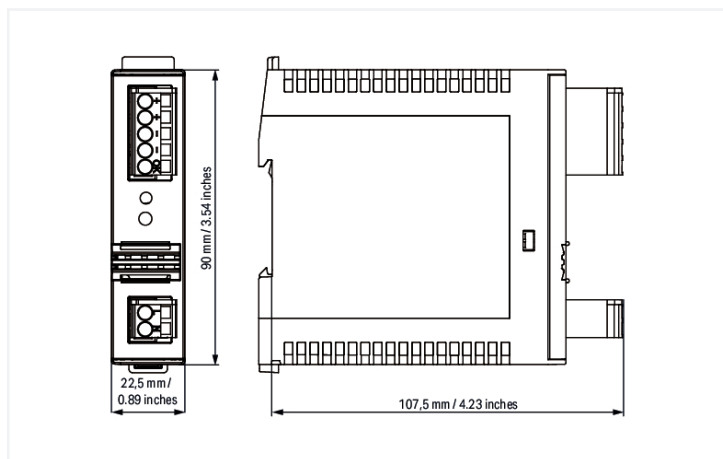
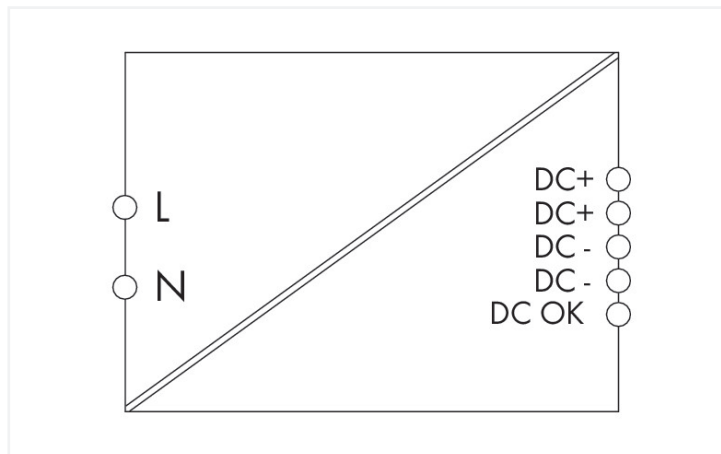


Data Sheet | Item Number: 787-1602

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

Technical data

Input	
Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x AC 100 ... 240 V
Input voltage range	1 x AC 85 ... 264 V; DC 120 ... 300 V
Input voltage derating	-2.5 %/V (
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.28 A (240 VAC); ≤ 0.49 A (100 VAC)
Discharge current	≤ 0.25 mA
Inrush current	≤ 30 A
Power factor correction (PFC)	passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 20 ms (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 23 ... 28.5 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o, \text{nom}}$	1 A (24 VDC); 1.2 A (
Nominal output power	24 W
Deviation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	Constant current

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	≤ DC 35 V
Oversvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Oversvoltage 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	

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 (
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

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	-	-
MFD with product refe- rence WAGO GmbH & Co. KG	-	-

Approvals for marine applications



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


Downloads




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 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