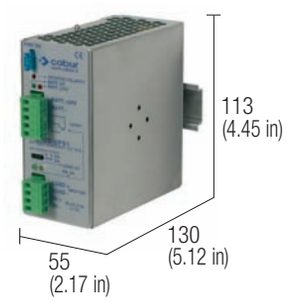
Accessory for charging and controlling buffer batteries

- Suitable for power supply with adjustable output
- Suitable for lead batteries
- Suitable for charging batteries while feeding loads
- Battery protection fuse
- “Deep discharge” battery protection
- Status display LED and failure contact

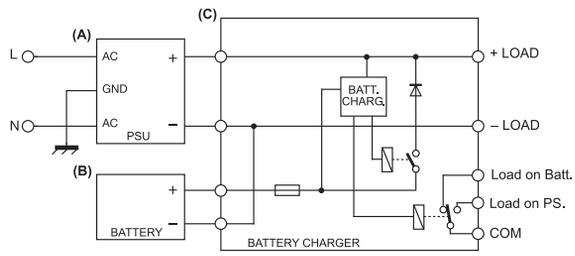


CE

NOTES

The depth dimension includes the DIN rail clamp.

BLOCK DIAGRAM



VERSIONS	Cod. XCSUPS1	Cod. XCSUPS2
Output 24 Vdc	**CS-UPS1**	
Output 12 Vdc		**CS-UPS2**

GENERAL TECHNICAL DATA		
Power supply input voltage	26...28.5 Vdc	12...15 Vdc
Power supply rated current	≥ 3 A	≥ 3 A
Load rated voltage	**26...28 Vdc**	**10...15 Vdc**
Max load current	**15 A**	**15 A**
Charging current	selectable 2 A or 4 A	selectable 2 A or 4 A
Battery disconnection voltage	≤ 18 Vdc ±0.5V	≤ 9.2 Vdc ±0.5V
IN/OUT voltage drop	0.4 V	
Battery protection fuse	T 15 A 42 V blade type	
Protections	Reverse polarity, short circuit, battery overload, battery deep discharge	
Alarm signals — Power supply OK:	SPDT 24 V / 1 A	
Battery OK	green LED	
Battery LOW	red LED	
Load OK	yellow LED	
Battery reverse polarity	green LED	
Operating temperature range	–10...+50°C	
EMC Standards	IEC 664-1, DIN VDE	
Overvoltage category/Pollution degree	II / 2	
Protection degree	IP 20 IEC 529, EN60529	
Connection terminal	2.5 mm² pluggable screw type	
Housing material	aluminium	
Approx. weight	300 g (10.58 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

All power supplies with adjustable output voltage to +15% of rated voltage can be used as lead battery chargers, suitable to be used as back up supply in case of AC line breakdown.

The CS-UPS-1 circuit regulate the current charging the battery, and it is possible to set it up to 2A or 4A charging current ; CS- UPS1 disconnects the load form the battery whenever the battery voltage drops under 19Vdc, to avoid total discharge which always shortens battery life.

The module is provided with a fuse protecting the battery and its cable to prevent fire risk in case in case of short circuit. The module is provided with the following leds diplay:

PS OK: The green LED is on when the power supply feeding the CS-UPS1 is OK and the load is supplied by the power supply while the battery is continuously charged.

LOAD OK: Yellow LED is on when CS-UPS1 feeds the load.

BATT. OK: Green LED is on when the power supply is turned OFF or disconnected and indicates that the battery is connected and can feed the load.

BATT. LOW: Red LED on when the battery is low or discharged.

REVERSE BATTERY: Red LED is on when battery is connected with reverse polarity.

Alarm contact: a relay with an SPDT contact 1A/24V switches when the load is no more supplied by the power supply and then is supplied by the battery. This contact allows to get a remote warning on the status of the system even in the case that the power supply is turned OFF or damaged, or non more supplied for any reasons.