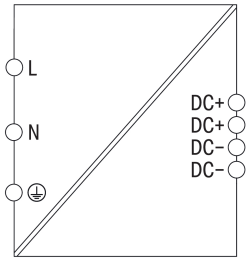
Data Sheet | Item Number: 787-712

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 100 … 240 VAC
Input voltage range	1 x 90 … 264 VAC; 90 … 373 VDC
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 $U_{o\,nom}$	24 VDC (SELV)
Output voltage range	22 … 28 VDC (adjustable)
Default Setting	24 VDC
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 DC OK LED (green) 1 x Overload LED (red)
Operation status indicator	Green LED (24 VDC OK) Red LED (overload)

Efficiency/Power Losses

Power loss P_l	≤ 8.3 W (230 VAC; nominal load)
Power loss (max.) $P_{l\,(max.)}$	11.5 W (110 VAC / 24 VDC; 2.75 A)
Efficiency (typ.)	86 % (230 VAC)

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Circuit Protection

Internal fuse	F 2.5 A / 250 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	4.242 kVDC
Isolation voltage (pri.-PE)	2.2 kVDC
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ 28 VDC
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

Note (conductor cross-section)	12 AWG: THHN, THWN

Connection 1

Connection type	Input/output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 745 Series
Solid conductor	0.08 … 4 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 4 mm² / 28 … 12 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inches

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

Material data

Fire load	4.4 MJ
Weight	470 g

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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)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4045454908195
Customs tariff number	85044083900

Product Classification

UNSPSC	39121004
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 9.0	EC002540
ETIM 10.0	EC002540
ECCN	NO US CLASSIFICATION

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

Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc.	UL 508	E255817
UR Underwriters Laboratories Inc.	UL 60950-1	E255815

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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Approvals for hazardous areas

Approval	Standard	Certificate Name
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

Continued on next page

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