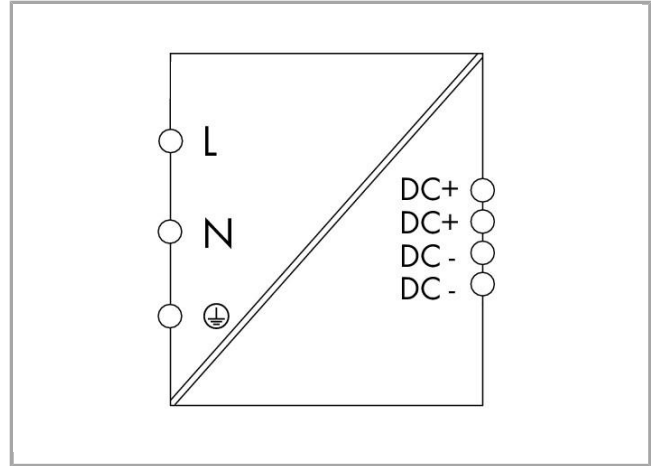
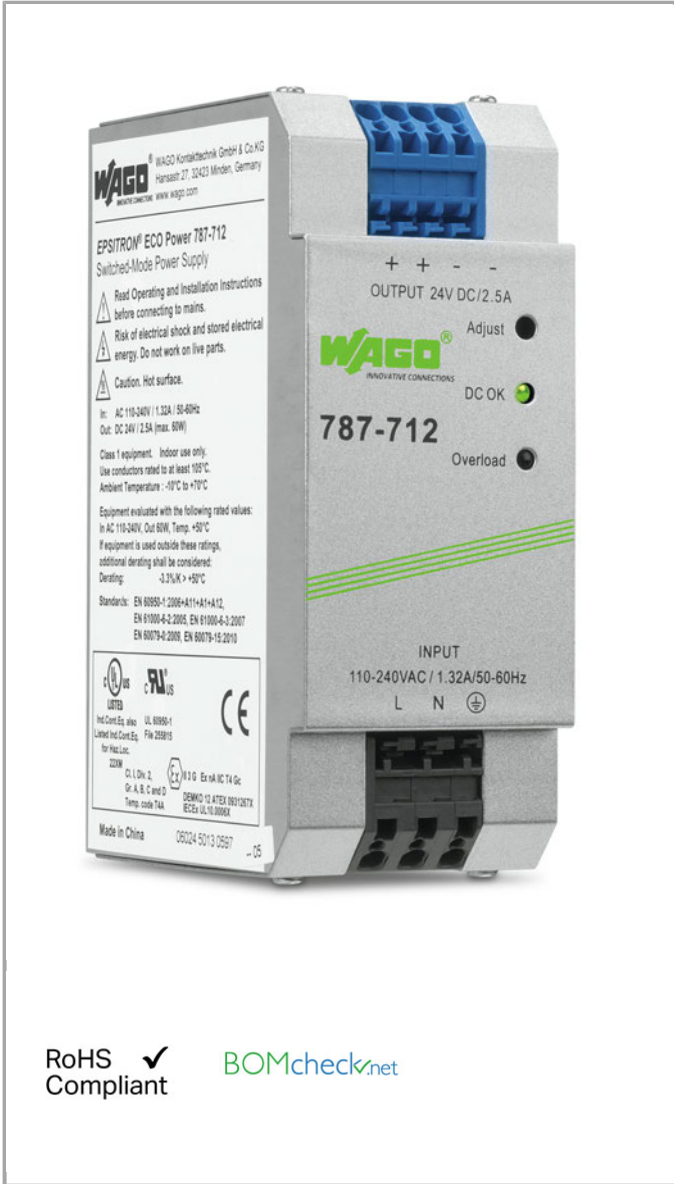


Data sheet | Item number: 787-712

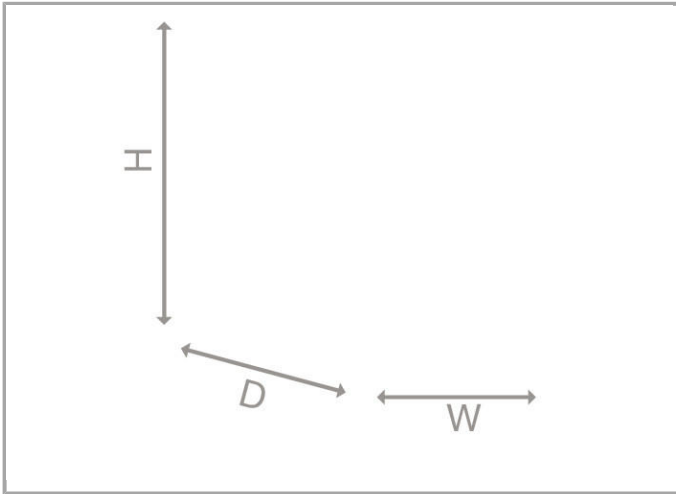
Switched-mode power supply; EPSITRON® ECO Power; 1-phase; 24 VDC output voltage; 2.5 A output current; 4,00 mm<sup>2</sup>



787-712



RoHS Compliant



## Item description

### Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

## Data

### Technical Data

#### Input

Phases	1
Nominal input voltage $U_{i\text{nom}}$	AC 110 240 V
Input voltage range	AC 85 264 V; DC 90 373 V
Nominal mains frequency range	47 63 Hz; 0 Hz
Input current $I_i$	$\leq 0.7$ A (230 VAC); $\leq 1.2$ A (115 VAC)
Discharge current	$\leq 1$ mA
Inrush current	$\leq 30$ A
Power factor	$\geq 0.5$ (230 VAC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 20$ ms (230 VAC)

#### Output

Nominal output voltage $U_{o\text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 22 28 V (adjustable)

Factory preset	DC 24 V
Nominal output current $I_{o\ nom}$	2.5 A (24 VDC)
Nominal output power	60 W
Adjustment accuracy	$\leq 1\ %$
Residual ripple	$\leq 100\ mV$ (peak-to-peak)
Overload behavior	Constant power (in overload range: $1.15 \dots 1.4 \times I_{o\ nom}$ ); shutdown and automatic restart in the event of a short circuit

### Signaling and communication

Signaling	1 x LED DC OK (green) 1 x LED overload (red)
Operation status indicator	LED green (24 VDC OK) LED red (overload)

### Efficiency/Power losses:

Power loss $P_v$	$\leq 8.3\ W$ (230 VAC; nominal load)
Max. power loss $P_{v\ max.}$	11.5 W (110 VAC / 24 VDC; 2.75 A)
Efficiency (typ.)	86 % (230 VAC)

### Fuse protection:

Internal fuse	F 2.5 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)	DC 4.242 kV
Isolation voltage (PRI-GND)	DC 2.2 kV
Insulation voltage (SEC-GND)	DC 0.7 kV
Protection class	I
Protection class	IP20 (per EN 60529)
Feedback voltage	$\leq DC\ 28\ V$
Overvoltage category	II
Transient protection, primary	Varistor
Short circuit protection	Yes
No-load proof	Yes
Parallel operation	Yes
Series connection	Yes
MTBF	480,000 h (per IEC 61709)

### Connection data

Connection type (1)	Input/Output
Connection technology	CAGE CLAMP®
WAGO terminal	WAGO 745 Series
Solid conductor	0.08 4 mm <sup>2</sup> / 28 12 AWG
Fine-stranded conductor	0.08 4 mm <sup>2</sup> / 28 12 AWG
Strip length	8 9 mm / 0.31 0.35 inch
Note (conductor cross-section)	12 AWG: THHN, THWN

### Geometrical Data

Width	50 mm / 1.969 inch
Height	92 mm / 3.622 inch
Length from upper-edge of DIN-35 rail	136 mm / 5.354 inch

### Mechanical data

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

### Material Data

Fire load	4.4 MJ
Weight	470 g

### Environmental Requirements

Surrounding air (operating) temperature	-10 70 °C
Surrounding air (storage) temperature	-25 85 °C
Relative humidity	≤ 95% (no condensation permissible)
Derating	-3.3 %/K (> 50 °C; 230VAC)
Pollution degree	2
Climatic category	3K3 (per EN 60721)

### Standards and specifications


Conformity marking	CE
Standards/specifications	EN 62368-1; EN 61204-3; cURus 60950-1; cULus 508; ANSI/ISA 12.12.01 (Class I Div. 2); ATEX; IEC Ex

### Commercial data



Product Group	6 (Interface Electronics)
Country of origin	CN
GTIN	4045454908195
Customs Tariff No.	85044082900

## Approvals / Certificates

### Ex-Approvals









Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726 Section 5











### UL-Approvals

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

## Compatible products

### ferrule

	<b>Item no.: 216-221</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	216-221
	<b>Item no.: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	216-222
	<b>Item no.: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	216-223
	<b>Item no.: 216-224</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	216-224
	<b>Item no.: 216-241</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	216-241
	<b>Item no.: 216-242</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	216-242
	<b>Item no.: 216-243</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	216-243
	<b>Item no.: 216-244</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	216-244

	<b>Item no.: 216-246</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	216-246
	<b>Item no.: 216-262</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	216-262
	<b>Item no.: 216-263</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	216-263
	<b>Item no.: 216-264</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	216-264
	<b>Item no.: 216-266</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	216-266
	<b>Item no.: 216-284</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	216-284
	<b>Item no.: 216-286</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	216-286
	<b>Item no.: 216-321</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	216-321
	<b>Item no.: 216-322</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	216-322
<b>tools</b>		
	<b>Item no.: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	210-720
	<b>Item no.: 210-769</b> SCREWDRIVER; green	210-769

**Downloads****Documentation****Bid Text**

787-712 Netzgerät	Apr 4, 2012	docx 21.5 kB	Download
----------------------	-------------	-----------------	----------

**Instruction Leaflet**

Primary Switch Mode Power Supply EPSITRON-ECO-Power 24 VDC, 2.5 A	V 2.2.7	pdf 344.7 kB	Download
--	---------	-----------------	----------

**Additional Information**

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



**CAD/CAE - Smart Data**

**CAD data**

3D Download 787-712

URL

Download

---

**EPLAN**

EPLAN Data Portal

Download

---

**WSCAD**

WSCAD Universe

Download

---

Subject to changes.

---