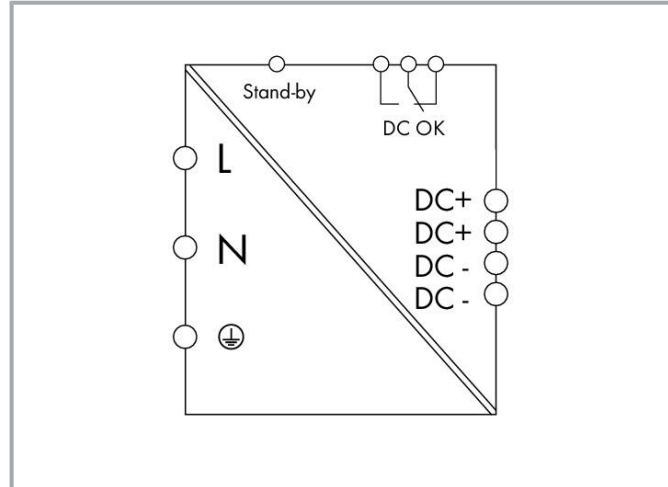


Data sheet | Item number: 787-833

Switched-mode power supply; Pro; 1-phase; 48 VDC output voltage; 5 A output current; TopBoost + PowerBoost; DC OK contact



www.wago.com/787-833



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

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

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

Data

Technical data

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	≤ 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 $U_{o\text{ nom}}$	DC 48 V (SELV)
Output voltage range	DC 33 ... 52 V (adjustable)
Nominal output current $I_{o\text{ nom}}$	5 A (48 VDC)
Nominal output power	240 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 10 A (4 s); DC 7.5 A (8 s)
TopBoost	DC 30 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); ≤ 7.4 W (no load); ≤ 21.6 W (nominal load)
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Subject to changes. Please also observe the further product documentation!



Efficiency (typ.)	91 %
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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

Isolation voltage (sec.-PE)	DC 0.7 kV
Protection class	I
Protection type	IP20; per EN 60529
Overvoltage 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/Output
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	Signaling
Connection technology 2	CAGE CLAMP®
WAGO connector 2	WAGO 733 Series
Solid conductor 2	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor 2	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Strip length 2	5 ... 6 mm / 0.2 ... 0.24 inches

Physical data

Width	57 mm / 2.244 inches
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Subject to changes. Please also observe the further product documentation!



Height	163 mm / 6.417 inches
Depth from upper-edge of DIN-rail	179 mm / 7.047 inches
Note (dimensions)	Height with connector

Mechanical Data

Mounting type	DIN-35 rail
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Material Data

Weight	1475 g
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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
Packaging type	box
Country of origin	DE
GTIN	4050821226468
Customs tariff number	85044083900

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




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 508	E255817
	UL Underwriters Laboratories Inc.	UL 60950-1	E255815



Declarations of conformity and manufacturer's declarations

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

Optional accessories

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.: 210-769 SCREWDRIVER; green	www.wago.com/210-769

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

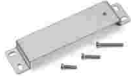


Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

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

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



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

Downloads

Documentation

Bid Text

787-833	2019 Jul 4	docx	Download
docx - Datei		22.6 kB	

787-833	2019 Jul 4	xml	Download
X81 - Datei		7.3 kB	

Instruction Leaflet

Primär getaktete Stromversorgungen PRO	pdf	Download
DC 48 V, 5 A	253.1 kB	

Additional Information

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

Engineering-Software

Configuration and Commissioning Software

WAGO Line Length Calculation	1.3.5	exe	Download
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.	2019 Dec 9	337.4 kB	

CAD/CAE-Data

CAD data

2D/3D Models 787-833	URL	Download
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CAE data

EPLAN Data Portal 787-833	URL	Download
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WSCAD Universe 787-833	URL	Download
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ZUKEN Portal 787-833	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-833	URL	Download
Switched-mode power supply; Pro; 1-phase; 48 VDC output voltage; 5 A output current; TopBoost + PowerBoost; DC OK contact		

Installation Notes

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