

MINI-DC-UPS/12DC/4

Order No.: 2866598



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Uninterruptible power supply with integrated power supply unit, 4 A, in combination with MINI-BAT/12/DC 1.6 Ah or 2.6 Ah



Commercial data	
EAN	 4 046356 418522
Pack	1
Customs tariff	85049091
Country of Origin	CN
Catalog page information	Page 622 (IF-2011)

Product notes

WEEE/RoHS-compliant since:
09/06/2008



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Product description

The MINI-DC-UPS provide an uninterruptible DC voltage both in case of AC power supply network and in the event of mains interferences. The wide-range input allows input voltages from 85 V AC to 264 V AC; 4 A is provided at the output with a regulated and adjustable output voltage from 10 V DC to 16 V DC. The rechargeable battery module supplies an output voltage from 13.6 V DC to 9.6 V DC in buffer mode.

A 1.6 Ah or a 2.6 Ah rechargeable battery module is optionally used depending on the required buffer time. The buffer time varies depending on the load current.

Technical data

Input data

Nominal input voltage	100 V AC ... 240 V AC
AC input voltage range	85 V AC ... 264 V AC
DC input voltage range	100 V DC ... 350 V DC (UL508: 100...250 V DC)
Current consumption	Approx. 0.5 A
	0.65 A (for 230 V AC)
	Approx. 1.15 A
	1.35 A (for 120 V AC)
Inrush surge current	< 34 A
Power failure bypass	(refer to the diagram)
Buffer period	20 min (4 A)
Input fuse	3.15 A (slow-blow, internal)
Permissible backup fuse	B6
	B10
	B16
Power factor (cos phi)	Approx. 0.5
Protective circuit/component	Varistor

Output data

Nominal output voltage	12 V DC (AC input voltage available: 10 to 16 V DC, AC input voltage not available: 13.6 to 9.6 V DC)
Setting range of the output voltage	10 V DC ... 16 V DC (AC input voltage available, AC input voltage not available: Output voltage depending on the battery voltage: 13.6 V DC ... 9.6 V DC)
Output current	4 A
Derating	60 °C ... 70 °C (2.5%/K)
Connection in parallel	No
Connection in series	Yes
Max. capacitive load	Unlimited
Control deviation	< 1 % (change in load, static 10% ... 90%)
Residual ripple	< 50 mV _{PP}
Peak switching voltages nominal load	< 100 mV _{PP}
Maximum power dissipation idling	3.8 W
Power loss nominal load max.	10.5 W

General data

Width	67.5 mm
Height	99 mm
Depth	115 mm
Net weight	0.45 kg
Memory medium	External, rechargeable battery 1.6 Ah / 2.6 Ah
Efficiency	> 82 %
Insulation voltage input/output	2 kV (routine test) 4 kV (type test)
Degree of protection	IP20
Protection class	II (in an enclosed control cabinet)
MTBF (IEC 61709, SN 29500)	> 500000 h
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C derating)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Max. permissible relative humidity (operation)	95 % (at 25 °C, no condensation)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontally 0 mm, vertically 50 mm
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 50081-2
Noise immunity	EN 61000-6-2:2005
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard – Electrical equipment of machines	EN 60204
Standard - Safety of transformers	EN 61558-2-17
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV) EN 61558-2-17
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard – Safety extra-low voltage	EN 60950-1 (SELV) EN 60204 (PELV)
Standard - Safe isolation	DIN VDE 0100-410 DIN VDE 0106-1010
Standard – Protection against shock currents, basic requirements for protective separation in electrical equipment	DIN VDE 0106-101
UL approvals	UL Listed UL 508 UL/C-UL Recognized UL 60950

Connection data, input

Connection method	Pluggable COMBICON screw connections,
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Stripping length	8 mm
Screw thread	M3

Connection data, output

Connection method	Pluggable COMBICON screw connections,
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Stripping length	8 mm

Signaling

Continuous load current	≤ 20 mA
Status display	LED "Power Good", green
Note on status display	Buffer module is loaded: LED ON
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M3
Output name	Alarm
Output description	Relay output

Maximum switching voltage	≤ 12 V
Output voltage	12 V
Continuous load current	≤ 200 mA
Status display	LED red
Note on status display	Malfunction/alarm: LED permanently lit
Output name	Battery charge
Output description	Relay output
Maximum switching voltage	≤ 12 V
Output voltage	12 V
Continuous load current	≤ 200 mA
Status display	LED yellow, flashing
Note on status display	Battery charge/battery is being charged: LED flashing
Output name	Battery mode
Output description	Relay output
Type of signaling	LED, active switching output
Maximum switching voltage	≤ 12 V
Output voltage	12 V
Continuous load current	≤ 200 mA
Status display	Yellow LED
Note on status display	Battery mode/buffer mode: LED permanently lit

Certificates



Certification CUL, UL, UL Listed
 Certifications applied for: UL-EX LIS / CUL-EX LIS

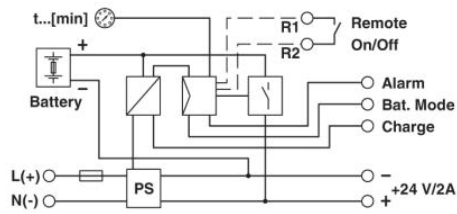
Accessories

Item	Designation	Description
General		
2866572	MINI-BAT/12DC/1.6AH	Rechargeable battery module, lead AGM, VRLA technology, 12 V DC, 1.6 Ah.

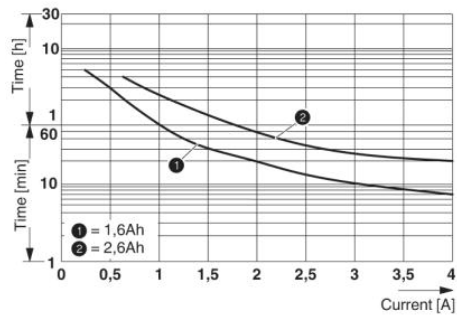
2866569	MINI-BAT/12DC/2.6AH	Rechargeable battery module, lead AGM, VRLA technology, 12 V DC, 2.6 Ah.
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Drawings

Block diagram



Diagram



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