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640 mA, MDRC SU/S 30.640.1, GH Q631 0049 R0111

Uninterruptible EIB / KNX Power Supply,



The Uninterruptible EIB / KNX Power Supply produces and monitors the EIB / KNX system voltage. The bus line is decoupled from the power supply with the integrated choke.

The power supply is connected to the bus line with a bus connection terminal. A reset is triggered by pressing the reset push button and lasts for 20 seconds (regardless of the duration of the push button action).

The bus line is disconnected from the power supply and the bus devices connected to this bus line are returned to their initial state. If the line should be disconnected for a longer period, the bus connection terminal must be removed from the power supply. Up to two 12 V sealed lead acid batteries can be connected as a back-up energy supply for the

EIB / KNX system voltage in the event of mains failures.

The batteries are charged via the SU/S 30.640.1 during normal operation. The charging voltage is temperature-controlled using a temperature sensor. If a mains failure occurs, the SU/S 30.640.1 is then supplied by the batteries.

The temperature sensor must always be connected to ensure that the battery is charged correctly!

A fault in the Uninterruptible EIB / KNX Power Supply is reported and stored via a potential-free changeover contact. The following faults cause a switching operation at the changeover contact: mains failure, battery fault, overvoltage and overload or short circuit.

Technical data

Power supply	Power supplyPower consumptionPower loss	230 V AC +10/-15%, 45 65 Hz < 60 VA < 10 W
EIB / KNX output	 Number Output voltage Nominal current Sustained short-circuit current Mains failure back-up time (without connected battery) 	1 line with integrated choke 30 V DC +1/-2 V, SELV 640 mA, short circuit proof < 1.5 A 200 ms
Battery back-up	 Battery type Number Nominal voltage Battery capacity Mains failure back-up time Nominal charging current of battery Temperature control	Sealed lead acid battery Max. 2 in parallel 12 V DC Preferably 1 Ah, 7 Ah, 12 Ah, 17 Ah Dependent on battery capacity 650 mA (terminals 9 + 10), for battery capacities > 5 Ah 150 mA (terminals 8 + 10) for battery capacities < 5 Ah Temperature-controlled adjustment of charging voltage via temperature sensor
Potential-free changeover contact	Nominal voltageMax. switching currentMin. switching current	230 V AC or 12/24 V AC/DC 6 A AC or 4 A DC 100 mA (at U < 30 V AC/DC)
Operating and display elements	 - Green LED - Red LED - Reset push button - Red LED - Green LED - Green LED 	"ON": output voltage is OK "I>I _{max} ": overload or short circuit Reset starts when the push button is pressed and lasts 20 s Reset at the EIB / KNX output Main voltage is OK Battery is OK

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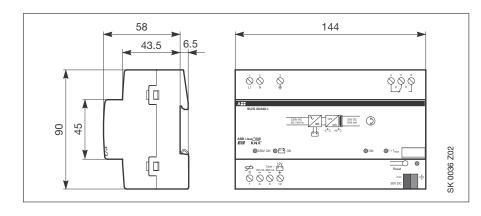
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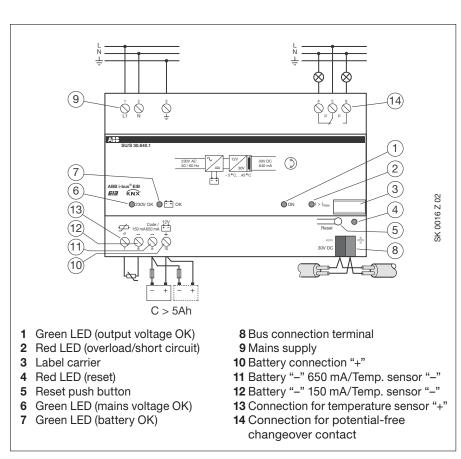
Connections	 Power supply Battery connection Temperature sensor Changeover contact Cable cross-section for all screw terminals EIB / KNX output 	3 screw terminals 2 screw terminals 2 screw terminals 3 screw terminals multi-core 0.2 - 2.5 mm² single-core 0.2 - 4.0 mm² Bus connection terminal (black/red)
Type of protection	– IP 20, EN 60 529	
Ambient temperature range	OperationStorageTransport	- 5 °C + 45 °C - 25 °C + 55 °C - 25 °C + 70 °C
Design	 Modular installation device, proM 	
Housing, colour	- Plastic housing, grey	
Mounting	- On 35 mm mounting rail, DIN EN 60 715	
Dimensions	– 90 x 144 x 64.5 mm (H x W x D)	
Mounting depth/width	- 68 mm/ 8 modules at 18 mm	
Weight	– 0.5 kg	
Certification	- EIB / KNX-certified	
CE norm	 In accordance with the EMC guideline and the low voltage guideline 	

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Dimension drawing



Device connection



Note

During normal operation, the potential-free changeover contact is closed between terminals 4 and 5. In case of a fault, it is closed between terminals 5 and 6.

If a total battery capacity of less than 5 Ah is connected to the Uninterruptible EIB / KNX Power Supply SU/S 30.640.1, the battery is connected to terminals 8 ("150 mA –") and

ed to terminals 8 ("150 mA -") and 10 ("12 V +") while the temperature sensor is connected to terminals 7 ("\vartheta") and 9 ("Code/650 mA -").

If a total battery capacity of more than 5 Ah is used, the battery is connected to terminals 9 ("Code/650 mA –") and 10 ("12 V +") while the temperature sensor is connected to terminals 7 (" ϑ ") and 8 ("150 mA").

If a battery is used, the temperature sensor must always be connected!

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Installation and commissioning

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Switch on the mains voltage once the device has been correctly installed. The green "ON" LED and the green "230 V OK" LED light up. If a battery is connected, the green "Battery OK" LED also lights up. All the other LEDs are switched off. The device is functioning correctly.

The battery test is carried out automatically at 15 minute intervals. It can take up to 15 minutes after switching on the mains voltage until a possible battery fault is indicated. It can also take 15 minutes for the "Battery OK" LED to relight up once the cause of the fault has been rectified.

A battery test can be triggered manually by pressing the reset push button. In this case, a reset is always carried out simultaneously.

If a faulty battery is connected or the polarity of the battery connection is reversed, the green "ON" LED for the battery flashes.