EMB 1101
Repeater

The repeater EMB 1101 is designed to process and distribute signals in the FRAKO Starkstrombus. It is necessary to use a repeater for lines with a length of over 1000 m and for bus systems where more than 32 instruments are served by one line. The EMB 1101 also allows to realize star topology.

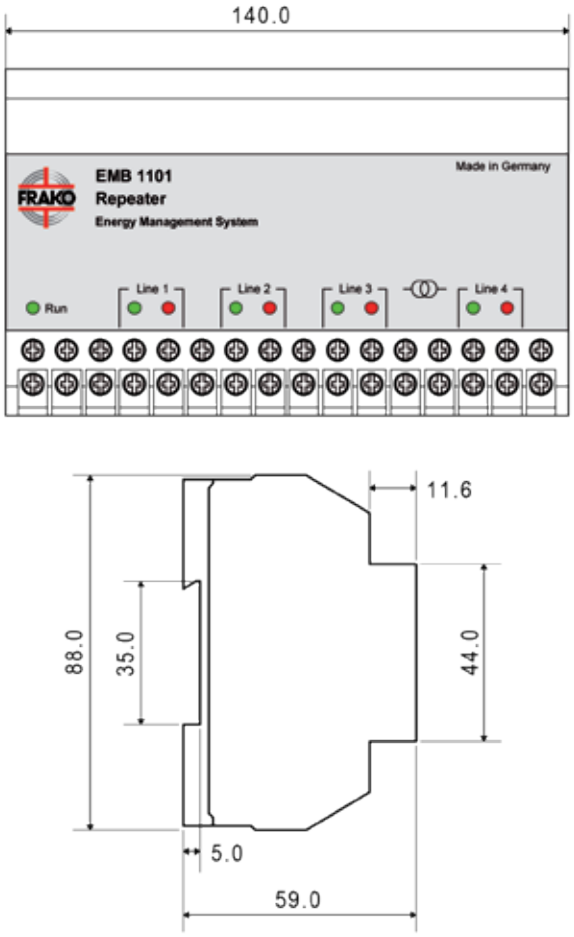
Description

- Device for conditioning and distribution of signals
- Up to 120 instruments can be operated in a bus system
- The repeater is necessary for lines with a length of over 1000 m and for bus systems where more than 32 instruments are served by one line
- Installing the repeater improves the reliability of the bus system, especially under difficult operating conditions that cause interference
- Star wiring system; up to four lines, each connected to a maximum of 32 instruments, can be wired to one repeater
- Cascading repeaters enables bus lenghts of up to 15 km to be installed
- Existing cable connections, which do not use a bus cable specified by FRAKO, can be used for distances of up to 4 km
- The repeater can electrically isolate sections of the bus system in order to prevent stray currents flowing in the FRAKO Starkstrombus
- In case of an electrical error in the connected lines, the error will be automatically detected and displayed, and the corresponding line will be closed
- Data transmission errors are automatically detected and signalled by an LED

Technical Data

Power supply	
Supply voltage	60 V - 230 V + 15 % AC or DC
Frequency	If AC: 48 up to 62 Hz
Power consumption	Approx. 6 VA
Fuse protection	Max. 2 A external prescribed
In- / Outputs	
Quantity	4 lines, thereof 1 line galvanically separated
Protocol	FRAKO Starkstrombus, according to EN 50170 (P-Net), standardized fieldbus, RS-485; transfer rate: 76.8 kbit/s
Display elements	
Operating (Run)	One blinking green LED
Data transfer	One green and red LED per line
Connections	Screw terminals Wire cross-section: max. 2.5 mm²
Mechanical construction	
Dimensions	140 x 90 x 59 mm (W x H x D), DIN module case 8 HP
Ingress protection	Housing IP40, terminals IP20
Version	According to VDE 0411 protection class II (also DIN EN 61010-1)
Housing	PC with 10 % GF, V-0, flammability to UL-94 V-0
Installation	On standard rail 35 mm according to DIN EN 50022
Mounting position	Optional
Weight	Approx. 0.6 kg
Operating conditions	
Ambient temperature	0 °C up to +50 °C
Article-No.	20-10600

Dimensions



Dimensional drawing EMB 1101

All dimensions in mm

Subject to technical changes / © FRAKO GmbH / www.frako.com