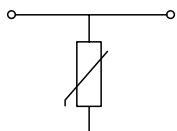
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 91 mm x 56 mm
Mounting type	DIN-35 rail

Standards and specifications

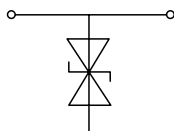
Standards/specifications	IEC 61643-21
--------------------------	--------------

Component Terminal Block ► with Surge Arrester ► for DIN-35 Rail 280 Series

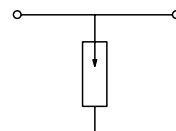
Image	Description	Nominal Operating Voltage	Item No.	PU
	Component terminal block; double-deck; with varistor; with direct connection to DIN-35 rail	24 VDC	280-502/281-609	50
		48 VDC	280-502/281-610	50
		60 VDC	280-502/281-611	50
		110 VDC	280-502/281-612	50
		24 VAC	280-502/281-613	50
		115 VAC	280-502/281-614	50
	Component terminal block; double-deck; with direct connection to DIN-35 rail			
	with P6KE36C TVS diode	24 VDC	280-502/281-602	50
	with P6KE68C TVS diode	48 VDC	280-502/281-603	50
	with P6KE91C TVS diode	60 VDC	280-502/281-604	50
	with BZW06-B TVS diode	110 VDC	280-502/281-605	50
	with BZW06-40B TVS diode	24 VAC	280-502/281-606	50
	with BZW06-B TVS diode	115 VAC	280-502/281-607	50
	with P6KE400CA TVS diode	230 VAC	280-502/281-608	50
	Component terminal block; double-deck; with varistor; with end plate; with direct connection to DIN-35 rail	24 VDC	280-502/281-582	25
		48 VDC	280-502/281-583	25
		60 VDC	280-502/281-584	25
		110 VDC	280-502/281-585	25
		24 VAC	280-502/281-586	25
		115 VAC	280-502/281-587	25
		230 VAC	280-502/281-588	25
	Component terminal block; double-deck; with end plate; with direct connection to DIN-35 rail			
	with 1.5KE33C TVS diode	24 VDC	280-502/281-589	25
	with 1.5KE62C TVS diode	48 VDC	280-502/281-590	25
	with 1.5KE82C TVS diode	60 VDC	280-502/281-591	25
	with 1.5KE150C TVS diode	110 VDC	280-502/281-592	25
	with 1.5KE39CA TVS diode	24 VAC	280-502/281-593	25
	with 1.5KE-C TVS diode	115 VAC	280-502/281-594	25
	with 1.5KE-C TVS diode	230 VAC	280-502/281-595	25
	Component terminal block; double-deck; with Gas-Filled Surge Arrester; with end plate; with direct connection to DIN-35 rail	24 VAC/VDC	280-503/281-579	25
		115 VAC/VDC	280-503/281-580	25
		230 VAC/VDC	280-503/281-581	25



Component Terminal Block with Varistor



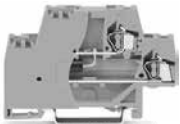
Component Terminal Block with TVS Diode

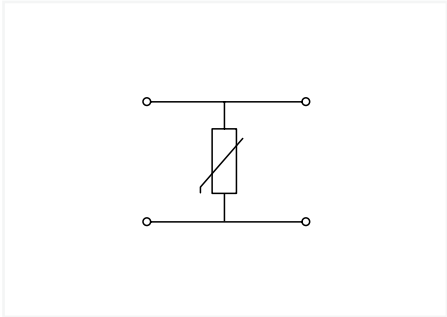


Component Terminal Block with Gas-Filled Surge Arrester

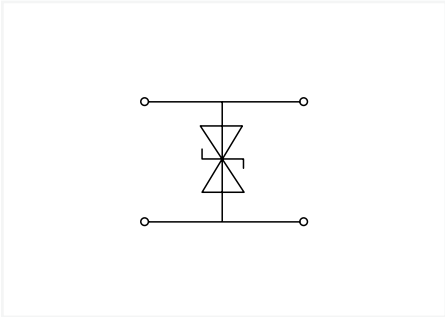
Component Terminal Block ▶ with Surge Arrester ▶ for DIN-35 Rail

280 Series

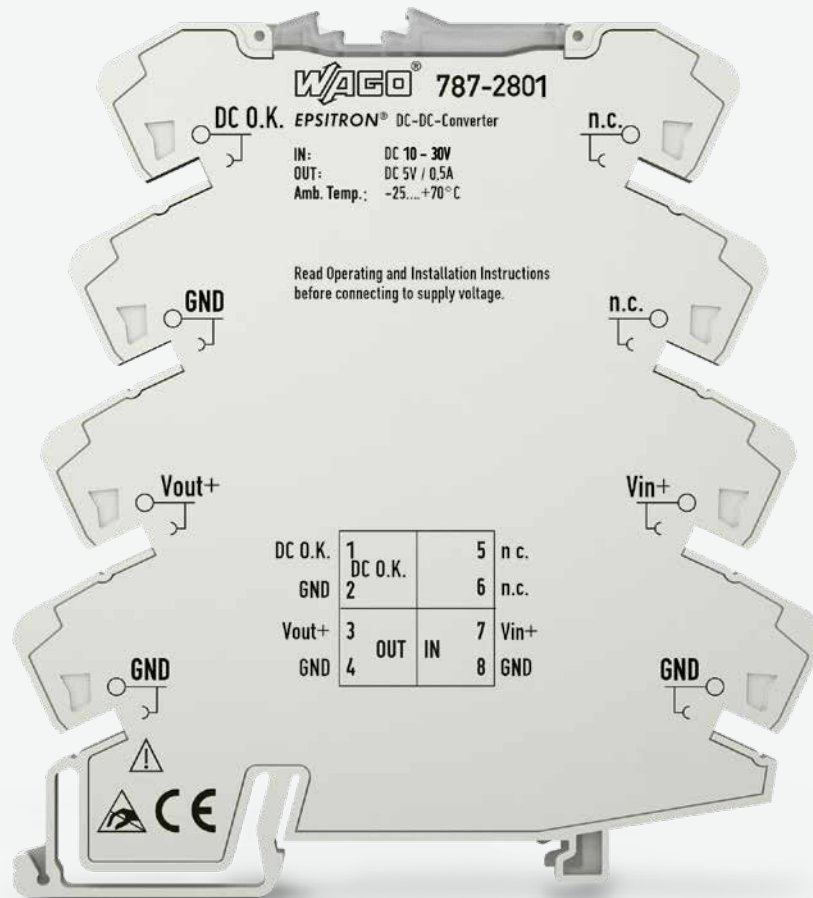
Image	Description	Nominal Operating Voltage	Item No.	PU
	Component terminal block; double-deck; with varistor; with end plate	24 VDC	280-504/281-582	25
		48 VDC	280-504/281-583	25
		60 VDC	280-504/281-584	25
		110 VDC	280-504/281-585	25
		24 VAC	280-504/281-586	25
		115 VAC	280-504/281-587	25
		230 VAC	280-504/281-588	25
	Component terminal block; double-deck; with end plate			
	with 1.5KE33C TVS diode	24 VDC	280-944/281-589	25
	with 1.5KE62C TVS diode	48 VDC	280-944/281-590	25
	with 1.5KE82C TVS diode	60 VDC	280-944/281-591	25
	with 1.5KE150C TVS diode	110 VDC	280-944/281-592	25
	with 1.5KE39CA TVS diode	24 VAC	280-944/281-593	25
	with 1.5KE-C TVS diode	115 VAC	280-944/281-594	25
	with 1.5KE-C TVS diode	230 VAC	280-944/281-595	25



Component Terminal Block with Varistor



Component Terminal Block with TVS Diode



WAGO DC/DC Converters

WAGO DC/DC Converters

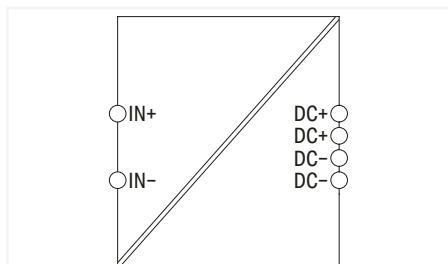
	Compact DC/DC Converters; 787 Series	Page 180
	DC/DC Converters; 787 Series	186

WAGO DC/DC Converters

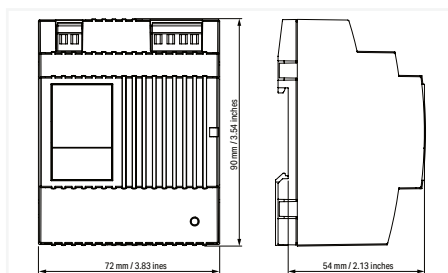
Selection Guide

Input		Output		Standards/Approvals				Signaling		Dimensions and Environmental Requirements				Item No.
Nominal voltage [VDC]		Nominal voltage [VDC]	Nominal current [A]	EN 50125	EN 50121-3-2	UL 61010	DNV	DC OK LED	1 x Active signal output	Width	Height	Depth from upper- edge of DIN-rail	Surrounding air temperature	
24 VDC		5 V	0.5 A			■		■	■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2801
24 VDC		5 V / 10 V / 12 V	0.5 A			■		■	■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2810
24 VDC		10 V	0.5 A			■		■	■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2802
24 VDC		12 V	4 A					■		45 mm	90 mm	107.5 mm	-25 ... +70 °C	787-1650
24 VDC		12 V	0.5 A			■		■	■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2805
48 VDC		24 V	0.5 A			■		■	■	6 mm	94 mm	97.8 mm	-25 ... +70 °C	787-2803
72 VDC		12 V	4 A	■	■		■	■		72 mm	89 mm	55 mm	-40 ... +70 °C	787-1015/072-000
72 VDC		24 V	2 A		■		■	■		72 mm	89 mm	55 mm	-40 ... +70 °C	787-1014/072-000
110 VDC		24 V	2 A		■		■	■		72 mm	89 mm	55 mm	-40 ... +70 °C	787-1014

DC/DC converter ► Compact ► Nominal input voltage (DC): 110 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 2 A



Item No.	PU
787-1014	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1
- Control deviation: $\pm 1\%$ ($\pm 10\%$ within the application range of EN 50121-3-2)
- Suitable for railway applications

Input	
Nominal input voltage $U_{i, \text{nom}}$	110 VDC
Input voltage range	77 ... 140 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.77 A (77 VDC); ≤ 0.42 A (140 VDC)
Inrush current	≤ 30 A (NTC)
Mains failure hold-up time	≥ 8 ms (77 VDC); ≥ 25 ms (140 VDC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Nominal output current $I_{o, \text{nom}}$	2 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	48 W
Residual ripple	≤ 100 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1.9 W (110 VDC; no load); ≤ 9.9 W (110 VDC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	9.9 W (77 VDC / 24 VDC; 2 A)
Efficiency (typ.)	85 %

Circuit protection	
Internal fuse	T 4 A / 125 VDC
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

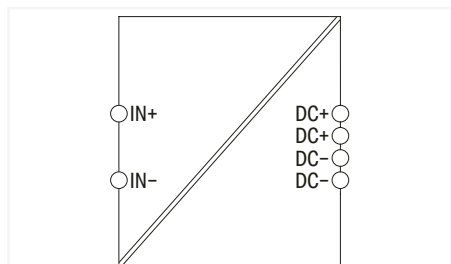
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000$ h (per IEC 61709)
Ambient temperature (operation)	$-40 \dots +70$ °C
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	5 ... 96 % (Coated PCB)
Derating	-1.5 %/K (> 55 °C)
Resistance to shock and vibration	Category 1, Class B (per EN 61373:2010)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

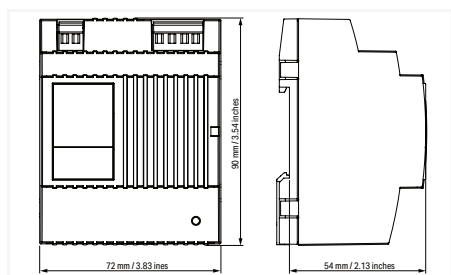
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 50121-3-2; DNV
Standards/specifications (pending)	EN 50125; UL 60950; UL 508

DC/DC converter ► Compact ► Nominal input voltage (DC): 72 VDC ► Nominal output voltage (DC): 12 V ► Nominal output current: 4 A



Item No.	PU
787-1015/072-000	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1
- Control deviation: $\pm 1\%$ ($\pm 10\%$ within the application range of EN 50121-3-2)
- Suitable for railway applications

Input	
Nominal input voltage $U_{i\text{nom}}$	72 VDC
Input voltage range	40 ... 90 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.79 A (72 VDC)
Inrush current	≤ 30 A (NTC)
Mains failure hold-up time	≥ 8 ms (72 VDC)

Output	
Nominal output voltage $U_{o\text{nom}}$	12 VDC (SELV)
Nominal output current $I_{o\text{nom}}$	4 A (24 VDC); 3.1 A (in any mounting position)
Nominal output power	48 W
Residual ripple	≤ 100 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 1.2 W (72 VDC; no load); ≤ 8.6 W (72 VDC; nominal load)
Power loss (max.) $P_{i\text{(max.)}}$	9.7 W (40 VDC / 12 VDC; 4 A)
Efficiency (typ.)	85 %

Circuit protection	
Internal fuse	T 4 A / 125 VDC
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 21.5 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000$ h (per IEC 61709)
Ambient temperature (operation)	$-40 \dots +70$ °C
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	5 ... 96 % (Coated PCB)
Derating	$-1.5\%/K$ (> 55 °C)
Resistance to shock and vibration	Category 1, Class B (per EN 61373:2010)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

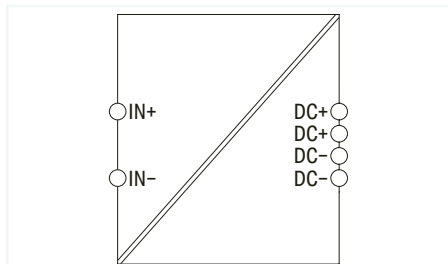
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 50121-3-2; EN 50125; DNV

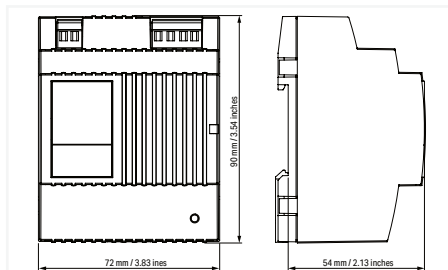
DC/DC converter ► Compact ► Nominal input voltage (DC): 72 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 2 A



Similar to illustration



Item No.	PU
787-1014/072-000	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1
- Control deviation: $\pm 1\%$ ($\pm 10\%$ within the application range of EN 50121-3-2)
- Suitable for railway applications

Input	
Nominal input voltage $U_{i, \text{nom}}$	72 VDC
Input voltage range	40 ... 90 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.79 A (72 VDC)
Inrush current	≤ 30 A (NTC)
Mains failure hold-up time	≥ 8 ms (72 VDC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Nominal output current $I_{o, \text{nom}}$	2 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	48 W
Residual ripple	≤ 100 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 2 W (72 VDC; no load); ≤ 9 W (72 VDC; nominal load)
Power loss (max.) $P_{i, \text{(max.)}}$	10.5 W (40 VDC / 24 VDC; 2 A)
Efficiency (typ.)	84 %

Circuit protection	
Internal fuse	T 4 A / 125 VDC
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

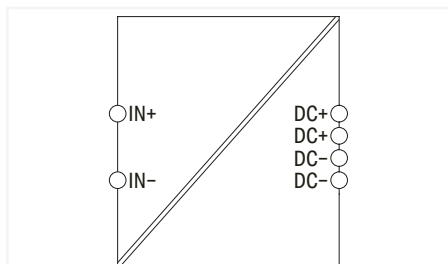
Safety and protection/Environmental requirements	
Protection class/Protection type	II / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; ≤ 40 VDC (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	No/Yes
MTBF	$> 500,000$ h (per IEC 61709)
Ambient temperature (operation)	$-40 \dots +70$ °C
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	5 ... 96 % (Coated PCB)
Derating	$-1.5\%/K$ (> 55 °C)
Resistance to shock and vibration	Category 1, Class B (per EN 61373:2010)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

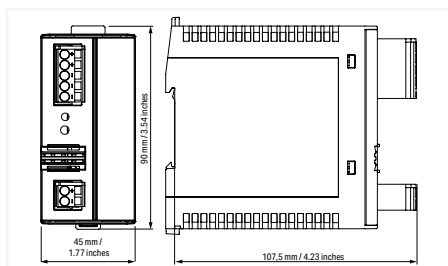
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 89 mm x 55 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 50121-3-2; DNV
Standards/specifications (pending)	EN 50125; UL 60950; UL 508

DC/DC converter ► Classic ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 12 V ► Nominal output current: 4 A



Item No.	PU
787-1650	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1
- Control deviation: $\pm 1\%$

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 60 VDC
Nominal mains frequency range	0 Hz
Input current I_i	$\leq 2.56 \text{ A}$ (24 VDC); $\leq 0.96 \text{ A}$ (60 VDC); $\leq 3.39 \text{ A}$ (18 VDC)
Inrush current	$\leq 60 \text{ A}$ (NTC)
Mains failure hold-up time	$\geq 5 \text{ ms}$ (24 VDC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	12 VDC (SELV)
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	4 A
Nominal output power	48 W
Residual ripple	$\leq 50 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication	
Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	$\leq 1 \text{ W}$; $\leq 11.7 \text{ W}$ (DC_{in} 24 V / 4 A); $\leq 1.28 \text{ W}$ (48 VDC; 40 A)
Power loss (max.) $P_{i, \text{(max)}}$	15 W (DC_{in} 18 V / 4 A)
Efficiency (typ.)	84 %

Circuit protection	
Internal fuse	T 4 A / 250 VDC
Backup fusing (recommended)	T 6.3 A

Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-25 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2 \text{ }^\circ\text{C/K}$ ($> 55 \text{ }^\circ\text{C}$)

Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	45 mm x 90 mm x 107.5 mm
Mounting type	DIN-35 rail

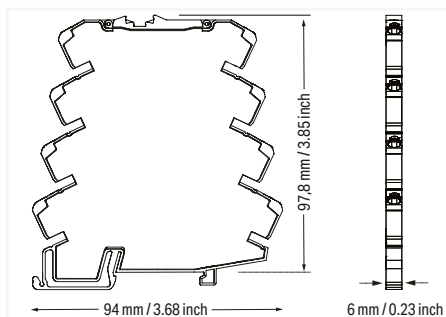
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16

DC/DC converter ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 5 V ► Nominal output current: 0.5 A ► DC OK contact



DC OK	1	DC OK	5	n.c.
GND	2		6	n.c.
V_{out+}	3	OUT	7	V_{in+}
GND	4	IN	8	GND

Item No.	PU
787-2801	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W.
- Output voltage monitoring via DC OK signal output
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input

Nominal input voltage $U_{in, nom}$	24 VDC
Input voltage range	10 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.34 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output

Nominal output voltage $U_{o, nom}$	5 VDC
Output voltage range	± 3 %
Nominal output current $I_{o, nom}$	0.5 A
Nominal output power	2.5 W
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and communication

Signaling	1 x LED DC OK (green); 1 x Short circuit LED (red); 1 x Active signal output (U_i , max. 4 mA)
Operation status indicator	Green LED (U_o); Red LED (short circuit)

Efficiency/power losses

Power loss P_i	≤ 0.13 W; ≤ 0.6 W (nominal load)
Efficiency (typ.)	82.5 % (at nominal input voltage and nominal output)

Circuit protection

Internal fuse	No
---------------	----

Safety and protection/Environmental requirements

Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	No/No
MTBF	$> 1,800,000$ h
Ambient temperature (operation)	$-25 \dots +70$ °C
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	No derating

Connection data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.34 ... 2.5 mm² / 28 ... 14 AWG

Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail

Standards and specifications

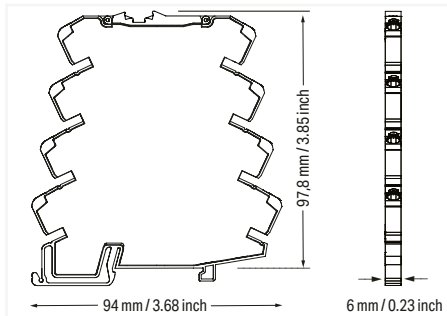
Conformity marking	CE
Standards/specifications	EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201

DC/DC converter ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 10 V ►
Nominal output current: 0.5 A ► DC OK contact



DC OK	1	DC OK	5	n.c.
GND	2		6	n.c.
V _{out} +	3		7	V _{in} +
GND	4	OUT IN	8	GND

	Item No.	PU
	787-2802	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W.
- Output voltage monitoring via DC OK signal output
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

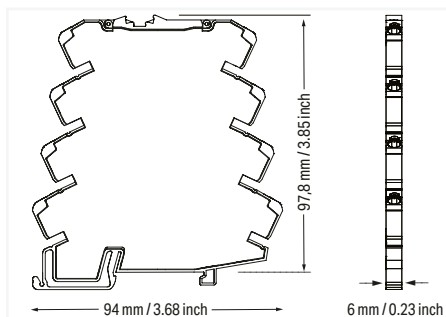
Input	
Nominal input voltage U _{in nom}	24 VDC
Input voltage range	15 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I _i	≤ 0.42 A
Inrush current	≤ 0.5 A (at nominal input voltage)
Output	
Nominal output voltage U _{o nom}	10 VDC
Output voltage range	±2 %
Nominal output current I _{o nom}	0.5 A
Nominal output power	5 W
Residual ripple	≤ 20 mV (peak-to-peak)
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Short circuit LED (red); 1 x Active signal output (U _s , max. 4 mA)
Operation status indicator	Green LED (U _s); Red LED (short circuit)
Efficiency/power losses	
Power loss P _i	≤ 0.19 W; ≤ 0.7 W (nominal load)
Efficiency (typ.)	89 % (at nominal input voltage and nominal output)
Circuit protection	
Internal fuse	No
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	No/No
MTBF	> 1,800,000 h
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	No derating
Connection data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.34 ... 2.5 mm² / 28 ... 14 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201

DC/DC converter ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 12 V ► Nominal output current: 0.5 A ► DC OK contact



DC OK	1	DC OK	5	n.c.
GND	2		6	n.c.
V _{out} +	3	OUT	7	V _{in} +
GND	4	IN	8	GND

Item No.	PU
787-2805	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W.
- Output voltage monitoring via DC OK signal output
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input

Nominal input voltage U _{in,nom}	24 VDC
Input voltage range	15 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I _i	≤ 0.5 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output

Nominal output voltage U _{o,nom}	12 VDC
Output voltage range	±2 %
Nominal output current I _{o,nom}	0.5 A
Nominal output power	6 W
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and communication

Signaling	1 x LED DC OK (green); 1 x Short circuit LED (red); 1 x Active signal output (U _i , max. 4 mA)
Operation status indicator	Green LED (U _o); Red LED (short circuit)

Efficiency/power losses

Power loss P _i	≤ 0.21 W; ≤ 0.7 W (nominal load)
Efficiency (typ.)	90 % (at nominal input voltage and nominal output)

Circuit protection

Internal fuse	No
---------------	----

Safety and protection/Environmental requirements

Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	No/No
MTBF	> 1,800,000 h
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	No derating

Connection data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm ² / 0.34 ... 2.5 mm ² / 28 ... 14 AWG

Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail

Standards and specifications

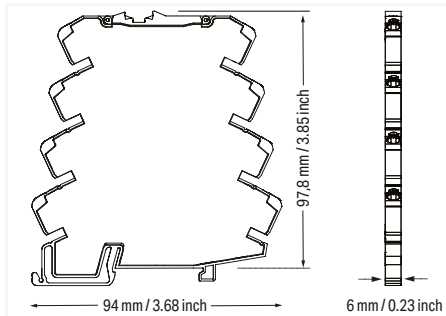
Conformity marking	CE
Standards/specifications	EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201

DC/DC converter ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 5 V; 10 V; 12 V ► Nominal output current: 0.5 A ► DC OK contact



DC OK	1	DC OK	5	n.c.
GND	2		6	n.c.
V _{out} +	3		7	V _{in} +
GND	4	OUT IN	8	GND

	Item No.	PU
	787-2810	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W.
- Output voltage monitoring via DC OK signal output
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

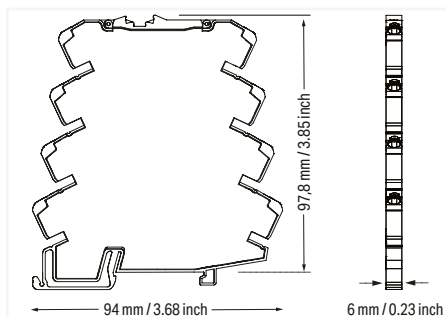
Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Input voltage range	15 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.5 A
Inrush current	≤ 0.5 A (at nominal input voltage)
Output	
Nominal output voltage $U_{o\text{nom}}$	5 / 10 / 12 VDC (adjustable via DIP switch)
Output voltage range	± 3 %
Nominal output current $I_{o\text{nom}}$	0.5 A
Nominal output power	2.5 W
Residual ripple	≤ 20 mV (peak-to-peak)
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Short circuit LED (red); 1 x Active signal output (U_o , max. 4 mA)
Operation status indicator	Green LED (U_o); Red LED (short circuit)
Efficiency/power losses	
Power loss P_i	≤ 0.21 W; ≤ 0.7 W (nominal load)
Efficiency (typ.)	82.5 % (at nominal input voltage and nominal output)
Circuit protection	
Internal fuse	No
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	No/No
MTBF	$> 1,800,000$ h
Ambient temperature (operation)	$-25 \dots +70$ °C
Ambient temperature (storage)	$-40 \dots +85$ °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	No derating
Connection data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.34 ... 2.5 mm² / 28 ... 14 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201

DC/DC converter ► Nominal input voltage (DC): 48 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 0.5 A ► DC OK contact



DC OK	1	DC OK	5	n.c.
GND	2		6	n.c.
V _{in} +	3	IN	7	V _{out} +
GND	4	OUT	8	GND

Item No.	PU
787-2803	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W.
- Output voltage monitoring via DC OK signal output
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input

Nominal input voltage U _{in,nom}	48 VDC
Input voltage range	40 ... 55 VDC
Nominal mains frequency range	0 Hz
Input current I _i	≤ 0.34 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output

Nominal output voltage U _{o,nom}	24 VDC
Output voltage range	±3 %
Nominal output current I _{o,nom}	0.5 A
Nominal output power	12 W
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and communication

Signaling	1 x LED DC OK (green); 1 x Short circuit LED (red); 1 x Active signal output (U _i , max. 4 mA)
Operation status indicator	Green LED (U _i); Red LED (short circuit)

Efficiency/power losses

Power loss P _i	≤ 0.29 W; ≤ 1.2 W (nominal load)
Efficiency (typ.)	91 % (at nominal input voltage and nominal output)

Circuit protection

Internal fuse	No
---------------	----

Safety and protection/Environmental requirements

Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Short-circuit-protected/Open-circuit-proof	Yes/Yes
Parallel operation/Series operation	No/No
MTBF	> 1,800,000 h
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	No derating

Connection data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.34 ... 2.5 mm² / 28 ... 14 AWG

Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail

Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201

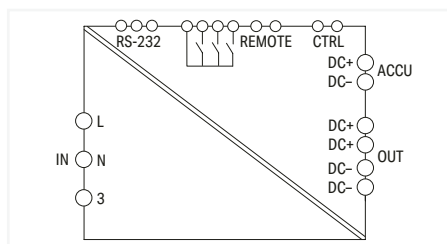


WAGO UPS Charger and Controller and WAGO Capacitive Buffer Modules

WAGO UPS Charger and Controller and WAGO Capacitive Buffer Modules

		Page
	Classic Switched-Mode Power Supply with Integrated Charger and Controller; 787 Series	194
	UPS Charger and Controller 2685 / 787 Series	196
	Lead-Acid AGM Battery Module 787 Series	204
	Pure Lead Battery Module 787 Series	209
	Capacitive Buffer Module 787 Series	212

Switched-mode power supply with integrated charger and controller ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A



	Item No.	PU
	787-1675	1

Features:

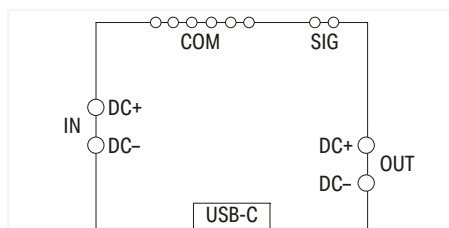
- Switched-mode power supply with integrated charger and controller for uninterruptible power supply (UPS)
- Battery control technology for smooth charging and predictive maintenance applications
- Potential-free contacts provide function monitoring
- Buffer time can be set on site via rotary switch
- Parameter setting and monitoring via RS-232 interface
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-1.5 %/V (< 110 VAC); -1 %/V (< 150 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 1.1 \text{ A}$ (230 VAC; 5 ADC); $\leq 2.2 \text{ A}$ (110 VAC; 5 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (mains operation); 18.5 ... 27.5 VDC (buffer mode)
Nominal output current $I_{o, \text{nom}}$	5 A
Nominal output power	120 W
Residual ripple	$\leq 50 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.); TopBoost
Overload behavior	Constant current
Energy storage systems	
Buffer time	1 s ... 20 min or constant; PC mode; configurable via software
Switch-on threshold (adjustable)	DC 20 ... 25.5 V (adjustable via software; 22 VDC (pre-configured))
Storage type	Lead-acid (AGM)
Charging current	0.3 ... 1 A
End-of-charge voltage	26 ... 29.5 VDC (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873, 787-876, 787-1671
Signaling and communication	
Signaling	1 x Alarm LED (red); 1 x Battery charge LED (yellow); 1 x LED DC OK (green); 3 x Signal output (24 VDC; max. 200 mA in total); 1 x RS-232 interface
Communications	RS-232 serial interface
Operation status indicator	Green LED (DC OK); Yellow LED (battery mode); Red LED (alarm)
Remote input	Switching buffer mode off
Efficiency/power losses	
Power loss P_i	$\leq 5.2 \text{ W}$ (buffer mode; 24 VDC; 5 A); $\leq 17 \text{ W}$ (Mains operation; 230 VAC; 24 VDC; 5 A); $\leq 22 \text{ W}$
Power loss (max.) $P_{i, \text{(max)}}$	30 W (90 VAC; charging)
Efficiency (typ.)	88 %
Circuit protection	
Internal fuse	T 4 A / 250 VAC (input side)
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C
Safety and protection/Environmental requirements	
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class/Protection type	I / IP20; per EN 60529
Reverse voltage protection	Yes
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit; $\leq 38 \text{ VDC}$ (in the event of a fault)
Parallel operation/Series operation	Yes, max. 3 battery modules for buffer time extension/No
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C (device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)
Connection data	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Interface
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 1.5 mm² / 0.08 ... 1.5 mm² / 28 ... 14 AWG
Cable length (max.)	3 m (Output, battery control)
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	60 mm x 127 mm x 135.5 mm
Mounting type	DIN-35 rail

Switched-mode power supply with integrated charger and controller ► Nominal output voltage (DC): 24 V ► Nominal output current: 5 A

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508; DNV

UPS charger and controller ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 4 A



Item No.	PU
2685-1002/601-204	1

Features:

- DC UPS module for uninterruptible power supply (UPS)
- Potential-free contacts provide function monitoring
- Modbus RS-485 communication interface
- Configuration via USB-C

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	22.5 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	$\leq 4.8 \text{ A}$

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	U_{be} (rated operation); 23.5 VDC ($U_{\text{in}} - 0.5 \text{ V}$) (battery voltage in buffer mode)
Nominal output current $I_{o, \text{nom}}$	4 A

Energy storage systems	
Buffer time	30 ... 35 s at $I_{\text{out}} = 4 \text{ A}$
Storage type	Supercaps
Battery capacity	0.06625 Ah; 1.59 Wh; 5.724 kJ
Charging time (typ.)	4.5 min

Signaling and communication	
Signaling	1 x Isolated relay contact (max. 30 VDC; 1 A); 1 x LED status (green)
Operation status indicator	Static LED (green, mains operation); Flashing LED (green, 1 Hz, buffer mode)

Circuit protection	
Internal fuse	T 15 A (input)

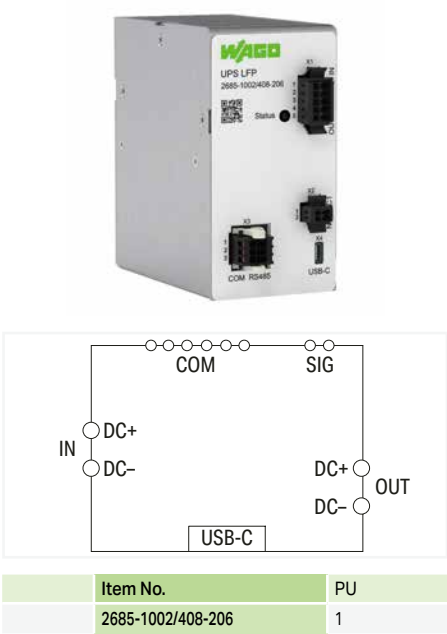
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	No/No
Ambient temperature (operation)	-20 ... +65 °C
Ambient temperature (storage)	-30 ... +65 °C
Relative humidity	5 ... 95 % (no condensation permissible)

Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 1.5 mm² / 0.08 ... 1.5 mm² / 28 ... 14 AWG
Connection type	Relay
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Connection type	Communication
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 1.5 mm² / 0.08 ... 1.5 mm² / 28 ... 16 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	63 mm x 120 mm x 108 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	IEC 61010-1 (SELV); IEC 61010-2-201
Standards/specifications (pending)	CSA

UPS charger and controller ▶ Nominal input voltage (DC): 24 VDC ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 6 A



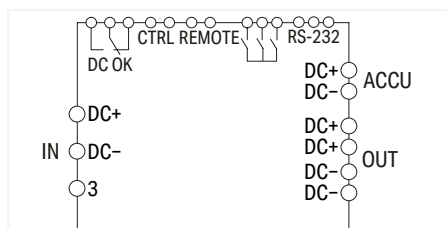
Item No.	PU
2685-1002/408-206	1

Features:

- DC UPS module for uninterruptible power supply (UPS)
- Potential-free contacts provide function monitoring
- Modbus RS-485 communication interface
- Configuration via USB-C

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Input voltage range	22.5 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 6.2 A
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	U_o (rated operation); 23.5 VDC ($V_{\text{in}} - 0.5$ V) (battery voltage in buffer mode)
Nominal output current $I_{o\text{nom}}$	6 A
Energy storage systems	
Buffer time	1 s ... 11 min at $I_{\text{out}} = 4$ A
Storage type	LiFePO4
Battery capacity	2.5 Ah; 60 Wh; 216 kJ
Charging time (typ.)	60 min
Signaling and communication	
Signaling	1 x Isolated relay contact (max. 30 VDC; 1 A); 1 x LED status (green)
Operation status indicator	Static LED (green, mains operation); Flashing LED (green, 1 Hz, buffer mode)
Circuit protection	
Internal fuse	T 15 A (input)
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	No/No
Ambient temperature (operation)	-20 ... +50 °C
Ambient temperature (storage)	-30 ... +55 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 1.5 mm² / 0.08 ... 1.5 mm² / 28 ... 14 AWG
Connection type	Relay
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Connection type	Communication
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 1.5 mm² / 0.08 ... 1.5 mm² / 28 ... 16 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	63 mm x 120 mm x 108 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	IEC 61010-1 (SELV); IEC 61010-2-201
Standards/specifications (pending)	CSA

UPS charger and controller ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 10 A



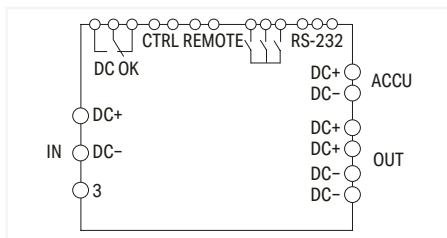
	Item No.	PU
	787-870	1

Features:

- Charger and controller for uninterruptible power supply (UPS)
- Current and voltage monitoring, as well as parameter setting via LCD and RS-232 interface
- Active signal outputs for function monitoring
- Remote input for deactivating the buffered output
- Input for temperature control of connected battery
- Battery control (from manufacturing no. 215563 onwards) detects both battery life and battery type

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Input voltage range	22 ... 29 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load); ≤ 0.8 A (Charging); ≤ 10.8 A
Inrush current	≤ 4 A (no load)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	$U_i - 1$ VDC (rated operation); 20 ... 25.5 VDC (buffer mode)
Nominal output current $I_{o\text{nom}}$	10 A
Current limitation	1.1 ... 1.4 x $I_{o\text{nom}}$ (typ.)
Energy storage systems	
Buffer time	10 s ... 10 min or constant; adjustable
Switch-on threshold (adjustable)	DC 20 ... 25.5 V
Storage type	Lead-acid (AGM)
Charging current	≤ 0.6 A
End-of-charge voltage	26 ... 29.5 VDC (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873, 787-876, 787-1671
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 3 x Signal output (24 VDC; max. 25 mA); 1 x Isolated relay contact (max. 30 VDC; 1 A); 1 x RS-232 interface; Battery control (C+; C-)
Communications	RS-232 serial interface
Operation status indicator	Green LED (U_o); Yellow LED (warning); Red LED (error)
Remote input	Switching buffer mode off
Efficiency/power losses	
Power loss P_i	≤ 15 W; ≤ 20 W (nominal load)
Efficiency (typ.)	95 %
Circuit protection	
Internal fuse	T 15 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	Yes, max. 3 battery modules for buffer time extension (temperature measurement evaluation is only possible via one battery module)/No
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-10 ... +60 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Cable length (max.)	3 m (Input, output, battery control)
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 163 mm x 163 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; UL 60950; UL 508; EN 61000-6-2; EN 61000-6-3

UPS charger and controller ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A



	Item No.	PU
	787-875	1

Features:

- Charger and controller for uninterruptible power supply (UPS)
- Current and voltage monitoring, as well as parameter setting via LCD and RS-232 interface
- Active signal outputs for function monitoring
- Remote input for buffered output deactivation
- Input for temperature control of connected battery
- Battery control (from manufacturing no. 215563) detects both battery life and battery type

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Input voltage range	22 ... 29 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load); ≤ 1.5 A (Charging); ≤ 21.5 A
Inrush current	≤ 4 A (no load)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	$U_i - 1$ VDC (rated operation); 20 ... 25.5 VDC (buffer mode)
Nominal output current $I_{o\text{nom}}$	20 A
Current limitation	1.1 ... 1.3 x $I_{o\text{nom}}$ (typ.)
Energy storage systems	
Buffer time	10 s ... 10 min or constant; adjustable
Switch-on threshold (adjustable)	DC 20 ... 25.5 V
Storage type	Lead-acid (AGM)
Charging current	≤ 1 A
End-of-charge voltage	26 ... 29.5 VDC (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 3 x Signal output (24 VDC; max. 25 mA); 1 x Isolated relay contact (max. 30 VDC; 1 A); 1 x RS-232 interface; Battery control (C+; C-)
Communications	RS-232 serial interface
Operation status indicator	Green LED (U_o); Yellow LED (warning); Red LED (error)
Remote input	Switching buffer mode off
Efficiency/power losses	
Power loss P_i	≤ 15 W; ≤ 30 W (nominal load)
Efficiency (typ.)	95 %
Circuit protection	
Internal fuse	T 25 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	Yes, max. 3 battery modules for buffer time extension (temperature measurement evaluation is only possible via one battery module)/No
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-10 ... +60 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 0.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Cable length (max.)	3 m (Input, output, battery control)
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 171 mm x 163 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 60950; UL 60950; UL 508; EN 61000-6-2; EN 61000-6-3

UPS charger and controller ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 20 A



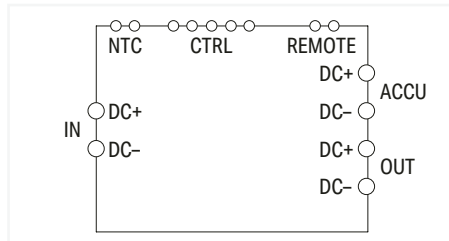
Item No.	PU
2685-1001/601-220	1

Features:

- DC UPS module for uninterruptible power supply (UPS)
- Potential-free contacts provide function monitoring
- Remote function via digital signals
- Integrated memory can be expanded with additional modules
- Konfiguration via USB-C

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Input voltage range	23.5 ... 29 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load); ≤ 4 A (Charging); ≤ 44 A
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	22 ... 28 VDC
Nominal output current $I_{o\text{nom}}$	20 A; 40 A
Energy storage systems	
Buffer time	41 s (1 A) / 1 s (20 A)
Storage type	Supercaps
Battery capacity	0.0196 Ah; 0.4704 Wh; 1.69344 kJ
Charging time (typ.)	4.3 min
Signaling and communication	
Signaling	2 x Isolated relay contact (max. 30 VDC; 1 A); 3 x LED (green/red/yellow)
Operation status indicator	Green LED (DC OK); Yellow LED (warning); Red LED (error)
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Parallel operation/Series operation	No/No
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 1.5 mm² / 0.08 ... 1.5 mm² / 28 ... 14 AWG
Connection type	Relay
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 0.5 mm² / 28 ... 20 AWG
Connection type	Communication
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 1.5 mm² / 0.08 ... 1.5 mm² / 28 ... 16 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 127 mm x 131.5 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61140; UL 61010-1
Standards/specifications (pending)	DNV

UPS charger and controller ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 40 A



	Item No.	PU
	787-915	1

Features:

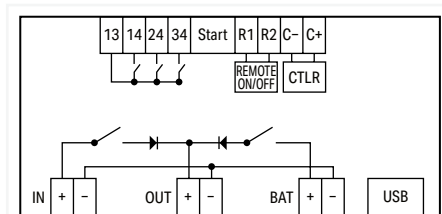
- DC UPS module for uninterruptible power supply (UPS)
- Potential-free contacts provide function monitoring
- Remote input for buffered output deactivation
- Input for temperature control of connected battery
- Battery internal resistance measurement for diagnosing batteries, including the connection cable and fuse

Safety Information

For North America: Use only batteries with appropriate safety approvals!

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Input voltage range	22 ... 28 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.16 A (no load); ≤ 4 A (Charging); ≤ 44 A
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	U_i (rated operation); 19.5 ... 26.5 VDC (battery voltage in buffer mode)
Nominal output current $I_{o\text{nom}}$	40 A
Energy storage systems	
Buffer time	load-dependent
Switch-on threshold (adjustable)	DC 21.5 ... 22.5 V
Storage type	Lead-acid (AGM)
Charging current	1 ... 4 A (adjustable in 1 A steps via DIP switch; Default setting: 2 A)
End-of-charge voltage	26.4 ... 29 VDC (temperature-controlled with NTC; without temperature sensor: 27.2 VDC)
Recommended battery module	Typ: VRLA 24 V; 7 ... 40 Ah
Signaling and communication	
Signaling	1 x Power LED (green); 1 x UPS LED (yellow); 1 x Warning LED (red); 2 x Isolated relay contact (max. 30 VDC; 1 A)
Operation status indicator	Green LED (operation); Yellow LED (buffer mode/charging); Red LED (warning)
Remote input	Switching buffer mode off
Efficiency/power losses	
Power loss P_i	≤ 4 W; ≤ 22.5 W (nominal load)
Efficiency (typ.)	97 % (Rated operation); 85 % (Charging)
Circuit protection	
Internal fuse	T 6.3 A (charging circuit)
Backup fusing (recommended)	T 50 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	No/No
MTBF	600,000 h (40 °C; per SN 29500)
Ambient temperature (operation)	0 ... +50 °C
Ambient temperature (storage)	-20 ... +55 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.75 ... 16 mm² / 0.75 ... 25 mm² / 18 ... 4 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	68 mm x 181 mm x 162 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61000-6-2; EN 61000-6-3
Standards/specifications (pending)	CSA

UPS charger and controller ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 40 A



Item No.	PU
2685-2001/100-240	1

Features:

- DC UPS module for uninterruptible power supply (UPS)
- Potential-free contacts provide function monitoring
- Remote function via digital signals
- Active signal outputs for watchdog functions
- Parallel operation of multiple connected storage modules
- Battery control for recognition of battery type and condition
- Configuration via USB-C

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load); ≤ 7 A (Charging); ≤ 40 A (max.)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	18 ... 30 VDC
Nominal output current $I_{o\text{nom}}$	40 A
Energy storage systems	
Storage type	Lead-acid (AGM)
Signaling and communication	
Signaling	3 x Isolated relay contact parameterizable for alarm/battery mode/loading mode; 1 x Digital input for start in battery mode; 1 x Interruption contact for remote shutdown in buffer mode; 3 x Status LED (red/yellow/green)
Operation status indicator	Green LED (DC OK); LED yellow (charging/buffer mode); Red LED (error)
Circuit protection	
Internal fuse	No
Safety and protection/Environmental requirements	
Protection class/Protection type	I / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	No/No
Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output/external energy storage
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	45 mm x 127 mm x 128.5 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1 (SELV); EN 61010-2-201 (PELV); UL 61010
Standards/specifications (pending)	DNV

UPS charger and controller ► Nominal input voltage (DC): 24 VDC ► Nominal output voltage (DC): 24 V ► Nominal output current: 40 A



Item No.	PU
2685-2501/603-240	1

- Features:**
- DC UPS module for uninterruptible power supply (UPS)
 - Potential-free contacts provide function monitoring
 - Communications interface Modbus RS485
 - Konfiguration via USB-C

Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load); ≤ 4 A (Charging); ≤ 44 A
Output	
Nominal output voltage $U_{o, nom}$	24 VDC
Output voltage range	22 ... 28 VDC
Nominal output current $I_{o, nom}$	40 A
Energy storage systems	
Storage type	Supercaps
Battery capacity	0.133 Ah; 3.192 Wh; 11.4912 kJ
Charging time (typ.)	32 min
Signaling and communication	
Signaling	3 x LED (green/red/yellow)
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Parallel operation/Series operation	Yes/No
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	77 mm x 127 mm x 139 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1 (SELV); EN 61010-2-201 (PELV); UL 61010-1
Standards/specifications (pending)	DNV

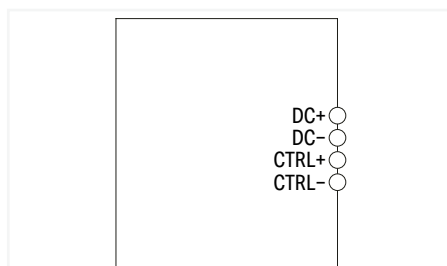
Accessories



UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage; 20 A output current; communication capability

Item No.	PU
2685-1001/601-220	1

Lead-acid AGM battery module ► Nominal input voltage (DC): 24 VDC ► Nominal output current: 5 A ► Battery capacity: 0.8 Ah ► Battery control (C+; C-)



	Item No.	PU
	787-1671	1

Features:

- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870/875 UPS Charger/Controller and 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- DIN-35-rail mountable
- Battery control (from manufacturing no. 216570) detects both battery life and battery type

Note

For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Nominal output current $I_{o\text{nom}}$	5 A
Energy storage systems	
Storage type	Lead-acid (AGM)
Battery capacity	0.8 Ah; 19.2 Wh; 69.12 kJ
Charging current	0.2 A (recommended)
End-of-charge voltage	27 VDC (25 °C)
Signaling and communication	
Signaling	Battery control (C+; C-)
Circuit protection	
Internal fuse	T 10 A / 250 VAC
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	> 500,000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Ambient temperature (operation)	-15 ... +40 °C (-20 ... +40 °C (during discharge))
Ambient temperature (storage)	-20 ... +40 °C
Relative humidity	5 ... 80 % (no condensation permissible)
Connection data	
Connection type	Input/output/battery control
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	3 m
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 97 mm x 124 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201
Standards/specifications (pending)	UL 508

Lead-acid AGM battery module ▶ Nominal input voltage (DC): 24 VDC ▶ Nominal output current: 7.5 A ▶ Battery capacity: 1.2 Ah ▶ Battery control (C+; C-)

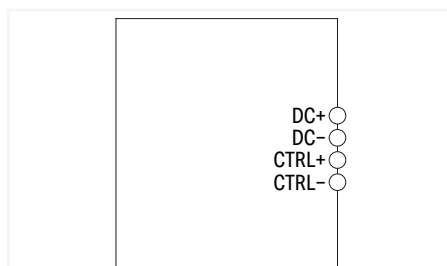


	Item No.	PU
	787-876	1

- Features:**
- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
 - Can be connected to both 787-870 UPS Charger and Controller and 787-1675 Power Supply with integrated UPS charger and controller
 - Parallel operation provides higher buffer time
 - Built-in temperature sensor
 - DIN-35-rail mountable
 - Battery control (from manufacturing no. 216570) detects both battery life and battery type
- Note**
For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{in nom}$	24 VDC
Output	
Nominal output voltage $U_{o nom}$	24 VDC
Nominal output current $I_{o nom}$	7.5 A
Energy storage systems	
Storage type	Lead-acid (AGM)
Battery capacity	1.2 Ah; 28.8 Wh; 103.68 kJ
Charging current	≤ 0.3 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and communication	
Signaling	Battery control (C+; C-)
Circuit protection	
Internal fuse	T 15 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	> 500,000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Ambient temperature (operation)	-10 ... +40 °C
Ambient temperature (storage)	-20 ... +40 °C
Relative humidity	5 ... 80 % (no condensation permissible)
Connection data	
Connection type	Input/output/battery control
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	3 m (Input, output, battery control)
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	55 mm x 153 mm x 126.6 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	VdS-tested battery; UL 508

Lead-acid AGM battery module ► Nominal input voltage (DC): 24 VDC ► Nominal output current: 20 A ► Battery capacity: 3.2 Ah ► Battery control (C+; C-)



	Item No.	PU
	787-871	1

Features:

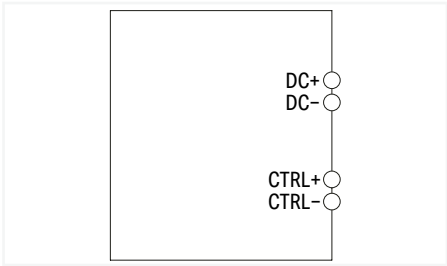
- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870 or 787-875 UPS Charger and Controller, as well as to the 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- Mounting plate via continuous carrier rail
- Battery-Control (from manufacturing no. 213987) detects both battery life and battery type

Note

For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Nominal output current $I_{o\text{nom}}$	20 A
Energy storage systems	
Storage type	Lead-acid (AGM)
Battery capacity	3.2 Ah
Charging current	≤ 0.8 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and communication	
Signaling	Battery control (C+; C-)
Circuit protection	
Internal fuse	T 25 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	> 500,000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Ambient temperature (operation)	-10 ... +40 °C
Ambient temperature (storage)	-20 ... +40 °C
Relative humidity	5 ... 80 % (no condensation permissible)
Connection data	
Connection type	Input/output/battery control
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	3 m (Input, output, battery control)
Physical data/Mechanical data/Material Data	
Width x Height x Depth	76.2 mm x 168 mm x 175.5 mm
Mounting type	Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	VdS-tested battery; UL 508

Lead-acid AGM battery module ▶ Nominal input voltage (DC): 24 VDC ▶ Nominal output current: 40 A ▶ Battery capacity: 12 Ah ▶ Battery control (C+; C-)

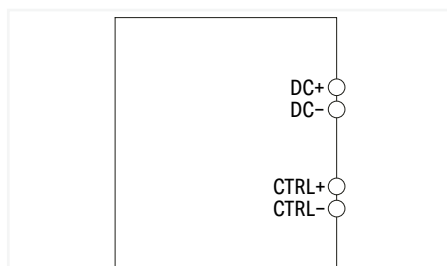


	Item No.	PU
	787-873	1

- Features:**
- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
 - Can be connected to both 787-870 or 787-875 UPS Charger and Controller, as well as to the 787-1675 Power Supply with integrated UPS charger and controller
 - Parallel operation provides higher buffer time
 - Built-in temperature sensor
 - Mounting plate installation via continuous DIN-rail
 - Battery control (from manufacturing no. 213412) detects both battery life and battery type
- Note**
- For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{in nom}$	24 VDC
Output	
Nominal output voltage $U_{o nom}$	24 VDC
Nominal output current $I_{o nom}$	40 A
Energy storage systems	
Storage type	Lead-acid (AGM)
Battery capacity	12 Ah
Charging current	≤ 3 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and communication	
Signaling	Battery control (C+; C-)
Circuit protection	
Internal fuse	2 x T 25 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	> 500,000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Ambient temperature (operation)	-10 ... +40 °C
Ambient temperature (storage)	-20 ... +40 °C
Relative humidity	5 ... 80 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Battery control
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	3 m (Input, output, battery control)
Physical data/Mechanical data/Material Data	
Width x Height x Depth	120.5 mm x 239 mm x 217.5 mm
Mounting type	Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	VdS-tested battery; UL 508

Lead-acid AGM battery module ► Nominal input voltage (DC): 24 VDC ► Nominal output current: 40 A ► Battery capacity: 7 Ah ► Battery control (C+; C-)



	Item No.	PU
	787-872	1

Features:

- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870 or 787-875 UPS Charger and Controller, as well as to the 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- Mounting plate installation via continuous DIN-rail
- Battery control (from manufacturing no. 213987) detects both battery life and battery type

Note

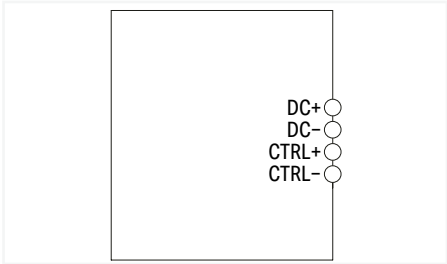
For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Nominal output current $I_{o\text{nom}}$	40 A
Energy storage systems	
Storage type	Lead-acid (AGM)
Battery capacity	7 Ah
Charging current	≤ 1.8 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and communication	
Signaling	Battery control (C+; C-)
Circuit protection	
Internal fuse	2 x T 25 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	> 500,000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Ambient temperature (operation)	-10 ... +40 °C
Ambient temperature (storage)	-20 ... +40 °C
Relative humidity	5 ... 80 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Battery control
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	3 m (Input, output, battery control)
Physical data/Mechanical data/Material Data	
Width x Height x Depth	86 mm x 239 mm x 217.5 mm
Mounting type	Screw mount
Standards and specifications	
Conformity marking	CE
Standards/specifications	VdS-tested battery; UL 508

Pure lead battery module ▶ Nominal input voltage (DC): 24 VDC ▶ Nominal output current: 20 A ▶ Battery capacity: 2.5 Ah ▶ Battery control (C+; C-)



Similar to illustration



Item No.	PU
787-878/000-2500	1

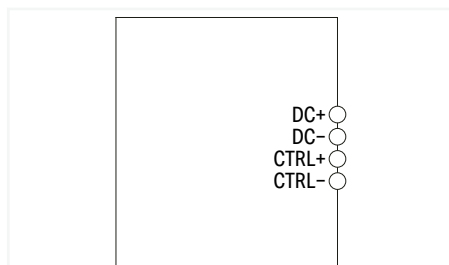
- Features:**
- Pure lead battery module: 12 x CYCLON battery (D cell) per module
 - Various mounting options
 - Intelligent battery management (battery control)
 - Optional coated PCB
 - Pluggable connection technology (WAGO MULTI CONNECTION SYSTEM)

Input	
Nominal input voltage $U_{in nom}$	24 VDC
Output	
Nominal output voltage $U_{o nom}$	24 VDC
Nominal output current $I_{o nom}$	20 A
Energy storage systems	
Storage type	Pure lead
Battery capacity	2.5 Ah
Charging current	≤ 5 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and communication	
Signaling	Battery control (C+; C-)
Circuit protection	
Internal fuse	T 25 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Overvoltage category	I
Pollution degree	2
Parallel operation/Series operation	Yes/No
Service life (typ.)	15 / 8 / 4 a (20 / 30 / 40 °C)
Ambient temperature (operation)	-40 ... +60 °C
Ambient temperature (storage)	-40 ... +60 °C
Relative humidity	5 ... 80 % (no condensation permissible)
Self-discharge	3 % per month at 20 °C
Commissioning	6 months at 30 ... 40 °C
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Connection type	Battery control
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	3 m
Physical data/Mechanical data/Material Data	
Width x Height x Depth	86 mm x 186 mm x 160 mm
Mounting type	Direct screw connection; Optional DIN-rail mount (EN 60715)
Standards and specifications	
Conformity marking	CE

Pure lead battery module ► Nominal input voltage (DC): 24 VDC ► Nominal output current: 40 A ►
Battery capacity: 13 Ah ► Battery control (C+; C-)



Similar to illustration



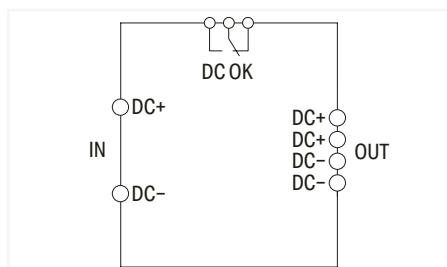
Item No.	PU
787-878/001-3000	1

Features:

- Pure lead battery module: 2 x Genesis EPX battery per module
- Intelligent battery management (battery control)
- Optional coated PCB
- Pluggable connection technology (WAGO MULTI CONNECTION SYSTEM)

Input	
Nominal input voltage $U_{i\text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Nominal output current $I_{o\text{nom}}$	40 A
Energy storage systems	
Storage type	Pure lead
Battery capacity	13 Ah
Charging current	≤ 5 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and communication	
Signaling	Battery control (C+; C-)
Circuit protection	
Internal fuse	2 x T 25 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Overvoltage category	I
Pollution degree	2
Parallel operation/Series operation	Yes/No
Service life (typ.)	15 / 8 / 4 a (20 / 30 / 40 °C)
Ambient temperature (operation)	-40 ... +60 °C
Ambient temperature (storage)	-40 ... +60 °C
Relative humidity	5 ... 80 % (no condensation permissible)
Self-discharge	3 % per month at 20 °C
Commissioning	6 months at 30 ... 40 °C
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Battery control
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Cable length (max.)	3 m
Physical data/Mechanical data/Material Data	
Width x Height x Depth	217 mm x 186 mm x 199.5 mm
Mounting type	Direct screw connection
Standards and specifications	
Conformity marking	CE

Capacitive buffer module ► Nominal input voltage (DC): 24 V ► Nominal output voltage (DC): 24 V
 ► Nominal output current: 10 A ► Buffer time: 0.06 ... 7.2 s depends on load current and switch-on threshold



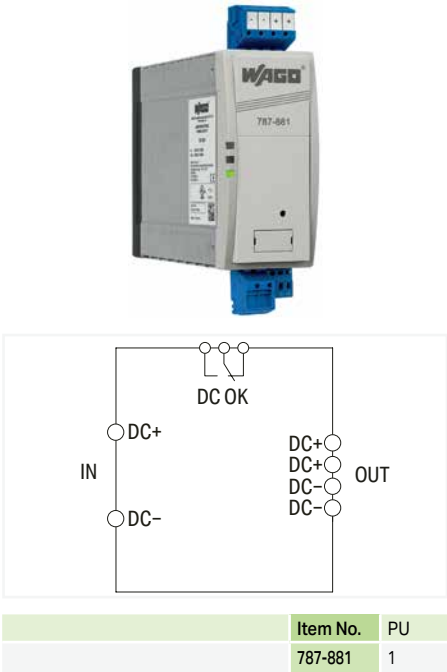
	Item No.	PU
	787-880	1

Features:

- Capacitive buffer module bridges short duration voltage drops or load fluctuations
- For an uninterruptible power supply
- Internal diode between input and output enables operation with a decoupled output
- Buffer modules can be readily parallel-connected to increase buffer time or load current
- Potential-free contact for charge condition monitoring

Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	20 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.06 A (no load); ≤ 1 A (Charging); ≤ 11 A
Output	
Nominal output voltage $U_{o, nom}$	24 VDC
Output voltage range	$U_i - 0.5$ VDC (rated operation); 20.4 ... 24 VDC (buffer mode)
Nominal output current $I_{o, nom}$	10 A
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Energy storage systems	
Buffer time	0.06 ... 7.2 s depends on load current and switch-on threshold
Switch-on threshold (adjustable)	DC 20 ... 24 V
Storage type	Supercaps
Charging time (typ.)	5 min
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Charge LED (yellow); 1 x DC not OK LED (red); 1 x Isolated relay contact (max. 30 VDC; 1 A)
Operation status indicator	Green LED ($U_o > 20$ V); Yellow LED (charging); Red LED ($U_o < 20$ V)
Efficiency/power losses	
Power loss P_i	≤ 1.5 W; ≤ 6.5 W (nominal load)
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	typ. 87,600 h (at 25 °C); typ. 30,500 h (at 40 °C)
Ambient temperature (operation)	-10 ... +50 °C
Ambient temperature (storage)	-10 ... +60 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output/relay
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 163 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 60950; UL 508; EN 61000-6-2; EN 61000-6-3

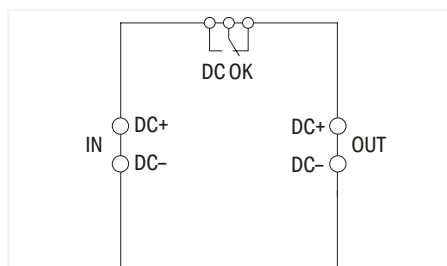
Capacitive buffer module ▶ Nominal input voltage (DC): 24 V ▶ Nominal output voltage (DC): 24 V ▶ Nominal output current: 20 A ▶ Buffer time: 0.17 ... 16.5 s depends on load current and switch-on threshold



- Features:**
- Capacitive buffer module bridges short duration voltage drops or load fluctuations.
 - For an uninterruptible power supply
 - Internal diode between input and output enables operation with a decoupled output.
 - Buffer modules can be readily parallel-connected to increase buffer time or load current.
 - Potential-free contact for charge condition monitoring

Input	
Nominal input voltage $U_{i\,nom}$	24 VDC
Input voltage range	20 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	$\leq 0.06\text{ A}$ (no load); $\leq 1\text{ A}$ (Charging); $\leq 22\text{ A}$
Output	
Nominal output voltage $U_{o\,nom}$	24 VDC
Output voltage range	$U_i - 1\text{ VDC}$ (rated operation); 20.4 ... 24 VDC (buffer mode)
Nominal output current $I_{o\,nom}$	20 A
Current limitation	$1.1 \times I_{o\,nom}$ (typ.)
Energy storage systems	
Buffer time	0.17 ... 16.5 s depends on load current and switch-on threshold
Switch-on threshold (adjustable)	DC 20 ... 24 V
Storage type	Supercaps
Charging time (typ.)	5 min
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x Charge LED (yellow); 1 x DC not OK LED (red); 1 x Isolated relay contact (max. 30 VDC; 1 A)
Operation status indicator	Green LED ($U_o > 20\text{ V}$); Yellow LED (charging); Red LED ($U_o < 20\text{ V}$)
Efficiency/power losses	
Power loss P_i	$\leq 1.5\text{ W}$; $\leq 15\text{ W}$ (nominal load)
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	typ. 87,600 h (at 25 °C); typ. 30,500 h (at 40 °C)
Ambient temperature (operation)	-10 ... +50 °C
Ambient temperature (storage)	-10 ... +60 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Relay
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	57 mm x 181 mm x 179 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 60950; UL 508; EN 61000-6-2; EN 61000-6-3

Capacitive buffer module ► Nominal input voltage (DC): 24 V ► Nominal output voltage (DC): 24 V ►
Nominal output current: 40 A ► Buffer time: 0.3 ... 6.6 s depends on load current and temperature

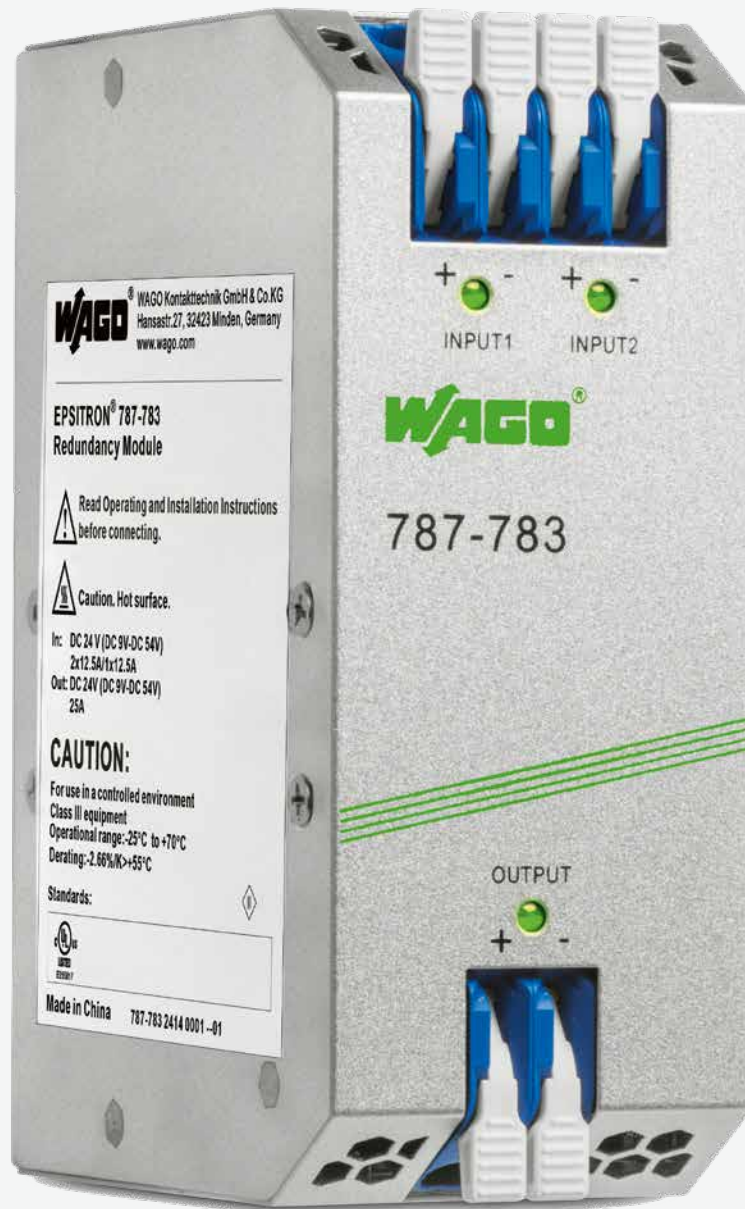


	Item No.	PU
	787-916	1

Features:

- Capacitive buffer module bridges short duration voltage drops or load fluctuations.
- Internal diode between input and output enables operation with a decoupled output.
- Potential-free contact for charge condition monitoring

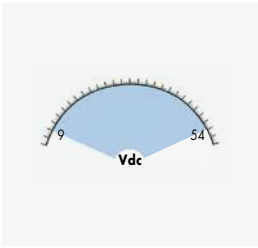
Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	23 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.06 A (no load); ≤ 0.8 A (Charging); ≤ 40.8 A
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	$U_i - 0.5$ VDC (mains operation; $I_o = 20$ A); $U_i - 0.8$ VDC (mains operation; $I_o = 40$ A); 20 ... 29 VDC (buffer mode)
Nominal output current $I_{o, \text{nom}}$	40 A
Energy storage systems	
Buffer time	0.3 ... 6.6 s depends on load current and temperature
Storage type	Supercaps
Nominal voltage	32.4 V
Effective energy content (typ.)	500 Ws
Charging time (typ.)	2.5 min
Signaling and communication	
Signaling	1 x LED DC OK (green); 1 x UPS LED (yellow); 1 x Warning LED (red); 1 x Isolated relay contact (max. 30 VDC; 1 A)
Operation status indicator	Green LED (DC OK); Yellow LED (buffer mode/charging); Red LED (warning)
Efficiency/power losses	
Power loss P_i	≤ 1.9 W (operation without decoupled output); ≤ 11.5 W (Operation with uncoupled output; $I_o = 20$ A); ≤ 33.5 W (Operation with uncoupled output; $I_o = 40$ A)
Efficiency (typ.)	96.5 %
Circuit protection	
Internal fuse	No
Backup fusing (recommended)	T 40 A
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	No/No
Service life	74,000 h (25 °C; $I_o = 40$ A); 28,200 h (40 °C; $I_o = 40$ A)
Ambient temperature (operation)	-10 ... +50 °C
Ambient temperature (storage)	-10 ... +60 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.75 ... 16 mm² / 0.75 ... 25 mm² / 18 ... 4 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	68 mm x 181 mm x 162 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61000-6-2; EN 61000-6-3
Standards/specifications (pending)	CSA



WAGO Redundancy Modules

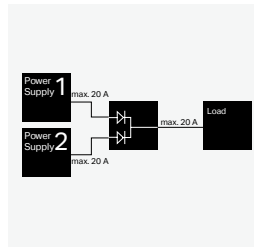
WAGO Redundancy Modules

	Redundancy Modules 787 Series	Seite 219
---	---	----------------------------



Highly Versatile

- The diode redundancy modules (787-783 and -785) can be used for the 12 V, 15 V, 24 V, or 48 V power supplies thanks to their wide voltage range



High Overload Capability

- Power diodes in each input path feature a high overload capacity and are also suitable for power supplies with TopBoost or PowerBoost
- Output currents up to 76 A thanks to parallel connection of the input paths



Signaling

- Three LEDs indicate the presence of an input or output voltage
- An isolated signal contact optionally indicates a power supply failure on the input*

*only for 787-885 and -886

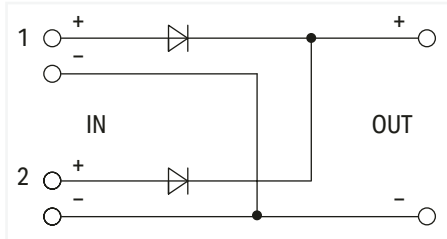


Low Power Dissipation

- Low power dissipation via active-switching MOSFETs*
- Includes MOSFET function monitoring*

*only for 787-1685

Redundancy module ▶ Nominal input voltage (DC): 2 x 24 VDC ▶ Input current: 2 x 40 A ▶ Nominal output voltage (DC): 24 V ▶ Output current: 76 A



	Item No.	PU
	787-785	1

Features:

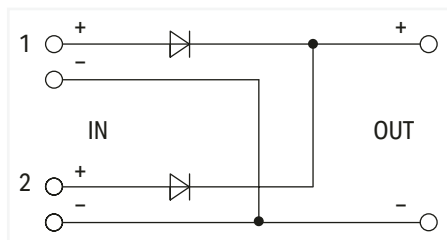
- Redundancy module with two inputs decouples two power supplies.
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site and remotely

Input	
Nominal input voltage $U_{i\text{nom}}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 40 A (per path); ≤ 76 A (in total)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	9 ... 54 VDC (U_o — voltage drop)
Voltage drop	≤ 500 mV (Input/output)
Nominal output current $I_{o\text{nom}}$	40 A (redundancy operation); 76 A (Parallel operation); 65 A (Parallel operation [UL])
Nominal output power	1824 W
Signaling and communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)
Operation status indicator	2 x Green LED ($U_i > 7.5$ VDC); 1 x Green LED ($U_o > 7.5$ VDC)
Efficiency/power losses	
Power loss P_i	≤ 38 W (nominal load)
Efficiency (typ.)	97 %
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Overvoltage protection; secondary	No
Short-circuit-protected/Open-circuit-proof	No/Yes
Parallel operation/Series operation	Yes/No
MTBF	> 10 million h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (55 °C < T_u ≤ 70 °C)
Resistance to shock and vibration	Shock: 15g (per EN 60068-2-27)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	1.5 ... 16 mm ² / 1.5 ... 16 mm ² / 16 ... 6 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	83 mm x 130 mm x 153 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	UL 508

Redundancy module ► Nominal input voltage (DC): 2 x 24 VDC ► Input current: 2 x 40 A ► Nominal output voltage (DC): 24 V ► Output current: 76 A



Similar to illustration



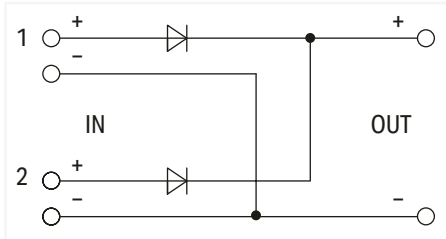
Item No.	PU
787-785/000-040	1

Features:

- Redundancy module with two inputs decouples two power supplies.
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site and remotely

Input	
Nominal input voltage $U_{i, \text{nom}}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 40 A (per path); ≤ 76 A (in total)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	9 ... 54 VDC (U_o — voltage drop)
Voltage drop	≤ 500 mV (Input/output)
Nominal output current $I_{o, \text{nom}}$	40 A (redundancy operation); 76 A (Parallel operation); 65 A (Parallel operation [UL])
Nominal output power	1824 W
Signaling and communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)
Operation status indicator	2 x Green LED ($U_i > 7.5$ VDC); 1 x Green LED ($U_o > 7.5$ VDC)
Efficiency/power losses	
Power loss P_i	≤ 38 W (nominal load)
Efficiency (typ.)	97 %
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Overvoltage protection; secondary	No
Short-circuit-protected/Open-circuit-proof	No/Yes
Parallel operation/Series operation	Yes/No
MTBF	> 10 million h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (55 °C $< T_a \leq 70$ °C)
Resistance to shock and vibration	Shock: 15g (per EN 60068-2-27)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	1.5 ... 16 mm² / 1.5 ... 16 mm² / 16 ... 6 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	83 mm x 130 mm x 153 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	UL 508; ATEX; IECEx; ANSI/ISA 12.12.01 (Class I Div. 2)

Redundancy module ► Nominal input voltage (DC): 2 x 24 VDC ► Input current: 2 x 12.5 A ► Nominal output voltage (DC): 24 V ► Output current: 25 A



	Item No.	PU
	787-783	1

Features:

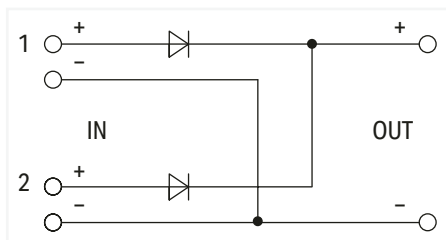
- Redundancy module with two inputs decouples two power supplies.
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site and remotely

Input	
Nominal input voltage $U_{i\text{nom}}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 12.5 A (per path); ≤ 25 A (in total)
Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	9 ... 54 VDC (U_o — voltage drop)
Voltage drop	≤ 0.8 V (Input/output)
Nominal output current $I_{o\text{nom}}$	12.5 A (redundancy operation); 25 A (Parallel operation)
Nominal output power	600 W
Signaling and communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)
Operation status indicator	2 x Green LED ($U_i > 7.5$ VDC); 1 x Green LED ($U_o > 7.5$ VDC)
Efficiency/power losses	
Power loss P_i	≤ 19 W (nominal load)
Efficiency (typ.)	96 %
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Overvoltage protection; secondary	No
Short-circuit-protected/Open-circuit-proof	No/Yes
Parallel operation/Series operation	Yes/No
MTBF	> 10 million h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (55 °C < $T_u \leq 70$ °C)
Resistance to shock and vibration	Shock: 15g (per EN 60068-2-27)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 92 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	UL 508

Redundancy module ► Nominal input voltage (DC): 2 x 24 VDC ► Input current: 2 x 12.5 A ► Nominal output voltage (DC): 24 V ► Output current: 25 A



Similar to illustration



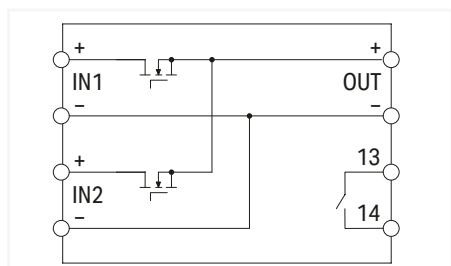
Item No.	PU
787-783/000-040	1

Features:

- Redundancy module with two inputs decouples two power supplies.
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site and remotely

Input	
Nominal input voltage $U_{i, \text{nom}}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 12.5 A (per path); ≤ 25 A (in total)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	9 ... 54 VDC (U_o – voltage drop)
Voltage drop	≤ 0.8 V (Input/output)
Nominal output current $I_{o, \text{nom}}$	12.5 A (redundancy operation); 25 A (Parallel operation)
Nominal output power	600 W
Signaling and communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)
Operation status indicator	2 x Green LED ($U_i > 7.5$ VDC); 1 x Green LED ($U_o > 7.5$ VDC)
Efficiency/power losses	
Power loss P_i	≤ 19 W (nominal load)
Efficiency (typ.)	96 %
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Pollution degree	2
Overvoltage protection; secondary	No
Short-circuit-protected/Open-circuit-proof	No/Yes
Parallel operation/Series operation	Yes/No
MTBF	> 10 million h (per IEC 61709)
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K ($55^\circ\text{C} < T_u \leq 70^\circ\text{C}$)
Resistance to shock and vibration	Shock: 15g (per EN 60068-2-27)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	50 mm x 130 mm x 92 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	UL 508; ATEX; IECEx; ANSI/ISA 12.12.01 (Class I Div. 2)

Redundancy module ► Nominal input voltage (DC): 2 x 24 VDC ► Input current: 2 x 40 A ► Nominal output voltage (DC): 24 V ► Output current: 40 A



	Item No.	PU
	787-1685	1

Features:

- Redundancy module with low-loss MOSFET decouples two power supplies.
- For redundant and fail-safe power supply
- Continuous output current: 40 ADC, in any ratio of both inputs (e.g., 20 A / 20 A or 0 A / 40 A)
- Suitable for power supplies with PowerBoost and TopBoost
- Same profile as CLASSIC Power Supplies
- Electrically isolated output voltage (SELV/PELV) per EN 61140/UL 60950-1

Input	
Nominal input voltage $U_{i\text{nom}}$	2 x 24 VDC
Input voltage range	2 x 10 ... 36 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 40 A (per path); ≤ 40 A (in total)
PowerBoost input	DC 60 A (4 s); DC 50 A (8 s)
TopBoost input	DC 100 A (50 ms)

Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC
Output voltage range	10 ... 36 VDC (U_o – voltage drop)
Voltage drop	≤ 100 mV (Input/output)
Nominal output current $I_{o\text{nom}}$	40 A (redundancy operation); 40 A (Parallel operation)
Nominal output power	960 W
Switching frequency	5 kHz
PowerBoost	DC 120 A (4 s); DC 100 A (8 s)
TopBoost	200 ADC (50 ms)

Signaling and communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x DC OK signal contact (IN1 and IN2 > 10 VDC)
Operation status indicator	2 x Green LED ($U_o > 10$ VDC)

Efficiency/power losses	
Power loss P_i	≤ 1.5 W; ≤ 9.5 W (nominal load)
Efficiency (typ.)	99.5 %

Circuit protection	
Internal fuse	No

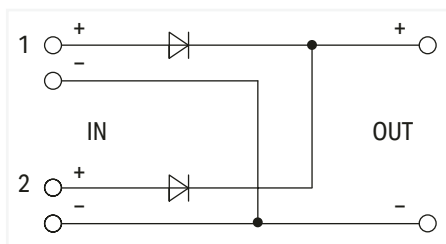
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	Yes/No
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1.5 %/K (> 65 °C)

Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Signaling
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	42 mm x 127 mm x 139.5 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61000-6-2; EN 61000-6-3; UL 60950; UL 508; DNV; EN 61140

Redundancy module ► Nominal input voltage (DC): 2 x 24 VDC ► Input current: 2 x 20 A ► Nominal output voltage (DC): 24 V ► Output current: 40 A



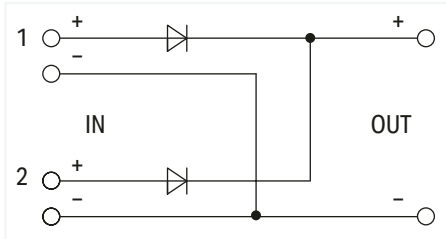
	Item No.	PU
	787-885	1

Features:

- Redundancy module with two inputs decouples two power supplies
- For redundant and fail-safe power supply
- With LED and potential-free contact for input voltage monitoring on site and remotely

Input	
Nominal input voltage $U_{i, \text{nom}}$	2 x 24 VDC
Input voltage range	2 x 18 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	$\leq 20 \text{ A}$ (per path); $\leq 40 \text{ A}$ (in total)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	18 ... 30 VDC (U_o – voltage drop)
Voltage drop	$\leq 0.6 \text{ V}$ (Input/output)
Nominal output current $I_{o, \text{nom}}$	20 A (redundancy operation); 40 A (Parallel operation)
Nominal output power	960 W
Signaling and communication	
Signaling	1 x OUT LED (green); 1 x IN1 LED (yellow); 1 x IN2 LED (yellow); 1 x Isolated relay contact (max. 30 VDC; 1 A)
Operation status indicator	Green LED (U_o); 2 x Yellow LED (U_i)
Efficiency/power losses	
Power loss P_i	$\leq 1.5 \text{ W}$; $\leq 14 \text{ W}$ (24 VDC; 20 A); $\leq 26 \text{ W}$ (48 VDC; 40 A)
Efficiency (typ.)	97 %
Circuit protection	
Internal fuse	No
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	Yes/Yes
MTBF	$> 500,000 \text{ h}$ (per IEC 61709)
Ambient temperature (operation)	$-10 \dots +60 \text{ }^\circ\text{C}$
Ambient temperature (storage)	$-25 \dots +85 \text{ }^\circ\text{C}$
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Connection type	Relay
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 181 mm x 163 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 60950; UL 60950; UL 508; EN 61000-6-2; EN 61000-6-3

Redundancy module ► Nominal input voltage (DC): 2 x 48 VDC ► Input current: 2 x 20 A ► Nominal output voltage (DC): 48 V ► Output current: 40 A



	Item No.	PU
	787-886	1

Features:

- Redundancy module with two inputs decouples two power supplies
- For redundant and fail-safe power supply
- With LED and potential-free contact for input voltage monitoring on site and remotely

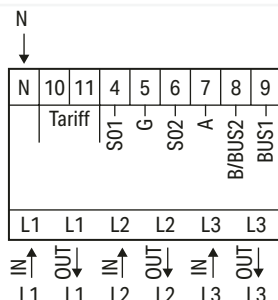
Input	
Nominal input voltage $U_{i\text{nom}}$	2 x 48 VDC
Input voltage range	2 x 36 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 20 A (per path); ≤ 40 A (in total)
Output	
Nominal output voltage $U_{o\text{nom}}$	48 VDC
Output voltage range	36 ... 54 VDC (U_o – voltage drop)
Voltage drop	≤ 1 V (Input/output)
Nominal output current $I_{o\text{nom}}$	20 A (redundancy operation); 40 A (Parallel operation)
Nominal output power	1920 W
Signaling and communication	
Signaling	1 x OUT LED (green); 1 x IN1 LED (yellow); 1 x IN2 LED (yellow); 1 x Isolated relay contact (max. 30 VDC; 1 A)
Operation status indicator	Green LED (U_o); 2 x Yellow LED (U_i)
Efficiency/power losses	
Power loss P_i	≤ 1.7 W (48 VDC; no load); ≤ 20 W (48 VDC; 20 A); ≤ 40 W (48 VDC; 40 A)
Efficiency (typ.)	96 %
Circuit protection	
Internal fuse	No
Safety and protection/Environmental requirements	
Protection class/Protection type	III / IP20; per EN 60529
Reverse voltage protection	Yes
Pollution degree	2
Parallel operation/Series operation	Yes/Yes
MTBF	> 500,000 h (per IEC 61709)
Ambient temperature (operation)	-10 ... +60 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Connection data	
Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.5 ... 10 mm² / 0.5 ... 10 mm² / 20 ... 8 AWG
Connection type	Relay
Connection technology	CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	40 mm x 181 mm x 163 mm
Note (dimensions)	Height with connector
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 60950; EN 61000-6-2; EN 61000-6-3
Standards/specifications (pending)	UL 60950; UL 508



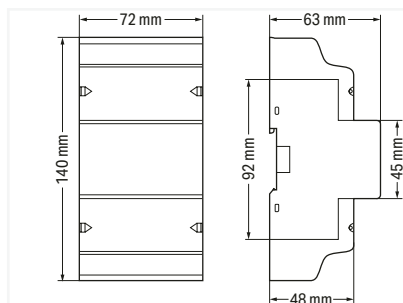
WAGO Energy Measurement Technology

		Page
	Energy Meter (MID); with Push-in CAGE CLAMP® and Lever 879 Series	228
	3-Phase Power Measurement Module 2857 Series	234
	Current Signal Conditioner 857 Series	240
	Voltage Signal Conditioner 857 Series	242
	Current Signal Conditioner 789 Series	244
	Selection Guide: Current Transformers	246

Energy meter ► for direct connection ► Input current $I_i \leq 65 \text{ A}$ ► Nominal input voltage $U_{i \text{ nom}}$: 3 x 230 ... 400 VAC ► Frequency range: 45 ... 60 Hz ► Modbus®; M-Bus; *Bluetooth*® ► RS-485 (2-wire); 2 x S0 interfaces (configurable) ► 4PU ► MID



Item No.	PU
879-3000	1



Short description:

Optimizing energy consumption requires comprehensive energy measurement. WAGO's portfolio has energy meters that make that easier while offering several key advantages. They use push-in connection technology with a lever, making them connect quickly and easily. The devices have a width of just 72 mm for direct measurement. These slim profiles save a tremendous amount of control cabinet space. In addition to the values for active and reactive energy, the energy meters also record the mains frequency, as well as current, voltage and power for all phases. And the user can conveniently scan all of these energy characteristics at a glance on a large, illuminated display.

Features:

- Time savings at every stage thanks to Push-in CAGE CLAMP® and lever
- Real space savings: 72 mm wide (4PU)
- The communications pro: M-Bus/Modbus® interface and two S0 pulse outputs
- Full transparency at a glance: display energy quality characteristics on an illuminated full-format display
- Intuitive configuration: touch-sensitive controls and configuration app via *Bluetooth*®

Configuration	
Configuration options	Touch-sensitive controls; Configuration app via <i>Bluetooth</i> ®
Input	
Input signal type	Voltage; Current
Network configuration	Two-wire, three-wire and four-wire networks
Reference current I_{ref}	5 A
Measured variable	Voltage; Current; Electrical output; Mains frequency
Nominal input voltage $U_{i \text{ nom}}$	3 x 230 ... 400 VAC
Input voltage range	±20 %
Input current I_i	≤ 65 A
Frequency range	45 ... 60 Hz
Communication	
Communications	Modbus®; M-Bus; <i>Bluetooth</i> ®
Interface	RS-485 (2-wire); 2 x S0 interfaces (configurable)
Indicators	LCD with backlight
Rate control input	230 VAC
Signal processing	
Measured variables (calculated)	Active and reactive energy in supply and reference direction
Measurement type (load profile)	No
Measured value acquisition	for direct connection
Measurement error	
Accuracy class	Class B (= 1 % error); Active energy per EN 50470-3
Calibration validity period	8 years
Power supply	
Power supply type	Via measurement circuit
Power consumption P_{max} (phase; active power)	2 W
Power consumption P_{max} (phase; apparent power)	10 VA
Safety and protection/Environmental requirements	
Dielectric strength	4 kV; 1 min
Impulse withstand voltage (1.2/50 μs)	6 kV
Pollution degree	2
Protection class	II
Protection type	IP51 / IP20; IP51 (front side); IP20 (connection)
Ambient temperature (operation)	-40 ... +70 °C
Relative humidity	≤ 75 % (for storage ≤ 95 %)
Connection data	
Connection position	Output bottom (PU)
Design	4PU
Connection object type 1	
Connection type	Voltage/current
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2616 Series
Actuation type	Lever
Strip length	18 ... 20 mm / 0.71 ... 0.79 inches
Solid/fine-stranded/AWG	0.75 ... 16 mm² / 0.75 ... 25 mm² / 18 ... 4 AWG
Connection object type 2	
Connection type	Communication/rate control input
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2604 Series
Actuation type	Lever
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Solid/fine-stranded/AWG	0.2 ... 4 mm² / 0.2 ... 4 mm² / 24 ... 12 AWG

Accessories



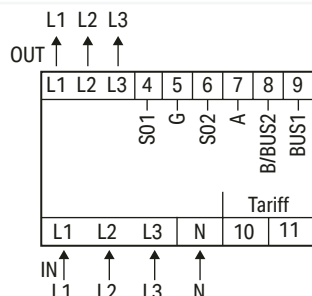
Communication module; Modbus TCP

Item No.	PU
879-9000	1

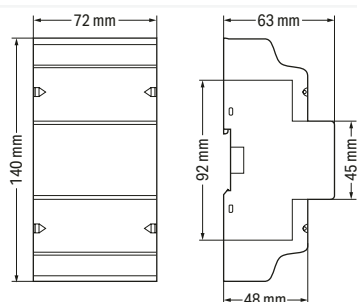
Energy meter ▶ for direct connection ▶ Input current $I_i \leq 65\text{ A}$ ▶ Nominal input voltage $U_{i\text{ nom}}$: 3 x 230 ... 400 VAC ▶ Frequency range: 45 ... 60 Hz ▶ Modbus®; M-Bus; *Bluetooth*® ▶ RS-485 (2-wire); 2 x S0 interfaces (configurable) ▶ 4PU ▶ MID

Physical data/Mechanical data/Material Data	
Note (dimensions)	Height without cover: 92 mm
Width x Height x Depth	72 mm x 140 mm x 63 mm
Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure
Housing material	PC 940A
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 50470-1/3
Accounting guideline	MID

Energy meter ► for direct connection ► Input current $I_i \leq 65 \text{ A}$ ► Nominal input voltage $U_{i \text{ nom}}$: 3 x 230 ... 400 VAC ► Frequency range: 45 ... 60 Hz ► Modbus®; M-Bus; *Bluetooth*® ► RS-485 (2-wire); 2 x S0 interfaces (configurable) ► 4PS ► MID



Item No.	PU
879-3020	1



Short description:

Crucial for trimming costs, comprehensive energy measurement is necessary to optimize energy consumption. WAGO's portfolio has energy meters that simplify this task while offering several key advantages. They use push-in connection technology with a lever, making them connect quickly and easily. The devices have a width of just 72 mm for direct measurement. These slim profiles save a tremendous amount of control cabinet space. In addition to the values for active and reactive energy, the energy meters also record the mains frequency, as well as current, voltage and power for all phases. And the user can conveniently scan all of these energy characteristics at a glance on a large, illuminated display.

Features:

- Push-in CAGE CLAMP® and lever save time at every stage
- Real space savings: 72 mm wide (4PS)
- Measurement of supply and purchase
- Energy measurement in four tariffs
- The communications pro: M-Bus/Modbus® interface and two S0 pulse outputs
- Full transparency at a glance: display energy quality characteristics on an illuminated full-format display
- Intuitive configuration: touch-sensitive controls and configuration app via *Bluetooth*®

Configuration

Configuration options	Touch-sensitive controls; Configuration app via <i>Bluetooth</i> ®
-----------------------	--

Input

Input signal type	Voltage; Current
Network configuration	Two-wire, three-wire and four-wire networks
Reference current I_{ref}	5 A
Measured variable	Voltage; Current; Electrical output; Mains frequency
Nominal input voltage $U_{i \text{ nom}}$	3 x 230 ... 400 VAC
Input voltage range	$\pm 20 \%$
Input current I_i	$\leq 65 \text{ A}$
Frequency range	45 ... 60 Hz

Communication

Communications	Modbus®; M-Bus; <i>Bluetooth</i> ®
Interface	RS-485 (2-wire); 2 x S0 interfaces (configurable)
Indicators	LCD with backlight
Rate control input	230 VAC

Signal processing

Measured variables (calculated)	Active and reactive energy in supply and reference direction
Measurement type (load profile)	No
Measured value acquisition	for direct connection

Measurement error

Accuracy class	Class B (= 1 % error); Active energy per EN 50470-3
Calibration validity period	8 years

Power supply

Power supply type	Via measurement circuit
Power consumption P_{max} (phase; active power)	2 W
Power consumption P_{max} (phase; apparent power)	10 VA

Safety and protection/Environmental requirements

Dielectric strength	4 kV; 1 min
Impulse withstand voltage (1.2/50 μs)	6 kV
Pollution degree	2
Protection class	II
Protection type	IP51 / IP20; IP51 (front side); IP20 (connection)
Ambient temperature (operation)	-40 ... +70 °C
Relative humidity	$\leq 75 \%$ (for storage $\leq 95 \%$)

Connection data

Connection position	Output top (PS)
Design	4PS

Connection object type 1

Connection type	Voltage/current
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2616 Series
Actuation type	Lever
Strip length	18 ... 20 mm / 0.71 ... 0.79 inches
Solid/fine-stranded/AWG	0.75 ... 16 mm² / 0.75 ... 25 mm² / 18 ... 4 AWG

Connection object type 2

Connection type	Communication/rate control input
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2604 Series
Actuation type	Lever
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Solid/fine-stranded/AWG	0.2 ... 4 mm² / 0.2 ... 4 mm² / 24 ... 12 AWG

Accessories



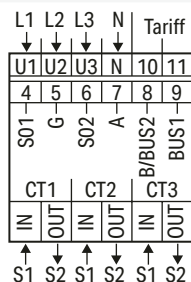
Communication module; Modbus TCP

Item No.	PU
879-9000	1

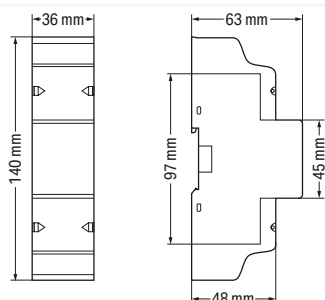
Energy meter ▶ for direct connection ▶ Input current $I_i \leq 65\text{ A}$ ▶ Nominal input voltage $U_{i\text{ nom}}$: 3 x 230 ... 400 VAC ▶ Frequency range: 45 ... 60 Hz ▶ Modbus®; M-Bus; *Bluetooth*® ▶ RS-485 (2-wire); 2 x S0 interfaces (configurable) ▶ 4PS ▶ MID

Physical data/Mechanical data/Material Data	
Note (dimensions)	Height without cover: 92 mm
Width x Height x Depth	72 mm x 140 mm x 63 mm
Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure
Housing material	PC 940A
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 50470-1/3
Accounting guideline	MID

Energy meter ► for transformer connection; ► Input current $I_i \leq 5 \text{ A}$ ► Nominal input voltage $U_{i, \text{nom}}$: 3 x 230 ... 400 VAC ► Frequency range: 45 ... 60 Hz ► Modbus®; M-Bus; Bluetooth® ► RS-485 (2-wire); 2 x S0 interfaces (configurable) ► 2PU CT ► MID



Item No.	PU
879-3040	1



Short description:

Crucial for trimming costs, comprehensive energy measurement is necessary to optimize energy consumption. WAGO's portfolio has energy meters that simplify this task while offering several key advantages. They use push-in connection technology with a lever, making them connect quickly and easily. Versions for current transformers are even slimmer at only 35 mm. These slim profiles save a tremendous amount of control cabinet space. In addition to the values for active and reactive energy, the energy meters also record the mains frequency, as well as current, voltage and power for all phases. And the user can conveniently scan all of these energy characteristics at a glance on a large, illuminated display.

Features:

- Push-in CAGE CLAMP® and lever save time at every stage
- Real space savings: 35 mm wide (2PU CT)
- Measurement of supply and purchase
- Energy measurement in four tariffs
- The communications pro: M-Bus/Modbus® interface and two S0 pulse outputs
- Full transparency at a glance: display energy quality characteristics on an illuminated full-format display
- Intuitive configuration: touch-sensitive controls and configuration app via Bluetooth®

Configuration

Configuration options	Touch-sensitive controls; Configuration app via Bluetooth®
-----------------------	--

Input

Input signal type	Voltage; Current
Network configuration	Two-wire, three-wire and four-wire networks
Reference current I_{ref}	1 A
Current transformer (secondary)	1; 5 A
Current transformer ratio	1:1 ... 9999 : 1 / 5:5 ... 9995 : 5
Measured variable	Voltage; Current; Electrical output; Mains frequency
Nominal input voltage $U_{i, \text{nom}}$	3 x 230 ... 400 VAC
Input voltage range	±20 %
Input current I_i	≤ 5 A
Frequency range	45 ... 60 Hz

Communication

Communications	Modbus®; M-Bus; Bluetooth®
Interface	RS-485 (2-wire); 2 x S0 interfaces (configurable)
Indicators	LCD with backlight
Rate control input	230 VAC

Signal processing

Measured variables (calculated)	Active and reactive energy in supply and reference direction
Measurement type (load profile)	No
Measured value acquisition	for transformer connection;

Measurement error

Accuracy class	Class B (= 1 % error); Active energy per EN 50470-3
Calibration validity period	8 years

Power supply

Power supply type	Via measurement circuit
Power consumption P_{max} (phase; active power)	2 W
Power consumption P_{max} (phase; apparent power)	10 VA

Safety and protection/Environmental requirements

Dielectric strength	4 kV; 1 min
Impulse withstand voltage (1.2/50 µs)	6 kV
Pollution degree	2
Protection class	II
Protection type	IP51 / IP20; IP51 (front side); IP20 (connection)
Ambient temperature (operation)	-40 ... +70 °C
Relative humidity	≤ 75 % (for storage ≤ 95 %)

Connection data

Connection position	Output bottom (PU)
Design	2PU CT

Connection object type 1

Connection type	Voltage/current
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2604 Series
Actuation type	Lever
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Solid/fine-stranded/AWG	0.2 ... 4 mm² / 0.2 ... 4 mm² / 24 ... 12 AWG

Connection object type 2

Connection type	Communication/rate control input
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2604 Series
Actuation type	Lever
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Solid/fine-stranded/AWG	0.2 ... 4 mm² / 0.2 ... 4 mm² / 24 ... 12 AWG

Accessories



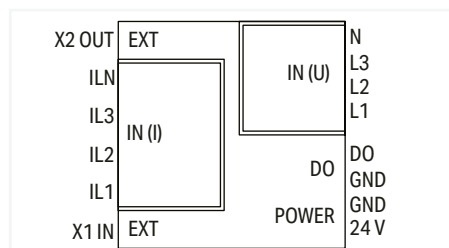
Communication module; Modbus TCP

Item No.	PU
879-9000	1

Energy meter ▶ for transformer connection; ▶ Input current $I_i \leq 5\text{ A}$ ▶ Nominal input voltage $U_{i\text{ nom}}$: 3 x 230 ... 400 VAC ▶ Frequency range: 45 ... 60 Hz ▶ Modbus®; M-Bus; *Bluetooth*® ▶ RS-485 (2-wire); 2 x S0 interfaces (configurable) ▶ 2PU CT ▶ MID

Physical data/Mechanical data/Material Data	
Note (dimensions)	Height without cover: 97 mm
Width x Height x Depth	36 mm x 140 mm x 63 mm
Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure
Housing material	PC 940A
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 50470-1/3
Accounting guideline	MID

Power measurement module ▶ Input signal (voltage): 277 VAC (ULN); 480 VAC (ULL) ▶ Input signal (current): 1 AAC (current transformer) ▶ Modbus RTU ▶ Nominal supply voltage U_s : 24 VDC (SELV)



Item No.	PU
2857-570/024-001	1

Short description:

WAGO's 3-Phase Power Measurement Module in a DIN-rail-mount enclosure measures electrical data in three-phase supply networks – remotely from the control level. Measured variables such as active/apparent/reactive power, energy consumption, power factor, phase angle and frequency can be accessed via Modbus® interface. In addition, the measured variables can be stored on a microSD card.

Features:

- Current measurement via 1 A current transformer
- Mobile measurement and storage of measured values on microSD card
- Configuration and display of measured values during operation via configuration interface
- Compact device in DIN-rail-mount enclosure saves space used for building technology
- Communication of measured values via Modbus® interface
- Configurable digital signal output as pulse output

Note

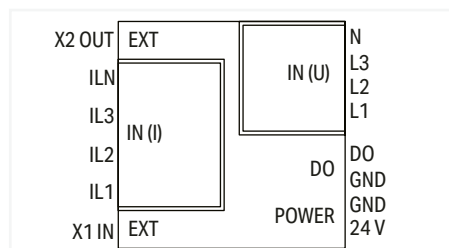
Additional setting options via the WAGO Interface Configuration Software

Configuration	
Configuration options	WAGO Interface Configuration Software
Input	
Input signal type	Voltage; Current; RTD sensors
Network configuration	3-phase power measurement with N-conductor (4-conductor); 3-phase power measurement without N-conductor (3-conductor)
Input current (max.)	1 AAC
Response threshold	10 mA
Resolution (current)	10 mA
Measured variable	Voltage; Current; Electrical output; Power factor; RTD
Input signal (voltage)	277 VAC (ULN); 480 VAC (ULL)
Input signal (current)	1 AAC (current transformer)
Frequency range	50 ... 60 Hz (Harmonics analysis: 0 ... 3.3 kHz)
Input resistance (current input)	22 mΩ
Input resistance (voltage input)	1.5 MΩ
Output – Modbus®	
Number of devices (max.)	32
Addressing	Via interface configuration software
Connector	2 x RJ-45 (daisy chain configuration)
Output – digital	
Configurable functions (DO)	Threshold value switch; Pulse output (S0 interface)
Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Communication	
Communications	Modbus RTU
Interface	RS-485 (2-wire) via RJ-45
Number of devices (max.)	32
Addressing	Via interface configuration software
Signal processing	
Measurement method	True RMS measurement (measured value acquisition with 8 kHz)
Measured variables (calculated)	Line-to-line voltage; Outputs; Energy sources; Power factors; Mains frequency; Harmonics analysis (up to 41st harmonic); Total Harmonic Distortion (THD)
Signal form	any periodic signals (considering the threshold frequencies)
Type of memory card	WAGO 758-879/000-3102 (microSD; 2 GB)
Limit frequency	15.9 kHz
Measurement error	
Transmission error (max.)	≤ 0.5 % for current and voltage (of the full scale value)
Power supply	
Power supply type	24 VDC
Nominal supply voltage U_s	24 VDC (SELV)
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 50 mA (+ I_{bo})
Safety and protection/Environmental requirements	
Rated Voltage	600 V
Overvoltage category	III
Pollution degree	2
Safe isolation	Input/supply and communication per EN 61010-1
Requirement (N input)	Neutral conductors that are part of the mains circuit are considered dangerous voltage.
IL _x input requirement	Coils/converters with basic insulation
Protection type	IP20
Test voltage (input/output/supply)	3.51 kVAC; 50 Hz; 1 min
Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (non-condensing)

Power measurement module ► Input signal (voltage): 277 VAC (ULN); 480 VAC (ULL) ► Input signal (current): 1 AAC (current transformer) ► Modbus RTU ► Nominal supply voltage U_S : 24 VDC (SELV)

Connection data	
Connector	2 x RJ-45 (daisy chain configuration)
Connection object type 1	
Connection type	Voltage
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 804 Series
Strip length	10 ... 11 mm / 0.39 ... 0.43 inches
Solid/fine-stranded/AWG	0.25 ... 2.5 mm² / 0.25 ... 2.5 mm² / 24 ... 14 AWG
Connection object type 2	
Connection type	Current/power supply/DO
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 805 Series
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Solid/fine-stranded/AWG	0.2 ... 1.5 mm² / 0.2 ... 1.5 mm² / 24 ... 16 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 90 mm x 55 mm
Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-3
Standards/specifications	EN 61010-1

Power measurement module ▶ Input signal (voltage): 277 VAC (ULN); 480 VAC (ULL) ▶ Input signal (current): 5 AAC (current transformer) ▶ Modbus RTU ▶ Nominal supply voltage U_s : 24 VDC (SELV)



Item No.	PU
2857-570/024-005	1

Short description:

WAGO's 3-Phase Power Measurement Module in a DIN-rail-mount enclosure measures electrical data in three-phase supply networks – remotely from the control level. Measured variables such as active/apparent/reactive power, energy consumption, power factor, phase angle and frequency can be accessed via Modbus® interface. In addition, the measured variables can be stored on a microSD card.

Features:

- Current measurement via 5 A current transformer
- Mobile measurement and storage of measured values on microSD card
- Configuration and display of measured values during operation via configuration interface
- Compact device in DIN-rail-mount enclosure saves space used for building technology
- Communication of measured values via Modbus® interface
- Configurable digital signal output as pulse output

Note

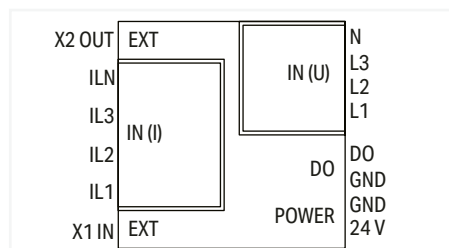
Additional setting options via the WAGO Interface Configuration Software

Configuration	
Configuration options	WAGO Interface Configuration Software
Input	
Input signal type	Voltage; Current; RTD sensors
Network configuration	3-phase power measurement with N-conductor (4-conductor); 3-phase power measurement without N-conductor (3-conductor)
Input current (max.)	5 AAC
Response threshold	5 mA
Resolution (current)	0.15 mA
Measured variable	Voltage; Current; Electrical output; Power factor; RTD
Input signal (voltage)	277 VAC (ULN); 480 VAC (ULL)
Input signal (current)	5 AAC (current transformer)
Frequency range	50 ... 60 Hz (Harmonics analysis: 0 ... 3.3 kHz)
Input resistance (current input)	5 mΩ
Input resistance (voltage input)	1.5 MΩ
Output – Modbus®	
Number of devices (max.)	32
Addressing	Via interface configuration software
Connector	2 x RJ-45 (daisy chain configuration)
Output – digital	
Configurable functions (DO)	Threshold value switch; Pulse output (S0 interface)
Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Communication	
Communications	Modbus RTU
Interface	RS-485 (2-wire) via RJ-45
Number of devices (max.)	32
Addressing	Via interface configuration software
Signal processing	
Measurement method	True RMS measurement (measured value acquisition with 8 kHz)
Measured variables (calculated)	Line-to-line voltage; Outputs; Energy sources; Power factors; Mains frequency; Harmonics analysis (up to 41st harmonic); Total Harmonic Distortion (THD)
Signal form	any periodic signals (considering the threshold frequencies)
Type of memory card	WAGO 758-879/000-3102 (microSD; 2 GB)
Limit frequency	15.9 kHz
Measurement error	
Transmission error (max.)	≤ 0.5 % for current and voltage (of the full scale value)
Power supply	
Power supply type	24 VDC
Nominal supply voltage U_s	24 VDC (SELV)
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 50 mA (+ I_{bo})
Safety and protection/Environmental requirements	
Rated Voltage	600 V
Overvoltage category	III
Pollution degree	2
Safe isolation	Input/supply and communication per EN 61010-1
Requirement (N input)	Neutral conductors that are part of the mains circuit are considered dangerous voltage.
IL _x input requirement	Coils/converters with basic insulation
Protection type	IP20
Test voltage (input/output/supply)	3.51 kVAC; 50 Hz; 1 min
Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (non-condensing)

Power measurement module ► Input signal (voltage): 277 VAC (ULN); 480 VAC (ULL) ► Input signal (current): 5 AAC (current transformer) ► Modbus RTU ► Nominal supply voltage U_S : 24 VDC (SELV)

Connection data	
Connector	2 x RJ-45 (daisy chain configuration)
Connection object type 1	
Connection type	Voltage
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 804 Series
Strip length	10 ... 11 mm / 0.39 ... 0.43 inches
Solid/fine-stranded/AWG	0.25 ... 2.5 mm² / 0.25 ... 2.5 mm² / 24 ... 14 AWG
Connection object type 2	
Connection type	Current/power supply/DO
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 805 Series
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Solid/fine-stranded/AWG	0.2 ... 1.5 mm² / 0.2 ... 1.5 mm² / 24 ... 16 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 90 mm x 55 mm
Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-3
Standards/specifications	EN 61010-1

Power measurement module ▶ Input signal (voltage): 277 VAC (ULN); 480 VAC (ULL); 90 mVAC (WAGO Rogowski Coils RC xxx) ▶ Modbus RTU ▶ Nominal supply voltage U_s : 24 VDC (SELV)



Item No.	PU
2857-570/024-000	1

Short description:

WAGO's 3-phase power measurement module in a DIN-rail-mount enclosure measures electrical data in three-phase supply networks – remotely from the control level. Measured variables such as active/apparent/reactive power, energy consumption, power factor, phase angle and frequency can be accessed via Modbus® interface. In addition, the measured variables can be stored on a microSD card.

Features:

- Current measurement via Rogowski Coils RC xxx
- Mobile measurement and storage of measured values on microSD card
- Configuration and display of measured values during operation via configuration interface
- Compact device in DIN-rail-mount enclosure saves space used for building technology
- Communication of measured values via Modbus® interface
- Configurable digital signal output as pulse output

Note

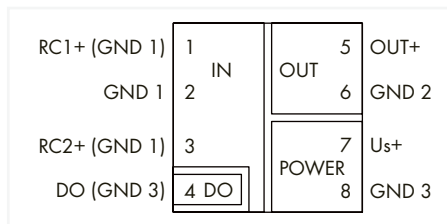
Additional setting options via the WAGO Interface Configuration Software

Configuration	
Configuration options	WAGO Interface Configuration Software
Input	
Input signal type	Voltage; Current; RTD sensors
Network configuration	3-phase power measurement with N-conductor (4-conductor); 3-phase power measurement without N-conductor (3-conductor)
Sensitivity	22.5 mV/kA (WAGO Rogowski Coils RC xxx)
Measured variable	Voltage; Current; Electrical output; Power factor; RTD
Input signal (voltage)	277 VAC (ULN); 480 VAC (ULL); 90 mVAC (WAGO Rogowski Coils RC xxx)
Measurement range (current)	4 x AC 4000 A (WAGO Rogowski Coils RC xxx)
Frequency range	50 ... 60 Hz (Harmonics analysis: 0 ... 3.3 kHz)
Output – Modbus®	
Number of devices (max.)	32
Addressing	Via interface configuration software
Connector	2 x RJ-45 (daisy chain configuration)
Output – digital	
Configurable functions (DO)	Threshold value switch; Pulse output (S0 interface)
Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Communication	
Communications	Modbus RTU
Interface	RS-485 (2-wire) via RJ-45
Number of devices (max.)	32
Addressing	Via interface configuration software
Signal processing	
Measurement method	True RMS measurement (measured value acquisition with 8 kHz)
Measured variables (calculated)	Line-to-line voltage; Outputs; Energy sources; Power factors; Mains frequency; Harmonics analysis (up to 41st harmonic); Total Harmonic Distortion (THD)
Signal form	any periodic signals (considering the threshold frequencies)
Type of memory card	WAGO 758-879/000-3102 (microSD; 2 GB)
Limit frequency	15.9 kHz
Measurement error	
Transmission error (max.)	≤ 0.5 % for current and voltage (of the full scale value)
Power supply	
Power supply type	24 VDC
Nominal supply voltage U_s	24 VDC (SELV)
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 50 mA (+ I_{D0})
Safety and protection/Environmental requirements	
Rated Voltage	600 V
Overvoltage category	III
Pollution degree	2
Safe isolation	Input/supply and communication per EN 61010-1
Requirement (N input)	Neutral conductors that are part of the mains circuit are considered dangerous voltage.
I_{Lx} input requirement	Coils/converters with basic insulation
Protection type	IP20
Test voltage (input/output/supply)	3.51 kVAC; 50 Hz; 1 min
Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (non-condensing)

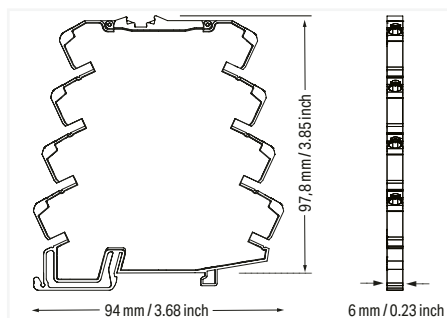
Power measurement module ► Input signal (voltage): 277 VAC (ULN); 480 VAC (ULL); 90 mVAC (WAGO Rogowski Coils RC xxx) ► Modbus RTU ► Nominal supply voltage U_S : 24 VDC (SELV)

Connection data	
Connector	2 x RJ-45 (daisy chain configuration)
Connection object type 1	
Connection type	Voltage
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 804 Series
Strip length	10 ... 11 mm / 0.39 ... 0.43 inches
Solid/fine-stranded/AWG	0.25 ... 2.5 mm² / 0.25 ... 2.5 mm² / 24 ... 14 AWG
Connection object type 2	
Connection type	Current/power supply/DO
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 805 Series
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Solid/fine-stranded/AWG	0.2 ... 1.5 mm² / 0.2 ... 1.5 mm² / 24 ... 16 AWG
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	72 mm x 90 mm x 55 mm
Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-3
Standards/specifications	EN 61010-1

Current signal conditioner ▶ Input signal type: Voltage ▶ Output signal type: Current; Voltage ▶ Digital output (DO); Clipping ▶ Width: 6 mm



	Item No.	PU
	857-552	1



Short description:

WAGO's Rogowski signal conditioner records RMS values from alternating currents via Rogowski coil, converting the input signal into an standard analog signal on the output side.

Digital switching output:

The digital output (DO) allows signaling of a message. Two switching behaviors can be selected for the edge:

GND switching: For all values below the lower threshold or above the upper threshold, the digital output switches to "GND".

Us switching: For all values below the lower threshold or above the upper threshold, the digital output (DO) matches the supply voltage level.

The preset switching thresholds are 0% and 100% of the input measurement range. These thresholds can be adjusted via the PC configuration interface. The switching threshold hysteresis is 5 mA.

Features:

- PC configuration interface
- Supports different Rogowski coil types
- Digital switching output (configurable switching thresholds)
- Configurable output signal
- Configuration via DIP switch
- 3-way electrical isolation with 2.5 kV test voltage
- No current bar interruption during installation
- Measurement range overflow indication

Safety Information

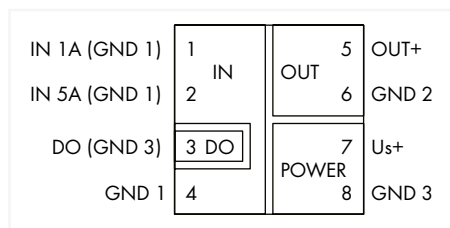
Input and output must be safely isolated from any hazardous live parts!

Note

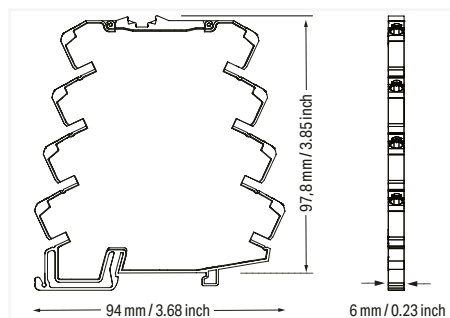
Additional setting options via the WAGO Interface Configuration Software

Configuration	
Configuration options	DIP switch; WAGO Interface Configuration Software
Input	
Input signal type	Voltage
Input signal (voltage)	50 Hz sinusoidal signals: 10.05 mVAC (RC1); 40.2 mVAC (RC2A); 90 mVAC (RC2B)
Sensitivity	RC2B: 22.5 mV/kA
Measurement range (current)	AC 500 A (RC1); AC 2000 A (RC2A); AC 4000 A (RC2B)
Frequency range	50 Hz (Sinusoidal signals)
Response threshold	≤ 1 % (of measurement range nominal value)
Resolution (current)	250 mA (RC1); 1 A (RC2A); 1.5 A (RC2B)
Output – analog	
Output signal type	Current; Voltage
Output signal (voltage)	0 ... 5 V; 1 ... 5 V; 0 ... 10 V; 2 ... 10 V
Output signal (current)	0 ... 10 mA; 2 ... 10 mA; 0 ... 20 mA; 4 ... 20 mA
Load impedance (voltage output)	≥ 1 kΩ
Load impedance (current output)	≤ 600 Ω
Output – digital	
Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 (adjustable)
Signal processing	
Limit frequency	2 kHz
Software filter (adjustable)	Moving average value (filter level: 30)
Step response (typ.)	60 ms
Measurement error	
Transmission error (max.)	≤ 1 % (of the full scale value)
Temperature coefficient	≤ 0.01 %/K
Power supply	
Power supply type	24 VDC (SELV)
Nominal supply voltage U_s	24 VDC
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 40 mA (+ I_{DO})
Safety and protection	
Protection type	IP20
Test voltage	
Test voltage (input/output/supply)	2.5 kVAC; 50 Hz; 1 min
Insulation coordination	
Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output/supply)	Functional insulation
Insulation type (adjacent devices)	Reinforced insulation (safe isolation)
Connection data	
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.34 ... 2.5 mm² / 28 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail
Insulation material (main housing)	Polyamide (PA66)
Environmental requirements	
Ambient temperature (operation)	-25 ... +70 °C (individual arrangement; -25 ... +60 °C (block arrangement))
Ambient temperature (storage)	-40 ... +85 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	≥ ($T_{ambient}$ + 15 K)
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m
Standards and specifications	
Conformity marking	CE
Standards/specifications	EN 61010-2-201

Current signal conditioner ▶ Input signal type: Current ▶ Output signal type: Current; Voltage ▶ Digital output (DO); Clipping ▶ Width: 6 mm



	Item No.	PU
	857-550	1



Short description:

WAGO's current signal conditioner measures both 0 ... 1 A and 0 ... 5 A AC/DC currents, converting the input signal to an standard analog signal at the output.

Digital switching output:

The digital output (DO) allows signaling of a message. Two switching behaviors can be selected for the edge: GND switching: For all values below the lower threshold or above the upper threshold, the digital output switches to "GND".

Us switching: For all values below the lower threshold or above the upper threshold, the digital output (DO) matches the supply voltage level.

The preset switching thresholds are 0% and 100% of the input measurement range. These thresholds can be adjusted via the PC configuration interface. The switching threshold hysteresis is 5 mA.

Features:

- PC configuration interface
- True RMS measurement or arithmetic mean value
- Digital switching output (configurable switching thresholds)
- Switchable filter function
- Calibrated measurement range switching
- 3-way electrical isolation with 2.5 kV test voltage
- Extremely fast response times
- Measurement range overflow indication

Safety Information

Input and output must be safely isolated from any hazardous live parts!

Note

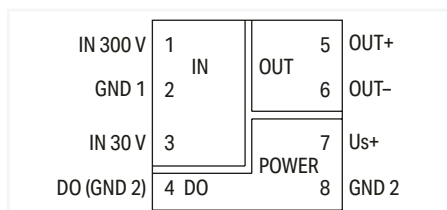
Additional setting options via the WAGO Interface Configuration Software

Use shielded signal lines!

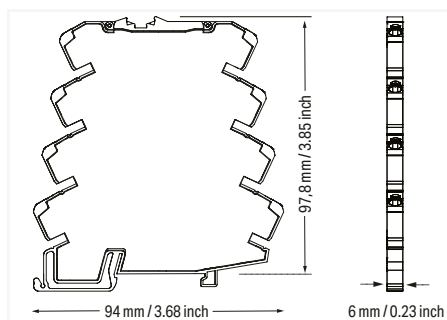
Only use shielded signal lines for analog output signals. Only then can you ensure that the accuracy and interference immunity specified for the device can be achieved, even in the presence of interference acting on the signal cable.

Configuration	
Configuration options	DIP switch; WAGO Interface Configuration Software
Input	
Input signal type	Current
Input signal (current)	0 ... 1 AAC/ADC (IN 1); 0 ... 5 AAC/ADC (IN 2)
Frequency range	16 ... 400 Hz
Input resistance (current input)	47 mΩ (IN 1); 10 mΩ (IN 2)
Input current (max.)	10 A (IN 1; 5 s); 15 A (IN 2; 5 s)
Response threshold	2 mA (IN 1); 4 mA (IN 2)
Output – analog	
Output signal type	Current; Voltage
Output signal (voltage)	0 ... 5 V; 1 ... 5 V; 0 ... 10 V; 2 ... 10 V
Output signal (current)	0 ... 10 mA; 2 ... 10 mA; 0 ... 20 mA; 4 ... 20 mA
Load impedance (voltage output)	≥ 2 kΩ (Temperature range restrictions may occur.)
Load impedance (current output)	≤ 600 Ω Temperature range restrictions may occur.
Output – digital	
Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 (adjustable)
Signal processing	
Measurement method	True RMS measurement; Arithmetic mean value
Software filter (adjustable)	Moving average value (filter level: 30)
Step response (typ.)	60 ms
Measurement error	
Transmission error (typ.)	≤ 0.1 % of upper-range value
Transmission error (max.)	≤ 0.4 % of upper-range value
Temperature coefficient	≤ 0.01 %/K
Power supply	
Power supply type	24 VDC (SELV)
Nominal supply voltage Us	24 VDC
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 40 mA (+ I _{DO})
Safety and protection	
Protection type	IP20
Test voltage	
Test voltage (input/output/supply)	2.5 kVAC; 50 Hz; 1 min
Insulation coordination	
Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output/supply)	Functional insulation
Insulation type (adjacent devices)	Reinforced insulation (safe isolation)
Connection data	
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.34 ... 2.5 mm² / 28 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail
Insulation material (main housing)	Polyamide (PA66)
Environmental requirements	
Ambient temperature (operation)	-25 ... +70 °C (at nominal current, individual arrangement; -25 ... +60 °C (block arrangement))
Ambient temperature (storage)	-40 ... +85 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	≥ (T _{ambient} + 15 K)
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4
Standards/specifications	EN 50121-3-2; DNV; EN 61010-2-201

Voltage signal conditioner ▶ Input signal type: Voltage ▶ Output signal type: Current; Voltage ▶ Digital output (DO); Clipping ▶ Width: 6 mm



	Item No.	PU
	857-560	1



Short description:

WAGO's voltage signal conditioner measures AC/DC voltages up to 300 V, converting the input signal into a standard analog signal at the output.

Features:

- Two isolated measurement inputs for 30 and 300 V AC/DC
- RMS measurement or arithmetic mean value
- A digital signal output reacts to configured measurement range limits (on/off switching delay and threshold value switch function can be configured with up to two threshold values).
- Switchable filter function
- 3-way electrical isolation with 2.5 kV test voltage

Configuration	
Configuration options	DIP switch; WAGO Interface Configuration Software
Input	
Input signal type	Voltage
Input signal (voltage)	300 VAC/VDC (IN 1); 30 VAC/VDC (IN 2)
Measurement frequency	10 ... 100 Hz (AC)
Frequency range	10 ... 100 Hz (AC)
Input resistance (voltage input)	≥ 300 kΩ
Response threshold	300 mV (IN 1); 30 mV (IN 2)
Resolution (voltage)	30 mV (IN 1); 3 mV (IN 2)
Output – analog	
Output signal type	Current; Voltage
Output signal (voltage)	0 ... 5 V; 1 ... 5 V; 0 ... 10 V; 2 ... 10 V (can be inverted, also bipolar)
Output signal (current)	0 ... 10 mA; 2 ... 10 mA; 0 ... 20 mA; 4 ... 20 mA (can be inverted, also bipolar)
Load impedance (voltage output)	≥ 1 kΩ
Load impedance (current output)	≤ 600 Ω
Output – digital	
Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 or 2 (adjustable)
Configurable rise/fall delay time (DO)	0 ... 60 s (via software)
Signal processing	
Measurement method	RMS measurement; Arithmetic mean value
Limit frequency	2 kHz
Software filter (adjustable)	Moving average value (filter level: 30)
Step response (typ.)	30 ms
Measurement error	
Transmission error (max.)	≤ 0.5 % (of the full scale value)
Temperature coefficient	≤ 0.01 %/K
Power supply	
Power supply type	24 VDC
Nominal supply voltage U_s	24 VDC
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 46 mA (+ I_{DO})
Safety and protection	
Rated Voltage	300 V; 150 V (UL)
Measurement category per EN/UL 61010-2-030	CAT II (input)
Note on insulation parameters	Danger: Configuration via the service interface must only be performed with a voltage-free measurement input! The digital output (DO) is at the potential of the supply.
Protection type	IP20
Test voltage	
Test voltage (input/analog output/supply/service interface)	2.5 kVAC; 50 ... 60 Hz; 1 min
Insulation coordination (UL)	
Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output/supply/service interface)	Reinforced insulation (safe isolation)
Insulation coordination	
Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output/supply/service interface)	Double insulation (impedance and basic insulation); Requirement: The GND 1 input is dangerous when active and the measurement is conducted as a low-side measurement!
Connection data	
Connection technology	Push-in CAGE CLAMP®
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.34 ... 2.5 mm² / 28 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail
Insulation material (main housing)	Polyamide (PA66)

Voltage signal conditioner ► Input signal type: Voltage ► Output signal type: Current; Voltage ► Digital output (DO); Clipping ► Width: 6 mm

Environmental requirements	
Ambient temperature (operation)	-40 ... +70 °C (at nominal current)
Ambient temperature (storage)	-40 ... +85 °C
Temperature range of connection cable	≥ (T _{ambient} + 10 K)
Temperature range of connection cable (UL)	80 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2; EN 61326-2-3; EN 50121-3-2
EMC emission of interference	EN 61000-6-3; EN 61326-2-3; EN 50121-3-2
Standards/specifications	EN 61010-1; EN 61373; EN 50121-3-2

Current sensor with bus connection ▶ Modbus RTU ▶ Nominal supply voltage U_s : 24 VDC ▶ Width: 35 mm



	Item No.	PU
	789-621	1

Short description:

WAGO's intelligent current sensor monitors solar plants or inverters for DC measurements within a large current measurement range. The sensor is mounted on DIN-35 rail.

Input	
Input signal type	Current
Resolution [bit]	15 bits
Measured variable	Current
Input signal (current)	0 ... 140 ADC
Output – Modbus®	
Number of devices (max.)	32
Connector	RJ-45
Bus length (max.)	1200 m
Terminating resistor	150 Ω (can be activated via DIP switch 1)
Communication	
Communications	Modbus RTU
Interface	RS-485
Transmission channels	Half duplex; 8-bit data; 1 stop bit
Number of devices (max.)	32
Parity	Even
Terminating resistor	150 Ω (can be activated via DIP switch 1)
Bus length (max.)	≤ 1200 m
Transmission rate	19.2 kBd
Measurement error	
Transmission error (typ.)	≤ 0.5 % of upper-range value (0 ... 80 A; at room temperature); ≤ 1 % of upper-range value (80 ... 140 A; at room temperature)
Temperature coefficient	≤ 0.05 %/K (-20 ... 60 °C); ≤ 0.1 %/K (60 ... 70 °C)
Power supply	
Nominal supply voltage U_s	24 VDC
Current consumption at nominal supply voltage	≤ 8 mA
Safety and protection/Environmental requirements	
Protection type	IP20
Ambient temperature (operation)	-20 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Connection data	
Feedthrough for measurement conductor	Ø 15 mm
Connector	RJ-45
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	35 mm x 90 mm x 55 mm
Mounting type	DIN-35 rail
Housing design	DIN-rail-mount enclosure
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4
Standards/specifications	DIN EN 50178

Accessories



Interface module; 2xRJ-45; PCB terminal blocks, double-row; in mounting carrier

	Item No.	PU (SPU)
	289-965	5 (1)



Interface module; 2xRJ-45; PCB terminal blocks, double-row; in mounting carrier; with shield connection

	Item No.	PU (SPU)
	289-966	5 (1)



ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly

	Item No.	PU
	750-975	1

Selection Guide: Current Transformers

The Right Solution for Every Application

Current Transformers 855 Series	Split-Core Current Transformers	Plug-In Current Transformers with CAGE CLAMP® Connection Technology
		
Application	Retrofit	New systems
Coil bobbin	Separable	Closed
Connection technology	Connection cable (color coded)	CAGE CLAMP®
Mounting	Round cable (insulated), copper current bar (insulated)	Round cable, copper current bar, DIN-rail, mounting plate
Compatibility with other WAGO components	750-493; (750-493/000-001); 750-494; (750-494/000-001); 750-495; (750-495/000-001); 857-550; 2857-570/024-001; 2857-570/024-005	
Primary rated current	60 ... 1000 A	50 ... 2500 A
Secondary rated current	1 A / 5 A	1 A / 5 A
Accuracy class	0,5; 1 oder 3	1 oder 3
Surrounding air temperature	-10 ... +55 °C	-5 ... +50 °C
Standards	EN 61869-2	EN 61869-2
Approvals	—	
Connection examples		

* In the measurement range between 0.8 and 32 A and in combination with WAGO's 3-Phase Power Measurement Modules, accuracy class 0.5 per EN 61869-2 is achieved.

Plug-In Current Transformers
with *picoMAX*® Pluggable Connectors

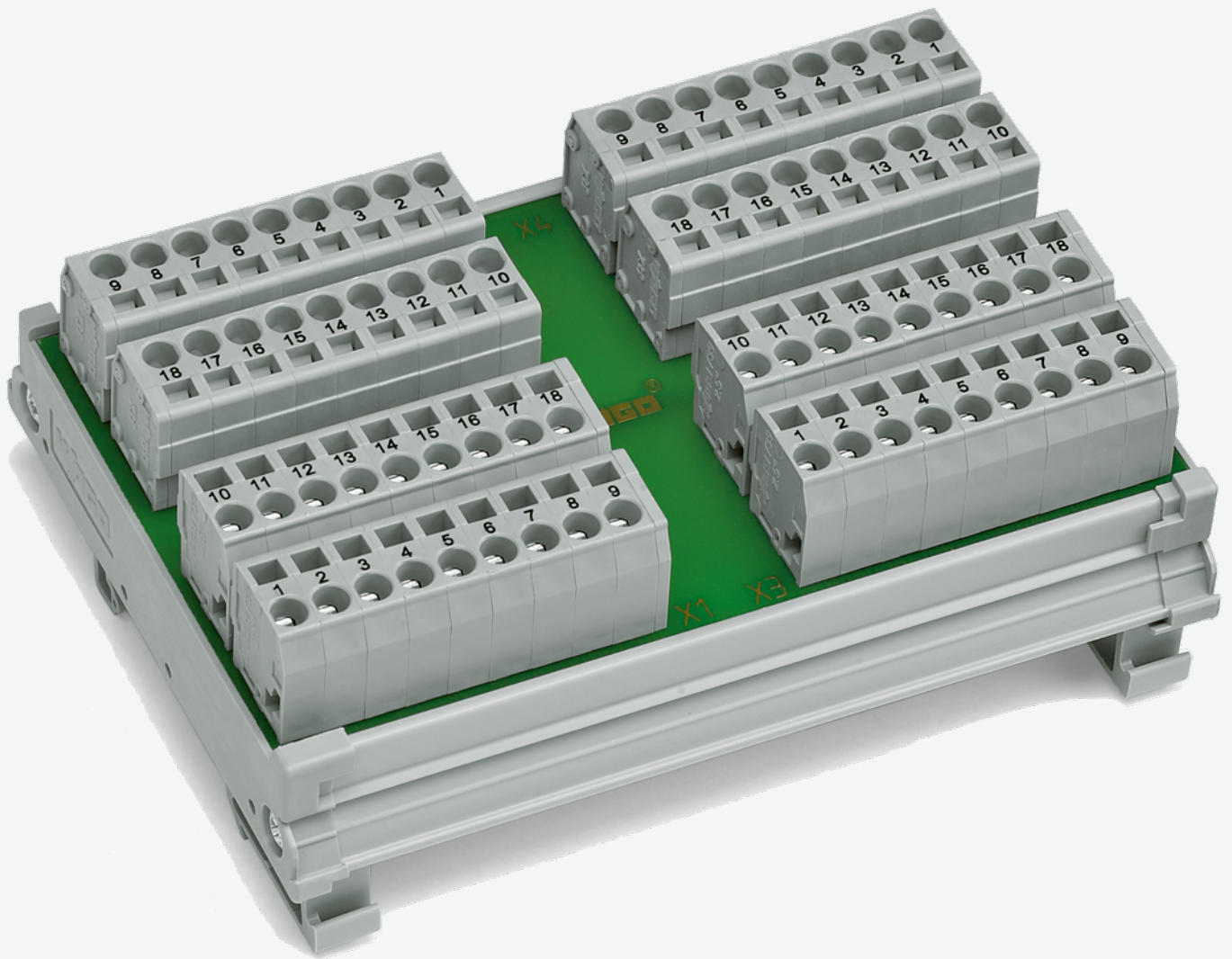
Rogowski Coils
RC 70 / RC 125 / RC 175

Current and Voltage Taps



New systems		Retrofit	New systems
Closed		Bayonet connector, separable	Closed
<i>picoMAX</i> ®		Connecting cable	Push-in CAGE CLAMP®
Round cable, copper current bar, mounting plate		Round cable, copper current bar	Jumper slot of the 285 series 2-Conductor Through Teremin Blocks 285-150; 285-195; 285-1185; 285-141; 285-181; 285-1161
750-493; 750-494; 750-495; 857-550; 2857-570/024-001		750-495/000-002; 857-552; 2857-570/024-000	750-493; 750-494; 750-495; 857-550; 2857-570/024-001
32 A	35 / 64 A	Up to 4000 A	150 ... 350 A
320 mA	1 A	22.5 mV/kA	1 A
0.5*	1	0.5	0.5
-10 ... +55 °C		-40 ... +80 °C	-25 ... +70 °C
EN 61869-2		IEC 61010-1 / EN 61869-2	EN 61869-2, EN 60947-7-3, IEC 60068-2-6
–		UL-Zulassung	–





WAGO Potential Distribution

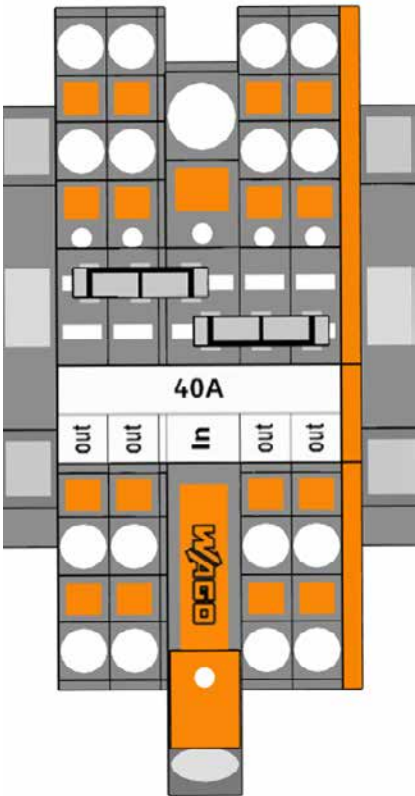
WAGO Potential Distribution

	Page
	Potential Distribution Blocks 250
	Busbar Terminal Blocks 812 Series 252
	DIN-Rail-Mount Potential Distribution Modules 288 / 830 / 787 / 2006 / 2016 / 2206 / 2216 Series 254

WAGO Potential Distribution Blocks

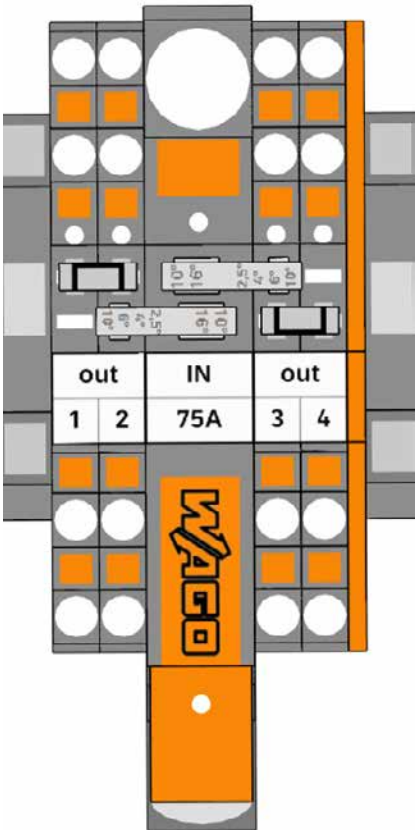
Potential distribution can be seamlessly implemented using WAGO’s TOPJOB® S Rail-Mount Terminal Blocks with mixed conductor cross-sections. If required, jumpers can be used to easily provide additional connection points. Some standard setups are shown below. For more information on rail-mount terminal block operation and other accessories, visit www.wago.com.

Potential Distribution Blocks; 40 A



Part list:		
1x	2-conductor through terminal block; with lever and push-button; 6 mm²; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2106-5201
4x	4-conductor through terminal block; with push-button; 2.5 mm²; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2202-1401
2x	End and intermediate plate; 0.8 mm thick	2002-1491/2
2x	Push-in type jumper bar; insulated; 3-way; Nominal current 25 A	2002-403

Potential Distribution Blocks; 75 A

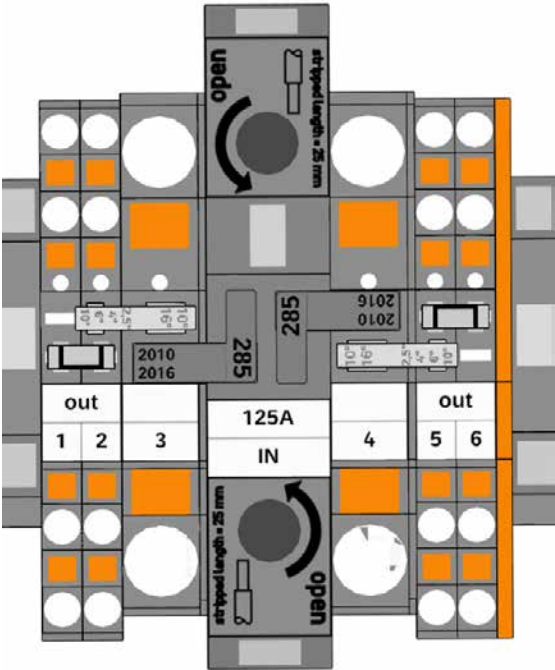


Part list:		
1x	2-conductor through terminal block; with lever and push-button; 16 mm²; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2116-5201
4x	4-conductor through terminal block; with push-button; 2.5 mm²; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2202-1401
1x	End and intermediate plate; 0.8 mm thick	2002-1492
2x	Step-down jumper; insulated; from 16/10 mm² to 10/6/4/2.5 mm²; Nominal current 57 A	2016-499
2x	Push-in type jumper bar; insulated; 3-way; Nominal current 25 A	2002-403

WAGO Potential Distribution Blocks

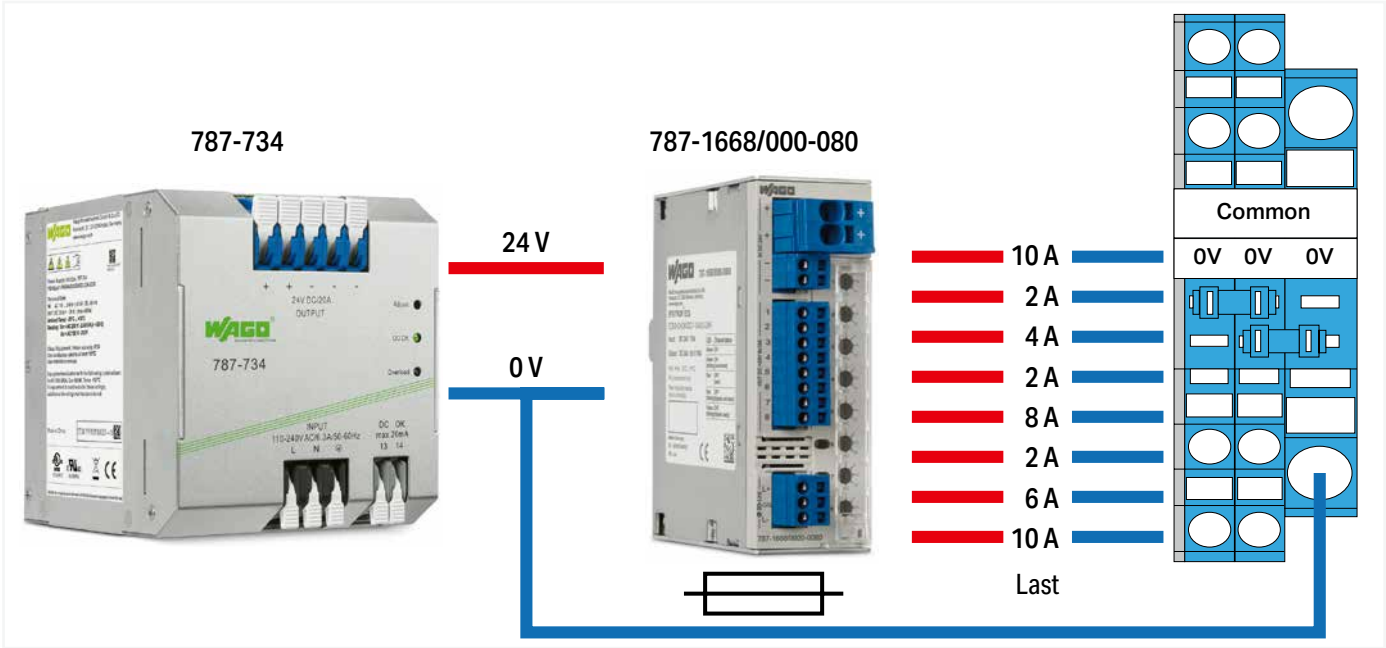
The setups and individual compilations below, e.g., with power supply and ECB can be easily created and documented via WAGO's Smart Designer Configuration Software (available at www.wago.com), and then ordered as a custom rail assembly.

Potential Distribution Blocks; 125 A



Part list:		
1x	2-conductor through terminal block; 35 mm ² ; lateral marker slots; only for DIN 35 x 15 rail; 2.3 mm thick; copper; POWER CAGE CLAMP	285-135
2x	2-conductor through terminal block; with push-button; 10 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2210-1201
4x	4-conductor through terminal block; with push-button; 2.5 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2202-1401
2x	End and intermediate plate; 1 mm thick	2020-1291
1x	End and intermediate plate; 1 mm thick	2020-1492
2x	Step-down jumper; insulated; from 285-13x to 2010 and 1616 Series TOPJOB® S terminal blocks; Nominal current 90 A	285-430
2x	Step-down jumper; insulated; from 16/10 mm ² to 10/6/4/2.5 mm ² ; Nominal current 57 A	2016-499
2x	Push-in type jumper bar; insulated; 3-way; Nominal current 25 A	2002-403

Application example



Busbar Terminal Blocks

812 Series

Description and Installation

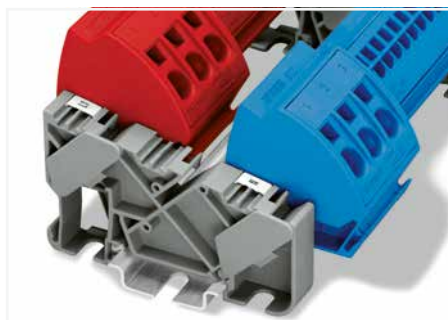


Snapping a ground busbar terminal block onto the N-busbar.



Unlock right and left positions to remove the ground busbar terminal block. Then pull up the block from the busbar.

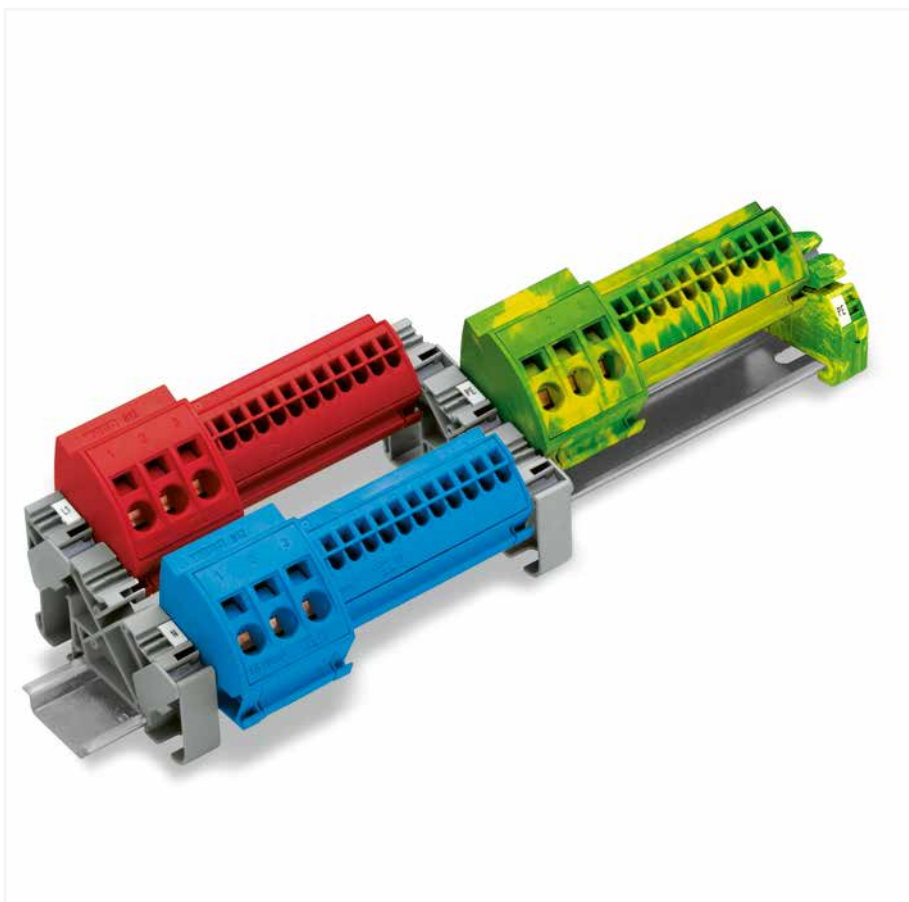
Using the 812 Series Busbar Terminal Blocks in switch-gear cabinets and distribution boards permits simple and safe potential distribution on standard (10 x 3) mm busbars. Tool-free snapping of self-locking busbar terminal blocks onto the busbar enables quick and easy assembly, as well as subsequent extension. The busbar terminal blocks are available in two different versions for conductors ranging from 1.5 to 16 mm² (16–6 AWG). Current carrying capacity: With a maximum total current of 96 A, the clamping units of the busbar terminal block can be loaded with the rated current of the conductor cross sections approved. This only applies when (10 x 3) mm busbars are used.



Busbar carrier (812-140):
Offers three receptacles for (10 x 3) mm busbars with locking device for easy mounting of the busbars. The carrier can be snapped onto the DIN-35 rail or screwed on a panel.



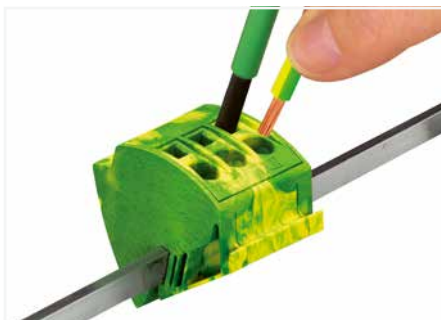
Ground busbar carrier (812-141):
Offers a receptacle with locking device for (10 x 3) mm busbar. Contact between the busbar and rail is made automatically by simply snapping the carrier onto the DIN-35 rail. One end of the busbar is mounted into the ground busbar carrier, the other end is inserted into the middle position of the insulated busbar carrier.



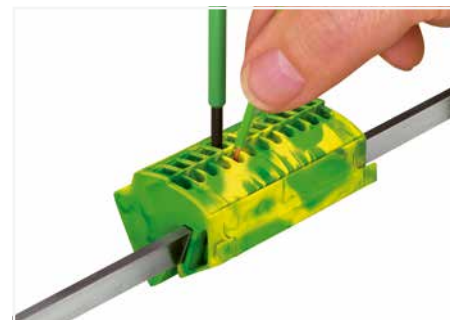
Mixed 4 mm² (12 AWG) and 16 mm² (6 AWG) busbar terminal blocks



Conductor termination (4 mm²/12 AWG):
With Push-in CAGE CLAMP®, solid conductors can be terminated by simply pushing them into the 12 x 4 mm² busbar terminal block, significantly reducing wiring time.



Conductor termination (16 mm²/6 AWG):
Open the clamping unit with an operating tool when terminating solid, stranded and fine-stranded conductors.



Conductor removal (4 mm²/12 AWG and 16 mm²/6 AWG):
Open the clamping unit using an operating tool.

Busbar Terminal Block 4 mm² and 16 mm²; 812 Series

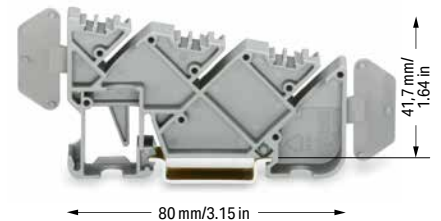
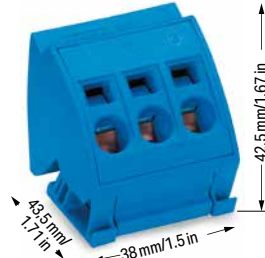
Technical data

0.5 ... 4 mm ²	20 ... 12 AWG
1000 V / 6 kV / 3	600 V, 20 A 
I _N 96 A	600 V, 95 A 
Terminal block width: 75 mm / 2.953 inch	
 11 mm / 0.43 inch	



Technical data

1.5 ... 16 mm ²	14 ... 6 AWG
1000 V / 6 kV / 3	600 V, 20 A 
I _N 96 A	600 V, 95 A 
Terminal block width: 38 mm / 1.496 inch	
 12 mm / 0.47 inch	



Busbar terminal block 4 mm² ▶ with Push-in CAGE CLAMP® connection

Color	Item No.	Pack. Unit
 blue	812-104	10
 light gray	812-101	10
 dark gray	812-102	10
 red	812-103	10

Accessories; item-specific

Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm

I _N 140 A	210-133	1
----------------------	---------	---



Busbar terminal block 16 mm² ▶ with CAGE CLAMP® connection

Color	Item No.	Pack. Unit
 blue	812-114	12
 light gray	812-111	12
 dark gray	812-112	12
 red	812-113	12

Accessories; item-specific

Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm

I _N 140 A	210-133	1
----------------------	---------	---



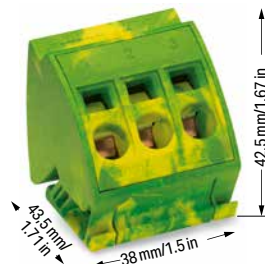
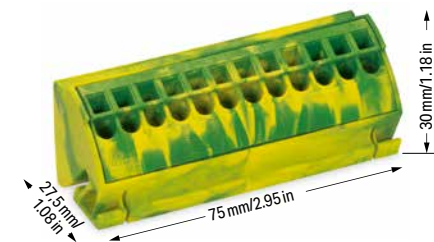
Finger guard; touch-proof cover protects unused conductor entries

yellow	284-400	100 (25)
--------	---------	----------



Insulated busbar carrier ▶ 12 mm wide

Color	Item No.	Pack. Unit
 gray	812-140	25



Ground busbar terminal block 4 mm² ▶ with Push-in CAGE CLAMP® connection

Color	Item No.	Pack. Unit
 green-yellow	812-100	10

Accessories; item-specific

Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm

I _N 140 A	210-133	1
----------------------	---------	---



Ground busbar terminal block 16 mm² ▶ with CAGE CLAMP® connection

Color	Item No.	Pack. Unit
 green-yellow	812-110	12

Accessories; item-specific

Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm

I _N 140 A	210-133	1
----------------------	---------	---



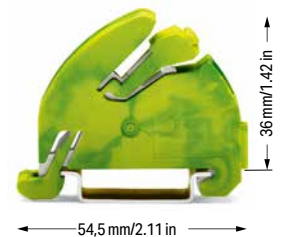
Finger guard; touch-proof cover protects unused conductor entries

yellow	284-400	100 (25)
--------	---------	----------

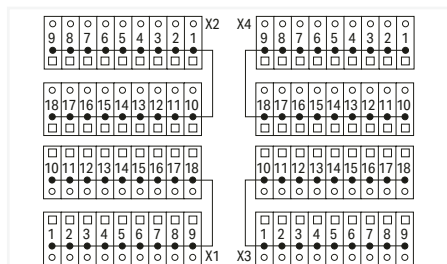
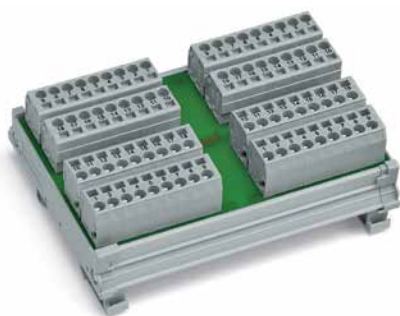


Ground busbar carrier ▶ with DIN-35 rail contact ▶ 11 mm wide

Color	Item No.	Pack. Unit
 green-yellow	812-141	25



Potential distribution module ► Total number of potentials: 4 ► Clamping units: 18



	Item No.	PU
	288-825	5

Electrical data

Operating voltage	≤ 250 VAC/VDC
Current per connection (max.)	12 A
Total current per potential (max.)	12 A

Safety and protection/Environmental requirements

Rated Voltage	250 V
Rated impulse withstand voltage	4 kV
Pollution degree	2
Ambient temperature (operation)	-20 ... +50 °C
Ambient temperature (storage)	-40 ... +80 °C

Connection data

Total number of potentials	4
Clamping units	18

Connection 1

Connection technology	CAGE CLAMP®
WAGO connector	WAGO 739 Series
Solid/fine-stranded/AWG	0.08 ... 2.5 mm² / 0.08 ... 2.5 mm² / 28 ... 12 AWG
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Mating direction	vertical

Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	115 mm x 85 mm x 39 mm
Mounting type	DIN-35 rail
Housing design	Mounting carrier

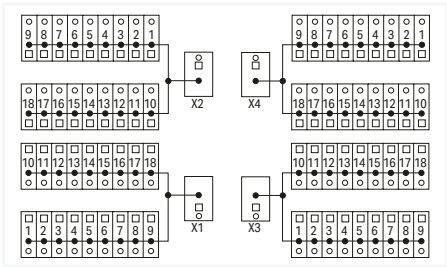
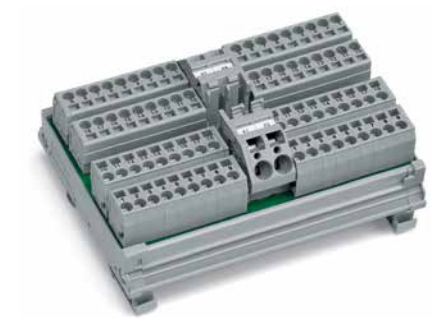
Accessories



Jumper; 2-way; unplated; silver-colored

	Item No.	PU (SPU)
	745-382	250 (50)

Potential distribution module ▶ Total number of potentials: 4 ▶ Clamping units: 19



	Item No.	PU
	288-837	4

Electrical data

Operating voltage	≤ 250 VAC/VDC
Current per connection (max.)	12 A
Total current per potential (max.)	32 A

Safety and protection/Environmental requirements

Rated Voltage	250 V
Rated impulse withstand voltage	4 kV
Pollution degree	2
Ambient temperature (operation)	-20 ... +50 °C
Ambient temperature (storage)	-40 ... +80 °C

Connection data

Total number of potentials	4
Clamping units	19

Connection 1

Connection type	Power supply
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 745 Series
Solid/fine-stranded/AWG	0.2 ... 6 mm² / 0.2 ... 6 mm² / 24 ... 10 AWG
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	11 ... 12 mm / 0.43 ... 0.47 inches
Mating direction	45°

Connection 2

Connection type	Connection points
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 739 Series
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	115 mm x 85 mm x 45 mm
Mounting type	DIN-35 rail
Housing design	Mounting carrier

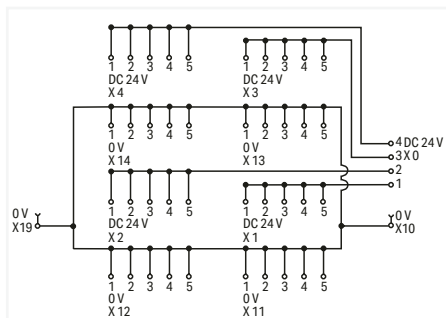
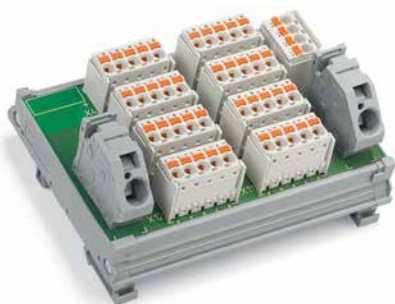
Accessories



Jumper; 2-way; unplated; silver-colored

	Item No.	PU (SPU)
	745-382	250 (50)

Potential distribution module ► Total number of potentials: 4 ► Clamping units: 28



Item No.	PU
288-870/000-030	1

Features:

- May be used with electronic circuit breakers for 24 and 0 VDC power distribution, as a substitute for rail-mount terminal blocks
- Pre-wiring and electrical isolation of current paths via pluggable *picoMAX*® Female Headers
- Optional coding pins (2092-1610) protect against any inadvertent mixing of female headers
- Optional gripping plates with sliding connector release (2092-1601/002-000 or 2092-1602/002-000) provide conductor strain relief
- 0 V may be supplied to the adjacent modules via comb-style jumper bar (745-682)

Electrical data

Nominal operating voltage	24 VDC
Current per connection (max.)	10 A
Total current per potential (max.)	10 A
Total current 0 V (max.)	40 A

Safety and protection/Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (without condensation)
Ambient temperature (storage)	-40 ... +85 °C

Connection data

Total number of potentials	4
Clamping units	28

Connection 1

Connection type	Power supply 0 V
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 745 Series
Solid/fine-stranded/AWG	0.2 ... 16 mm² / 0.2 ... 16 mm² / 24 ... 6 AWG
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	12 ... 13 mm / 0.47 ... 0.51 inches
Mating direction	45°

Connection 2

Connection type	Power supply 24 V; connection points
Connection technology	Push-in CAGE CLAMP®
WAGO connector	<i>picoMAX</i> ® 5.0 (WAGO 2092 Series)
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	100 mm x 85 mm x 49 mm
Mounting type	DIN-35 rail
Housing design	Mounting carrier

Accessories



Jumper; 2-way; unplated; silver-colored

Item No.	PU (SPU)
745-682	400 (50)



Gripping plate

Item No.	PU (SPU)
2092-1601/002-000	100 (25)



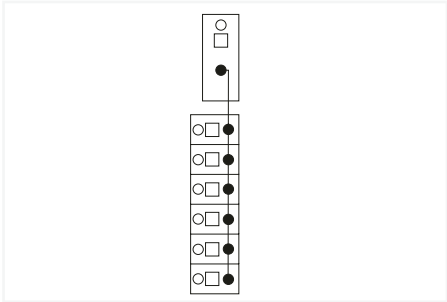
Coding key carrier; orange

Item No.	PU (SPU)
2092-1610	100 (25)

Potential distribution module ▶ Lever ▶ Total number of potentials: 1 ▶ with 1 input clamping point; with 6 output clamping points



Similar to illustration



	Item No.	PU
	830-800/000-312/000-006	10

Electrical data	
Operating voltage	≤ 250 VAC/VDC
Current per connection (max.)	12 A
Total current per potential (max.)	65 A
Specialty functions	with 1 input clamping point; with 6 output clamping points

Safety and protection/Environmental requirements	
Ambient temperature (operation)	-20 ... +50 °C
Relative humidity	≤ 95 % (without condensation)

Connection data	
Total number of potentials	1

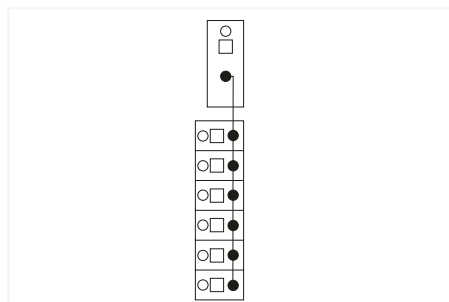
Connection 1	
Connection type	Input
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 2716 Series
Solid/fine-stranded/AWG	1.5 ... 16 mm² / 1.5 ... 16 mm² / 16 ... 6 AWG
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	12 ... 13 mm / 0.47 ... 0.51 inches
Mating direction	30°

Connection 2	
Connection type	Output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 739 Series
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	21 mm x 85 mm x 49 mm
Mounting type	DIN-35 rail
Housing design	Mounting carrier

Standards and specifications	
Standards/specifications	cULus 61010-2-201

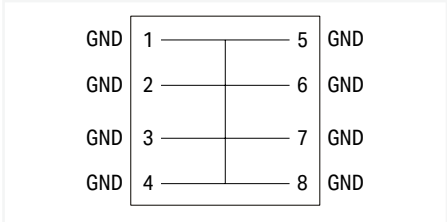
Potential distribution module ▶ Lever ▶ Total number of potentials: 1 ▶ with 1 input clamping point; with 6 output clamping points



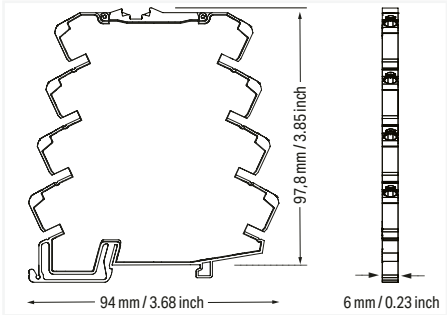
Item No.	PU
830-800/000-312	10

Electrical data	
Operating voltage	≤ 250 VAC/VDC
Current per connection (max.)	12 A
Total current per potential (max.)	65 A
Specialty functions	with 1 input clamping point; with 6 output clamping points
Safety and protection/Environmental requirements	
Ambient temperature (operation)	-20 ... +50 °C
Relative humidity	≤ 95 % (without condensation)
Connection data	
Total number of potentials	1
Connection 1	
Connection type	Input
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 2716 Series
Solid/fine-stranded/AWG	1.5 ... 16 mm² / 1.5 ... 16 mm² / 16 ... 6 AWG
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	12 ... 13 mm / 0.47 ... 0.51 inches
Mating direction	30°
Connection 2	
Connection type	Output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 739 Series
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	21 mm x 85 mm x 49 mm
Mounting type	DIN-35 rail
Housing design	Mounting carrier
Standards and specifications	
Standards/specifications	cULus 61010-2-201

Potential distribution module ► Total number of potentials: 1 ► with 4 clamping points (0 V)



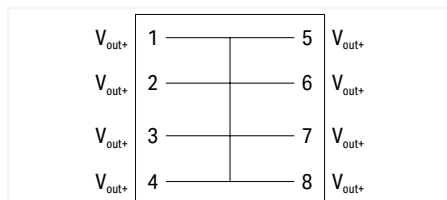
Item No.	PU
787-3861/000-1000	1



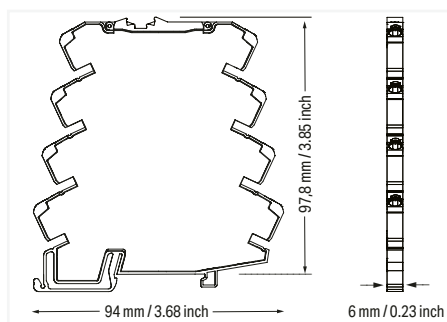
Note
The device is designed for use in SELV circuits.

Electrical data	
Nominal operating voltage	24 VDC
Operating voltage	0 ... 30 VDC
Limiting continuous current	20 A; 15 A (UL)
Specialty functions	with 4 clamping points (0 V)
Safety and protection/Environmental requirements	
Pollution degree	2
Protection type	IP20; per EN 60529
Protection class	III
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m
Connection data	
Total number of potentials	1
Clamping units	8
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm² / 26 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail
Standards and specifications	
Conformity marking	CE

Potential distribution module ► Total number of potentials: 1 ► with 4 clamping points (24 V)



Item No.	PU
787-3861/000-2000	1



Note

The device is designed for use in SELV circuits.

Electrical data

Nominal operating voltage	24 VDC
Operating voltage	0 ... 30 VDC
Limiting continuous current	20 A; 15 A (UL)
Specialty functions	with 4 clamping points (24 V)

Safety and protection/Environmental requirements

Pollution degree	2
Protection type	IP20; per EN 60529
Protection class	III
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m

Connection data

Total number of potentials	1
Clamping units	8
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm² / 26 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

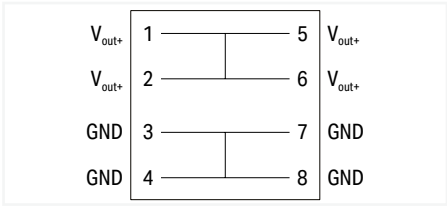
Physical data/Mechanical data/Material Data

Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail

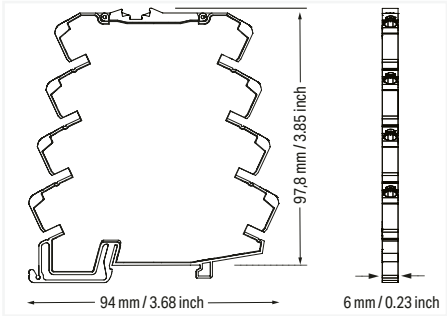
Standards and specifications

Conformity marking	CE
--------------------	----

Potential distribution module ► Total number of potentials: 2 ► with 4 clamping points each (0 V / 24 V)



Item No.	PU
787-3861/000-3000	1



Note
The device is designed for use in SELV circuits.

Electrical data	
Nominal operating voltage	24 VDC
Operating voltage	0 ... 30 VDC
Limiting continuous current	20 A; 15 A (UL)
Specialty functions	with 4 clamping points each (0 V / 24 V)

Safety and protection/Environmental requirements	
Pollution degree	2
Protection type	IP20; per EN 60529
Protection class	III
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m

Connection data	
Total number of potentials	2
Clamping units	8
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm² / 26 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data/Mechanical data/Material Data	
Width x Height x Depth from upper-edge of DIN-rail	6 mm x 94 mm x 97.8 mm
Mounting type	DIN-35 rail

Standards and specifications	
Conformity marking	CE

Distribution terminal block ► TOPJOB® S

1 x 6 mm² / 6 x 1.5 mm²; 1 x 16 mm² / 6 x 4 mm²; 2006 / 2016 / 2206 / 2216 Series

Illustration	Description	Color	Item No.	Pack. Unit	Dimensions (W x H x D)	Electrical Data
Distribution terminal block ▶ with push-button ▶ 1 x 6 mm ² und 6 x 1.5 mm ² ▶ 2206 Series ① ②						
	Distribution terminal block; with integrated end plate; side and center marking	 gray	2206-8031 ⑤	12	9 x 73.8 x 32.9 mm/ 0.35 x 2.91 x 1.3 inch	800 V / 8 kV / 3 ⑦; I _N 41 A
		 red	2206-8033 ⑤	12		
		 blue	2206-8034 ⑤ ⑥	12		
		 black	2206-8035 ⑤	12		
Distribution terminal block ▶ with operating slots ▶ 1 x 6 mm ² und 6 x 1.5 mm ² ▶ 2006 Series ① ②						
	Distribution terminal block; with integrated end plate; side and center marking	 gray	2006-8031	12	9 x 73.8 x 32.9 mm/ 0.35 x 2.91 x 1.3 inch	800 V / 8 kV / 3 ⑦; I _N 41 A
		 red	2006-8033	12		
		 blue	2006-8034	12		
		 black	2006-8035	12		
Distribution terminal block ▶ with push-button ▶ 1 x 16 mm ² und 6 x 4 mm ² ▶ 2216 Series ③ ④						
	Distribution terminal block; with integrated end plate; side and center marking	 gray	2216-8031 ⑤	7	12.8 x 87 x 36.9 mm/ 0.5 x 3.43 x 1.45 inch	800 V / 8 kV / 3 ⑦; I _N 76 A
		 red	2216-8033 ⑤	7		
		 blue	2216-8034 ⑤ ⑥	7		
		 black	2216-8035 ⑤	7		
Distribution terminal block ▶ with operating slots ▶ 1 x 16 mm ² und 6 x 4 mm ² ▶ 2016 Series ③ ④						
	Distribution terminal block; with integrated end plate; side and center marking	 gray	2016-8031	7	12.8 x 87 x 36.9 mm/ 0.5 x 3.43 x 1.45 inch	800 V / 8 kV / 3 ⑦; I _N 76 A
		 red	2016-8033	7		
		 blue	2016-8034	7		
		 black	2016-8035	7		

Accessories



Jumper; light gray		
Jumper assignment	Item No.	Pack. Unit
1-2	2001-402	25
1-2-3	2001-403	25



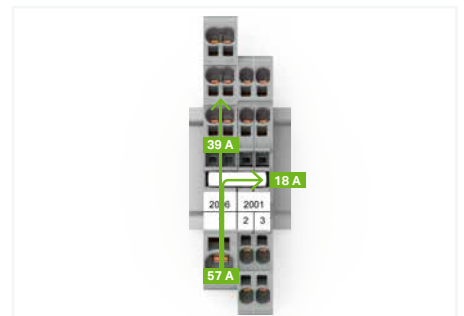
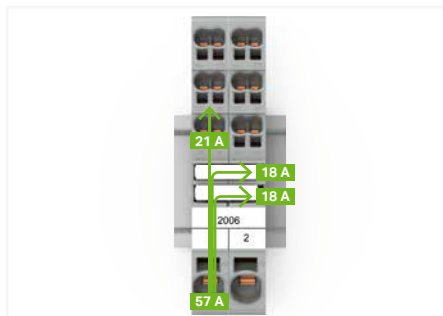
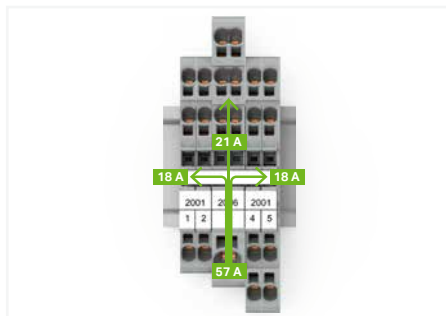
Marking strips; plain; width: 11 mm		
Color	Item No.	Pack. Unit
○ white	2009-110	1



Test plug adapter; gray		
	Item No.	Pack. Unit
	2009-174	100 (25)



Testing tap; gray		
	Item No.	Pack. Unit
	2009-182	100 (25)



Commoning options for 2006 / 2206 Series Distribution Terminal Blocks and 2001 Series Terminal Blocks using 2001 Series Jumpers

Note:

The total current flowing must not exceed the rating of the step-down jumper.

① Conductor range: 0.5 ... 10 mm² „s + f“;
Push-in termination: 2.5 ... 10 mm² „s“ and 2.5 ... 6 mm²;
„insulated ferrules; 12 mm“; 20 ... 8 AWG;
Strip length: 13 ... 15 mm / 0.51 ... 0.59 inch

② Conductor range: 0.25 ... 2.5 mm² „s + f“;
Push-in termination: 0.75 ... 2.5 mm² „s“ and 0.75 ... 1.5 mm²;
„insulated ferrules; 12 mm“; 22 ... 14 AWG;
Strip length: 9 ... 11 mm / 0.35 ... 0.43 inch

③ Conductor range: 0.5 ... 16 mm² „s + f“, 25 mm² „f“;
Push-in termination: 6 ... 16 mm² „s“ und 6 ... 16 mm²;
„insulated ferrules; 18 mm“; 20 ... 6 AWG;
Strip length: 18 ... 20 mm / 0.71 ... 0.79 inch

④ Conductor range: 0.5 ... 6 mm² „s + f“;
Push-in termination: 1.5 ... 6 mm² „s“ und 0.5 ... 4 mm²;
„insulated ferrules; 20 mm“; 20 ... 10 AWG;
Strip length: 11 ... 13 mm / 0.43 ... 0.51 inch

⑤ Suitable for Ex e II applications

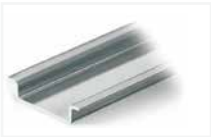
⑥ Suitable for Ex i applications

⑦ 800 V = rated voltage
8 kV = rated impulse voltage
3 = pollution degree



WAGO Accessories and WAGO Tools

WAGO Accessories and WAGO Tools

		Seite
	Thermal Transfer Printer - Smart Printer	
	Smart Printer	272
	Accessories	274
	Empty Housings 2857 Series	280
	DIN-Rails, Collective Jumper Carriers and Rail-Mount Terminal Block Covers	282
	End Stops	284
	Operating Tools	285
	Screwdriver	286
	Wall Mount Adapter 787 Series	288
	DIN-Rail Adapters 787 Series	290
	Mounting Carriers 2789 Series	292
	Communication Cables 787 Series	294



Marking with Smart Printer



Terminal Block Marking

- Multi-line marking strips for clear, detailed control cabinet labels
- WMB Inline markers on a reel are suitable for various terminal block sizes
- Same profile across all TOPJOB® S Rail-Mount Terminal Blocks ensures quick labeling



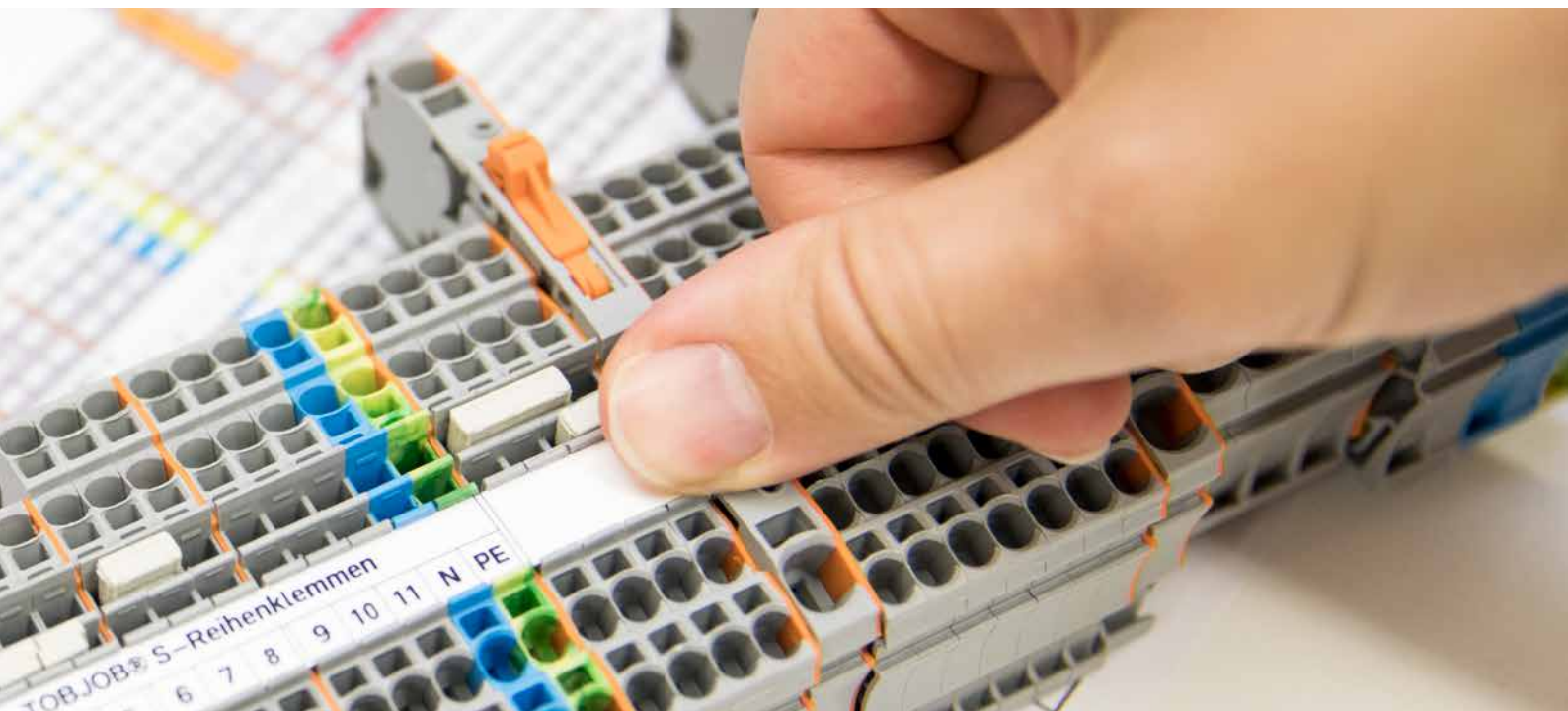
Cable and Conductor Marking

- Different versions available: marking sleeves, self-laminating labels, conductor markers for thread-on mounting or shrink tubes
- Large variety of marking surface sizes



Device Marking

- Broad selection of labels, type plates, fabric labels and type plates optimizes marking for devices and control cabinets
- Marking materials are available in a variety of colors and sizes

**Your Benefits:**

- Long-lasting, indelible, scratch-proof printing
- Lower purchase costs thanks to economical marking
- Save time on printing and affixing markings
- Universal application for all control cabinet marking tasks
- Easy installation

Thermal Transfer Printer Smart Printer Installation



Open Smart Printer.



Smart Printer is open.



Secure the appropriate roller in the printer.



Insert the entire core of the ink ribbon at the bottom.



Use the tear-off edge to remove the printed material.



Insert the empty core at the top and twist until the empty core has been completely wrapped.

Secure Material inside the Printer



Close Smart Printer.



Loosen the center bar, loosen the wing and place material on the bar.



Secure the second wing on the center bar, resecure the bar in the housing and loosely attach guide rails to the material.

Secure Material outside the Printer



Secure the material on the external unwinder.



Route material through the printer.



Guide the marker strip over the roller.



Place unwinder and material centrally behind the printer.



Loosely fit guide rails to the material.

External Unwinder



Set of external unwinder

Mobile Application



Secure *Bluetooth®* (258-5102) or *WiFi Dongle* (258-5103) in the USB-A interface.



Download *WAGO Smart Script App* and couple it to the desired printer in the print preview.



Optional use: *Power bank 24 V* (258-5104)

WAGO Marking Software Smart Script Intuitive Marking Software

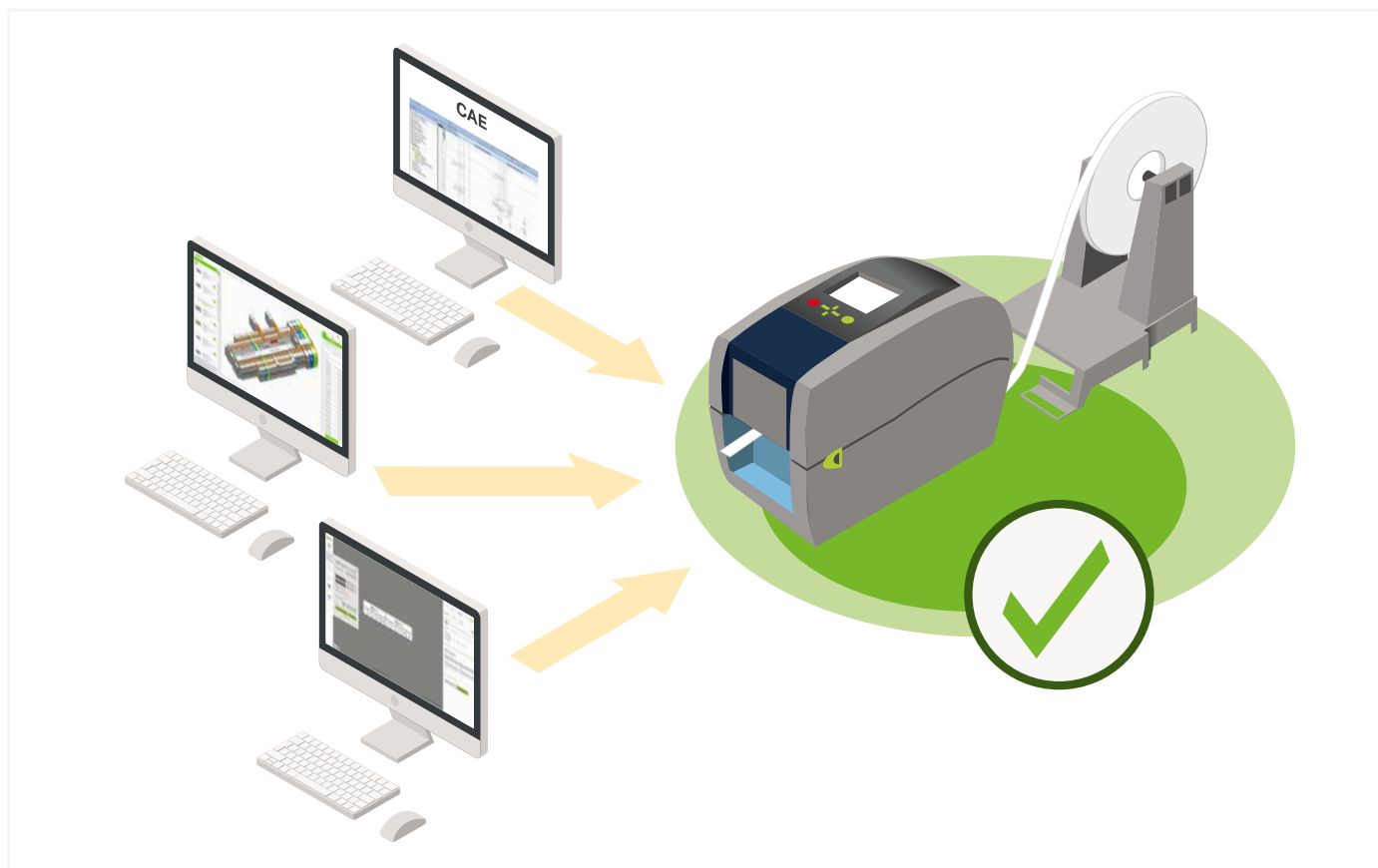
With its intuitive operation, this clearly structured marking software is suitable for all WAGO markers. Eliminate duplicated effort and simply export data from Excel or CAE systems for marking your terminal strips.

Combining superior usability with a modern design, Smart Script helps the user complete the task quickly and easily with just a few clicks. For example, Smart Script can be used to easily customize type labels, as well as define and print barcodes and graphic elements.

- ➔ Modern design and intuitive workflow
- ➔ Fast and easy use thanks to an integrated printer driver and printer settings
- ➔ A large selection of different marking media, including templates
- ➔ Optimized data interfaces to WAGO Configurator Smart Designer, EPLAN P8, Microsoft Excel, CSV



Printing with the Thermal Transfer Smart Printer



Direct Printing from a CAE System

With the perfect EPLAN interfaces, both terminal block markings and marking accessories for electrical equipment and conductors can be conveniently generated directly from a CAE system. Direct connection to the Thermal Transfer Smart Printer accelerates the manufacturing process.



Generate Marking Data from the Configuration Software

Save time and reduce your costs by printing markings directly from WAGO's Smart Designer Configuration Software on the economical Thermal Transfer Smart Printer. Configured terminal strips can be printed with just a few mouse clicks.



WAGO Marking Software Smart Script

With its intuitive operation, this clearly structured marking software is suitable for all WAGO markers. Eliminate duplicated effort and simply export data from Excel or CAE systems for marking your terminal strips.

Marking device

Printer model: Smart Printer



Connection data	
Interfaces	USB type A, (for BT and WiFi connection), USB type B (for PC connection), RS-232, ETHERNET 10/100 Mbps
System requirements	
Supported operating systems	Windows 7; Windows 8; Windows 10; Windows 11; Linux®
Memory	4 GB
Technical data	
Operating voltage	100 ... 240 VAC, 50 ... 60 Hz (automatic adjustment)
Print resolution	300 dpi (12 pixels/mm)
Print speed	Max. 127 mm/s (WAGO recommends 50.8 mm/s)
Print width (max.)	47 mm
Print length (max.)	762 mm
Print head	Glass layer, spring-mounted
See-through/reflective sensor	Yes, centrally mounted
Memory	8192 MB
Operating display	Color TFT LCD with navigation button
Safety approvals	CE (EMC)
Ink ribbon	External roll diameter: 40 mm; Internal core diameter: 12.7 mm (0.5 inch); Max. length: 110 m; Max. width: 58 mm
Mechanical data	
Dimensions W x H x D	(135 x 175 x 245) mm
Environmental requirements	
Ambient temperature (operation)	+5 ... +40 °C
Ambient temperature (storage)	-20 ... +50 °C

Marking device

Printer model: Smart Printer

Scope of delivery: USB Adapter *Bluetooth*® 5.0 Nano (258-5102), tool bag (large) (206-3010), power supply + cable, 2 rollers (258-5006 + 258-5007), 1 reel holder, 1 ink ribbon (258-5005), Smart Script marking software and driver, USB cable, external unwinder, 1 empty cardboard core



258-5100

	Item No.	PU
	258-5100	1

Scope of delivery: Power supply + cable, 2 rollers (258-5006 + 258-5007), 1 reel holder, 1 ink ribbon (258-5005), Smart Script marking software and driver, USB cable, external unwinder, 1 empty cardboard core, 1 reel each of marking strips (2009-110) and WMB Inline markers (2009-115)



258-5107

	Item No.	PU
	258-5107	1

Item-Specific Accessories



Tool bag; empty; compatible with L-BOXX® 102; Capacity: 24 kg

	Item No.	PU
	206-3010	1

	USB Adapter 5.0 with Bluetooth®; for WAGO Thermal Transfer Smart Printer	
	Item No.	PU
	258-5102	1

Scope of delivery: Power supply + cable, 2 rollers (258-5006 + 258-5007), 1 roller holder, 1 ink ribbon (258-5005), Smart Script marking software and driver, USB cable, external unwinder, 1 empty cardboard core



258-5108

	Item No.	PU
	258-5108	1

Item-Specific Accessories

	Tool bag; empty; compatible with L-BOXX® 102; Capacity: 24 kg	
	Item No.	PU
	206-3010	1



USB Adapter 5.0 with Bluetooth®; for
 WAGO Thermal Transfer Smart Printer

	Item No.	PU
	258-5102	1

Accessories; for all products on this page

	WiFi USB Adapter; for WAGO Thermal Transfer Smart Printer	
	Item No.	PU
	258-5103	1



Power Bank; 12 ... 24 V; 20100 mAh; for
 WAGO Thermal Transfer Smart Printer

	Item No.	PU
	258-5104	1

PU = packaging unit; SPU = subpackaging unit

Accessories for marking devices

Cutter



258-5030

Dimensions W x H x D: (60 x 107 x 131) mm		
	Item No.	PU
	258-5030	1

- Hardware requirements:
- Printer model: Smart Printer
 - From manufacturing month/year: 0814 – August 2014
 - Firmware version: 1.UW7i
 - Printer driver: Version 7.4.2
- Software requirements:
- Smart Script: Version 4.2 or higher
 - WAGO printer settings: Version 2.4.0.0 or higher
- Approved print material to be cut:
- Marking Strips: 2009-110, 709-177, 709-178, 757-901/000-005
 - Self-Adhesive Marking Strips: 210-702, 210-870 ...-882/000-002
 - Cable Tie Markers: 211-835 ... -836, 211-836/000-002
 - Self-Laminating Labels: 211-855 ... -857
 - Wire Markers for Thread-On Mounting: 211-861 ...-863
 - Type Labels: 210-801 ... -804, 210-812
 - Continuous Labels: 210-831 ... -834
 - Label for Circuit Identification: 210-813
- Dimensions of printing materials:
- Width (max.): 46 mm
 - Thickness (max.): 250 µm

PU = packaging unit; SPU = subpackaging unit

Accessories for marking devices

Thermal transfer ink ribbon

for all marking accessories from the WAGO product series (except 211-855, 211-856, 211-857)

only for 211-855/-856/-857



258-5005			258-5014		
Length: 74 m			Length: 74 m		
Color	Item No.	PU	Color	Item No.	PU
● black	258-5005	1	● black	258-5014	1
● red	258-5005/000-005	1			
○ white	258-5005/000-008	1			

PU = packaging unit; SPU = subpackaging unit

Accessories for marking devices

Carrying case ► for Smart Printer ► With foam padding for printer



258-5015

Dimensions W x H x D: (500 x 260 x 230) mm

Color	Item No.	PU
○ white	258-5015	1

Accessories for marking devices

Roller

for marking strips, device and equipment markers, conductor and cable markers



258-5006

	Item No.	PU
	258-5006	1

for Micro WSB Inline markers



258-5011

	Item No.	PU
	258-5011	1

for Mini-WSB Inline markers



for WMB Inline markers



258-5007

	Item No.	PU
	258-5007	1

for WMB Inline markers; for Phoenix Contact Rail-Mount Terminal Blocks



258-5009

	Item No.	PU
	258-5009	1

for WMB Inline markers; for Weidmüller Rail-Mount Terminal Blocks



258-5010

	Item No.	PU
	258-5010	1

PU = packaging unit; SPU = subpackaging unit

Marking system

Terminal block width: 3.5 mm, 4 ... 4.2 mm and from 5 mm



Use		
Marker width	Can be snapped onto the following terminal block series	
	for continuous marking	that will be separated
3.5 mm	2000, 2020	-
4 ... 4.2 mm	279, 2001	-
5 ... 5.2 mm	270, 280, 780, 869, 870, 880, 2002, 2003, 2022	Terminal blocks with spacing > 5 ... 5.2 mm

WMB Inline ► plain ► 2.300 WMB markers (3.5 mm)/reel		
Color	3.5 mm Item No.	PU
○ white	2009-113	1

WMB Inline ► plain ► 2.000 WMB markers (4 mm)/reel ► stretchable 4 ... 4.2 mm		
Color	4 ... 4.2 mm Item No.	PU
○ white	2009-114	1

WMB Inline ► plain ► 1.500 WMB markers (5 mm)/reel ► stretchable 5 ... 5.2 mm		
Color	5 ... 5.2 mm Item No.	PU
○ white	2009-115	1



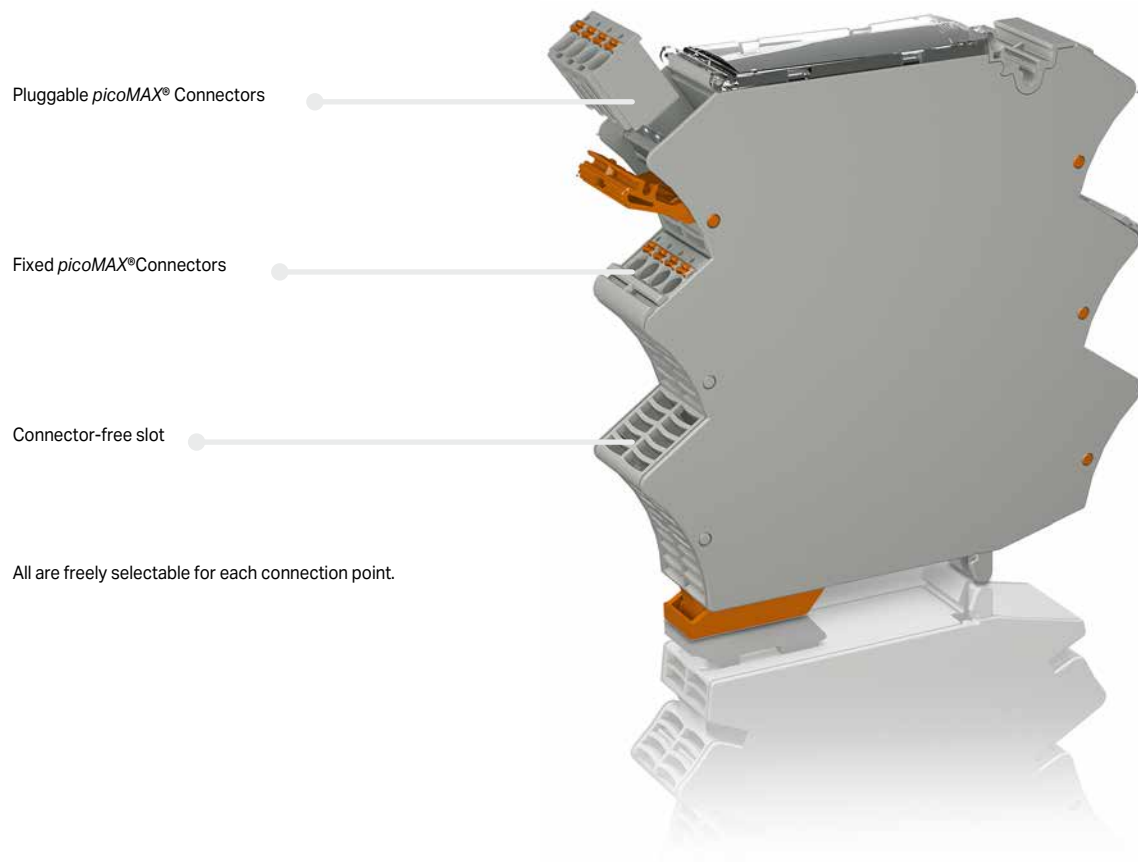
Use		
	Can be snapped onto the following terminal block series	
	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2010, 2016, 2020, 2022	

Marking strip ► plain ► 11 mm wide ► 50 m reel		
Color	Item No.	PU
○ white	2009-110	1

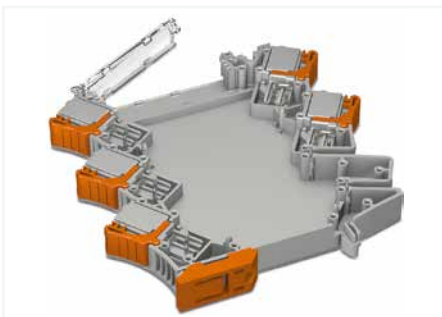
Modular empty housings

Overview and configuration

2857 Series



Supplied as a pre-assembled unit:



1. Pre-assembled unit



2. Insert and solder the PCB.



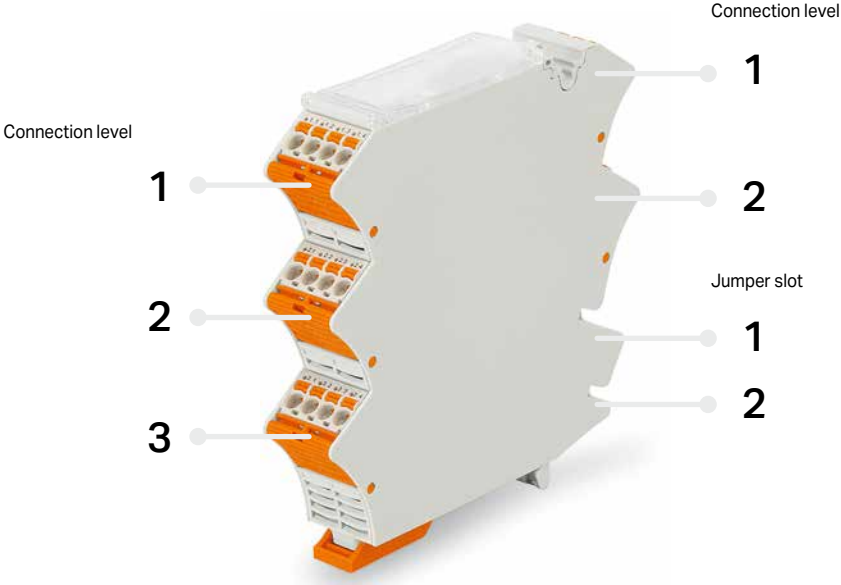
3. Snap on the side wall.

Housing configuration:

Housing width: 12.5 mm	 2857-101	 2857-102	 2857-103	-
Housing width: 22.5 mm	 2857-121	 2857-122	 2857-123	 2857-124
Connection levels	2-2	3-2	3-3	1-1
Jumper slots	2-2	0-2	0-0	2-2

Mixed configuration (fixed/removable/empty slot) upon request!

Example of connection level and jumper slot assignment:



Connection level

1

2

3

Connection level

1

2

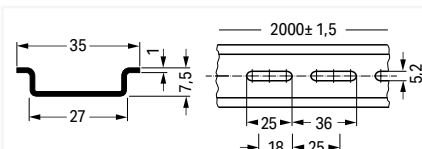
Jumper slot

1

2

Connection levels	3-2
Jumper slots	0-2

DIN-Rail; Rail End Cap; Angled Support Bracket and Collective Jumper Carrier



Steel DIN-rail ▶ I_N 76 A (based on 1 m length) ▶
35 x 7.5 mm ▶ 1 mm thick ▶ 2 m long ▶ per EN 60715

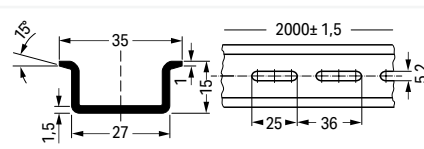
	Item No.	Pack. Unit
unslotted	210-113	10 (1)

Hole width: 25 mm ▶ Hole spacing: 36 mm

slotted	210-112	10 (1)
---------	---------	--------

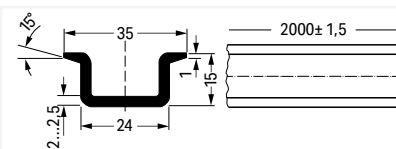
Hole width: 18 mm ▶ Hole spacing: 25 mm

slotted	210-115	1
---------	---------	---



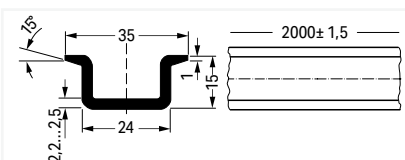
Steel DIN-rail ▶ I_N 125 A (based on 1 m length) ▶
35 x 15 mm ▶ 1.5 mm thick ▶ 2 m long ▶ similar to
EN 60715

	Item No.	Pack. Unit
unslotted	210-114	10 (1)
slotted	210-197	10 (1)



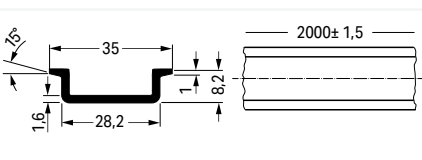
Steel DIN-rail ▶ I_N 125 A (based on 1 m length) ▶
35 x 15 mm ▶ 2.3 mm thick ▶ 2 m long ▶ per EN 60715

	Item No.	Pack. Unit
unslotted	210-118	10 (1)



Copper DIN-rail ▶ I_N 309 A (based on 1 m length) ▶
35 x 15 mm ▶ 2.3 mm thick ▶ 2 m long ▶ per EN 60715

	Item No.	Pack. Unit
unslotted	210-198	10 (1)



Aluminum DIN-rail ▶ I_N 76 A (based on 1 m length) ▶
35 x 8.2 mm ▶ 1.6 mm thick ▶ 2 m long ▶ similar to
EN 60715

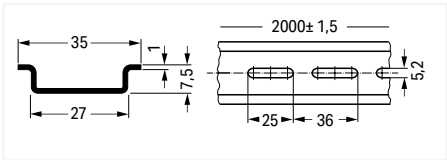
	Item No.	Pack. Unit
unslotted	210-196	20 (1)



Rail end cap ▶ for DIN-35 rail (7.5 mm high)

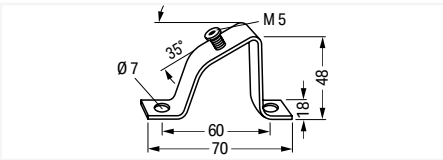
Color	Item No.	Pack. Unit
○ gray	209-109	50 (25)

PU = packaging unit; SPU = subpackaging unit



Steel DIN-rail ▶ I_N 76 A (based on 1 m length) ▶ 35 x 7.5 mm ▶ 1 mm thick ▶ 2 m long ▶ per EN 60715

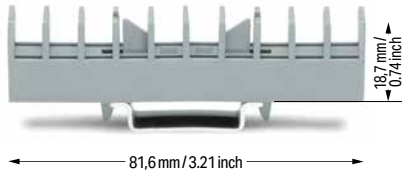
	Item No.	Pack. Unit
unslotted	210-505	1
slotted	210-504	1



Angled support bracket ▶ without screw

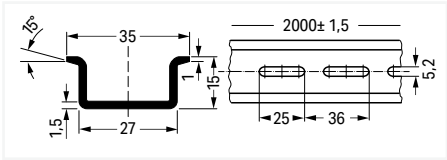
	Item No.	Pack. Unit
	210-148	10

Screw M5 x 8		
	210-149	100 (20)



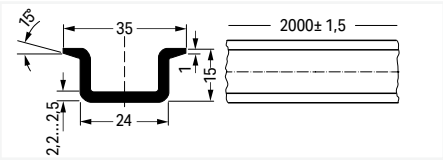
Collective jumper carrier ▶ for DIN-35 rail ▶ compatible with jumpers for transverse switching terminal block (282-811) and longitudinal switching disconnect terminal block (282-821)
The collective carrier can be snapped onto DIN-35 rails. It stores jumpers during maintenance.

Color	Item No.	Pack. Unit
○ gray	282-369	25



Steel DIN-rail ▶ I_N 125 A (based on 1 m length) ▶ 35 x 15 mm ▶ 1.5 mm thick ▶ 2 m long ▶ per EN 60715

	Item No.	Pack. Unit
unslotted	210-506	1
slotted	210-508	1



Carrier rail ▶ plastic
Not suited for use with ground terminal blocks!

	Item No.	Pack. Unit
	210-509	10 (1)



Collective carrier for adjacent jumpers ▶ for DIN-35 rail ▶ for adjacent jumpers (279 to 284 Series) ▶ for banana plugs (215 Series)
The collective carrier can be snapped onto DIN-35 rails. It stores adjacent jumpers and banana plugs during maintenance.

Color	Item No.	Pack. Unit
○ gray	209-100	50 (25)

Screwless End Stop ▶ for DIN-35 Rail 249 Series



Screwless end stop ▶ for DIN-35 rail ▶ 6 mm wide

Color	Item No.	Pack. Unit
○ gray	249-116	100 (25)

Screwless end stop ▶ for DIN-35 rail ▶ 10 mm wide

○ gray	249-117	50 (25)
--------	---------	---------



Simply snap on – that's it!



Simply snap on – that's it!



Screwless end stop ▶ for DIN-35 rail ▶ 14 mm wide

Color	Item No.	Pack. Unit
○ gray	249-197	10



Simply snap on – that's it!



Removing an end stop from the DIN-rail.

Snap on – that's it! Assembling the WAGO Screwless End Stop is as simple and quick as snapping a rail-mount terminal block onto the rail.

Tool free!

A tool-free design allows rail-mount terminal blocks to be safely and economically secured against any movement on all DIN-35 rails per DIN EN 60715 (35 x 7.5 mm; 35 x 15 mm).

Screwless!

The "secret" to a perfect fit lies in the two small clamping plates which keep the end stop in position, even if the rails are mounted vertically.

Simply snap on – that's it!

In addition, costs are significantly reduced when using large numbers of end stops.

Additional benefit: Three marker slots for all WAGO Rail-Mount Terminal Block Marking Systems and one snap-in hole for WAGO's adjustable height group marker carriers offer individual marking options.

PU = packaging unit; SPU = subpackaging unit

Operating Tool



Operating tool with a partially insulated shaft ▶ Type 1, (2.5 x 0.4) mm blade		
	Item No.	Pack. Unit
	210-719	50 (1)



Operating tool with a partially insulated shaft ▶ Type 1 ▶ (2.5 x 0.4) mm blade ▶ short		
	Item No.	Pack. Unit
	210-647	50 (1)



Operating tool ▶ Blades: 3.5 mm and 2.5 mm ▶ for instal- lation terminal blocks (TOPJOB® S)		
	Item No.	Pack. Unit
	2009-309	50 (1)

Operating tool with a partially insulated shaft ▶ Type 2, (3.5 x 0.5) mm blade		
	210-720	50 (1)

Operating tool with a partially insulated shaft ▶ (2.5 x 0.4) mm blade ▶ short ▶ angled		
	210-648	50 (1)

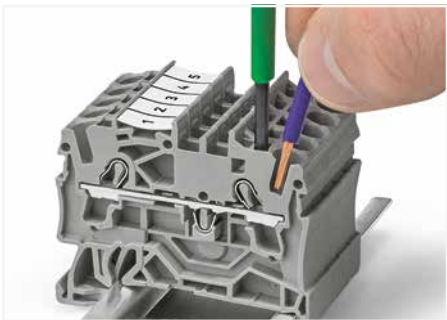
Operating tool ▶ Blades: 3.5 mm and 5.5 mm ▶ for instal- lation terminal blocks (TOPJOB® S)		
	2009-310	50 (1)

Operating tool with a partially insulated shaft ▶ Type 3, (5.5 x 0.8) mm blade		
	210-721	25 (1)

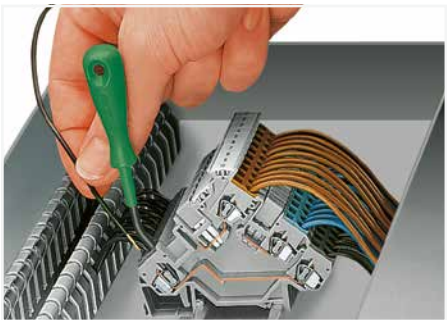
Operating tool with a partially insulated shaft ▶ (3.5 x 0.5) mm blade ▶ short		
	210-657	50 (1)

Set of operating tools with a partially insulated shaft ▶ Type 1, (2.5 x 0.4) mm blade ▶ Type 2, (3.5 x 0.5) mm blade ▶ Type 3, (5.5 x 0.8) mm blade		
	210-722	1

Operating tool with a partially insulated shaft ▶ (3.5 x 0.5) mm blade ▶ short ▶ angled		
	210-658	50 (1)



The blade of this operating tool with a partially insulated shaft is ideal for operating front-entry terminal blocks.



This operating tool with blade dimensions per DIN 5264 is ideal for front-entry sensor/actuator terminal blocks (280 Series).



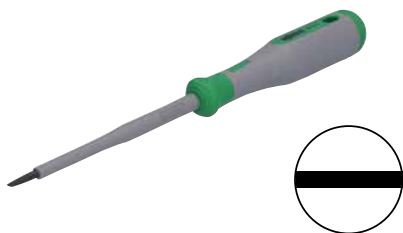
Open the clamping unit using an operating tool.



Set of operating tools in a box (Item No. 210-722)

PU = packaging unit; SPU = subpackaging unit

Screwdriver ► VDE tested ► 1000 V ► insulated



Slot screwdriver ► (2,5 x 0,4) mm ► 75 mm long

Color	Item No.	Pack. Unit
green/gray	206-2111	1

Crosshead screwdriver ► PH0 ► 60 mm long

Color	Item No.	Pack. Unit
green/gray	206-2120	1

Crosshead screwdriver ► PZ0 ► 60 mm long

Color	Item No.	Pack. Unit
green/gray	206-2130	1

Slot screwdriver ► (3,0 x 0,5) mm ► 100 mm long

Color	Item No.	Pack. Unit
green/gray	206-2112	1

Crosshead screwdriver ► PH1 ► 80 mm long

Color	Item No.	Pack. Unit
green/gray	206-2121	1

Crosshead screwdriver ► PZ1 ► 80 mm long

Color	Item No.	Pack. Unit
green/gray	206-2131	1

Slot screwdriver ► (3,5 x 0,6) mm ► 100 mm long

Color	Item No.	Pack. Unit
green/gray	206-2113	1

Crosshead screwdriver ► PH2 ► 100 mm long

Color	Item No.	Pack. Unit
green/gray	206-2122	1

Crosshead screwdriver ► PZ2 ► 100 mm long

Color	Item No.	Pack. Unit
green/gray	206-2132	1

Slot screwdriver ► (4,0 x 0,8) mm ► 100 mm long

Color	Item No.	Pack. Unit
green/gray	206-2114	1

Crosshead screwdriver ► PH3 ► 150 mm long

Color	Item No.	Pack. Unit
green/gray	206-2123	1

Crosshead screwdriver ► PZ3 ► 150 mm long

Color	Item No.	Pack. Unit
green/gray	206-2133	1

Slot screwdriver ► (5,5 x 1,0) mm ► 125 mm long

Color	Item No.	Pack. Unit
green/gray	206-2115	1

Slot screwdriver ► (6,5 x 1,2) mm ► 150 mm long

Color	Item No.	Pack. Unit
green/gray	206-2116	1

Slot screwdriver ► (8,0 x 1,2) mm ► 175 mm long

Color	Item No.	Pack. Unit
green/gray	206-2117	1



Torx® screwdriver ▶ T8 ▶ 180 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2163	1

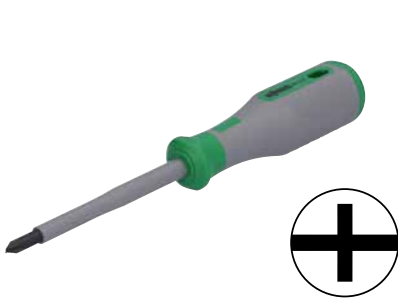
Torx® screwdriver ▶ T10 ▶ 180 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2164	1

Torx® screwdriver ▶ T15 ▶ 190 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2165	1

Torx® screwdriver ▶ T20 ▶ 190 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2166	1

Torx® screwdriver ▶ T25 ▶ 190 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2167	1

Torx® screwdriver ▶ T30 ▶ 215 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2169	1



Combination screwdriver ▶ Cross and slot ▶ +/- PH1/S ▶ 190 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2141	1

Combination screwdriver ▶ Cross and slot ▶ +/- PH2/S ▶ 215 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2142	1



Combination screwdriver ▶ Cross and slot ▶ +/- PZ1/S ▶ 190 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2151	1

Combination screwdriver ▶ Cross and slot ▶ +/- PZ2/S ▶ 215 mm long		
Color	Item No.	Pack. Unit
green/gray	206-2152	1



Screwdriver set ▶ PH1; PH2; PZ1; 2,5 x 0,4; 3,5 x 0,6; 5,5 x 0,8		
Color	Item No.	Pack. Unit
green/gray	206-2101	1

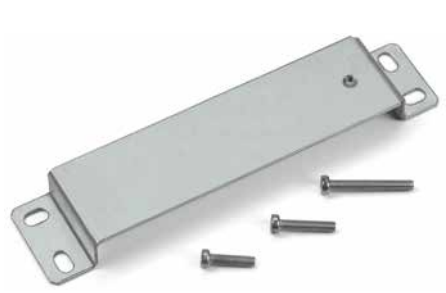


Torx® screwdriver set ▶ T8; T10; T15; T20; T25; T30		
Color	Item No.	Pack. Unit
green/gray	206-2102	1

PU = packaging unit; SPU = subpackaging unit

Wall-Mount adapter

787 Series



Geometric data/Mechanical data/Material data	
Width x height x depth (mm)	35 x 15 x 158.5
Mounting type	Mounting holes: 4 slots, 5.3 mm x 9 mm; Mounting hole spacing: 143 mm x 19.5 mm
Mounting type	Wall-mount
Material	Sheet steel; galvanized
Weight	100 g

Wall-Mount Adapter ► for screw mounting 787-8xx devices on a mounting plate or wall without DIN-35 rail		
	Item No.	PU
	787-895	5

The wall-mount adapter replaces the rail support of the 787-8xx device.
The adapter is secured to the 787-8xx device via the provided screws.



DIN-Rail adapter

787 Series



Geometric data/Mechanical data/Material data	
Width x height x depth (mm)	35 x 136.5 x 15.5
Mounting type	Slide both single parts into the guide slot and then screw
Mounting type	DIN-35 rail (EN 60715)
Material	Sheet steel; galvanized
Weight	81 g

DIN-Rail Adapter ► secures 787-8xx devices to a DIN-35 rail		
	Item No.	PU
	787-896	1

WAGO's 787-896 DIN-Rail Adapter allows both vertical and horizontal mounting of 787-8xx devices. Mounting the adapter to the device is performed by sliding both single parts into the guide slots of the cooling element and then screwing, allowing the position to be easily changed.

DIN-Rail adapter

787 Series



DIN-Rail Adapter ► made of zinc die-cast ► secures 787-8xx devices to a DIN-34 rail		
	Item No.	PU
	787-897	1

WAGO's 787-897 DIN-Rail Adapter allows horizontal mounting of 787-8xx devices. Mounting the adapter to the device is performed by sliding both single parts into the guide slots of the cooling element and then screwing, allowing the position to be easily changed.

Geometric data/Mechanical data/Material data	
Width x height x depth (mm)	37 x 102.5 x 10.5
Mounting type	Press the adapter into the guide slot
Mounting type	DIN-35 rail (EN 60715)
Material	Zinc die-cast
Weight	96 g

Mounting carrier ▶ 1.5 mm thick ▶ carbon steel ▶ for DIN-35 rail mounting ▶ 28 mm 2789 Series



Physical data/Mechanical data/Material data

Width x Height x Depth from upper-edge of DIN-rail (mm)	28 x 101 x 1,5
Weight	46 g

Mounting carrier ▶ 1.5 mm thick ▶ carbon steel ▶
for DIN-35 rail mounting ▶ 28 mm

Item No.	PU
2789-1128	1

Mounting carrier ▶ 1.5 mm thick ▶ carbon steel ▶ for DIN-35 rail mounting ▶ 45 mm
2789 Series



Mounting carrier ▶ 1.5 mm thick ▶ carbon steel ▶ for DIN-35 rail mounting ▶ 45 mm		
	Item No.	PU
	2789-1145	1

Physical data/Mechanical data/Material data	
Width x Height x Depth from upper-edge of DIN-rail (mm)	45 x 96 x 1.5
Weight	68 g

Communication cable ► with RS-232 Interface

787 Series



Similar to pictured device

RS-232 Communication Cable ► 1.8 m long		
for	Item No.	PU
787-8xx	787-890	1

This communication cable is used for configuration and visualization via PC or controller.

It is suitable for all 787-8xx Series devices equipped with an RS-232 serial interface. Download the corresponding PC software for all 787 Series devices at www.wago.com/epsitron.

Function modules for communication with the WAGO-I/O-SYSTEM 750 and other control systems are also available.

Note:

The 787-890 Communication Cable is not electrically isolated.

Signaling and communication

Signaling	1 x RS-232 cable
Communication	RS-232 interface

Safety and Protection/Environmental Requirements

Protection type	IP20 (per EN 60529)
Ambient temperature (operation)	-10 ... +70 °C

Connection data

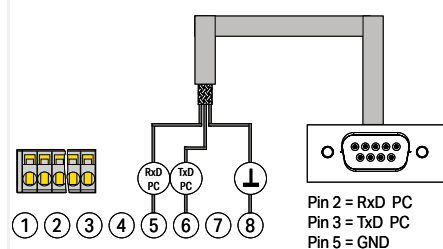
Module side (787-8xx)	1 x 8-pole female connector (734-108) with strain relief
PC/controller side	1 x 9 pole D-sub socket
Cable type	3 x 0.34 mm ² ; shielded

Geometric data/Mechanical data/Material data

Cable length	1.8 m
--------------	-------

Material data

Weight	113 g
--------	-------



Communication cable ► with RS-232 Interface

787 Series



Similar to pictured device

RS-232 Communication Cable ► 1.8 m long ► for 787-1675		
for	Item No.	PU
787-1675	787-892	1

This communication cable is used for configuration and visualization via PC or controller. The communication cable is suitable for 787-1675. Download the corresponding PC software for all 787 Series devices at www.wago.com/epsitron.

Function modules for communication with the WAGO-I/O-SYSTEM 750 and other control systems are also available.

Note:
The 787-892 Communication Cable is not electrically isolated.

Signaling and communication	
Signaling	1 x RS-232 cable
Communication	RS-232 interface
Safety and Protection/Environmental Requirements	
Protection type	IP20 (per EN 60529)
Ambient temperature (operation)	-10 ... +70 °C
Connection data	
Module side (787-1675)	1 x 4-pole female connector (734-104) with strain relief
PC/controller side	1 x 9 pole D-sub socket
Cable type	3 x 0.34 mm²; shielded
Geometric data/Mechanical data/Material data	
Cable length	1.8 m
Material data	
Weight	97 g



Index

Index

	Page
WAGO Connection Technologies	298
WAGO Seminars	300
Item Number Index	302

Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions.

PUSH-IN CAGE CLAMP®



Push-in CAGE CLAMP® terminates the following copper conductors: solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded, with ferrule (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

The universal connection with an additional advantage:

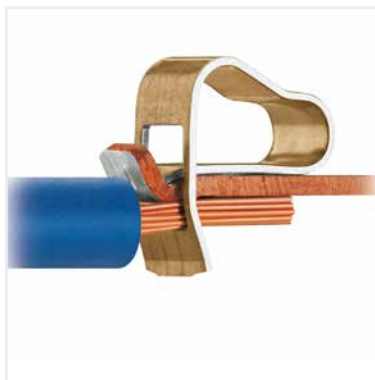
Push-in connection

Terminate solid and stranded (Class B 7 strands or less), as well as ferruled conductors, by simply pushing them in – no tools required.

Termination for all conductor types:

- Open clamping unit.
- Insert the conductor.
- Release clamp – done!

CAGE CLAMP®



CAGE CLAMP® terminates the following copper conductors: solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded, with ferrule (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

The universal connection for solid, stranded and fine-stranded conductors

Termination:

- Open clamping unit.
- Insert the conductor.
- Release clamp – done!

Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions.

POWER CAGE CLAMP®



POWER CAGE CLAMP terminates the following copper conductors: solid



stranded



fine-stranded, also with tinned single strands



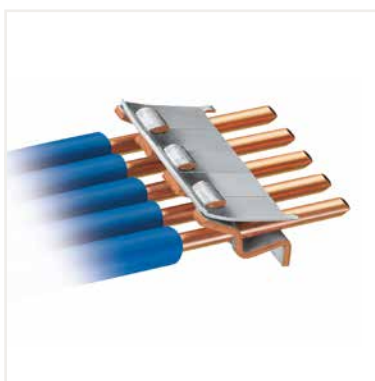
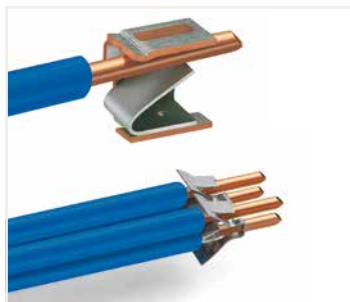
fine-stranded, with ferrule (gastight crimped)

The universal connection for conductors larger than 35 mm² (2 AWG)

Termination:

- Open clamp by turning a T-wrench counter-clockwise.
- Press the integrated latch to open clamping unit for hands-free wiring.
- Insert the conductor.
- A small counter-clockwise rotation closes the clamp, securing conductor.

PUSH WIRE®



PUSH WIRE® terminates the following copper conductors: solid

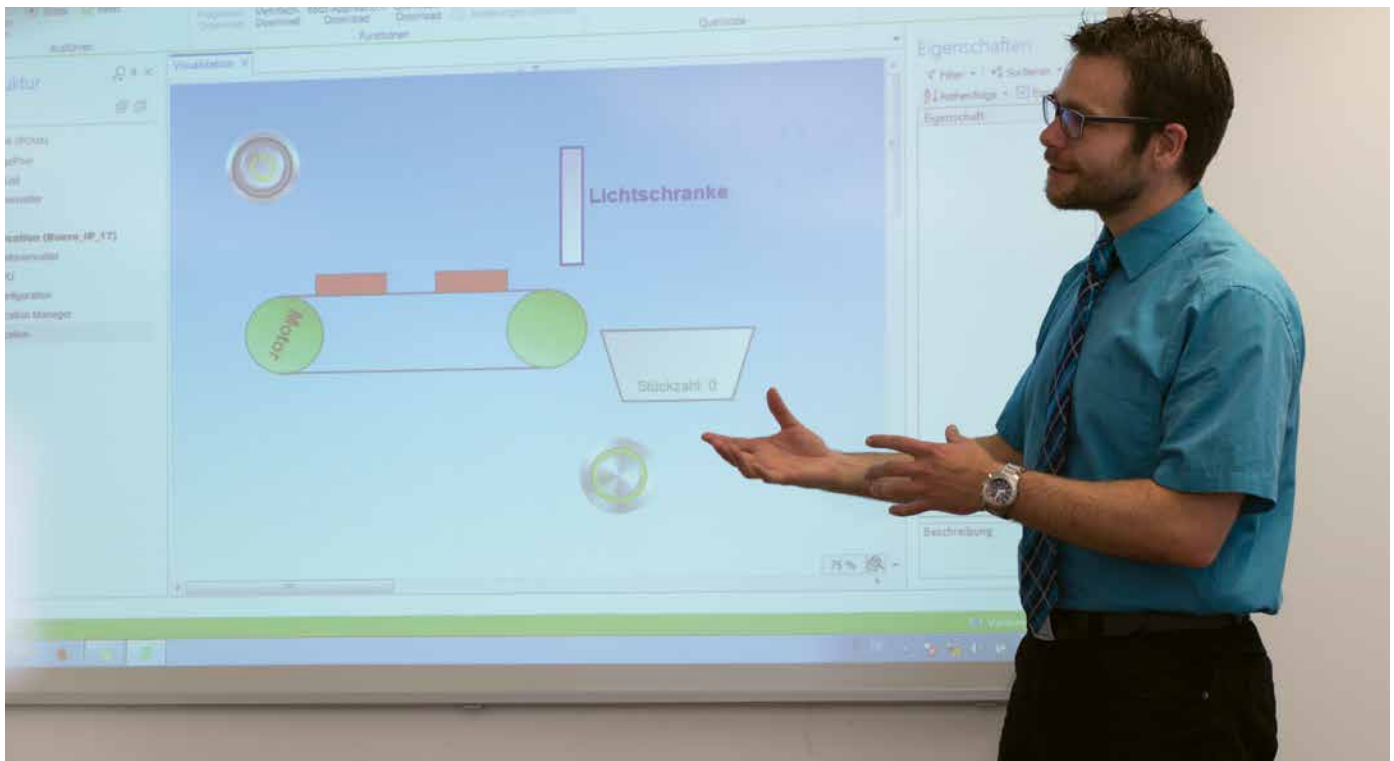
PUSH WIRE® connection for solid and stranded conductors (depending on the model used)

Termination:

Tool-free, twist-free terminations for solid and rigid stranded conductors – simply push into the unit.

WAGO-Seminars

Learn Today – Benefit Tomorrow



Setting the Bar with Your Goals

Product-Related and Customer-Specific Seminars



Small Groups

The small class sizes of WAGO training seminars ensures that no question goes unanswered and no one is overlooked.



Teamwork

Learning as a group is very effective. Ideas can be discussed and exchanged while experiences can be shared – all for the benefit of the participants.



Practical Topics

Experience has shown that practice makes perfect. This is why the focus of every WAGO training seminar is on practical, hands-on learning.

WAGO-Seminars

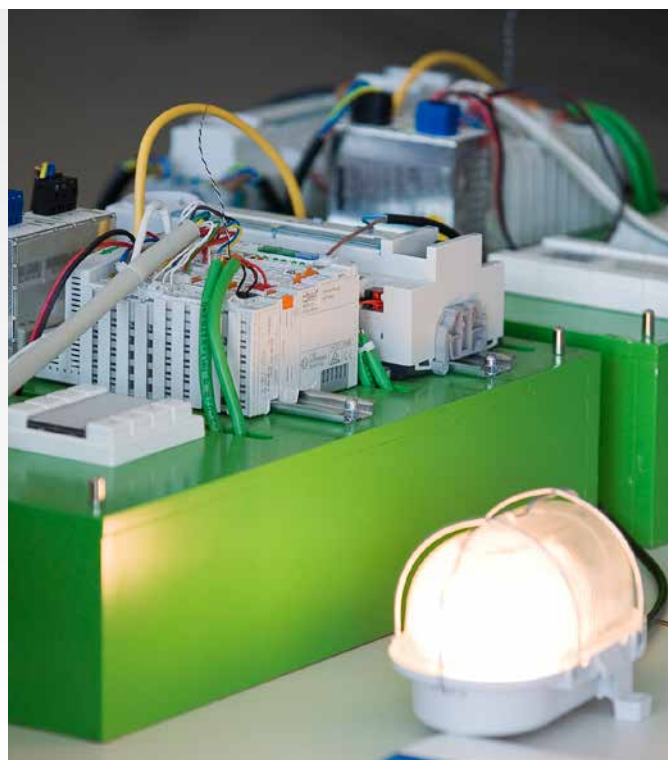
Experience the Benefits of First-Hand Knowledge and Expertise – Straight from the Source

Our instructors are specialists who know all the ins and outs of WAGO's products. This ensures that the time devoted to each WAGO training seminar is an effective investment in expanding your own expertise.

Request your registration form by email:

training@wago.com

**Contact your local
WAGO office.**



Product-Related Seminars

We regularly offer product-related seminars on the following topics:

- Building and industrial automation
- Programming of automation components
- Fieldbus systems

**Current Seminars at:
www.wago.com**

Customer-Specific Training Seminars

In addition to these "open" seminars, we also offer seminars specially tailored to your organization and its particular needs.

Upon request, we can also conduct these courses at your location.

**Special
Corporate Seminars**

Item Number Index

Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
206 Series		258 Series		281 Series		787 Series	
206-2101	287	258-5104	273	281-623/281-417	167	787-897	291
206-2102	287	258-5107	273	281-623/281-418	167	787-915	201
206-2111	286	258-5108	273	281-623/281-541	167	787-916	214
206-2112	286			281-623/281-542	167	787-974	160
206-2113	286	280 Series		282 Series		787-976	161
206-2114	286	280-502/281-582	174	282-333	167	787-1001	88
206-2115	286	280-502/281-583	174	282-334	167	787-1002	92
206-2116	286	280-502/281-584	174	282-369	283	787-1011	89
206-2117	286	280-502/281-585	174	282-402	167	787-1012	93
206-2120	286	280-502/281-586	174	282-694	167	787-1014	180
206-2121	286	280-502/281-587	174	282-696	167	787-1014/072-000	182
206-2122	286	280-502/281-588	174	282-698/281-413	167	787-1015/072-000	181
206-2123	286	280-502/281-589	174	282-698/281-429	167	787-1017	91
206-2130	286	280-502/281-590	174	282-698/281-434	167	787-1020	95
206-2131	286	280-502/281-591	174	282-698/281-449	167	787-1021	90
206-2132	286	280-502/281-592	174	282-699	167	787-1022	94
206-2133	286	280-502/281-593	174			787-1200	80
206-2141	287	280-502/281-594	174	288 Series		787-1201	81
206-2142	287	280-502/281-595	174	288-825	254	787-1202	84
206-2151	287	280-502/281-602	174	288-837	255	787-1211	82
206-2152	287	280-502/281-603	174	288-870/000-030	256	787-1212	85
206-2163	287	280-502/281-604	174			787-1216	86
206-2164	287	280-502/281-605	174	289 Series		787-1221	83
206-2165	287	280-502/281-606	174	289-965	244	787-1226	87
206-2166	287	280-502/281-607	174	289-966	244	787-1601	44
206-2167	287	280-502/281-608	174	745 Series		787-1602	48
206-2169	287	280-502/281-609	174	745-382	254	787-1606	49
206-3010	273	280-502/281-610	174	745-682	256	787-1611	45
209 Series		280-502/281-611	174	750 Series		787-1616	51
209-100	283	280-502/281-612	174	750-975	244	787-1616/000-070	52
209-109	282	280-502/281-613	174			787-1616/000-1000	50
210 Series		280-502/281-614	174	787 Series		787-1621	46
210-112	282	280-503/281-579	174	787-712	72	787-1622	54
210-113	282	280-503/281-580	174	787-722	74	787-1623	59
210-114	282	280-503/281-581	174	787-732	76	787-1628	53
210-115	282	280-504/281-582	175	787-734	78	787-1631	47
210-118	282	280-504/281-583	175	787-736	79	787-1632	56
210-148	283	280-504/281-584	175	787-738	146	787-1632/000-070	57
210-149	283	280-504/281-585	175	787-740	147	787-1633	60
210-196	282	280-504/281-586	175	787-742	148	787-1634	58
210-197	282	280-504/281-587	175	787-783	221	787-1635	61
210-198	282	280-504/281-588	175	787-785	219	787-1635/000-070	62
210-199	282	280-504/281-589	175	787-785/000-040	220	787-1638	55
210-504	283	280-504/281-590	175	787-818	38	787-1640	140
210-505	283	280-504/281-591	175	787-822	39	787-1642	141
210-506	283	280-504/281-592	175	787-832	40	787-1644	142
210-508	283	280-504/281-593	175	787-833	42	787-1650	184
210-509	283	280-504/281-594	175	787-834	41	787-1671	204
210-647	285	280-504/281-595	175	787-835	43	787-1675	194
210-648	285	281 Series		787-840	133	787-1685	223
210-657	285	281-309	167	787-842	135	787-1701	68
210-658	285	281-311	167	787-844	137	787-1702	71
210-719	285	281-402	167	787-844/000-002	137	787-1711	69
210-720	285	281-511	167	787-845	138	787-1712	73
210-721	285	281-512/281-417	167	787-847	139	787-1721	70
210-722	285	281-512/281-418	167	787-850	132	787-1722	75
		281-512/281-501	167	787-852	134	787-1732	77
249 Series		281-611	167	787-854	136	787-2742	149
249-116	284	281-611/281-417	167	787-870	198	787-2744	150
249-117	284	281-611/281-418	167	787-871	206	787-2801	186
249-197	284	281-611/281-541	167	787-872	208	787-2802	187
		281-611/281-542	167	787-873	207	787-2803	190
258 Series		281-612	167	787-875	199	787-2805	188
258-5005	275	281-612/281-417	167	787-876	205	787-2810	189
258-5005/000-005	275	281-612/281-418	167	787-878/000-2500	209	787-2850	97
258-5005/000-008	275	281-612/281-541	167	787-878/001-3000	210	787-2857	96
258-5006	277	281-612/281-542	167	787-880	212	787-3861/000-1000	259
258-5007	277	281-613	167	787-881	213	787-3861/000-2000	260
258-5008	277	281-613/281-417	167	787-885	224	787-3861/000-3000	261
258-5009	277	281-613/281-418	167	787-886	225	787-6716	154
258-5010	277	281-613/281-541	167	787-890	294	789 Series	
258-5011	277	281-613/281-542	167	787-892	295	789-621	244
258-5014	275	281-616	167	787-895	288	792 Series	
258-5015	276	281-622	167	787-896	290	792-800	173
258-5030	274	281-622/281-417	167			792-801	172
258-5100	273	281-622/281-418	167			811 Series	
258-5102	273	281-622/281-541	167			811-310	167
258-5103	273	281-622/281-542	167				
		281-623	167				

Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
811 Series		2092 Series					
811-311	167	2092-1610	256				
811-314	167						
811-316	167						
811-317	167	2587 Series					
811-320	167	2587-2144	98				
811-321	167	2587-2146	99				
811-330	167	2587-2147	100				
811-331	167						
811-410	167						
811-411	167	2685 Series					
811-414	167	2685-1001/601-220	200				
811-420	167	2685-1002/408-206	197				
811-421	167	2685-1002/601-204	196				
811-430	167	2685-2001/100-240	202				
811-431	167	2685-2501/603-240	203				
811-472	167						
811-482	167	2687 Series					
		2687-2142	64				
812 Series		2687-2144	65				
812-100	253	2687-2146	66				
812-101	253	2687-2344	144				
812-102	253	2687-2346	145				
812-103	253						
812-104	253	2787 Series					
812-110	253	2787-2134	12				
812-111	253	2787-2135	13				
812-112	253	2787-2144	14				
812-113	253	2787-2144/000-030	15				
812-114	253	2787-2144/000-070	16				
812-140	253	2787-2146	17				
812-141	253	2787-2146/000-030	18				
		2787-2146/000-070	19				
830 Series		2787-2147	20				
830-800/000-312	258	2787-2147/000-030	24				
830-800/000-312/000-006	257	2787-2147/000-070	22				
		2787-2154	32				
857 Series		2787-2157	33				
857-550	241	2787-2344	106				
857-552	240	2787-2344/000-030	107				
857-560	242	2787-2344/000-070	108				
		2787-2346	110				
879 Series		2787-2346/000-030	112				
879-3000	228	2787-2346/000-070	114				
879-3020	230	2787-2347	116				
879-3040	232	2787-2347/000-030	120				
879-9000	228	2787-2347/000-070	118				
		2787-2348	122				
2002 Series		2787-2348/000-030	123				
2002-1911	165	2787-2348/000-070	124				
2002-1911/1000-542	165	2787-2357	125				
2002-1911/1000-836	165	2787-2358	126				
2002-1911/1000-867	165	2787-2448	26				
		2787-2448/000-030	28				
2006 Series		2787-2448/000-070	30				
2006-1611/1000-541	165	2789 Series					
2006-1611/1000-542	165	2789-1128	292				
2006-1611/1000-836	165	2789-1145	293				
2006-1611/1000-867	165	2789-9015	37				
2006-1621/1000-541	165	2789-9023	34				
2006-1621/1000-542	165	2789-9052	36				
2006-1621/1000-836	165	2789-9080	35				
2006-1621/1000-859	165						
2006-1631/1000-541	165	2857 Series					
2006-1631/1000-542	165	2857-570/024-000	238				
2006-1631/1000-836	165	2857-570/024-001	234				
2006-1631/1000-859	165	2857-570/024-005	236				
2006-1631/1000-867	165						
2009 Series							
2009-110	278						
2009-113	278						
2009-114	278						
2009-115	278						
2009-309	285						
2009-310	285						
2092 Series							
2092-1601/002-000	256						

WAGO GmbH & Co. KG

Postfach 2880 · D · 32385 Minden
Hansastraße 27 · D · 32423 Minden

info@wago.com

www.wago.com

Headquarters	+49 571 887 - 0
Sales	+49 571 887 - 44222
Order Service	+49 571 887 - 44333

Current addresses at www.wago.com

WAGO is a registered trademark of WAGO Verwaltungsgesellschaft mbH.

"Copyright – WAGO GmbH & Co. KG – All rights reserved.

The content and structure of the WAGO websites, catalogs, videos and other WAGO media are subject to copyright. Distribution or modification to the contents of these pages and videos is prohibited. Furthermore, the content may neither be copied nor made available to third parties for commercial purposes. Also subject to copyright are the images and videos that were made available to WAGO GmbH & Co. KG by third parties."