# SFP120 Safety Power





SFP120 (CBI245A)

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

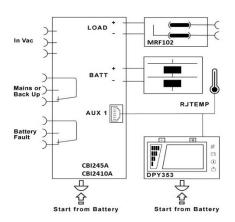
Signal output (Dry contact) for discharged or damaged battery, Mains / Back-UP

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

iliput Data	311 120 (CDI2 13/1)		
Nominal input voltage	115 - 230 - 277 Vac		
Input voltage range	90 - 305 Vac		
Inrush Current (Vn - In nom. Load) I2t	≤ 11 A ≤ 5 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 Ibatt	5 A ± 5%		
Charging current limiting ladj	20 - 100% Ibat		
Reverse battery protection	Yes		
Sulfated battery check	Yes by Jumper		
Detection of element in short circuit	Yes		

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Quiescent Current max.	≤ 100 mA	
Charging Curve automatic: IUoUo	5 stage	
Remote Input Control (RTCONN cable)	Boost / Float	
Battery Charge Capacity	3-7-12-	45Ah
	18 Ah	
Charging Current Limiter Position	Min	Max
Maximum internal battery resistance	600 mΩ	400 mΩ
Load Output		
Output voltage Vdc (at In)	22 - 28.8 V	
Out Voltage Max	32 V	
Nominal current Iload (Imax,a); ± 5%	4 A (3 - 7-	3 A
Different Battery type	12-18 Ah)	(45 Ah)
Continuous current (without battery) Iload= In	5 A	
(lmax,b); ± 5%		
Continuous current (I min)	0 approx.	
N° 2 Out true MRF102 Fuse Breaker	1 – 5 A x Ou	t (approx.)
Continuous current (I min) on N°2 Out	0 approx.	
Start From Battery Without Main (Remote Input	RTCONN (ca	able) Push
Control)	Button	
Threshold alarm Battery almost flat (Low Batt)	20 – 21 Vdc	
Protections against total discharge (LVD)	19 – 20 Vdc	batt
Efficiency (at 50% of rated current)	≥ 90 %	
Residual Ripple	≤ 300 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 lo	oad)	
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 (ca	ıble)
Remote monitoring display: Aux Out	RJ 45 (cable	
Climatic Data	,	<i></i>
Ambient temperature (operation)	-5 ÷ +40°C	
De Rating Ta > 40°C	- 2.5%(ln) / °	
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 restriction	15
Altitude: 2 000 to 6 000m - 6 560 to 20 000ft	De-rating 5°C/1000m	
Cooling	Auto convec	
General Data		<del></del> -
Insulation voltage (IN/OUT)	3000 Vac	
	2000 Vac	
Insulation voltage (Input / Earth, PE)	500 Vac	
Insulation voltage (Out Load & Battery / Earth, PE) Insulation voltage (Out Load & Battery / Fault	500 Vac	
System & Main or Back Up terminal)	JUU VAL	
Protection Class (EN/IEC 60529)	IP30	
1 TOLOGIOTI OIGSS (LIVILO 00023)	11 30	

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	

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

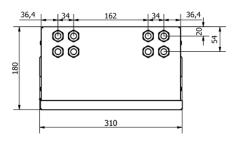
### Ordering

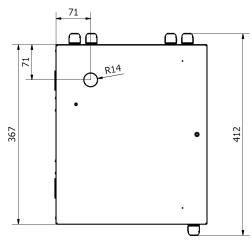
Enclosure coating White, Code:	SFP120W	
Enclosure coating Black, Code:	SFP120B	

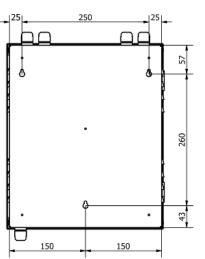
## Accessory

Temperature Battery Compensation Probe	RJTEMP451
Coupler for connection RJTemp451	RJ45COUPLER
Tamper Switch for the door	SWC102

## Drawings







## **Battery Configurations**

