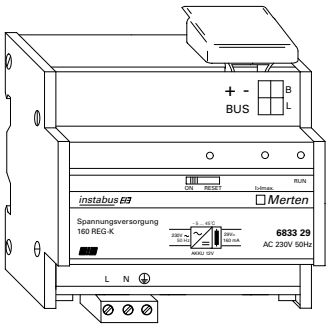
Power supply 160 REG-K



Colour	Article no.
light grey	683329

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1. Function

The power supply makes the energy available for the bus devices on a line. At least one power supply is required per bus line.

The power supply (PS) provides a stabilised safety extra-low voltage (SELV) of DC 29 V ± 1 V. The max. output current is 160 mA. If the bus devices are evenly distributed on the line, it is possible to operate up to 32 bus devices on a line with the standard power consumption of 5 mA. The max. cable length between the power supply and the furthest bus device is 350 m. The bus devices on the connected line can be reset via a slide switch on the power supply (under the hinged cover next to the bus terminal). The state (RESET) is indicated via the red LED (RESET) on the device.

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

The bus voltage is connected 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.

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

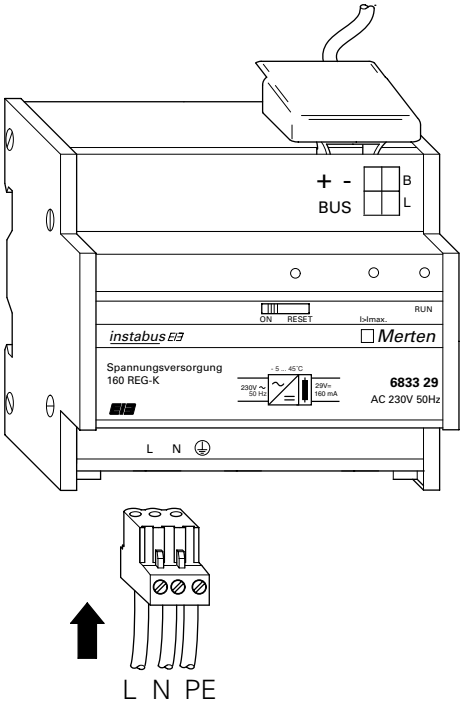
Meaning of the LEDs

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

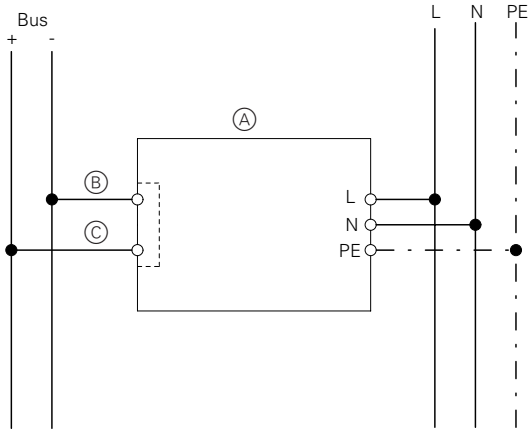


The mains voltage connection is carried out via plug-in terminals with screw connection. The cables can be screwed onto the plug-in terminal before installing the device and then inserted at a later date.

3. Technical Data

Mains input	
Input voltage:	AC 230 V +6%/-10%, 50 Hz
Output voltage:	DC 29 V ± 1 V, SELV
Residual ripple:	< 50 m Vss
Output current:	DC 160 mA, short-circuit-proof
Stored energy time (at nominal current):	> 100 ms
Ambient temperature	
Operation:	-5 °C to +45 °C
Storage:	-25 °C to +55 °C
Transport:	-25 °C to +70 °C
Max. humidity:	93 %
Connections	
Mains and PE:	Plug-in terminal with screw connection for max. 0.5-2.5 mm
Bus:	Plug for bus connecting terminal
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 line
EC guidelines:	corresponds to low voltage guideline 73/23/EEC, corresponds to EMC guideline 89/336/EEC
Dimensions:	90x90x65 mm (HxWxD)
Device width:	5 modules = 90 mm

Connection example



Ⓐ Power supply 160 REG-K
Ⓑ black
Ⓒ red

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 160 REG-K	
Order number:	683329	