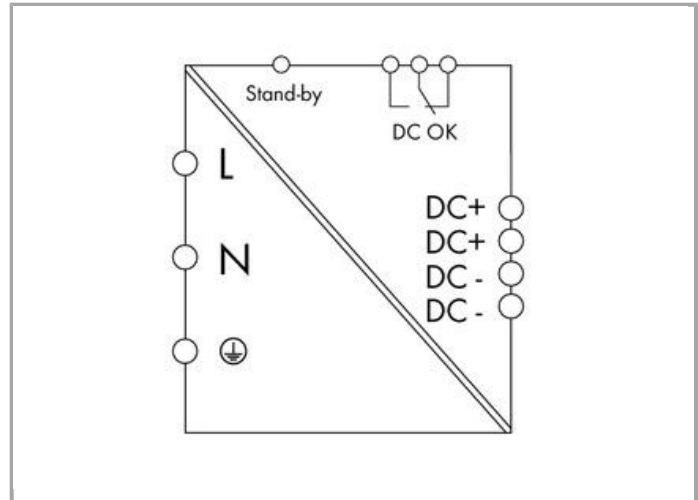


Data sheet | Item number: 787-831

Switched-mode power supply; Pro; 1-phase; 12 VDC output voltage; 15 A output current; TopBoost + PowerBoost; DC OK contact



www.wago.com/787-831



RoHS Compliant

Item description

Features:

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

Data

Technical Data

Input

Phases	1
Nominal input voltage $U_{i\text{ nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	-1.5 %/V (< 110 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 0.9 A (230 VAC; 15 ADC)
Discharge current	≤ 1 mA
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Aktive
Mains failure hold-up time	≥ 30 ms (230 VAC)

Output

Nominal output voltage $U_{o\text{ nom}}$	12 VDC (SELV)
Output voltage range	11 ... 18 VDC (adjustable)
Factory preset	12 VDC
Nominal output current $I_{o\text{ nom}}$	15 A (12 VDC)
Nominal output power	180 W
Adjustment accuracy	≤ 1 %
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	30 ADC (4 s); 22.5 ADC (8 s)
TopBoost	55 ADC (25 ms)

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x LED error (red) 1 x stand-by input 1 x Relaiskontakt DC O.K. (changeover contact)
Operation status indicator	LED green (DC OK) LED red (error)

Efficiency/Power losses:

Power loss P_v	0.8 W (stand-by); 4.6 W (no load); 23.4 W (nominal load)
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Efficiency	87 %
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Fuse protection:

Internal fuse	T 6.3 A / 250 VAC
External fuse (required)	an external DC fuse required for DC input voltage
External fuse (recommended)	Circuit breakers 6 A, 10 A, 16 A, characteristic: B or C

Safety and protection:

Insulation voltage (PRI-SEC)	4.242 kV DC
Isolation voltage (PRI-GND)	2.2 kV DC
Insulation voltage (SEC-GND)	0.7 kV DC
Protection class	I
Degree of protection	IP20 (per EN 60529)
Feedback voltage	≤ 25VDC
Overvoltage category	II
Transient protection, primary	Varistor
Short circuit protection	Yes
No-load proof	Yes
Parallel operation	Yes
Series connection	Yes
MTBF	> 500,000 h (per IEC 61709)

Connection data

Connection type (1)	Input/Output
Connection technology	CAGE CLAMP®
WAGO terminal	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 Inch
Connection type (2)	Signaling
Connection technology 2	CAGE CLAMP®
WAGO terminal 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 Inch

Geometrical Data

Width	57 mm / 2.244 inch
Height	163 mm / 6.417 inch

Length from upper-edge of DIN-35 rail	179 mm / 7.047 inch
Note on dimensions	Height including female connector

Mechanical data

Type of mounting	DIN-35 rail (EN 60715) in 2 positions
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Material Data

Weight	1480 g
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Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C (Device start at -40 °C type-tested)
Surrounding air (storage) temperature	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)
Pollution degree	2
Climatic category	3K3 (per EN 60721)

Standards and specifications

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

Commercial data

Country of origin	DE
GTIN	4050821226475
Customs Tariff No.	85044082900
Product Group	6 (Interface Electronics)

Compatible products

Mounting adapter



Item no.: 787-895
EPSITRON® wall mount adapter; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail www.wago.com/787-895



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



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

tools



Item no.: 210-719
Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm www.wago.com/210-719



Item no.: 210-720
Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

www.wago.com/210-720

ferrule



Item no.: 216-201
Ferrule; Sleeve for 0.5 mm² / AWG 22; insulated; electro-tin plated

www.wago.com/216-201



Item no.: 216-202
Ferrule; Sleeve for 0.75 mm² / AWG 20; insulated; electro-tin plated

www.wago.com/216-202



Item no.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated

www.wago.com/216-203



Item no.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated

www.wago.com/216-204



Item no.: 216-221
Ferrule; Sleeve for 0.5 mm² / AWG 22; insulated; electro-tin plated

www.wago.com/216-221



Item no.: 216-222
Ferrule; Sleeve for 0.75 mm² / AWG 20; insulated; electro-tin plated

www.wago.com/216-222



Item no.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated

www.wago.com/216-223



Item no.: 216-224
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated

www.wago.com/216-224



Item no.: 216-241
Ferrule; Sleeve for 0.5 mm² / AWG 22; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-241



Item no.: 216-242
Ferrule; Sleeve for 0.75 mm² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-242



Item no.: 216-243
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-243



Item no.: 216-244
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-244



Item no.: 216-262
Ferrule; Sleeve for 0.75 mm² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-262



Item no.: 216-263
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-263



Item no.: 216-264
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-264






Item no.: 216-284
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

www.wago.com/216-284






Item no.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated

www.wago.com/216-301

	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-322

Marking accessories

	Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type	www.wago.com/2009-110
	Item no.: 210-831 Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive	www.wago.com/210-831
	Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive	www.wago.com/210-832

Downloads

Documentation

Bid Text

787-831 Stromversorgung EPSITRON	14.01.2016	DOC 35.8 kB	Download
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Instruction Leaflet

Primary Switch Mode Power Supply EPSITRON-PRO-Power 12 VDC, 15 A	10.04.2017	PDF 253.1 kB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	15.10.2018	265.8 kB	Download
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Engineering-Software

Configuration and Commissioning Software

Used for line length calculation	1.3.3	EXE	Download
The conductor length calculation assists in planning the secondary fuse protection for conductors to power supply devices from the EPSITRON® PRO power family (787-8xx) as well as EPSITRON(R) CLASSIC Power family (787-16xx). After choosing a 787-8xx and 787-16xx power supply unit, the desired conductor size and associated fuse can be selected. The software tool then calculates the maximum conductor length at which the fuse functions correctly, while also considering the conductor and transfer resistances. The user can select a base load.	26.04.2017	428.0 kB	



smartDATA

CAD data

3D Download 787-831

URL

Download

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.

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