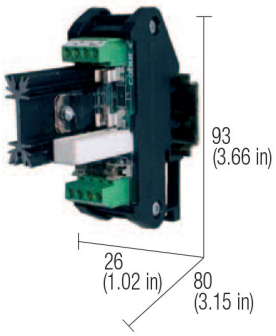
DIN Rail Battery Charging Module
XCSBC

Your Source for Automation Components

Accessory for charging buffer batteries

- Battery charger
- Allows to connect in redundant parallel two power supplies
- Suitable for power supplies up to 10 A
- Battery protection fuse
- Battery feedback protection diode
- Current charge limiting resistor



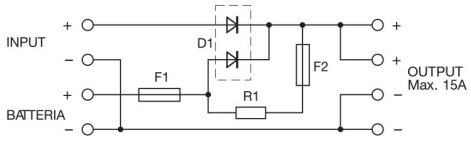
NOTES

The depth dimension includes the terminal blocks and the DIN rail clamp.

(1) The charging current is dependent on the battery type and the required level of charge, it's about:
- 0,5A max @ 12Vdc battery
- 1A max @ 24Vdc battery

(2) The device do not avoid total discharge which always shortens battery life.

BLOCK DIAGRAM



VERSIONS	Cod. XCSBC
	CSBC
GENERAL TECHNICAL DATA	
Power supply rated voltage	6...30 Vdc
Power supply rated current	> 3 A
Load rated voltage	6...29.5 Vdc
Load max current	10 A
Charge current limitation	(1)
Battery disconnecting voltage	not available
IN/OUT drop voltage	0.5 V
Battery protection fuse	F1 = T 6.3 A / F2 = T 1 A
Protections	battery short circuit /overload (2)
Alarm signal	—
Operating temperature range	–10...+50°C
Reference Standards	IEC 664-1, DIN VDE
Overvoltage category/Pollution degree	II / 2
Protection degree	IP 20 IEC 529, EN60529
Connection terminal	2.5 mm² fixed screw type
Housing material	UL94V-0 plastic material
Approx. weight	80 g (2.82 oz)
Mounting information	vertical on rail, adjacent
MOUNTING ACCESSORIES	
Mounting rail type according to IEC60715/TH35-7.5	**PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB**
Mounting rail type according to IEC60715/G32	**PR/DIN/AC, PR/DIN/AS, PR/DIN/AL**

APPLICATIONS

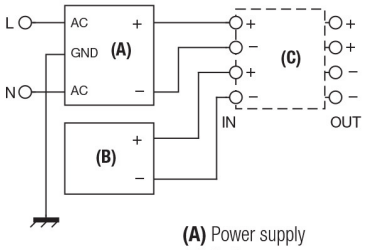
1. Battery charger

With this module is possible to use a power supply as a battery charger while it is feeding the load.
The diode provides decoupling between the battery and the power supply; the resistance limits the current charge limiting power supply output current and assuring longer life to the battery. The F1 fuse protects the battery and its wiring against short circuit.
The next picture shows the connections.

2. Parallel connection of power supplies

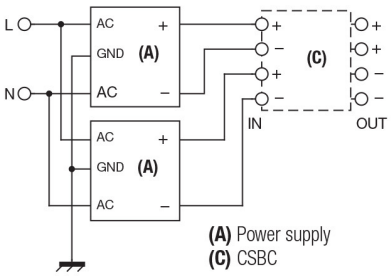
It is possible to use this module also to connect two power supplies in parallel, not provided with output decoupling diode, eliminating "Fuse 2" in series to charging current limiting resistor.
The next picture shows the connections.

1. Battery charger



(A) Power supply
(B) Battery
(C) CSBC

2. Parallel connection of power supplies



(A) Power supply
(C) CSBC