

SFP544 Safety Power



Input: Single-phase 115 - 230 Vac
 Output: 12 - 24 - 48 Vdc
 Temperature compensation
 Deep Discharge protections
 Charging curve IUoUO, constant voltage and constant current Battery Life Test function (Battery Care)
 Three charging levels: Boost, Trickle and Recovery
 Protected against short circuit and inverted polarity
 Signal output (contact free) for discharged or damaged battery, Modbus, Mains / Back-UP
 Combined with DC UPS series
 Wall Mount
 Protection degree IP30 ; Space saving

Product Selection

Input Voltage	Output Voltage	Output Current	Internal Device	Battery Capacity
115 – 230 Vac	12 Vdc	3A	CBI123A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	12 Vdc	5A	CBI125A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	12 Vdc	10A	CBI1210A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	12 Vdc	35A	CBI1235A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	24 Vdc	3A	CBI243A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	24 Vdc	5A	CBI245A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	24 Vdc	10A	CBI2410A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	24 Vdc	20A	CBI2420A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	48 Vdc	5A	CBI485A	1.2 – 3 – 7 – 12 Ah
115 – 230 Vac	48 Vdc	10A	CBI4810A	1.2 – 3 – 7 – 12 Ah

Norms and Certifications

In Conformity to: IEC/EN 60335-2-29 Battery chargers; EN60950 / UL1950 Electrical safety; EN54-4 Fire Detection and fire alarm systems; 89/336/EEC EMC Directive; 2006/95/EC (Low Voltage); DIN41773 (Charging cycle); Emission : IEC 61000-6-3; Immunity: IEC 61000-6-2. CE.

Climatic Data

Ambient temperature (operation)	-25 ÷ +70°C
De Rating T ³ > 50°C	- 2.5%(In) / °C
Ambient temperature Storage	-40 ÷ +85°C
Humidity at 25 °C no condensation	95% to 25°C
Cooling	Auto convection

General Data

Insulation voltage (IN/OUT)	3000 Vac
Insulation voltage (input / ground)	1605 Vac
Insulation voltage (Output / ground)	500 Vac
Protection Class (EN/IEC 60529)	IP20
Protection class (PE Connected)	I, with PE
Dimensions (w-h-d)	60x100x190 mm
Weight	0.6 kg approx.

Input Data

Nominal Input Voltage	115 – 230 Vac
Voltage range	90 ÷ 264 Vac
Frequency	47 ÷ 63 Hz

Generic Output Data “Load side”

Output Voltage 12 24 – 48 Vdc.:	Depending on CBI
Turn-On delay after applying mains voltage	1 sec. (max)
Continuous current (without battery) I _{load=In}	I _n A
Continuous current (With battery) I _{load= In+ I_{batt}}	2 x I _n
Max. current Output Load (Main) I _{load (4 sec.)}	3 x I _n max.
Max. current Output Load (Back Up) I _{load (4 sec.)}	2 x I _n max.
Push Button or Remote Input Control (RTCONN cable)	Start From Battery Without Main
Short-circuit protection	Yes
Over Load protection	Yes
Overheating Thermal protection	Yes

Load Output 24 Vdc

Output voltage (at I _n)	22 - 28.8 Vdc
Nominal current I _n = I _{load}	Depending On CBI
Threshold alarm Battery almost flat	20 – 21 Vdc batt

Protections against total discharge	19 – 20 Vdc batt
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Load Output 12 Vdc

Output voltage (at I _n)	22 - 28.8 Vdc
Nominal current I _n = I _{load}	Depending On CBI
Threshold alarm Battery almost flat	10 – 11 Vdc batt
Protections against total discharge	9 – 10 Vdc batt

Battery Output Connection

Output Voltage Battery	Follow Out Load
Boost charge (25 °C) (at I _n)	2.4 V/cell.
Max. time Bust Charge	15 h
Min. time Bust Charge	1 min.
Jumper Configuration battery type (V cell) Ni-Cd (optional); when Trickle Charging mode	2,23;2,25;2,27;2,3; NiCd:1,5 (20 cell.)
Charging current max I _{batt}	In ± 5%
Charging current limiting I _{adj}	10 ÷ 100 % / I _{bat}
Reverse battery protection	Yes
Sulfated battery check	Yes by Jumper
Detection of element in short circuit	Yes
Quiescent Current	≤ 5 mA
Charging Curve automatic: IUoUo	3 stage
Remote Input Control (RTCONN cable)	Boost /Trickle

Signal Output (free switch contacts)

Main or Backup Power	Yes
Low Battery	Yes
Fault Battery	Yes

Type of Signal Output Contact

Max. Current can be switched (EN60947.4.1):	
Max. DC1: 30 Vdc 1 A; AC1: 60 Vac 1A	Resistive load
Min.1mA at 5 Vdc	Min permissive load

Signal Input / Output (RJ45)

Temp. Comp. Battery (with external probe)	Yes
Remote monitoring display	Yes
Connection	Modbus