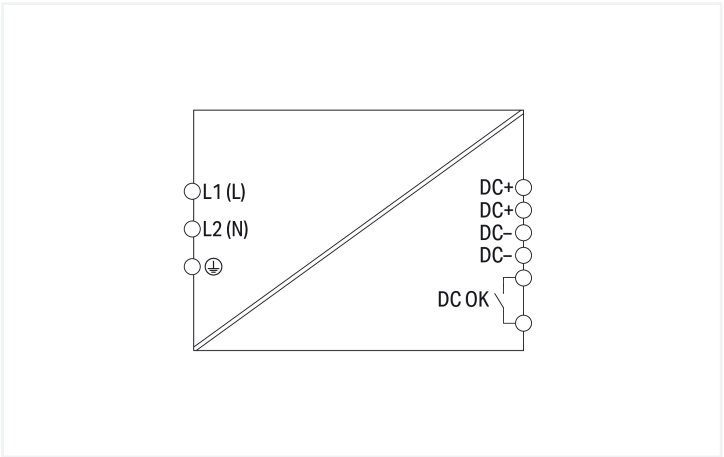


Data Sheet | Item Number: 787-1628

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	
Phases	1 / 2
Nominal input voltage $U_{i\text{nom}}$	(1 / 2) x 200 ... 500 VAC
Input voltage range	(1 / 2) x 180 ... 550 VAC; 254 ... 780 VDC
Input voltage derating	-0.5 %/V (< 200 VAC); -0.4 %/V (< 280 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 1.25 \text{ A}$ (200 VAC); $\leq 0.67 \text{ A}$ (500 VAC)
Discharge current	$\leq 1 \text{ mA}$
Inrush current	NTC
Power factor	≥ 0.52
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 126 \text{ ms}$ (500 VAC); $\geq 15 \text{ ms}$ (200 VAC)

Output	
Nominal output voltage $U_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Default Setting	24 VDC
Nominal output current $I_{o\text{nom}}$	5 A (24 VDC)
Nominal output power	120 W
Deviation	$\leq 1 \%$
Residual ripple	$\leq 30 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (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	$\leq 0.94 \text{ W}$; $\leq 16.36 \text{ W}$ (230 VAC; nominal load); $\leq 14.55 \text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{i(\text{max.})}$	18.2 W (200 VAC / 24 VDC; 5 A)
Efficiency (typ.)	89 %



Circuit Protection	
Internal fuse	T 3.15 A / 500 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and protection	
Isolation voltage (pri.-sec.)	4.242 kVDC
Isolation voltage (pri.-PE)	2.2 kVDC
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	0.36 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 10.0	EC002540
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates		
General approvals		General approvals
  		UR Underwriters Laboratories Inc.
		UL 60950-1
		E255815
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



Declarations of conformity and manufacturer's declarations

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	DNV-CG-0339, Aug. 2021	TAA00000KT

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-1628



Documentation

Bid Text
787-1628
04.07.2019
xml 7.20 KB
787-1628
04.06.2019
docx 21.23 KB



Instruction Leaflet
Primär getaktete Stromversorgungen CLASSIC
pdf 159.50 KB



CAD/CAE-Data

CAD data
2D/3D Models 787-1628



CAE data
EPLAN Data Portal 787-1628
WSCAD Universe 787-1628
ZUKEN Portal 787-1628



Engineering-Software

Configuration and Commissioning Software
WAGO Line Length Cal- culation
1.3.5 09.12.2019
exe 329.50 KB



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