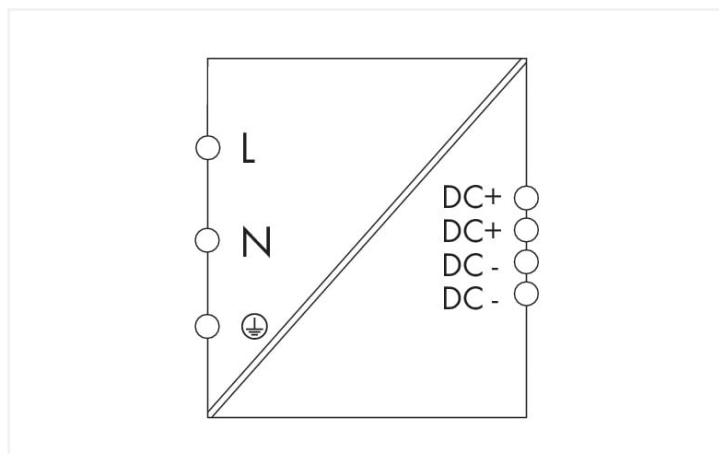


Data Sheet | Item Number: 787-712

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		Output	
Phases	1	Nominal output voltage $U_{o\text{nom}}$	DC 24 V (SELV)
Nominal input voltage $U_{i\text{nom}}$	1 x AC 100 ... 240 V	Output voltage range	DC 22 ... 28 V (adjustable)
Input voltage range	1 x AC 90 ... 264 V; DC 90 ... 373 V	Default setting	DC 24 V
Nominal mains frequency range	47 ... 63 Hz; 0 Hz	Nominal output current $I_{o\text{nom}}$	2.5 A (24 VDC)
Input current I_i	≤ 0.7 A (230 VAC); ≤ 1.2 A (115 VAC)	Nominal output power	60 W
Discharge current	≤ 1 mA	Deviation	≤ 1 %
Inrush current	≤ 30 A	Residual ripple	≤ 100 mV (peak-to-peak)
Power factor	≥ 0.5 (230 VAC)	Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o\text{nom}}$); Shutdown and automatic restart in the event of a short circuit
Power factor correction (PFC)	Passive		
Mains failure hold-up time	≥ 20 ms (230 VAC)		

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.) $P_{I(\text{max})}$	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
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	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; per EN 60529
Resistance to reverse feed	≤ DC 28 V
Oversvoltage 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 inches
Note (conductor cross-section)	12 AWG: THHN, THWN

Physical data

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

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
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	≤ 95% (no condensation permissible)
Derating	-3.3%/K (> 50°C; 230°VAC)
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 IECEX SEMI F47 UL HazLoc

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4045454908195
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Bulgaria)	a447b5ed-bfab-4354-ad87-91c72437e9ed
SCIP notification number (Czech Republic)	648038fe-6170-414c-8081-c02ad85c75d0

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc.	UL 508	E255817	MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc.	UL 60950-1	E255815			

Approvals for hazardous areas

Approval	Standard	Certificate Name
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV20.1339X
UKEx WAGO GmbH & Co. KG	EN 60079-0	WAGO22UKEX001X_ec
UL UL International Germany GmbH (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726 Section 5

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 787-712	↓

Documentation

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

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 127.27 KB	↓
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 Tool

1.1.1.1 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