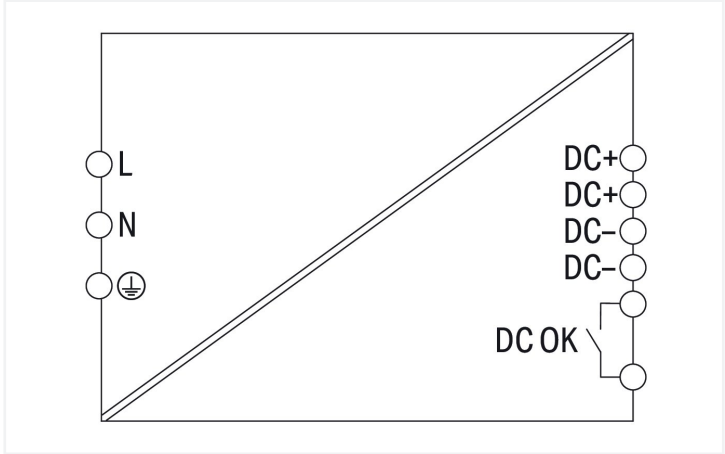


Data Sheet | Item Number: 787-1631

Switched-mode power supply; Classic; 1-phase; 12 VDC output voltage; 15 A output current; TopBoost; DC OK contact

<https://www.wago.com/787-1631>



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- DNV approval

Technical data

Input	
Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.93 A (240 VAC); ≤ 2.05 A (100 VAC)
Discharge current	≤ 1 mA
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 28 ms (230 VAC); ≥ 28 ms (100 VAC)

Output	
Nominal output voltage $U_{o\text{nom}}$	12 VDC (SELV)
Output voltage range	11.5 ... 15 VDC (adjustable)
Default Setting	DC 12 V
Nominal output current $I_{o\text{nom}}$	15 A (12 VDC)
Nominal output power	180 W
Deviation	≤ 1 %
Residual ripple	≤ 35 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

Signaling and communication	
Signaling	1 x LED DC OK (green) 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/power losses	
Power loss P_i	≤ 4.4 W; ≤ 21.8 W (230 VAC; nominal load)
Power loss (max.) $P_{i(\text{max})}$	24.7 W (100 VAC / 12 VDC; 15 A)
Efficiency (typ.)	90 %

Circuit protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C



Safety and protection		
Isolation voltage (pri.-sec.)		DC 4.242 kV
Isolation voltage (pri.-PE)		DC 2.2 kV
Isolation voltage (sec.-PE)		0.7 kVDC
Protection class		I
Protection type		IP20; per EN 60529
Resistance to reverse feed		≤ 25 VDC
Overtoltage category		II
Pollution degree		2
Transient suppression (primary)		Varistor
Overtoltage protection; secondary		Internal protective circuit ≤ 20 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		55 mm / 2.165 inches
Height		127 mm / 5 inches
Depth from upper-edge of DIN-rail		172 mm / 6.772 inches

Mechanical data		
Mounting type		DIN-35 rail

Material data		
Fire load		0 MJ
Weight		930 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		-5 %/K (> 60 °C, 196 ... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC)
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 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	4055143060509
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	-	-
UK-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 787-1631

Download icon

Documentation

Bid Text

787-1631	04.07.2019	xml 6.98 KB	Download icon
787-1631	03.06.2019	docx 20.50 KB	Download icon

Instruction Leaflet

Primär getaktete Stromversorgungen CLASSIC	pdf 244.90 KB	Download icon
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CAD/CAE-Data

CAD data

2D/3D Models 787-1631	Download icon
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CAE data

EPLAN Data Portal 787-1631	Download icon
WSCAD Universe 787-1631	Download icon
ZUKEN Portal 787-1631	Download icon

Engineering-Software

Configuration and Commissioning Software

WAGO Line Length Calculation	1.3.5 09.12.2019	exe 329.50 KB	Download icon
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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 Mounting adapter

1.1.2.1 DIN-rail adapter



Item No.: 787-897/000-010
Carrier rail adapter made of zinc die-cast; horizontal mounting of 787-16xx (TS35)

1.1.3 Tool

1.1.3.1 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