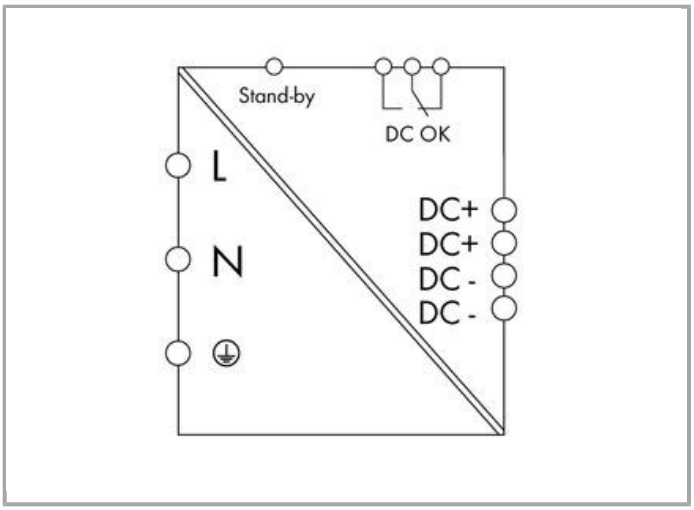
Switched-mode power supply; EPSITRON® PRO Power; 1-phase; 48 VDC output voltage; 5 A output current; TopBoost + PowerBoost; DC OK contact

www.wago.com/787-833



Item description

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- 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 $U_{i\ nom}$	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	≤ 1.2 A (230 VAC; 5 ADC)
Discharge current	≤ 1 mA
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Aktive
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)
Factory preset	48 VDC
Nominal output current $I_{o\ nom}$	5 A (48 VDC)
Nominal output power	240 W
Adjustment accuracy	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o\ nom}$ typ.
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	10 ADC (4 s); 7.5 ADC (8 s)
TopBoost	30 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); 7.4 W (no load); 21.6 W (nominal load)
Efficiency	91 %

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	≤ 63VDC
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 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 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 mm² / 28 … 20 AWG
Fine-stranded conductor (2)	0.08 … 0.5 mm² / 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 iincluding female connector

Mechanical data

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

Material Data

Weight	1475 g

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	4050821226468
Customs Tariff No.	85044082900
Product Group	6 (Interface Electronics)

Compatible products

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

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

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

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 mm² / AWG 24; insulated; electro-tin plated	www.wago.com/216-302
	**Item no.: 216-321** Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321
	**Item no.: 216-322** Ferrule; Sleeve for 0.34 mm² / AWG 24; insulated; electro-tin plated	www.wago.com/216-322

Downloads

Documentation

Bid Text

787-833 Stromversorgung EPSITRON	Jan 14, 2016	DOC 35.8 kB	Download

Instruction Leaflet

Primary Switch Mode Power Supply EPSITRON-PRO-Power 48 VDC, 5 A	Apr 10, 2017	PDF 253.1 kB	Download

Additional Information

Disposal; Electrical and electronic equipment, Packaging	Oct 15, 2018	265.8 kB	Download

Engineering-Software

Configuration and Commissioning Software

Used for line length calculation 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.	1.3.3 Apr 26, 2017	EXE 428.0 kB	Download

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CAD data

3D Download 787-833	URL	Download

Product family

EPSITRON PRO Power

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

Show all products from the family

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