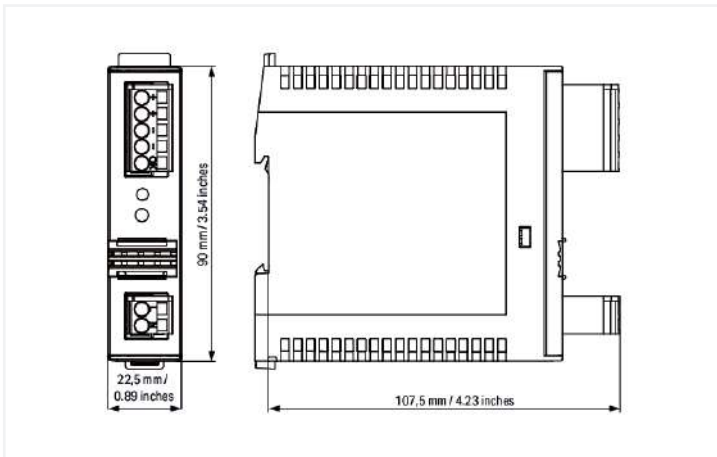
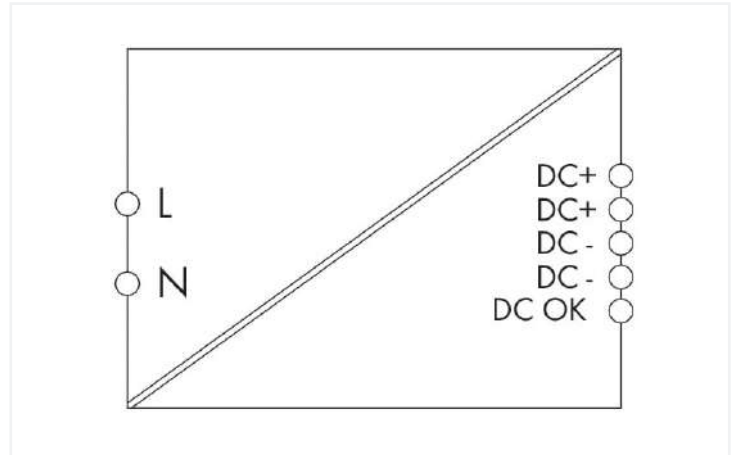


Data Sheet | Item Number: 787-1601

Switched-mode power supply; Classic; 1-phase; 12 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal

<https://www.wago.com/787-1601>



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Technical data

Input		Output	
Phases	1	Nominal output voltage $U_{o, nom}$	DC 12 V (SELV)
Nominal input voltage $U_{i, nom}$	1 x AC 100 ... 240 V	Output voltage range	DC 11.5 ... 14.5 V (adjustable)
Input voltage range	1 x AC 85 ... 264 V; DC 120 ... 300 V	Default setting	DC 12 V
Input voltage derating	-2.5 %/V (< 95 VAC)	Nominal output current $I_{o, nom}$	2 A (12 VDC); 2.1 A (
Nominal mains frequency range	44 ... 66 Hz; 0 Hz	Nominal output power	24 W
Input current I_i	≤ 0.29 A (240 VAC); ≤ 0.5 A (100 VAC)	Deviation	≤ 1 %
Discharge current	≤ 0.25 mA	Residual ripple	≤ 20 mV (peak-to-peak)
Inrush current	≤ 30 A	Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Power factor correction (PFC)	passive	Overload behavior	Constant current
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 15 ms (100 VAC)		

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x Active signal output DC OK (12 VDC; 40 mA)
Operation status indicator	Green LED (U _o)

Efficiency/power losses

Power loss P _I	≤ 0.7 W; ≤ 5.3 W (230 VAC; nominal load)
Power loss (max.) P _{I(max)}	5.7 W (100 VAC / 12 VDC; 2 A)
Efficiency (typ.)	82 %

Circuit protection

Internal fuse	T 2 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Protection class	II
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ DC 25 V
Oversoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Oversoltage protection; secondary	Internal protective circuit ≤ 35 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 type 1	Input/output/signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	22.5 mm / 0.886 inches
Height	90 mm / 3.543 inches
Depth from upper-edge of DIN-rail	107.5 mm / 4.232 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0 MJ
Weight	128 g

Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 EN 60335-1 UL 60950-1 UL 508 DNV SEMI F47

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	DE
GTIN	4055143060400
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 004/2011, TP TC 020/2011	EAC RU C-DE.AM02. B.00089_19
UL Underwriters Laboratories Inc.	UL 508	E255817
UL Underwriters Laboratories Inc.	UL 60950-1	E255815

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNVGL-CG-339,Dec.2019	TAA00002YC

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-1601

Documentation

Bid Text			
787-1601	04.07.2019	xml 6.94 KB	
787-1601	31.05.2019	docx 19.83 KB	

Instruction Leaflet		
Primär getaktete Stromversorgungen CLASSIC	pdf 314.15 KB	

CAD/CAE-Data

CAD data
2D/3D Models 787-1601

CAE data
EPLAN Data Portal 787-1601
WSCAD Universe 787-1601
ZUKEN Portal 787-1601

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marker



Item No.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.1.2 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



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