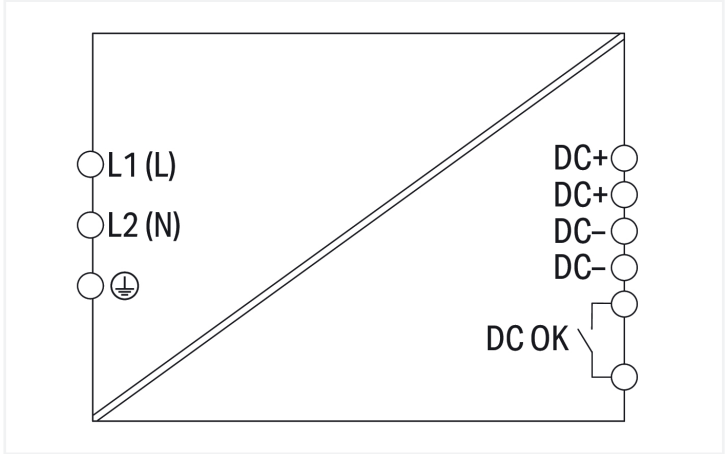


Data Sheet | Item Number: 787-1628

Switched-mode power supply; Classic; 2-phase; 24 VDC output voltage; 5 A output current; TopBoost; DC OK contact

<https://www.wago.com/787-1628>



Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- 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 EN 60950-1/UL 60950-1; PELV per EN 60204

Technical data

Input		Output	
Phases	1 / 2	Nominal output voltage $U_{o\ nom}$	24 VDC (SELV)
Nominal input voltage $U_{i\ nom}$	(1 / 2) x 200 ... 500 VAC	Output voltage range	23 ... 28.5 VDC (adjustable)
Input voltage range	(1 / 2) x 180 ... 550 VAC; 254 ... 780 VDC	Default Setting	DC 24 V
Input voltage derating	-0.5 %/V (< 200 VAC); -0.4 %/V (< 280 VDC)	Nominal output current $I_{o\ nom}$	5 A (24 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz	Nominal output power	120 W
Input current I_i	≤ 1.25 A (200 VAC); ≤ 0.67 A (500 VAC)	Deviation	≤ 1 %
Discharge current	≤ 1 mA	Residual ripple	≤ 30 mV (peak-to-peak)
Inrush current	≤ 30 A (NTC)	Current limitation	$1.1 \times I_{o\ nom}$ (typ.)
Power factor	≥ 0.52	Overload behavior	Constant current
Power factor correction (PFC)	Passive		
Mains failure hold-up time	≥ 126 ms (500 VAC); ≥ 15 ms (200 VAC)		

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	≤ 0.94 W; ≤ 16.36 W (230 VAC; nominal load); ≤ 14.55 W (400 VAC; nominal load)
Power loss (max.) $P_{i\ (max.)}$	18.2 W (200 VAC / 24 VDC; 5 A)
Efficiency (typ.)	89 %

Circuit protection	
Internal fuse	T 3.15 A / 500 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	
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	≤ 35 VDC	
Overvoltage category	II	
Pollution degree	2	
Transient suppression (primary)	Varistor	
Overvoltage protection; secondary	Internal protective circuit ≤ 40 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/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	42 mm / 1.654 inches	
Height	127 mm / 5 inches	
Depth from upper-edge of DIN-rail	143.5 mm / 5.65 inches	

Mechanical data		
Mounting type	DIN-35 rail	

Material data		
Fire load	0.614 MJ	
Weight	600 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	-2.5 %/K (> 55 °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 SEMI F47

Commercial data	
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143259156
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 8.0	EC002540
ECCN	NO US CLASSIFICATION

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	TP TC 004/2011	EAC CoC 03078	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
GZO Almaty Standart			MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
EAC	TP TC 020/2011	EAC CoC 03081	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
GZO Almaty Standart					
UL	UL 508	E255817			
Underwriters Laboratories Inc.					
UR	UL 60950-1	E255815			
Underwriters Laboratories Inc.					

Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00000KT



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-1628

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Documentation

Bid Text

787-1628	04.07.2019	xml 7.20 KB	Download icon
787-1628	04.06.2019	docx 21.23 KB	Download icon

Instruction Leaflet

Primär getaktete Stromversorgungen CLASSIC	pdf 159.50 KB	Download icon
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CAD/CAE-Data

CAD data

2D/3D Models 787-1628	Download icon
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CAE data

EPLAN Data Portal 787-1628	Download icon
WSCAD Universe 787-1628	Download icon
ZUKEN Portal 787-1628	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

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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