

SFP120 Safety Power



Input: Single-phase 115 - 230 - 277 Vac

Output: 24 Vdc 5 A

Device Inside: CBI245A

Battery Temperature compensation

Batteries: 3.2; 7; 12; 18; 45 Ah

Deep Discharge protections

Charging curve IUoU, constant voltage and Constant current

Life Test Battery: detect internal battery resistance

Charging State: Recovery, Bulk, Absorption, Boost, Float; Refresh

Protected against short circuit, Overload and inverted polarity

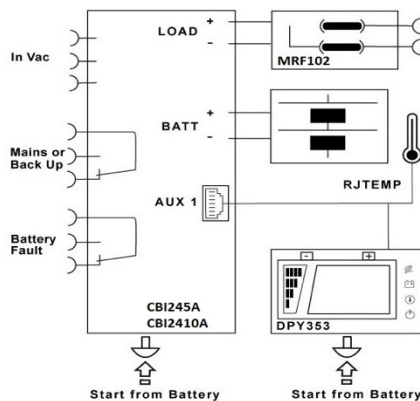
Signal output (Dry contact) for discharged or damaged battery, Mains / Back-UP

Wall Mount

Protection degree IP30; Space saving

Technical Feature

Uninterruptible Power supply unit for fire protection and voice alarm system, compliant with European standard EN54-4:1997+A1:2002 +A2:2006. The device integrates DC-Ups ADELSYSTEM "All In One" CBI with different battery sizes and two independent outputs, controlled by an internal electronic circuit breaker. The device can supply the load while charging and testing the battery. When mains failure occurs, the load continues to be supplied by the battery without any output interruption. In any situation the battery is tested and temperature charging compensation is performed thanks to the temperature sensor probe RJTEMP. With DPY353 it is possible to monitor the state and the alarms of the system, all of them transmitted by Dry contact. Alarms Type: Battery Fault (Internal Impedance), Mains failure, Generic Fault, battery disconnected, battery element in short circuit.



Input Data

	SFP120 (CBI245A)
Nominal input voltage	115 - 230 - 277 Vac
Input voltage range	90 - 305 Vac
Inrush Current ($V_n - I_n$ nom. Load) I_{2t}	$\leq 11 \text{ A} \leq 5 \text{ msec.}$
Frequency	47 - 63 Hz
Input Current (115 - 230 Vac)	2.8 - 1.3 A
Internal fuse (not replaceable)	4 A
External Fuse (recommended) MCB curve B	10 A

Battery Output

Boost charge (25 °C) (at In)	28.8 Vdc
Max. time Boost Charge	15 h
Min. time Boost Charge	1 min.
Float charge (25 °C) (at In) (max)	27.5 Vdc
Jumper Configuration battery type (V/cell)	2.23; 2.25; 2.27; 2.3
Recovery Charge	2 - 20 Vdc
Charging current max I_{bat}	5 A $\pm 5\%$
Charging current limiting I_{adj}	20 - 100% I_{bat}
Reverse battery protection	Yes
Sulfated battery check	Yes by Jumper
Detection of element in short circuit	Yes

Quiescent Current max.	$\leq 100 \text{ mA}$	
Charging Curve automatic: IUoUo	5 stage	
Remote Input Control (RTCONN cable)	Boost / Float	
Battery Charge Capacity	3 - 7 - 12 - 18 Ah	45Ah
Charging Current Limiter Position	Min	Max
Maximum internal battery resistance	600 m Ω	400 m Ω

Load Output

Output voltage Vdc (at In)	22 - 28.8 V	
Out Voltage Max	32 V	
Nominal current I_{load} ($I_{max,a}$); $\pm 5\%$	4 A (3 - 7- 12-18 Ah)	3 A (45 Ah)
Different Battery type		
Continuous current (without battery) $I_{load} = I_n$ ($I_{max,b}$); $\pm 5\%$	5 A	
Continuous current (I min)	0 approx.	
N° 2 Out true MRF102 Fuse Breaker	1 - 5 A x Out (approx.)	
Continuous current (I min) on N°2 Out	0 approx.	
Start From Battery Without Main (Remote Input Control)	RTCONN (cable) Push Button	
Threshold alarm Battery almost flat (Low Batt)	20 - 21 Vdc batt	
Protections against total discharge (LVD)	19 - 20 Vdc batt	
Efficiency (at 50% of rated current)	$\geq 90 \%$	
Residual Ripple	$\leq 300 \text{ mVpp}$	
Turn-On delay after applying mains voltage	1 sec. (max)	
Start up with Strong Load (capacitive load)	Yes, Unlimited	
Dissipation power load max (W)	17	

Signal Output (free switch contacts)

Main or Backup Input Power	Yes
Low Battery	Yes
Fault Battery or system	Yes

Type of Signal Output Contact

Dry Contact. 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)

Fault System / Low Battery	C	NC	NO
Main or Back Up	C	NC	NO

Signal Input / Output (RJ45)

Temp. Comp. Battery (with external probe): Aux Out	RJ Temp (cable)
Remote monitoring display: Aux Out	RJ 45 (cable)

Climatic Data

Ambient temperature (operation)	-5 + +40°C
De Rating $T_a > 40^\circ\text{C}$	- 2.5%/(In) / °C
Ambient temperature Storage	-40 + +85°C
Humidity at 25 °C no condensation (max.)	95% to 25°C
Altitude: 0 to 2 000m - 0 to 6 560ft	No restrictions
Altitude: 2 000 to 6 000m - 6 560 to 20 000ft	De-rating 5°C/1000m
Cooling	Auto convection

General Data

Insulation voltage (IN/OUT)	3000 Vac
Insulation voltage (Input / Earth, PE)	2000 Vac
Insulation voltage (Out Load & Battery / Earth, PE)	500 Vac
Insulation voltage (Out Load & Battery / Fault System & Main or Back Up terminal)	500 Vac
Protection Class (EN/IEC 60529)	IP30

Reliability: MTBF IEC 61709	> 300.000 h
Pollution Degree Environment	2
Protection class (PE Connected)	I, with PE
Dimensions (w-h-d)	305x360x185 mm
Weight	kg 6.8 approx...

Fuse

Internal fuse (not replaceable)	4 A
Battery Fuse (F) Type: Blade Fuse	20A
MRF102 Electronic Fuse	10A Auto Restart

Ordering

Enclosure coating White , Code:	SFP120W
Enclosure coating Black , Code:	SFP120B

Accessories Included

Temperature Battery Compensation Probe	RJTEMP451
Coupler for connection RJTemp451	RJ45COUPLER
Cable RJ45-RJ45 length 0.5m N°2 pcs	RJCONN45
Cable Grand N°2 pcs	PG 13.5
Fuse Cabling for Battery protection	20 A
Wiring cables for internal connections	Yes
Faston and screws for Earth connection	Yes

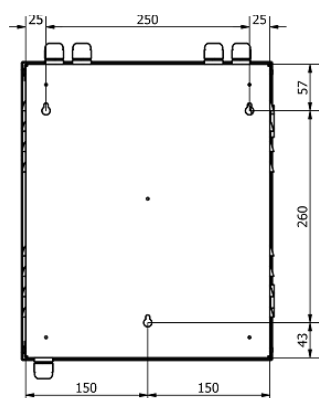
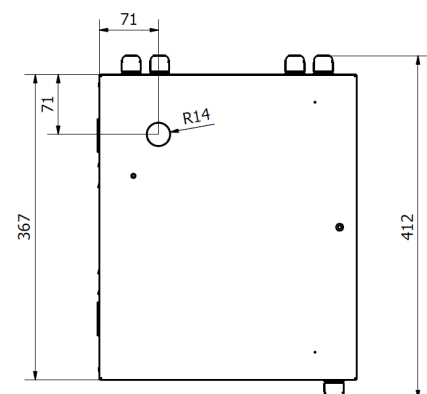
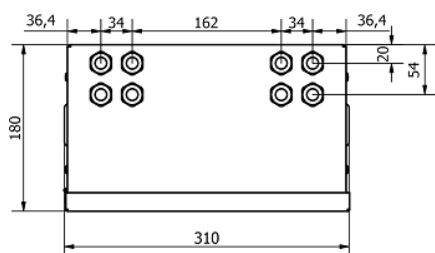
Accessories not Included

Tamper Switch for the door	SWC102
----------------------------	--------

Packaging

The device is shipped with all components not assembled. Please find Video on YouTube for the assembling instructions.

Drawings



Battery Configurations

