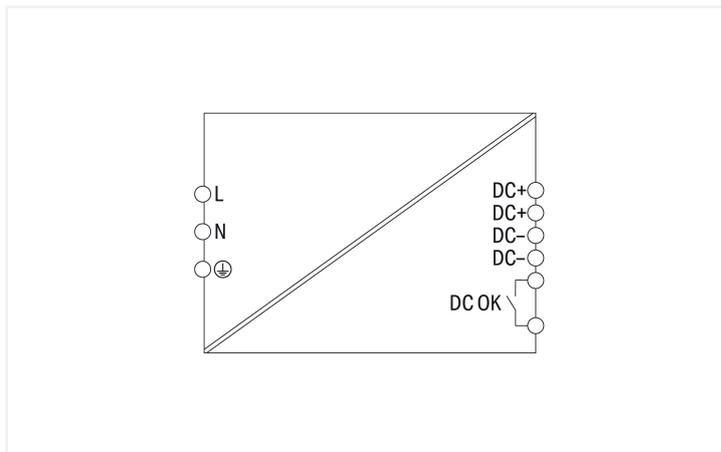


Data Sheet | Item Number: 787-1634/000-070

Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 20 A output current; TopBoost; DC OK contact

<https://www.wago.com/787-1634/000-070>



Similar to illustration

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
- Coated PCBs (with Bectron PL 1104 or Voltatex 2010), resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A

Technical data

Input	
Phases	1
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-1.8 %/V (< 105 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 2.23 A (230 VAC); ≤ 5.56 A (100 VAC)
Discharge current	≤ 1 mA
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC); ≥ 8 ms (100 VAC)

Output	
Nominal output voltage $U_{o, nom}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC (adjustable)
Default Setting	DC 24 V
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Deviation	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current
TopBoost	See instruction leaflet

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_l	≤ 7.2 W; ≤ 42.4 W (230 VAC; nominal load)
Power loss (max.) $P_{l(max)}$	68.3 W (100 VAC / 24 VDC; 20 A)
Efficiency (typ.)	92 %

Circuit protection

Internal fuse	T 10 A / 250 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (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
Protective coating	Coated PCBs
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/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

Connection 2

Connection type	Output
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inches

Physical data

Width	95 mm / 3.74 inches
Height	127 mm / 5 inches
Depth from upper-edge of DIN-rail	170 mm / 6.693 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0.797 MJ
Weight	1600 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

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143786331
Customs tariff number	85044083900

Product Classification

UNSPSC	39121004
ETIM 9.0	EC002540
ETIM 10.0	EC002540
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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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

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance
787-1634/000-070



Documentation

Instruction Leaflet

Primär getaktete	24.07.2017	pdf	↓
Stromversorgung;	04.03.2022	1622.10 KB	



CAD/CAE-Data

CAD data

2D/3D Models
787-1634/000-070



Engineering-Software

Configuration and Commissioning Software

WAGO Line Length Cal- culation	1.3.5 09.12.2019	exe	329.50 KB	↓
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1 Compatible Products

1.1 Optional Accessories

1.1.1 Mounting adapter

1.1.1.1 DIN-rail adapter



[Item No.: 787-897/000-010](#)

Carrier rail adapter made of zinc die-cast;
horizontal mounting of 787-16xx (TS35)

1.1.2 Tool

1.1.2.1 Operating tool



[Item No.: 210-769](#)

SCREWDRIVER; green