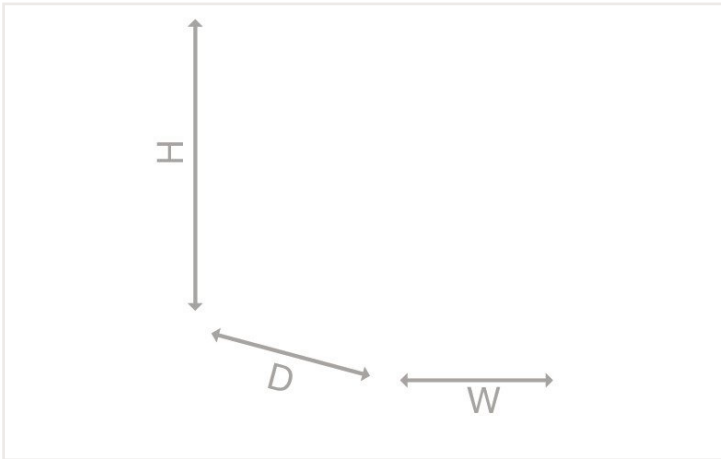
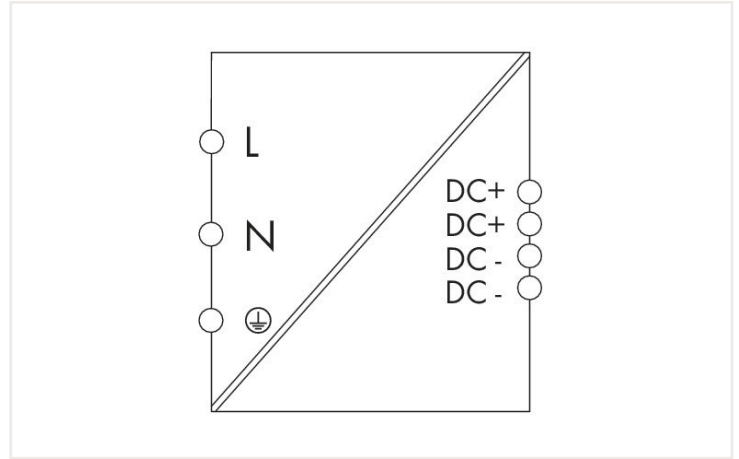


Data sheet | Item number: 787-712

Power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED; 4,00 mm²

<https://www.wago.com/787-712>



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated 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

Technical data

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

Output	
Nominal output voltage $U_{o, nom}$	DC 24 V (SELV)
Output voltage range	DC 22 ... 28 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o, nom}$	2.5 A (24 VDC)
Nominal output power	60 W
Deviation	≤ 1 %
Residual ripple	≤ 100 mV (Peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and communication

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

Efficiency/power losses

Power loss P_I	≤ 8.3 W (230 VAC; Nominal load)
Power loss (max.) $P_{I(max)}$	11.5 W (110 VAC / 24 VDC; 2.75 A)
Efficiency (typ.)	86 % (230 VAC)

Circuit protection

Internal fuse	F 2.5 A / 250 VAC
Required backup fusing	An external DC fuse is required for the DC input voltage.
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Isolation voltage (pri.-PE)	DC 2.2 kV
Isolation voltage (sec.-PE)	DC 0.7 kV
Protection class	I
Protection type	IP20
Note on protection type	per EN 60529
Resistance to reverse feed	\leq DC 28 V
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	480,000 h (per IEC 61709)

Connection data

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

Physical data

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

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	4.4 MJ
Weight	470 g

Environmental requirements

Ambient temperature (operation)	-10 ... +70 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Relative humidity	≤ 95% (no condensation permissible)
Derating	-3.3 %/K (

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)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 7.0	EC002540
ETIM 6.0	EC002540
PU (SPU)	1 Stück
Packaging type	Box
Country of origin VKOrg Germany	CN
GTIN	4045454908195
Customs tariff number VKOrg Germany	85044082900

Approvals / Certificates

Ex-Approvals



Approval	Standard	Certificate name
ATEX UL International Demko A/ S	EN 60079-0	12 ATEX 0931267 X
CCCEX CQST/CNEX	CNCA-C23-01	2020312303000383 (Ex nA IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV20.1339X
UL UL International Germany GmbH (HAZARDOUS LO- CATIONS)	ANSI/ISA 12.12.01	E198726 Section 5

UL-Approvals



Approval	Standard	Certificate name
UL UL International Germany GmbH	IEC 60079-0	IECEX UL 10.0006 X
UL Underwriters Laboratories Inc.	UL 60950-1	E255815
UL Underwriters Laboratories Inc.	UL 508	E255817

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 787-712	↓

Documentation

Additional Information			
Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 259.56 KB	↓

Bid Text			
787-712	12.07.2019	xml 6.84 KB	↓
787-712	12.07.2019	docx 20.99 KB	↓

Instruction Leaflet			
Primary Switch Mode Power Supply ECO-Power	V 2.2.7 21.12.2020	pdf 336.60 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 787-712	↓

CAE data	
EPLAN Data Portal 787-712	↓
WSCAD Universe 787-712	↓
ZUKEN Portal 787-712	↓

1 Compatible products

1.1 Optional accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

<p>Item no.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p>	<p>Item no.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</p>	<p>Item no.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white</p>	<p>Item no.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white</p>
<p>Item no.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	<p>Item no.: 216-262 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	<p>Item no.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray</p>	<p>Item no.: 216-243 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>

1.1.1.1 Ferrule



Item no.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

Item no.: 216-223

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

Item no.: 216-224

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

Item no.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item no.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

Item no.: 216-284

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

Item no.: 216-246

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

Item no.: 216-266

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

1.1.2 Tool

1.1.2.1 Operating tool



Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Item no.: 210-769

SCREWDRIVER; green