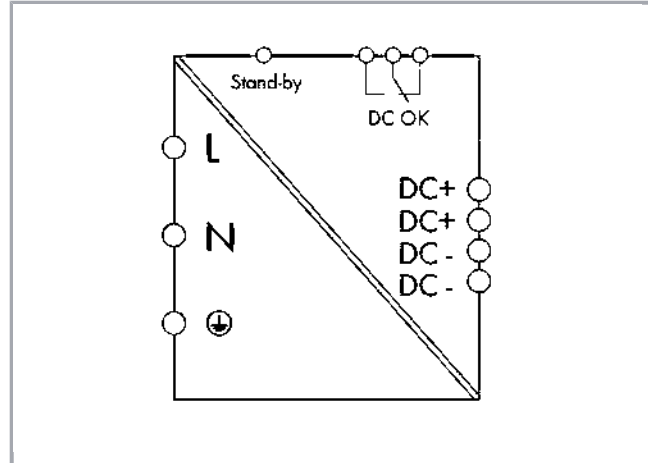


Data sheet | Item number: 787-821

Switched-mode power supply; Pro; 1-phase; 12 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact



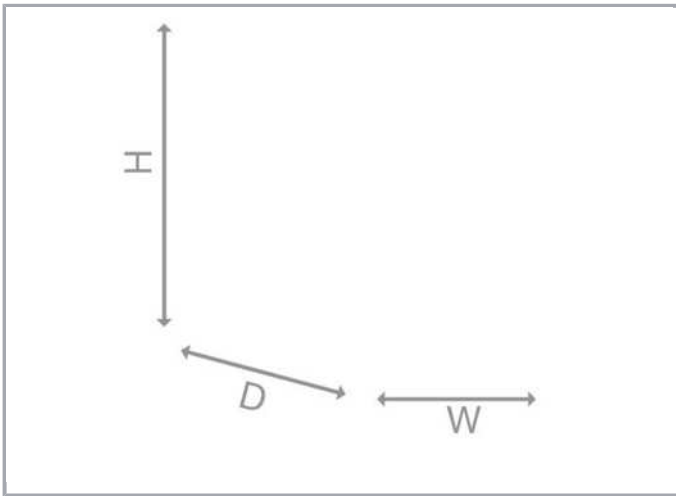
www.wago.com/787-821



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.



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 $U_{i\text{nom}}$	AC 100 ... 240 V
Input voltage range	AC 85 ... 264 V; DC 120 ... 373 V
Input voltage derating	-5 %/V (< 95 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 0.97 A (230 VAC; 10 ADC)
Discharge current	≤ 1 mA
Inrush current	≤ 30 A (peak)
Power factor correction (PFC)	Passive

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Mains failure hold-up time	≥ 35 ms (230 VAC)
----------------------------	-------------------

Output

Nominal output voltage $U_{o\ nom}$	DC 12 V (SELV)
Output voltage range	DC 11 ... 18 V (adjustable)
Factory preset	DC 12 V
Nominal output current $I_{o\ nom}$	10 A (12 VDC)
Nominal output power	120 W
Adjustment accuracy	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o\ nom}$ 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); DC 40 A (25 ms; $U_i < 110$ VAC)

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_l	≤ 0.5 W (stand-by); ≤ 5 W (no load); ≤ 14.6 W (nominal load)
Efficiency (typ.)	87.8 %

Fuse protection:

Internal fuse	T 4 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)	DC 4.242 kV
Isolation voltage (PRI-GND)	DC 2.2 kV

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



Insulation voltage (SEC-GND)	DC 0.7 kV
Protection class	I
Protection class	IP20 (per EN 60529)
Feedback voltage	≤ DC 25 V
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	163 mm / 6.417 inch
Note on dimensions	Height including pluggable connector

Mechanical data

Type of mounting	DIN-35 rail (EN 60715) in 2 positions
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Subject to changes. Please also observe the further product documentation!

Material Data

Weight	1295 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

Product Group	6 (Interface Electronics)
Packaging type	BOX
Country of origin	DE
GTIN	4050821226482
Customs Tariff No.	85044082900

Approvals / Certificates

UL-Approvals















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

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














Counterpart

Compatible products

ferrule

	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.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	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.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	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.: 216-243 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.: 216-262 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.: 216-263 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

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

	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 crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-284
	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.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302
	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; green	www.wago.com/216-322
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
Marking accessories		
	Item no.: 2009-110 Marking strips; 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
tools		
	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.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	www.wago.com/210-720
	Item no.: 210-769 SCREWDRIVER; green	www.wago.com/210-769

Downloads

Documentation

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Bid Text

787-821 GAEB docx - Datei	Jul 4, 2019	docx 20.9 kB	Download
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787-821 GAEB X81 - Datei	Jul 4, 2019	xml 7.7 kB	Download
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Instruction Leaflet

Primär getaktete Stromversorgungen EPSITRON-PRO-Power DC 12 V, 10 A		pdf 253.1 kB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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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) 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 Dec 9, 2019	exe 337.4 kB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 787-821		URL	Download
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CAE data

EPLAN Data Portal 787-821		URL	Download
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WSCAD Universe 787-821		URL	Download
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Installation Notes

Product family

Pro

[Show all products from the family](#)

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