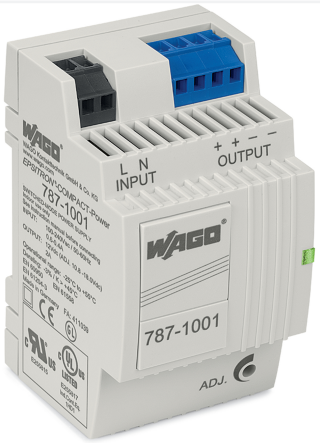
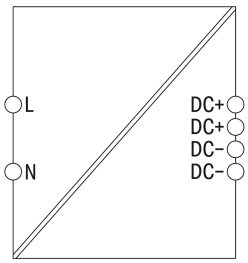
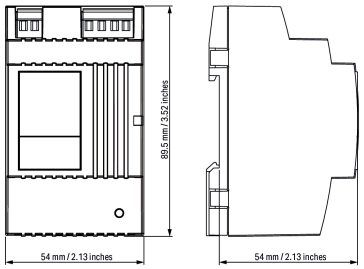
Data Sheet | Item Number: 787-1001

Switched-mode power supply; Compact; 1-phase; 12 VDC output voltage; 2 A output current

https://www.wago.com/787-1001







Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/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 85 … 264 VAC; 120 … 300 VDC
Input voltage derating	$I_o \leq 1.5$ A (< 100 VAC)
Nominal mains frequency range	44 … 66 Hz; 0 Hz
Input current I_i	≤ 0.4 A (230 VAC); ≤ 0.6 A (110 VAC)
Discharge current	≤ 1 mA
Inrush current	≤ 30 A (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); ≥ 10 ms (110 VAC)

Output

Nominal output voltage $U_{o\,nom}$	12 VDC (SELV)
Output voltage range	10.5 … 18 VDC (adjustable)
Default Setting	12 VDC
Nominal output current $I_{o\,nom}$	2 A (12 VDC); 1.4 A (12 VDC; in any mounting position); 0.75 A (18 VDC)
Nominal output power	24 W
Deviation	≤ 2 %
Residual ripple	≤ 100 mV (peak-to-peak)
Current limitation	1.1 x $I_{o\,nom}$ (typ.)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/Power Losses

Power loss P_l	≤ 2.6 W; ≤ 6 W (230 VAC; nominal load)
Power loss (max.) $P_{l\,(max.)}$	6 W (100 VAC / 12 VDC; 2 A)
Efficiency (typ.)	80 %

Circuit Protection

Internal fuse	T 2 A / 250 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (recommended)	Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and protection

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class	II
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ 25 VDC
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	≤ 30 VDC (in the event of a fault)
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	> 500,000 h (per IEC 61709)

Connection Data

Connection 1

Connection type	Input/output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 740 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	54 mm / 2.126 inches
Height	89 mm / 3.504 inches
Depth	59 mm / 2.323 inches
Depth from upper-edge of DIN-rail	55 mm / 2.165 inches

Continued on next page

Mechanical data

Housing design	DIN-rail-mount enclosure
Mounting type	DIN-35 rail

Material data

Flammability class per UL94	V0
Weight	180 g

Environmental requirements

Ambient temperature (operation)	-25 … +60 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 … +80 °C
Ambient temperature UL (operation at U_N)	-25 … +55 °C
Relative humidity	5 … 96 % (no condensation permissible)
Derating	-3 %/K (> 45 °C)
Climatic category	3K3 (per EN 60721)

Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 UL 60950-1 UL 508 DNV

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821298236
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

Continued on next page

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
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	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-1001

Documentation

Bid Text

787-1001	24.06.2019	xml 6.98 KB
787-1001	12.06.2019	docx 20.75 KB

Instruction Leaflet

Power Supply COMPACT	29-03-2021 20.12.2021	pdf 2143.15 KB

CAD/CAE-Data

CAD data

2D/3D Models 787-1001

CAE data

EPLAN Data Portal 787-1001

WSCAD Universe 787-1001

ZUKEN Portal 787-1001

Continued on next page

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marking strip



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



Item No.: 210-832
Marking strips; on reel; 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