

Data sheet | Item number: 787-742

Switched-mode power supply; Eco; 3-phase; 24 VDC output voltage; 20 A output current; DC OK contact

www.wago.com/787-742



Item description

Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler

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.

- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Data

Technical data

Phases	2 3
Nominal input voltage $U_{i\text{nom}}$	(2 / 3) x AC 400 ... 500 V
Input voltage range	(2 / 3) x AC 360 ... 575 V; DC 500 ... 800 V
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (400 VAC; 20 ADC)
Discharge current	$\leq 3.5 \text{ mA}$
Inrush current	$\leq 30 \text{ A}$
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 17 \text{ ms}$ (3 x 400 VAC)
Power loss P_i	$\leq 50 \text{ W}$
Power loss (max.) $P_{i(\text{max.})}$	55 W
Efficiency (typ.)	90 %
Nominal output voltage $U_{o\text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 22 ... 28 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o\text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Control deviation	$\leq 1 \%$
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o\text{nom}}$); Shutdown and automatic restart in the event of a short circuit
Isolation voltage (Pri.-Sec.)	DC 4.242 kV
Isolation voltage (Pri.-GND)	DC 2.2 kV
Isolation voltage (Sec.-GND)	DC 0.7 kV
Isolation voltage (Sec.-Signal)	DC 0.7 kV
Protection class	I
Protection type	IP20 (per EN 60529)
Resistance to reverse feed	$\leq \text{DC } 30 \text{ V}$

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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	> 250,000 h (per IEC 61709)
Internal fuse	3 x T 5 A / 250 VAC
Required backup fusing	An external DC fuse is required for the DC input voltage.
Recommended backup fusing	3 x circuit breaker \geq 6 A; Tripping characteristic: B or C Alternative: motor circuit breaker
Signaling	1 x LED DC OK (green) 1 x Overload LED (red) 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
Operation status indicator	Green LED (U_o) Red LED (overload)

Connection data

Connection type (1)	Input/Output
Connection technology	Push-in CAGE CLAMP®
WAGO Connector	WAGO 2706 Series
Solid conductor	0.5 ... 6 mm ² / 20 ... 10 AWG
Fine-stranded conductor	0.5 ... 6 mm ² / 20 ... 10 AWG
Strip length	11 ... 12 mm / 0.43 ... 0.47 inch
Connection type 2	Signaling
Connection technology 2	Push-in CAGE CLAMP®
WAGO Connector 2	<i>picoMAX</i> ® 3.5, 2091-1122
Solid conductor 2	0.2 ... 1.5 mm ² / 24 ... 14 AWG
Fine-stranded conductor 2	0.2 ... 1.5 mm ² / 24 ... 14 AWG
Strip length 2	8 ... 9 mm / 0.31 ... 0.35 inch

Physical data

Width	110 mm / 4.331 inch
Height	130 mm / 5.118 inch
Depth from upper edge of DIN-rail	151 mm / 5.944 inch

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

Mechanical data

Mounting type	DIN-35 rail
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Material data

Weight	1930 g
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Environmental requirements

Surrounding air temperature (operation)	-25 ... 70 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2 %/K (> 50 °C; 400 VAC)

Standards and specifications


Conformity marking	CE
Standards/Specifications	EN 62368-1 EN 61204-3 (Class A) UL 60950-1 UL 508

Commercial data

Product Group	6 (Interface Electronics)
PU (SPU)	1 Stück
Packaging type	box
Country of origin	CN
GTIN	4050821848387
Customs tariff number	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

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Optional accessories

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.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; gray	www.wago.com/216-207
	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.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow	www.wago.com/216-205
	Item no.: 216-208 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	www.wago.com/216-208
	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

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

	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.: 216-246 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; blue	www.wago.com/216-246
	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; blue	www.wago.com/216-266
	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.: 216-286 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; blue	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; gray	www.wago.com/216-287
	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.: 216-288 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	www.wago.com/216-288
	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.: 216-267 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-267
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302
Tool		
Operating tool		
	Item no.: 210-719 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	www.wago.com/210-719

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Item no.: 210-769
SCREWDRIVER; green

Downloads Documentation

Bid Text

787-742 X81 - Datei	2019. 7. 12.	xml 7.4 kB	Download
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787-742 docx - Datei	2019. 7. 12.	docx 23.7 kB	Download
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Instruction Leaflet

Primary Switch Mode Power Supply ECO-Power DC 24 V, 20 A	V 1.5.6 2020. 12. 21.	pdf 271.3 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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CAD/CAE-Data

CAD data

2D/3D Models 787-742	URL	Download
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CAE data

EPLAN Data Portal 787-742	URL	Download
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WSCAD Universe 787-742	URL	Download
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ZUKEN Portal 787-742	URL	Download
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Environmental Product Compliance

Compliance Search

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Installation Notes

Product family

EPSITRON ECO Power

[Show all products from the family](#)

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