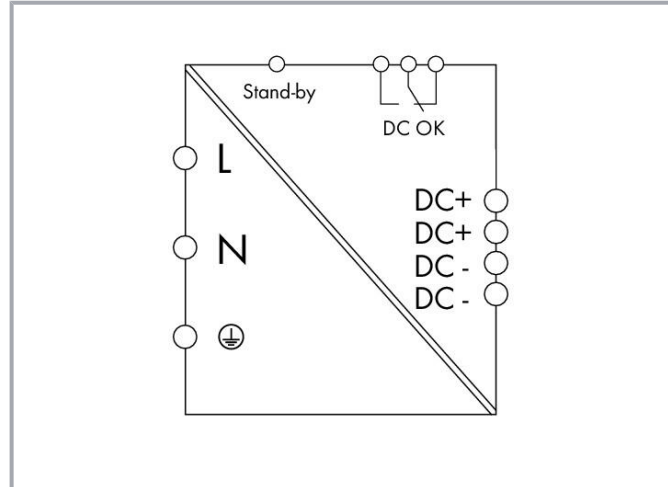


Data sheet | Item number: 787-835

Switched-mode power supply; Pro; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact



www.wago.com/787-835



Item description

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

Data

Technical data

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Input

Phases	1
Nominal input voltage $U_{i\text{ nom}}$	1 x AC 100 ... 240 V
Input voltage range	1 x AC 85 ... 264 V; DC 120 ... 300 V
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 $U_{o\text{ nom}}$	DC 48 V (SELV)
Output voltage range	DC 33 ... 52 V (adjustable)
Nominal output current $I_{o\text{ nom}}$	10 A (48 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/Constant current mode
PowerBoost	DC 17.5 A (4 s); DC 15 A (8 s)
TopBoost	DC 60 A (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_l	≤ 0.8 W (standby); ≤ 4.8 W (no load); ≤ 43.2 W (nominal load)
Efficiency (typ.)	91 %

Subject to changes. Please also observe the further product documentation!



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

Isolation voltage (sec.-PE)	DC 0.7 kV
Protection class	I
Protection type	IP20; per EN 60529
Oversvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	> 500,000 h (per IEC 61709)

Connection data

Connection type 1	Input
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 231 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection type 2	Output
Connection technology 2	Push-in CAGE CLAMP®
WAGO connector 2	WAGO 831 Series
Solid conductor 2	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor 2	0.5 ... 10 mm ² / 20 ... 8 AWG
Strip length 2	13 ... 15 mm / 0.51 ... 0.59 inches
Connection type 3	Signaling
Connection technology 3	CAGE CLAMP®
WAGO connector 3	WAGO 733 Series
Solid conductor 3	0.08 ... 0.5 mm ² / 28 ... 20 AWG

Subject to changes. Please also observe the further product documentation!



Fine-stranded conductor 3	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Strip length 3	5 ... 6 mm / 0.2 ... 0.24 inches

Physical data

Width	97 mm / 3.819 inches
Height	171 mm / 6.732 inches
Depth from upper-edge of DIN-rail	187 mm / 7.362 inches
Note (dimensions)	Height with connector

Mechanical Data

Mounting type	DIN-35 rail
---------------	-------------

Material Data

Weight	2460 g
--------	--------

Environmental requirements

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)

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

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 pcs

Subject to changes. Please also observe the further product documentation!



Packaging type	box
Country of origin	DE
GTIN	4050821226451
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 004/2011, TP TC 020/2011	EAC RU C-DE.AM02.B.00089_19
	UL Underwriters Laboratories Inc.	UL 60950-1	E255815
	UL Underwriters Laboratories Inc.	UL 508	E255817

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Optional accessories

Marking accessories

Marking strip			
	Item no.: 2009-110 Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white		www.wago.com/2009-110

Subject to changes. Please also observe the further product documentation!



Item no.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

www.wago.com/210-831



Item no.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

www.wago.com/210-832

Marker



Item no.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-145



Item no.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115



Item no.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/248-501



Item no.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/793-501



Item no.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/793-5501

Mounting adapter

Wall-mount adapter



Item no.: 787-895
Mounting carrier; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail

www.wago.com/787-895

DIN-rail adapter



Item no.: 787-897
Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail

www.wago.com/787-897



Item no.: 787-896
Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail

www.wago.com/787-896

Tool

Operating tool



Item no.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719



Item no.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-721

Subject to changes. Please also observe the further product documentation!



Item no.: 210-769
SCREWDRIVER; green



Item no.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Downloads

Documentation

Bid Text

787-835 X81 - Datei	2019 Jul 4	xml 7.4 kB	Download
787-835 docx - Datei	2019 Jul 4	docx 22.8 kB	Download

Instruction Leaflet

Primär getaktete Stromversorgungen PRO DC 48 V, 10 A		pdf 253.1 kB	Download
---	--	-----------------	----------

Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
---	------------------------	---------------	----------

Engineering-Software

Configuration and Commissioning Software

WAGO Line Length Calculation Die WAGO Leitungslaengenrechnung hilft bei der Planung der sekundärseitigen Absicherung von Leitungen an WAGO Stromversorgungen Pro (787-8xx) und Classic (787-16xx). Nach Auswahl eines Netzgerätes kann der gewünschte Leitungsquerschnitt und der zugehörige Leitungsschutzschalter ausgewählt werden. Das Software-Werkzeug berechnet dann die maximale Leitungslänge, bei der die Absicherung unter Berücksichtigung der Leitungs- und Übergangswiderstände ordnungsgemäß funktioniert. Die Auswahl einer Grundlast kann vom Anwender vorgenommen werden.	1.3.5 2019 Dec 9	exe 337.4 kB	Download
--	---------------------	-----------------	----------

CAD/CAE-Data

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



CAD data

2D/3D Models 787-835	URL	Download
----------------------	---------------------	--------------------------

CAE data

EPLAN Data Portal 787-835	URL	Download
---------------------------	---------------------	--------------------------

WSCAD Universe 787-835	URL	Download
------------------------	---------------------	--------------------------

ZUKEN Portal 787-835	URL	Download
----------------------	---------------------	--------------------------

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-835 Switched-mode power supply; Pro; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact	URL	Download
--	---------------------	--------------------------

Installation Notes

Product family

EPSITRON PRO Power

EPSITRON® PRO POWER: Professional and Efficient Power Supply with Extra Power

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!