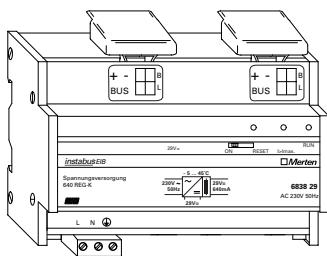


Power supply 640 REG-K



Colour
light grey

Article no.
683829

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1. Function

The power supply 640 REG-K makes the energy available for the bus devices on a line. The device has an integrated choke which isolates the data telegrams from the power supply. The bus voltage is picked up via a bus connecting terminal. A data rail is not required. A further line with its own choke can be supplied via a separately led DC 29 V supply.

The power supply (PS) provides a stabilised safety extra-low voltage (SELV) of DC 29 ± 1 V. The max. total output current is 640 mA.

If the bus devices are evenly distributed on the line, it is possible to operate up to 64 bus devices on one line. The max. cable length between the power supply and the furthest bus device is 350 m.

A slide switch is located under the hinged cover next to the bus connecting terminals. In the "RESET" position, the connected bus devices for the line are reset. This state is indicated by a red LED (RESET) on the device.

i The disconnection of a line (RESET) should be retained for at least 30 seconds.

The bus voltage is connecting by setting the slide switch to the "ON" position. The green LED (RUN) indicates that the power supply is ready for operation.

If the output current is too high, the red overcurrent LED ($I > I_{max}$) lights up or flashes. In the event of a short circuit between the red and black conductors of the bus cable, the green LED (RUN) is extinguished or flashes.

i Once the short circuit has been rectified, the power supply must be switched to the "RESET" state for approx. 5 seconds.

Meaning of the LEDs

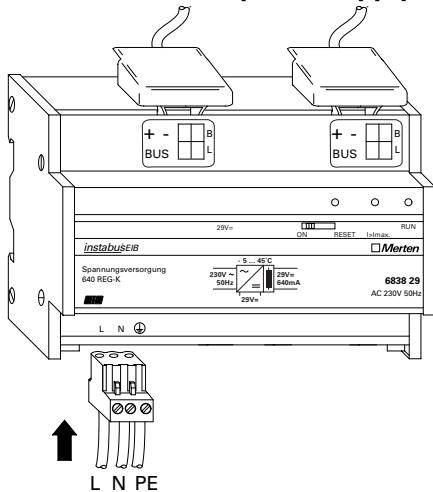
RUN	$I > I_{max}$	RESET	State
green	off	red	Slide switch in OFF or RESET position
green	off	off	Normal mains operation with $I < I_{max}$
green	red	off	Mains operation with $I > I_{max}$, the bus voltage is maintained
flashes green	flashes red	off	Mains operation with $I > > I_{max}$, the bus voltage has failed or there is a short circuit
off	off	off	Short circuit during mains operation

2. Installation

The INSTABUS power supply is mounted on a DIN rail EN 50022-35. A data rail is not required. The bus connection is carried out via the bus connecting terminal supplied with the device. The cable cover is then

placed over the bus connecting terminal to guarantee the safety clearance of the bus cable to the 230 V cables. A maximum of 4 core pairs can be connected to a bus connecting terminal. All the devices that are mounted next to the power supply must at least be equipped with basic insulation.

Connection of the power supply REG-K



3. Technical Data

Mains input

Input voltage: AC 230 V +6%/-10%, 50 Hz
 Output voltage: DC 29 V \pm 1 V, SELV
 Residual ripple: < 50 m Vss
 Output current: DC 640 mA, short-circuit-proof

Ambient temperature

Operation: -5 °C to +45 °C
 Storage: -25 °C to +55 °C
 Transport: -25 °C to +70 °C
 Environment: The device is designed for use at a height up to 2000 m above sea level

Max. humidity: 93%, no moisture condensation

Connections

Mains and PE: Plug-in terminals with screw connection for max. 0.5-2.5 mm
 Bus: Plug for bus connecting terminal
 DC 29 V (output 2): Plug for bus connecting terminal under the hinged cover

Display elements:

Green LED for error-free operation (RUN)

Red LED for short circuit on the line or excessive device load ($I > I_{max}$)

Red LED for monitoring purposes when the voltage is interrupted by pressing the slide switch (RESET)

Operating elements:

Slide switch behind the hinged cover for interrupting the voltage and for resetting the bus devices connected to the lines

EC guidelines:

corresponds to low voltage guideline 73/23/EEC, corresponds to EMC guideline 89/336/EEC

Type of protection:

IP 20

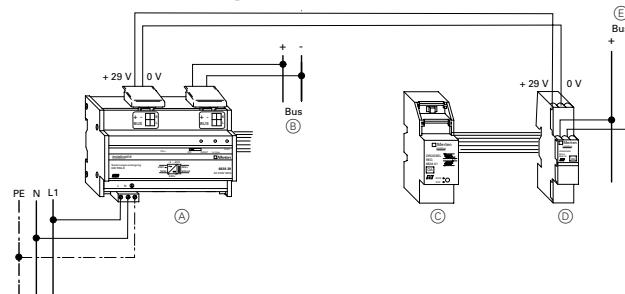
Dimensions:

90x126x65 mm (HxWxD)

Device width:

7 modules = approx. 126 mm

Connection example



Ⓐ Power supply 640 REG

Ⓑ z. B. Hauptlinie Linie 0

Ⓒ Drossel

Ⓓ Verbinder REG/4

Ⓔ z. B. Linie 1

4. Settings in the EIB Tool Software (ETS)

Selection in the product database

Manufacturer: Merten

Product family: 1.1 System devices

Product type: 1.1.01 Power supply

Media type: Twisted Pair

Product name: Power supply 640 REG-K

Order number: 683829