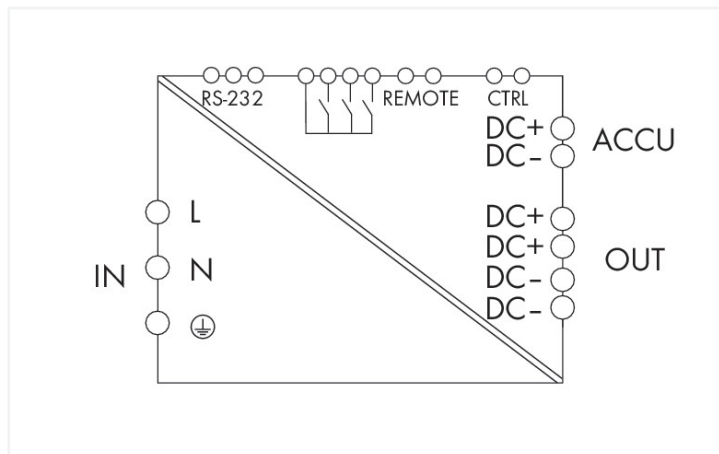


Data Sheet | Item Number: 787-1675

Switched-mode power supply with integrated charger and controller; Classic; 1-phase; 24 VDC output voltage; 5 A output current; communication capability; 10,00 mm²



<https://www.wago.com/787-1675>



Features:

- Switched-mode power supply with integrated charger and controller for uninterruptible power supply (UPS)
- Battery control technology for smooth charging and predictive maintenance applications
- Potential-free contacts provide function monitoring
- Buffer time can be set on site via rotary switch
- Parameter setting and monitoring via RS-232 interface
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Technical data

Input

Nominal input voltage $U_{i, nom}$	AC 100 ... 240 V
Input voltage range	AC 85 ... 264 V; DC 120 ... 372 V
Input voltage derating	-1.5 %/V (< 110 VAC); -1 %/V (< 150 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.1 A (230 VAC; 5 ADC); ≤ 2.2 A (110 VAC; 5 ADC)
Discharge current	≤ 1 mA
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive

Output

Nominal output voltage $U_{o, nom}$	DC 24 V (SELV)
Output voltage range	DC 23 ... 28.5 V (mains operation); 18.5 ... 27.5 VDC (buffer mode)
Nominal output current $I_{o, nom}$	5 A
Nominal output power	120 W
Deviation	≤ 1 %
Residual ripple	≤ 50 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.); TopBoost
Overload behavior	Constant current

Energy storage systems

Buffer time	1 s ... 20 min or constant; PC mode; configurable via software
Switch-on threshold (adjustable)	DC 20 ... 25.5 V (adjustable via software; 22 VDC (pre-configured))
Charging current	0.3 ... 1 A
End-of-charge voltage	DC 26 ... 29.5 V (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873, 787-876, 787-1671

Signaling and communication

Signaling	1 x Alarm LED (red) 1 x Battery charge LED (yellow) 1 x LED DC OK (green) 3 x Signal output (24 VDC; max. 200 mA in total) 1 x RS-232 interface
Operation status indicator	Green LED (DC OK) Yellow LED (battery mode) Red LED (alarm)
Communication	RS-232 serial interface
Remote input	Switching buffer mode off

Efficiency/power losses

Power loss P_1	≤ 5.2 W (buffer mode; 24 VDC; 5 A); ≤ 17 W (Mains operation; 230 VAC; 24 VDC; 5 A); ≤ 22 W
Power loss (max.) $P_{1(max)}$	30 W (90 VAC; charging)
Efficiency (typ.)	88 %

Circuit protection

Internal fuse	T 4 A / 250 VAC (input side)
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)	DC 0.7 kV
Protection class	I
Protection type	IP20; per EN 60529
Reverse voltage protection	Yes
Resistance to reverse feed	\leq DC 35 V
Oversvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Oversvoltage protection; secondary	Internal protective circuit ≤ 38 VDC (in the event of a fault)
Parallel operation	Yes, max. 3 battery modules for buffer time extension
Series operation	No
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 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 type 2	Interface
Connection technology 2	CAGE CLAMP®
WAGO connector 2	WAGO 734 Series
Solid conductor 2	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor 2	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Strip length 2	6 ... 7 mm / 0.24 ... 0.28 inches
Cable length (max.)	3 m (Output, battery control)

Physical data

Width	60 mm / 2.362 inches
Height	127 mm / 5 inches
Depth from upper-edge of DIN-rail	135.5 mm / 5.335 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0.78 MJ
Weight	847.8 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 (> 50°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 EN 61558-2-16 UL 60950 UL 508 DNV

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821502616
Customs tariff number	85044083900

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
UL Underwriters Laboratories Inc.	UL 508	E255817
UL Underwriters Laboratories Inc.	UL 60950-1	E255815

Approval	Standard	Certificate Name
EU-Declaration of Conformity 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 787-1675	↓
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Documentation

Manual

Product Manual Primary Switch Mode Power Supply with Integrated UPS Charger and Controller	V 1.0.0	pdf 3133.43 KB	↓
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Quick-Start Guide

Quickstart for Software 759-870	V 1.0.0	pdf 3043.43 KB	↓
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Bid Text

787-1675	12.07.2019	xml 9.33 KB	↓
787-1675	12.07.2019	docx 23.28 KB	↓
ausschreiben.de 787-1675			↓

Instruction Leaflet

Primär getaktete Stromversorgung mit integrierter USV Lade- und Kontrolleinheit	05.05.2020	pdf 247.29 KB	↓
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CAD/CAE-Data

CAD data


2D/3D Models 787-1675	↓
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CAE data

EPLAN Data Portal 787-1675	↓
WSCAD Universe 787-1675	↓
ZUKEN Portal 787-1675	↓

Engineering-Software

Configuration and Commissioning Software

WAGO Software	4.13	zip	
759-870	10.05.2021	38762.69 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cables and connectors

1.1.1.1 Communication cable



Item No.: [787-892](#)

RS-232 communication cable; Length 1.8 m; for 0787-1675

1.1.1.2 Connecting cable



Item No.: [761-9005](#)

USB adapter; with 1m connection cable

1.1.2 Marking

1.1.2.1 Marking strip



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

1.1.3 Mounting adapter

1.1.3.1 DIN-rail adapter



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

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

1.1.4 Power supply

1.1.4.1 Uninterruptible power supply



Item No.: 787-871

Lead-acid AGM battery module; 24 VDC input voltage; 20 A output current; 3.2 Ah capacity; with battery control; 2,50 mm²



Item No.: 787-873

Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 12 Ah capacity; with battery control; 10,00 mm²



Item No.: 787-872

Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 7 Ah capacity; with battery control; 10,00 mm²



Item No.: 787-1671

Lead-acid AGM battery module; 24 VDC input voltage; 5 A output current; Capacity: 0.8 Ah; with battery control



Item No.: 787-876

Lead-acid AGM battery module; 24 VDC input voltage; 7.5 A output current; 1.2 Ah capacity; with battery control

1.1.5 Tool

1.1.5.1 Operating tool



Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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