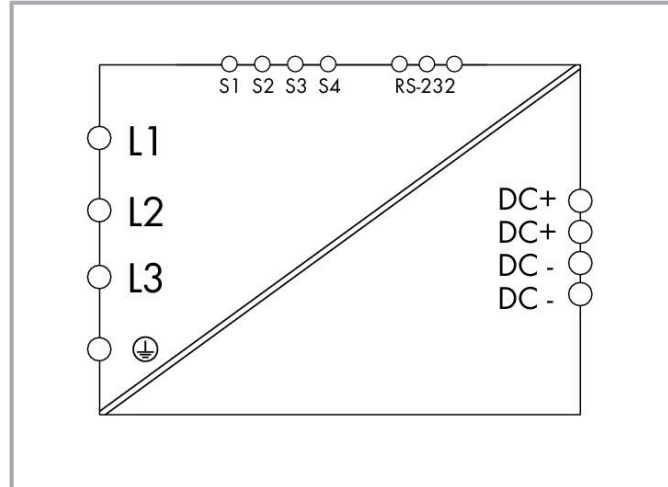


Data sheet | Item number: 787-850

Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; LineMonitor; DC OK signal; 2,50 mm²



www.wago.com/787-850



Item description

Features:

- Switched-mode power supply with PowerBoost and TopBoost
- 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
- LineMonitor for parameter setting and monitoring
- RS-232 serial interface
- Four signal outputs

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	2 / 3
Nominal input voltage $U_{i\text{ nom}}$	(2 / 3) x AC 400 ... 500 V
Input voltage range	(2 / 3) x AC 340 ... 550 V; DC 480 ... 780 V
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (340 VAC; 10 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	$\geq 22 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o\text{ nom}}$	DC 24 V (SELV)
Output voltage range	DC 22.8 ... 28.8 V (adjustable)
Nominal output current $I_{o\text{ nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{ nom}}$ (typ.)
Overload behavior	Adjustable (constant current/fuse mode)
PowerBoost	DC 20 A (4 s); DC 15 A (16 s)
TopBoost	DC 70 A (50 ms)

Signaling and Communication

Signaling	<ul style="list-style-type: none"> 1 x LED DC OK (green) 1 x Warning LED (yellow) 1 x Error LED (red) LCD 1 x RS-232 interface
Operation status indicator	<ul style="list-style-type: none"> Green LED (DC OK) Yellow LED (warning) Red LED (error)
Communication	RS-232 serial interface

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



Efficiency/power losses

Power loss P_1	$\leq 7.8 \text{ W}; \leq 19.9 \text{ W (nominal load)}$
Efficiency (typ.)	91.7 %

Circuit protection

Internal fuse	3 x T 2.5 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C Alternative: motor circuit breaker; Setpoint: 1.6 A; Setting range: 1.6 ... 2.5 A

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

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



Strip length 2	5 ... 6 mm / 0.2 ... 0.24 inches
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Physical data

Width	57 mm / 2.244 inches
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	1000 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

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




Country of origin	DE
GTIN	4045454909918
Customs tariff number	85044083900

Environmental Product Compliance


RoHS Compliance Status	Compliant, No Exemption
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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	
	<p>Item no.: 210-719 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft</p> <p style="text-align: right;">www.wago.com/210-719</p>

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

www.wago.com/210-720

Ferrule		
Ferrule		
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-264
	Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight	www.wago.com/216-284

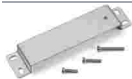
Subject to changes. Please also observe the further product documentation!

crimped; acc. to DIN 46228, Part 4/09.90; black

	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-262
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-322
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-302

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

Cables and pluggable connectors

Communication cable



Item no.: 787-890
RS-232 communication cable; Length 1.8 m

www.wago.com/787-890

Connecting cable



Item no.: 761-9005
USB adapter; with 1m connection cable

www.wago.com/761-9005

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

Downloads

Documentation

Bid Text

787-850 docx - Datei	2019 Jul 4	docx 21.2 kB	Download
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787-850 X81 - Datei	2019 Jul 4	xml 7.7 kB	Download
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Instruction Leaflet

Primär getaktete Stromversorgungen PRO DC 24 V, 10 A, SELV, Line Monitor		pdf 525.5 kB	Download
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Additional Information

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

Library

Anbindung Stromversorgungen Serie 787 Die Bibliothek "WagoLib787_01.lib" stellt Funktionsbausteine und Visualisierungen zur Verfügung, mit deren Hilfe die Informationen der WAGO Stromversorgungsmodule der Serie 787 angezeigt werden können.	1.3.0 2014 May 14	zip 562.7 kB	Download
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Engineering-Software

Configuration and Commissioning Software

WAGO Line Length Calculation Die WAGO Leitungslängenrechnung 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
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Subject to changes. Please also observe the further product documentation!

Data sheet | Item number: 787-850

www.wago.com/787-850



WAGO Software 759-850	1.10.16	zip	Download
Configuration software 759-850, for parameterization of power supply units 787-850, 787-852 and 787-854	2011 May 24	532.7 kB	

WAGO Software 759-851	1.4.5	zip	Download
Software 759-851, for visualization of power supply units 787-850, 787-852 und 787-854	2009 Nov 11	842.9 kB	

CAD/CAE-Data

CAE data

WSCAD Universe 787-850	URL	Download
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ZUKEN Portal 787-850	URL	Download
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EPLAN Data Portal 787-850	URL	Download
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CAD data

2D/3D Models 787-850	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-850	URL	Download
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Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; LineMonitor; DC OK signal; 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](#)

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

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