

The M-Bus converter is an MP client and converts the information of the MP-Bus of the thermal energy meters 22PE.. and the Belimo Energy Valve™ EV..R2+.. / EV..R3+.. to M-Bus. As an intelligent connection box, it supplies the connected devices with voltage and integrates them on M-Bus.



Type Overview

Type	Output signal
G-22PEM-A01	M-Bus

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption AC	0.9 VA
	Power consumption DC	0.75 W
	Electrical connection	Pluggable spring loaded terminal block max. 2.5 mm ²
	Cable entry	1x cable gland with strain relief ø6...8 mm, 1x cable gland with strain relief 2x ø6 mm, 1x cable gland with strain relief 4x ø6 mm
Materials	Cable gland	PA6, black
	Housing	Cover: PC, orange Bottom: PC, orange Seal: NBR70, black UV resistant
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Degree of protection IEC/EN	IP65
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1
	Quality Standard	ISO 9001
	Pollution degree	2
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-30...50°C [-22...122°F]

Safety notes



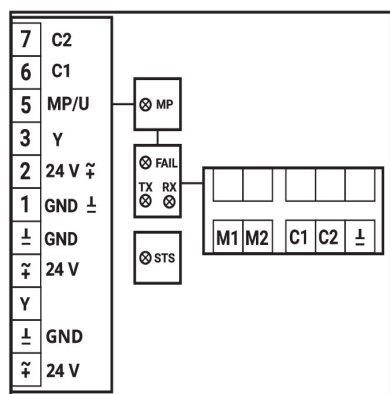
This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Indicators and Operation



MP (green)

ON: Data are transmitted or received from the MP-Bus

FAIL (red)

ON: M-Bus connection is not present

TX (green)

ON: Data are transmitted to M-Bus network

RX (green)

ON: Data are received from M-Bus network

STS (green), Indicates the current status of the unit

ON: Ok
 OFF: No power supply
 Blinking: MP-Bus device not responding

Installation notes



Procedure for replacing the M-Bus converter G-22PEM-A01

1. Before replacing the unit, all data must be read out from device, as otherwise they will be lost.
2. Replace the existing M-Bus converter with a new one of the same type.
3. The replaced M-Bus converter retains the secondary address, derived from the connected thermal energy meter.
4. Primary address is set to zero (0) by default and must be set again.

Procedure for replacing the thermal energy meter 22PE...

1. Read out the data from the M-Bus converter, as otherwise data will be lost.
2. Replace the existing thermal energy meter with a new one of the same type.
3. Secondary address of the M-Bus converter changes derived from the connected thermal energy meter.
4. Primary address of the M-Bus converter is set to zero (0) as soon as a new thermal energy meter is detected and must be set again.

Parts included

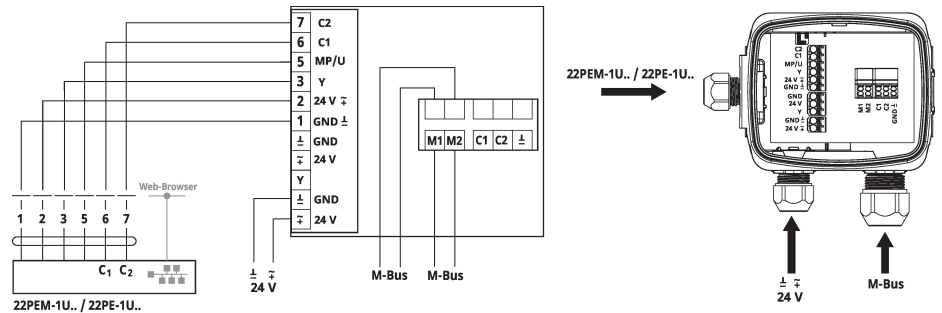
Parts included	Description	Type
	Mounting plate L housing	A-22D-A10
	5 pcs. sealing plugs for cable glands	
	Screws	
	Dowels	

Wiring diagram

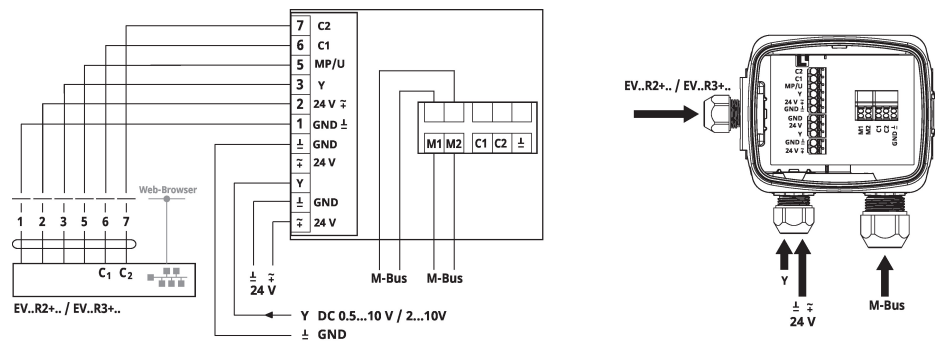
Notes Supply from isolating transformer.



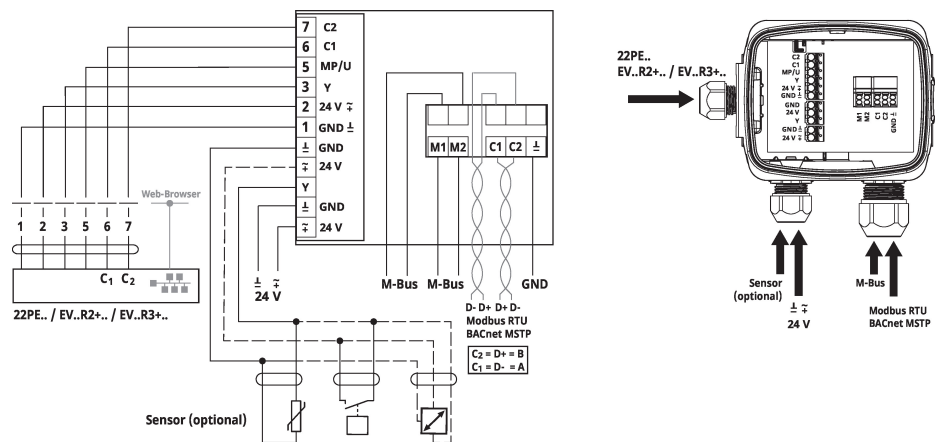
Wiring of thermal energy meter 22PE.. with M-Bus converter



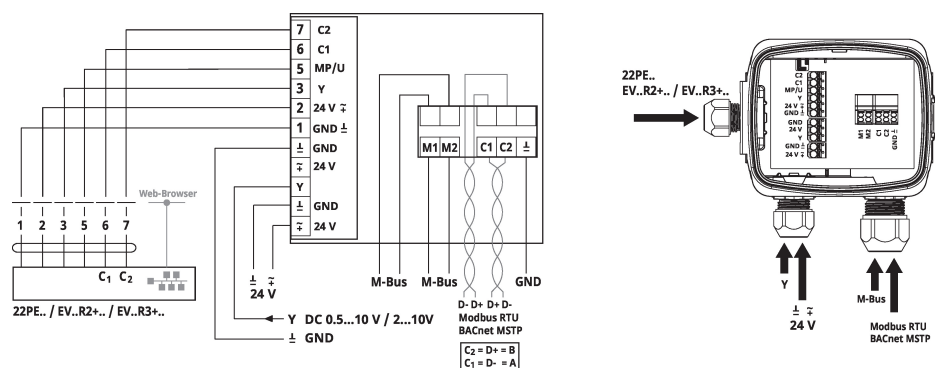
Wiring of Belimo Energy Valve™ EV..R2+.. / EV..R3+.. with M-Bus converter



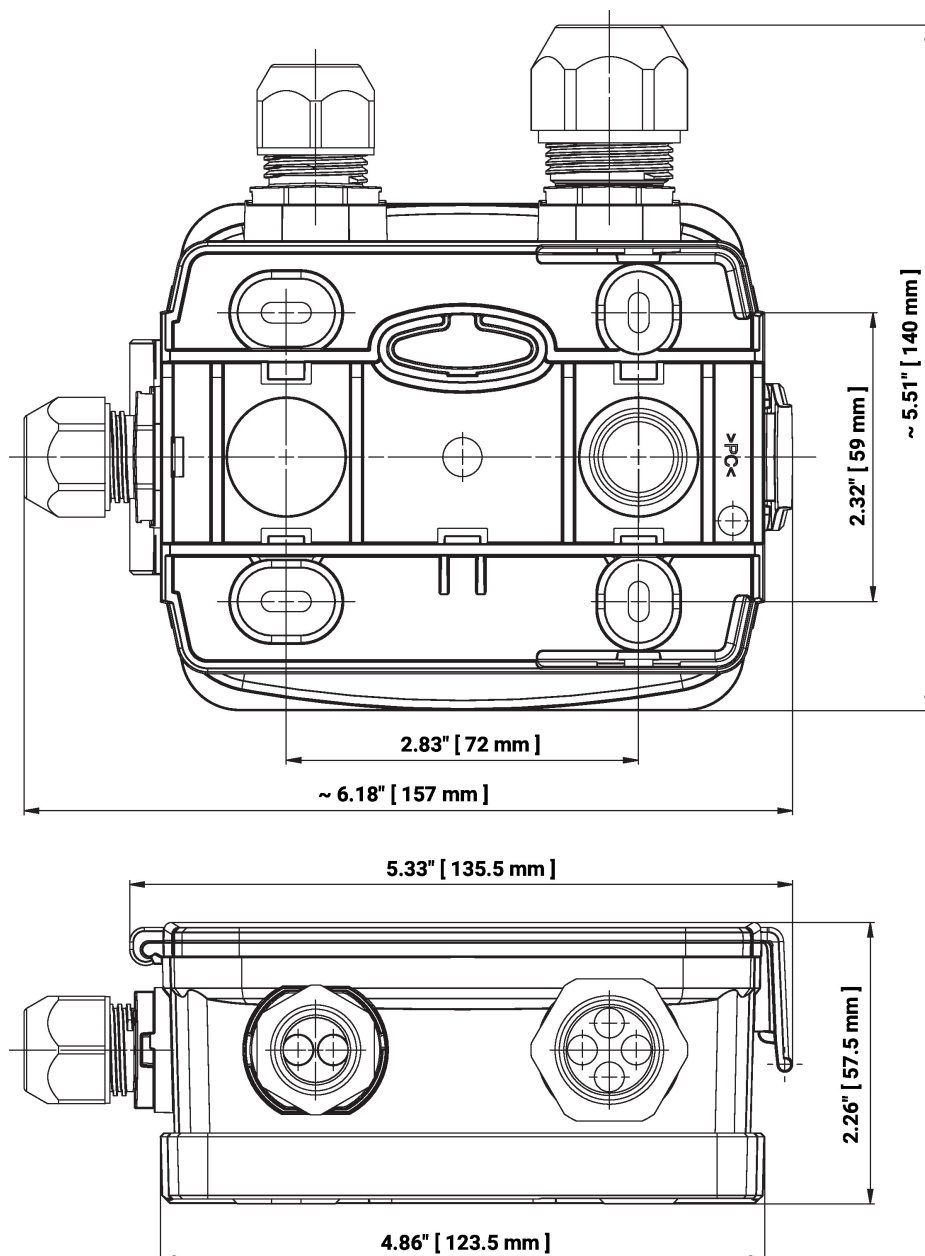
Wiring of thermal energy meter 22PE.. or Belimo Energy Valve™ EV..R2+.. / EV..R3+.. for M-Bus parallel Modbus RTU or BACnet MS/TP



Wiring of thermal energy meter 22PE.. or Belimo Energy Valve™ EV..R2+.. / EV..R3+.. for M-Bus parallel Modbus RTU or BACnet MS/TP (Hybrid)



Dimensions



Type

G-22PEM-A01

Weight

0.325 kg