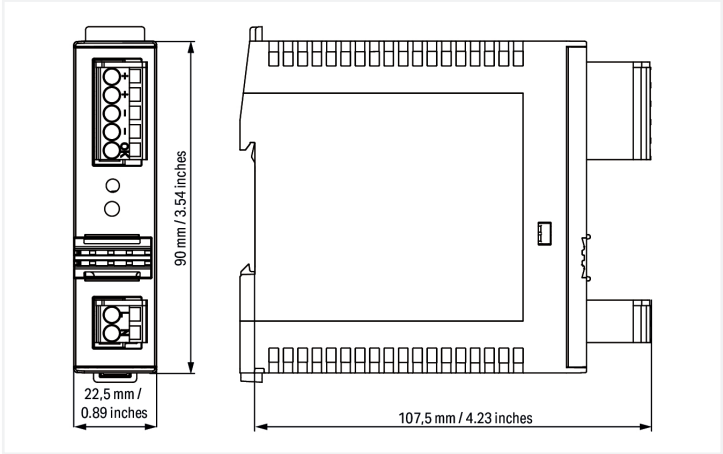
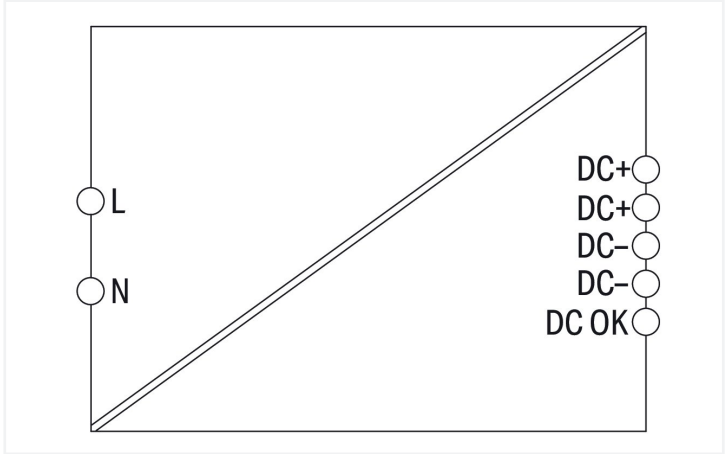


Data Sheet | Item Number: 787-1602

Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 1 A output current; NEC Class 2; DC OK signal

<https://www.wago.com/787-1602>



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
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Technical data			
Input		Output	
Phases	1	Nominal output voltage $U_{o\ nom}$	24 VDC (SELV)
Nominal input voltage $U_{i\ nom}$	1 x 100 ... 240 VAC	Output voltage range	23 ... 28.5 VDC (adjustable)
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC	Default Setting	DC 24 V
Input voltage derating	-2.5 %/V (< 95 VAC)	Nominal output current $I_{o\ nom}$	1 A (24 VDC); 1.2 A (
Nominal mains frequency range	44 ... 66 Hz; 0 Hz	Nominal output power	24 W
Input current I_i	≤ 0.28 A (240 VAC); ≤ 0.49 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); ≥ 20 ms (100 VAC)		



Signaling and communication	
Signaling	1 x LED DC OK (green) 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED (U _o)

Efficiency/power losses	
Power loss P _I	≤ 1 W; ≤ 4 W (230 VAC; nominal load)
Power loss (max.) P _{I(max)}	5 W (100 VAC / 24 VDC; 1 A)
Efficiency (typ.)	86 %

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	≤ 35 VDC
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit ≤ 39 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 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 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



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)
Climatic category	3K3 (per EN 60721)

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 9.0	EC002540
ETIM 8.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143060417
Customs tariff number	85044083900

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
  		
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

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
MFD for SEMI F47 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 787-1602



Documentation

Bid Text			
787-1602	04.07.2019	xml 6.92 KB	
787-1602	03.06.2019	docx 20.54 KB	

Instruction Leaflet			
Primär getaktete Stromversorgungen CLASSIC	17.05.2021	pdf 1620.11 KB	

CAD/CAE-Data

CAD data
2D/3D Models 787-1602



CAE data	
EPLAN Data Portal 787-1602	
WSCAD Universe 787-1602	
ZUKEN Portal 787-1602	

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 stretcha-
ble; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pie-
ces 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