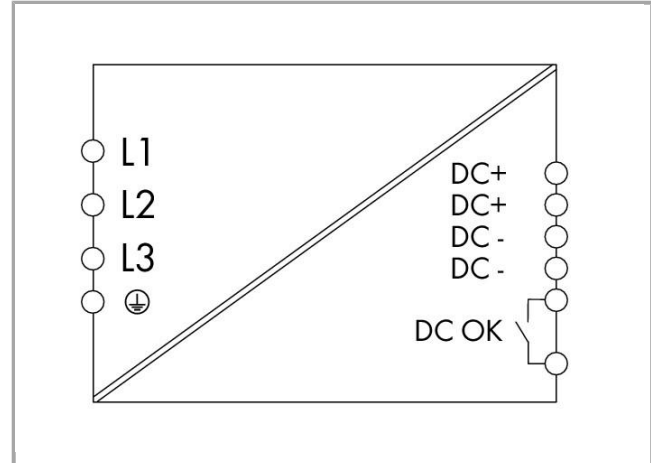


Data sheet | Item number: 787-1642

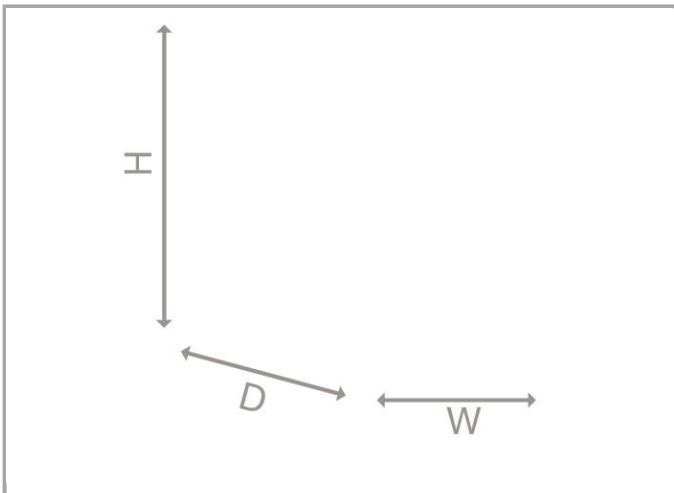
Switched-mode power supply; EPSITRON® CLASSIC Power; 3-phase; 24 VDC output voltage; 20 A output current; TopBoost; DC OK contact



www.wago.com/787-1642



RoHS Compliant BOMcheck.net



Item description

Features:



- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Contact (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

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 320 ... 575 V; DC 450 ... 800 V
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.21 \text{ A}$ (400 VAC); $\leq 3 \times 1.03 \text{ A}$ (500 VAC)
Discharge current	$\leq 1 \text{ mA}$
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 25 \text{ ms}$ (500 VAC); $\geq 15 \text{ ms}$ (400 VAC)

Output

Nominal output voltage $U_{o\text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 23 ... 28.5 V (adjustable)
Factory preset	DC 24 V
Nominal output current $I_{o\text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Adjustment accuracy	$\leq 1 \%$
Residual ripple	$\leq 15 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ typ.
Overload behavior	Constant current

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x DC OK contact (make contact; max. 30 V AC/DC, 1 A)
Operation status indicator	LED green (U_o)

**Efficiency/Power losses:**

Power loss P_v	≤ 5.8 W (no load); ≤ 42.8 W (400 VAC; nominal load)
Max. power loss $P_{v \max}$	47.6 W (500 VAC / 24 VDC; 20 A)
Efficiency	92 %

Fuse protection:

Internal fuse	No
External fuse (required)	3 x circuit breakers 6 A, 10 A, 16 A, characteristic: B or C, max. 20 A or motor circuit breakers an external DC fuse required for DC input voltage

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
Protection class	IP20 (per EN 60529)
Feedback voltage	\leq DC 35 V
Overvoltage category	II
Transient protection, primary	Varistor
Overvoltage protection, secondary	Internal protection circuit ≤ 40 VDC (in case of an error)
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/Signaling
Connection technology	CAGE CLAMP®
WAGO terminal	WAGO 721 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

Strip length (2)	13 ... 15 mm / 0.51 ... 0.59 inch
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Geometrical Data

Width	80 mm / 3.15 inch
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Height	127 mm / 5 inch
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Length from upper-edge of DIN-35 rail	180 mm / 7.087 inch
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Mechanical data

Type of mounting	DIN-35 rail (EN 60715)
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Material Data

Weight	1623 g
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Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C (Device start at -40 °C type-tested)
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Surrounding air (storage) temperature	-25 ... 85 °C
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Relative humidity	5 ... 96 % (no condensation permissible)
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Derating	-2.5 %/K (> 55 °C)
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Pollution degree	2
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Standards and specifications

Conformity marking	1
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Standards/specifications	EN 60950-1; EN 61204-3; UL 60950-1; UL 508; DNV GL
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Commercial data


Country of origin	DE
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GTIN	4055143259170
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Customs Tariff No.	85043180888
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Approvals / Certificates

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA00000KT

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name



UL
Underwriters Laboratories Inc.

UL 508

E255817



UL
Underwriters Laboratories Inc.

UL 60950-1

E255815

Compatible products

tools



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



Item no.: 210-769
SCREWDRIVER

www.wago.com/210-769

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 Smart Printer; 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 Smart Printer; 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 Smart Printer; 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 Smart Printer; 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 Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

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

	<p>Item no.: 2009-115/000-024 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-024
	<p>Item no.: 2009-135 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-135
	<p>Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145
	<p>Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; 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 Smart Printer; 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 Smart Printer; 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 Smart Printer; 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 Smart Printer; 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; for Smart Printer; 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; not stretchable; 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



Item no.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-007



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

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.: 793-5501/000-014
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-014



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

ferrule



Item no.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated

www.wago.com/216-201



Item no.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; 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 / 20 AWG; insulated; electro-tin plated

www.wago.com/216-221

	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; 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 / 20 AWG; 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 / 18 AWG; 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 / 18 AWG; 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 / 22 AWG; 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 / 22 AWG; insulated; electro-tin plated	www.wago.com/216-322

Downloads

Documentation

Bid Text

787-1642	Jan 15, 2016	doc	Download
Stromversorgung EPSITRON		38.4 kB	

Instruction Leaflet

Primary Switch Mode <i>EPSITRON</i> [®] CLASSIC Power		pdf	Download
24 VDC, 20 A		170.2 kB	

Additional Information

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

Engineering-Software

Configuration and Commissioning Software

Used for line length calculation	1.3.4	zip	Download
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.	Mar 20, 2017	125.5 kB	

CAD/CAE - Smart Data

CAD data

3D Download 787-1642	URL	Download
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Product family

EPSITRON CLASSIC Power

EPSITRON® CLASSIC POWER: The Robust Power Supply – with Integrated TopBoost (Optional)

[Show all products from the family](#)

Subject to changes.

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