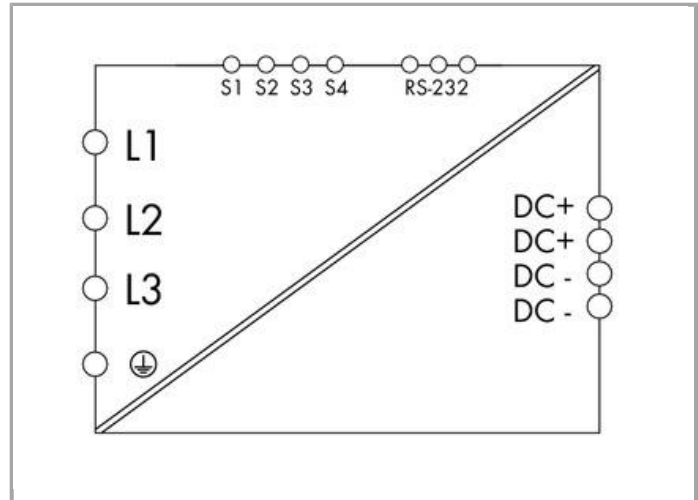


Data sheet | Item number: 787-854

Switched-mode power supply; EPSITRON® PRO Power; 3-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; LineMonitor; DC OK signal



www.wago.com/787-854



RoHS Compliant

Item description

Features:

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

Data

Technical Data

Input

Phases	2 3
Nominal input voltage $U_{i\text{ nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC)
Discharge current	$\leq 1 \text{ mA}$
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive (changeable via software/display)
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o\text{ nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Factory preset	24 VDC
Nominal output current $I_{o\text{ nom}}$	40 A (24 VDC)
Nominal output power	960 W
Adjustment accuracy	$\leq 1 \%$
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	60 ADC (4 s); 50 ADC (16 s)
TopBoost	100 ADC (50 ms)

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x LED warning (yellow) 1 x LED error (red) LCD 4 x signal output (24 VDC, max. 25 mA) 1 x RS-232 interface
Operation status indicator	LED green (DC OK) LED yellow (warning) LED red (error)
Communication	RS-232 serial interface

Efficiency/Power losses:

Power loss P_v	7 W (no load); 61.5 W (nominal load)
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Efficiency	93.6 %
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Fuse protection:

Internal fuse	3 x T 3.2 A / 440 VAC
External fuse (required)	an external DC fuse required for DC input voltage
External fuse (recommended)	3 x circuit breakers 6 A, 10 A, 16 A, characteristic: B or C or motor circuit breakers, setpoint: 3.2 A, setting range: 2.5 ... 4 A

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	≤ 35VDC
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
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)	Output
Connection technology 2	Push-in CAGE CLAMP®
WAGO terminal 2	WAGO 831 Series
Solid conductor (2)	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor (2)	0.5 ... 10 mm ² / 20 ... 8 AWG
Strip length (2)	13 ... 15 mm / 0.51 ... 0.59 Inch
Connection type (3)	Signaling
Connection technology 3	CAGE CLAMP®
WAGO terminal 3	WAGO 733 Series Series
Solid conductor (3)	0.08 ... 0.5 mm ² / 28 ... 20 AWG

Fine-stranded conductor (3)	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Strip length (3)	5 ... 6 mm / 0.2 ... 0.24 Inch

Geometrical Data

Width	128 mm / 5.039 inch
Height	171 mm / 6.732 inch
Length from upper-edge of DIN-35 rail	205 mm / 8.071 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	2300 g
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Environmental Requirements

Surrounding air (operating) temperature	-25 ... 55 °C (Device start at -40 °C type-tested)
Surrounding air (storage) temperature	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 45 °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	4045454909895
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



Item no.: 210-721
Operating tool with partially insulated shaft; Type 3, blade (5.5 x 0.8) mm

www.wago.com/210-721

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

www.wago.com/2009-110



Item no.: 2009-115
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115



Item no.: 2009-115/000-002
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115/000-002



Item no.: 2009-115/000-006
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115/000-006



Item no.: 2009-115/000-007
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115/000-007



Item no.: 2009-115/000-012
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115/000-012



Item no.: 2009-115/000-017
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115/000-017



Item no.: 2009-115/000-023
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115/000-023



Item no.: 2009-115/000-024
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-115/000-024


















Item no.: 2009-135
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-135



Item no.: 2009-145
Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/2009-145

	<p>Item no.: 2009-145/000-002 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-002
	<p>Item no.: 2009-145/000-005 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-005
	<p>Item no.: 2009-145/000-006 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-006
	<p>Item no.: 2009-145/000-007 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-007
	<p>Item no.: 2009-145/000-012 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-012
	<p>Item no.: 2009-145/000-023 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-023
	<p>Item no.: 2009-145/000-024 Mini-WSB Inline; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-024
	<p>Item no.: 210-831 Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive</p>	www.wago.com/210-831
	<p>Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive</p>	www.wago.com/210-832
	<p>Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card</p>	www.wago.com/248-501
	<p>Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/248-501/000-002
	<p>Item no.: 248-501/000-005 Mini-WSB marking card; as card; plain; snap-on type</p>	www.wago.com/248-501/000-005
	<p>Item no.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/248-501/000-006
	<p>Item no.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/248-501/000-007
	<p>Item no.: 248-501/000-012 Mini-WSB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/248-501/000-012



Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-017



Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-023



Item no.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501



Item no.: 793-501/000-002
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-002



Item no.: 793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-005



Item no.: 793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-006



Item no.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-007



Item no.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-012



Item no.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-017



Item no.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-023



Item no.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-024



Item no.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501



Item no.: 793-5501/000-002
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-002



Item no.: 793-5501/000-005
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-005



Item no.: 793-5501/000-006
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-006



Item no.: 793-5501/000-007
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-007



Item no.: 793-5501/000-012
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-012



Item no.: 793-5501/000-017
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-017



Item no.: 793-5501/000-023
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-023



Item no.: 793-5501/000-024
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-024

General accessories



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

www.wago.com/761-9005



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

www.wago.com/787-890

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.: 216-205
Ferrule; Sleeve for 2.08 mm² / AWG 14; insulated; electro-tin plated

www.wago.com/216-205



Item no.: 216-206
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated

www.wago.com/216-206



Item no.: 216-207
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated

www.wago.com/216-207



Item no.: 216-208
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90




www.wago.com/216-208



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 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 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 mm ² / 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 mm ² / 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 mm ² / 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.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-246
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 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 mm ² / 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 mm ² / 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.: 216-266 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-266
	Item no.: 216-267 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-267
	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	www.wago.com/216-284
	Item no.: 216-286 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-286
	Item no.: 216-287 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-287
	Item no.: 216-288 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-288
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / 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

Downloads

Documentation

Bid Text

787-854 Stromversorgung EPSITRON	Jan 14, 2016	DOC 37.9 kB	Download
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Instruction Leaflet

Primary Switch Mode Power Supply EPSITRON-PRO-Power DC 24 V, 40 A, SELV, Line Monitor	May 28, 2015	PDF 525.5 kB	Download
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Additional Information

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

Library

Connection of 787 Series power supplies The WagoLib787_01.lib library makes function blocks and visualization objects available which can be used to display information from the WAGO 787 Series power supply modules.	1.2.0 Aug 20, 2014	ZIP 562.7 kB	Download
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Engineering-Software

Software for Interface-Products

759-850 Configuration Software, for parameterizing 787-850, 787-852 and 787-854 Power Supplies	1.10.15 Oct 25, 2011	ZIP 541.8 kB	Download
Software 759-851, for the visualization of 787-850, 787-852 and 787-854	1.4.4 Aug 31, 2011	ZIP 869.2 kB	Download

Configuration and Commissioning Software

Used for line length calculation	1.3.3	EXE	Download
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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.

Apr 26, 2017

428.0 kB

smartDATA

CAD data

3D Download 787-854

URL

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Product family

EPSITRON PRO Power

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

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Subject to changes.