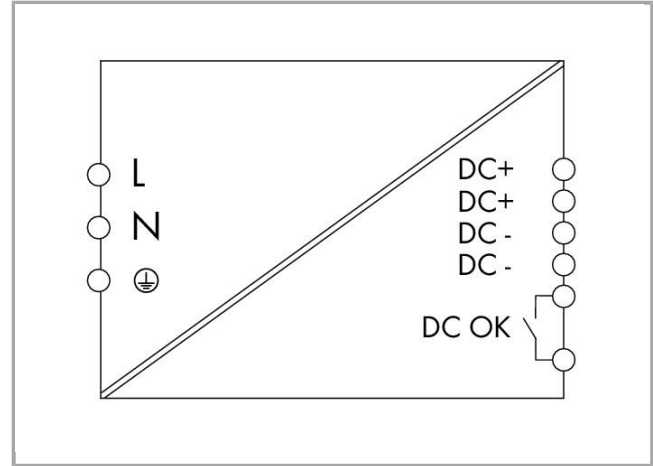


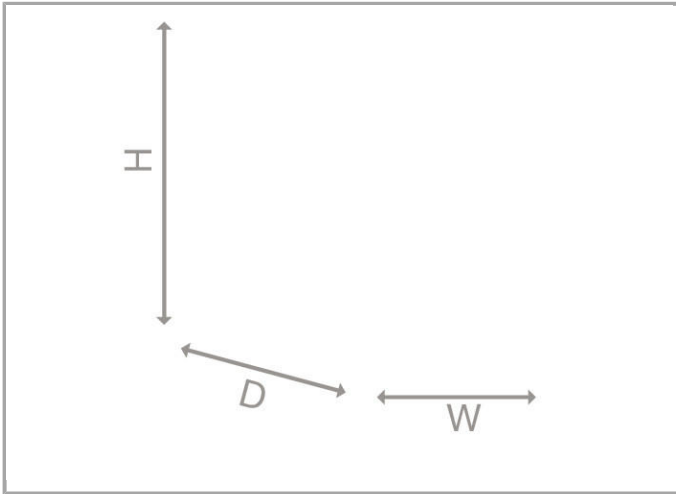
Data sheet | Item number: 787-1632

Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost; DC OK contact



787-1632





Item description

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear 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
- GL approval

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 ... 372 V
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.25 A (230 VAC); ≤ 2.74 A (100 VAC)
Discharge current	≤ 1 mA
Inrush current	≤ 30 A
Power factor correction (PFC)	Aktive
Mains failure hold-up time	≥ 17 ms (230 VAC); ≥ 15 ms (100 VAC)

Output

Nominal output voltage $U_{o\text{ nom}}$	DC 24 V (SELV)
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Output voltage range	DC 23 ... 28.5 V (adjustable)
Factory preset	DC 24 V
Nominal output current $I_{o\text{ nom}}$	10 A (24 VDC)
Nominal output power	240 W
Adjustment accuracy	$\leq 1\%$
Residual ripple	$\leq 50\text{ mV}$ (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	$\leq 6.6\text{ W}$ (230 VAC; no load); $\leq 24.4\text{ W}$ (230 VAC; nominal load)
Max. power loss $P_{v\text{ max.}}$	31.3 W (100 VAC / 24 VDC; 10 A)
Efficiency	91 %

Fuse protection:

Internal fuse	T 6.3 A / 250 VAC
External fuse (required)	an external DC fuse required for DC input voltage
External fuse (recommended)	Circuit breakers 10 A, 16 A, characteristic: B or C

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	$\leq \text{DC } 35\text{ V}$
Overvoltage category	II
Transient protection, primary	Varistor
Overvoltage protection, secondary	Internal protective circuit $\leq 40\text{ VDC}$ (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)
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Connection data

Connection type (1)	Input/Output/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

Geometrical Data

Width	55 mm / 2.165 inch
Height	127 mm / 5 inch
Length from upper-edge of DIN-35 rail	172 mm / 6.772 inch

Mechanical data

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

Weight	1140 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	-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)
Pollution degree	2
Climatic category	3K3 (per EN 60721)

Standards and specifications



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

Commercial data

Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4055143060516
Customs Tariff No.	85044082900












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










Compatible products

ferrule

	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated	216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated	216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	216-204
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated	216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated	216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	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	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	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	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	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	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	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	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	216-284
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	216-322
Marking accessories		
	Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type	2009-110
	Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115
	Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	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	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	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	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	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	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	/000-024	2009-115
	Item no.: 210-831 Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive		210-831
	Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive		210-832
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type		793-501
	Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type	/000-002	793-501
	Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type	/000-005	793-501
	Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type	/000-006	793-501
	Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type	/000-007	793-501
	Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type	/000-012	793-501
	Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type	/000-017	793-501
	Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type	/000-023	793-501
	Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type	/000-024	793-501
	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		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	/000-002	793-5501
	Item no.: 793-5501/000-005 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-005	793-5501

	Item no.: 793-5501/000-006 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
		/000-006
	Item no.: 793-5501/000-007 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
		/000-007
	Item no.: 793-5501/000-012 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
		/000-012
	Item no.: 793-5501/000-014 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
		/000-014
	Item no.: 793-5501/000-017 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
		/000-017
	Item no.: 793-5501/000-023 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
		/000-023
	Item no.: 793-5501/000-024 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
		/000-024
tools		
	Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	210-720
	Item no.: 210-769 SCREWDRIVER	210-769

Downloads

Documentation

Bid Text

787-1632	Jan 15, 2016	doc	Download
Stromversorgung EPSITRON		35.3 kB	

Instruction Leaflet

Primary Switch Mode <i>EPSITRON</i> [®] CLASSIC Power Supplies		pdf	Download
24 VDC, 10 A		257.3 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 787-1632	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.
