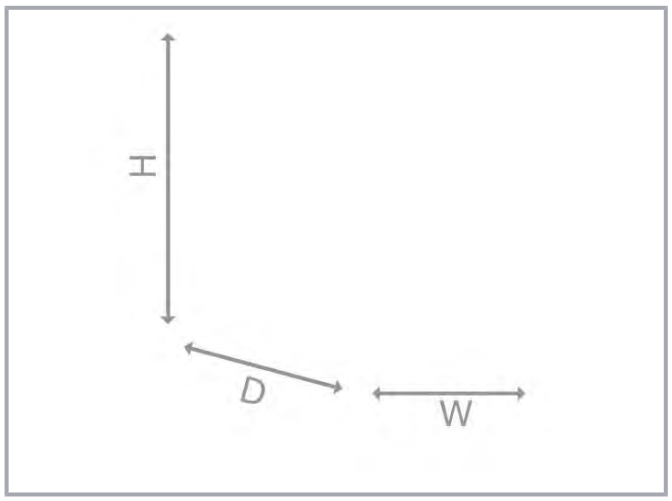
Data sheet | Item number: 787-832

EPSITRON® PRO Power supply; single-phase; output voltage 24 VDC; 10 A; PowerBoost

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



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 EN 60950-1/UL 60950-1; PELV per EN 60204

Data
Technical data

Input

Phases	1
Nominal input voltage [V]	AC 100 … 240 V
Input voltage range	AC 85 … 264 V; DC 120 … 373 V
Nominal mains frequency range	50 … 60 Hz; 0 Hz
Input current I_i	≤ 1.2 A (240 VAC; 10 ADC)
Discharge current	≤ 1 mA
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

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

Output

Nominal output voltage [V]	DC 24 V (SELV)
Output voltage range	DC 24 V
Default setting	DC 24 V
Nominal output current $I_{o\ nom}$	10 A (24 VDC)
Nominal output power	240 W
Control deviation	≤ 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	DC 20 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); ≤ 3.8 W (No load); ≤ 24 W (Nominal load)
Efficiency (typ.)	90 %

Circuit protection

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

Safety and protection

Isolation voltage (Pri.-Sec.)	DC 4.242 kV
Isolation voltage (Pri.-GND)	DC 2.2 kV
Isolation voltage (Sec.-GND)	DC 0.7 kV
Protection class	I

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

Protection type	IP20 (per EN 60529)
Resistance to reverse feed	≤ DC 35 V
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 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 Connector 2	WAGO 2616 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

Physical data

Width	57 mm / 2.244 inch
Height	163 mm / 6.417 inch
Depth from upper edge of DIN-rail	179 mm / 7.047 inch
Note (dimensions)	Height with connector

Mechanical data

Mounting type	DIN-35 rail

Material data

Weight	1472.2 g

Environmental requirements

Surrounding air temperature (operation)	-25 … 70 °C (Device starts at −40 °C (type-tested))
Surrounding air 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 Electronics)
PU (SPU)	1 Stück
Packaging type	box
Country of origin	DE
GTIN	4045454993931
Customs tariff number	8504409510

Approvals / Certificates

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 508	E255817
	UL Underwriters Laboratories Inc.	UL 60950-1	E255815

Optional accessories

Mounting adapter

Wall-mount adapter

Item no.: 787-895
EPSITRON® wall mount adapter; for 787-8xx devices

DIN-rail adapter

Item no.: 787-897
Carrier rail mount adapter; for mounting 787-8xx devices; zinc die-cast

Item no.: 787-896
Carrier rail mount adapter; for mounting 787-8xx devices

Marking accessories

Marking strip

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

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

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

Tools

Operating tool

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

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

Ferrules

Ferrule

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

Item no.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

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

	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white
	Item no.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black
	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; red
	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; black
	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; red
	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; black
	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; black
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

Downloads

Documentation

Bid Text

787-832 docx - Datei	Jul 4, 2019	docx 22.6 kB
787-832 X81 - Datei	Jul 4, 2019	xml 7.3 kB

Instruction Leaflet

Primär getaktete Stromversorgungen PRO DC 24 V, 10 A, SELV		pdf 253.1 kB

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB

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) unde 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 Dec 9, 2019	exe 337.4 kB

CAD files

CAE data

EPLAN Data Portal 787-832

WSCAD Universe 787-832

ZUKEN Portal 787-832

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

CAD data

2D/3D Models 787-832

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-832

Switched-mode power supply; Pro; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact; 2,50 mm²

Installation Notes

Product family

EPSITRON PRO Power

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

Show all products from the family