RTU7M – Power Backup Cards

General Description

Power backup card enables to use the batteries for RTU7M backup. Card switches automatically between external power supply and connected battery, if the power is lost. It also charges the battery and checks the status.

Power Backup Card RTU7M CHG(I)

Power backup cards are designed for DC. They do not have the function of power supply for the RTU, they only provide stable voltage on output, if the power is lost. There must be installed the appropriate power supply card in the RTU. The output from power backup card is connected to the input of power supply card.

Card RTU7M CHG24-24/30

One power backup card can provide the backup for the RTU, where it is fitted in and also for another RTUs (up to maximal load). Thus, it is not necessary to have the power backup card in each RTU in system, there is only necessary to use the batteries and external power supply with sufficient performance.

The charging process is controlled in accordance with ambient temperature and the status of battery is regularly checked. Version CHGI is galvanically isolated from bus.

Front panel of card RTU7M CHG

Technical Specification

Card	RTU7M CHG24-24/30	RTU7M CHGI48-48/30
Input voltage	20 ÷ 30 V DC (max. 250 W)	42 ÷ 60 V DC (max. 450 W)
Range in User Center (Source voltage)	0 ÷ 30 V	0 ÷ 60 V
Max. input current	10 A DC	8,5 A
Input / output / battery protection	Fuse 5 × 20 F 16 A	Fuses F 12 A / F 8 A / F 8 A
External protection	In case of connection to network system IT, it is necessary two-pole protection.	
Output voltage / current	Same as input voltage 20 ÷ 30 V DC / 8 A (200 W)	Same as input voltage 42 ÷ 60 V DC / 5 A (250 W), 39V – when running from battery
Battery voltage	24 V	48 V
Range in User Center (Battery voltage)	0 ÷ 30 V	0 ÷ 60 V
Max. battery loading current	3.0 A (can be set in parameterization SW)	
Max. battery maintenance voltage	27.4 V	54.8 V
Switch off voltage (battery protection)	22 V	44 V
Battery tester	Yes	
Testing current	8.5 A	8 A
Temperature sensor	Measured range -55 ÷ +125 °C, accuracy ±0.5 °C in range -10 ÷ +85 °C	
Connectors	2 × WAGO 231-302/026-000 (part of delivery), RJ-12	
Wire cross-section	0.08 ÷ 2.5 mm^2	
Signaling LED	STAT, PWR IN, PWR OUT, BAT	
Measurement accuracy	±0.5 % for input and battery voltage	
Dimensions (with mounted front panel)	25 × 172 × 92 mm (W × H × D)	
Position in bus	Any	

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