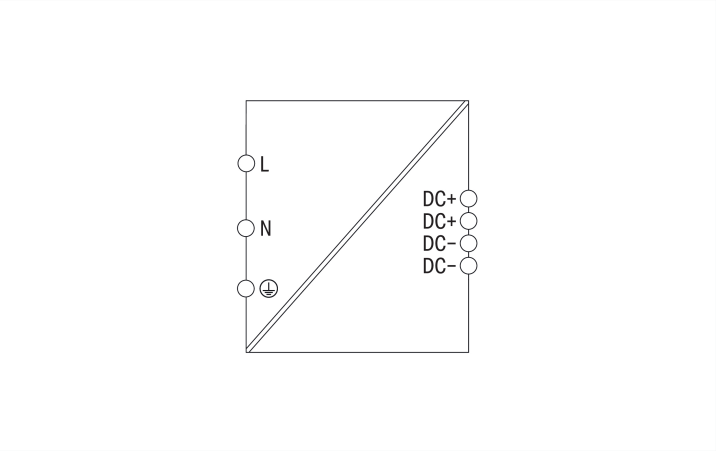
Data Sheet | Item Number: 787-1712

Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED

https://www.wago.com/787-1712



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 EN 60335-1 and UL 60950-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Technical data

Input

Phases	1
Nominal input voltage $U_{i\,nom}$	1 x 100 … 240 VAC
Input voltage range	1 x 90 … 264 VAC; 125 … 375 VDC
Nominal mains frequency range	47 … 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A (230 VAC); ≤ 1.2 A (115 VAC)
Discharge current	≤ 1.5 mA
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output

Nominal output voltage $U_{o\,nom}$	24 VDC (SELV)
Output voltage range	22 … 26 VDC (adjustable)
Default Setting	24 VDC
Nominal output current $I_{o\,nom}$	2.5 A (24 VDC; 110 … 240 VAC); 2 A (24 VDC; 100 … 240 VAC)
Nominal output power	60 W
Deviation	≤ 1 %
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 … 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)
Operation status indicator	Green LED (U_o)

Efficiency/Power Losses

Power loss P_l	≤ 12 W (230 VAC; 24 VDC; 2.5 A)
Efficiency (typ.)	88 % (230 VAC; 2.5 ADC)

Circuit Protection

Internal fuse	F 2 A / 250 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (recommended)	Circuit breaker: B6, B10

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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	≤ 30 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, for 2 devices of the same type
MTBF	> 300,000 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 236 Series
Solid conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Strip length	6 … 7 mm / 0.24 … 0.28 inches

Physical data

Width	40 mm / 1.575 inches
Height	90 mm / 3.543 inches
Depth from upper-edge of DIN-rail	99 mm / 3.898 inches

Mechanical data

Mounting type	DIN-35 rail Screw mount

Material data

Fire load	0.118 MJ
Weight	300 g

Environmental requirements

Ambient temperature (operation)	-20 … +60 °C
Ambient temperature (storage)	-25 … +75 °C
Relative humidity	10 … 95 % (no condensation permissible)
Derating	-4 %/K (> 45 °C)
Climatic category	3K3 (per EN 60721)

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Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 61204-3 EN 60335-1 EN 62368-1 UL 60950-1 UL 508 SEMI F47

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143372466
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)	7d2334e6-553b-4c2b-a393-ffe26f33c4cc
SCIP notification number (Czech Republic)	5e2d347c-a5a6-461e-b623-4c39a501d484

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
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	-	-

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Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-1712

Documentation

Bid Text

787-1712	01.10.2019	xml 6.83 KB	
787-1712	01.10.2019	docx 20.50 KB	
ausschreiben.de 787-1712			

Instruction Leaflet

ECO Power Switched-Mode Power Supplies	V 1.5 21.12.2020	pdf 247.65 KB	

CAD/CAE-Data

CAD data

2D/3D Models 787-1712

CAE data

EPLAN Data Portal 787-1712

WSCAD Universe 787-1712

ZUKEN Portal 787-1712

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marking strip

Item No.: 210-831
Marking strips; 25 m on roll; 2.3 mm wide; plain; Self-adhesive; white

Item No.: 210-832
Marking strips; 25 m on roll; 3 mm wide; plain; Self-adhesive; white

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