



Climatix™

## Climatix communication M-Bus module

POL907.00/xxx

**Communication module to connect M-bus devices to  
POL6xx.xxx controllers.**

The POL907.00/xxx communication module offers the following features:

- Up to 6 M-bus slaves, such as heat, water or electricity meters, can be directly connected to the M-bus module (up to 30 slaves with M-bus repeater)
- Module and controller form the M-bus master; the module controls communication and the controller stores the data received from the slaves
- The M-bus module connects the Climatix control system to the slaves via the M-bus network and facilitates remote readout of the slaves' data
- Connection of the M-bus module to the M-bus network is galvanically separated via optocoupler. The bus power supply is short-circuit-proof
- The module must be connected to the left side of a POL6xx.xxx controller

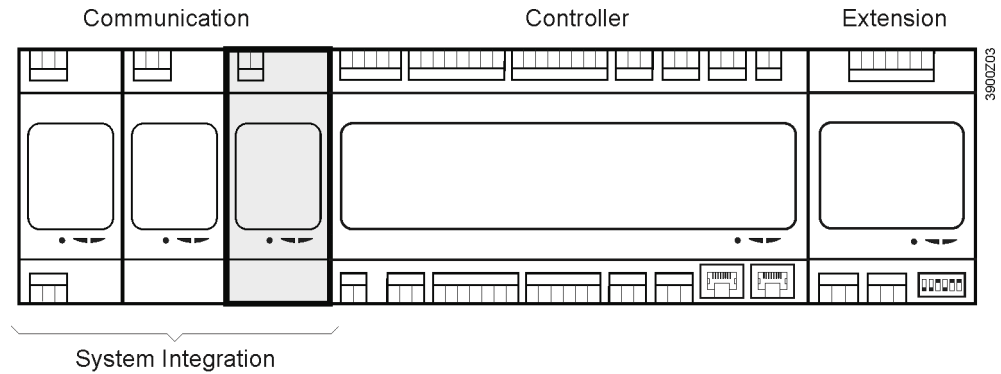
The POL907.00/xxx communication module is part of the Climatix product range (also refer to Data Sheet 3900 and Mounting Instructions M3910).

## The M-bus

The M-bus (Meter bus) is a European standard for remote readout of heat meters. It is also suited for use with all other types of consumption meters plus various sensors and actuators.

With its standardization as a galvanic interface for remote readout of heat meters, this bus will become more and more important for the energy industry. For more information about the M-bus, visit [www.m-bus.com](http://www.m-bus.com).

## Installation concept



## Technical data

### General data

Dimensions	W x H x D: 45 x 110 x 75 mm
Weight excl. packaging	100 g
Base	Plastic, pigeon-blue RAL 5014
Housing	Plastic, light-grey RAL 7035
Power supply	Via system interface from controller DC 5 V (+5% / -5%), max. 400 mA

### M-bus

M-bus interfaces	Plug-in terminals MP+ / MP- Galvanically isolated by optocoupler 2 wires, not interchangeable
Number of bus devices (M-bus slaves)	Without repeater, direct connection: - Max. 6 bus devices (6 standard loads of 1.5 mA) with external M-bus repeater: - Up to 30 bus devices (min. 25 bus devices via repeater)
Baud rate	300 / 600 / 1200 / 2400 / 4800 / 9600 baud
Type of addressing	Primary addressing using the addresses from 1 to 250

**Connection terminals**

Example FKCT

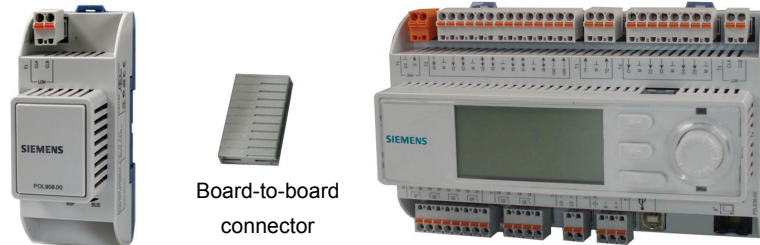
Equipped with plug (standard)	1 Phoenix FKCT 2,5 /2-ST
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For other types of plug (optional), refer to PolyCool range document 3900 (CB1Q3900en\_xx)

Solid wire	0.5...2.5 mm <sup>2</sup>
Stranded wire (twisted or with ferrule)	0.5...1.5 mm <sup>2</sup>

**COMM interface plug**

Board-to-board	ZEC1,0/10-LPV-3,5 GY35AUC2C11
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Board-to-board connector

**System interface**

Equipped with board-to-board plug	ZEC1,0/4-LPV-3,5 GY35AUC2C11
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**Cable types**

M-bus	Refer to M-bus Manual
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**Environmental conditions**

Operation	IEC 721-3-3
Temperature	-40...+70 °C
Humidity	< 90 % r.h.
Atmospheric pressure	Min. 700 hPa, corresponding to max. 3,000 m above sea level
Transport	IEC 721-3-2
Temperature	-40...70 °C
Humidity	<95% r.h.
Atmospheric pressure	Min. 260 hPa, corresponding to max. 10,000 m above sea level

**Protection**

Degree of protection	IP20 (EN 60529)
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**Standards**

Product safety	
Automatic electrical controls	EN 60730-1
Electromagnetic compatibility	
Immunity	EN 60730-1 +A16
Emissions	EN 60730-1 +A16
CE conformity	
EMC directive	2004/108/EC
Low-voltage directive	2006/95/EC
Listings	UL916, UL873 CSA C22.2M205
RoHS directive	2002/95/EC (Europe) ACPEIP (China)

**Ordering data**

Climatix M-bus module	POL907.00/STD
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## M-Bus service pin and LEDs for diagnostics

Service pin button >



LEDs for BSP and BUS diagnostics (green, red and yellow)

Mode	BUS LED status
M-bus running and communication ok	Green on
At least one M-bus device is not running	Yellow on
No M-bus device is running	Red on

Mode	BSP LED status
BSP running and communication with controller	Green on
BSP running but no communication with controller	Yellow on
BSP error (software error)	Red blinking at 2 Hz

## Commissioning notes

### Meter setting

Prior to connecting the M-bus to the ACX51.26 M-bus card, the following meter settings must be made:

Primary address from 1 to 250 (physical address)

Baud rate 300 / 600 / 1200 / 2400 / 4800 / 9600 baud

Enabling the required data, storage no. = 0, tariff = 0

- Energy in kWh
- Volume in m<sup>3</sup>
- Power in W
- Flow rate in l/h
- Flow temperature in °C
- Return temperature in °C

Enabling the required data, storage no. = 1, tariff = 0

- Date of set day: Day, month, (year)
- Energy in kWh on the set day
- Volume in m<sup>3</sup> on the set day

## Engineering notes

- The communication module is attached to the controller with a board-to-board connector
- The connection to the M-bus is made via the T1 port
- For service, use the M-bus service button

## Disposal notes



**The module contains electrical and electronic components and must not be disposed of together with household waste.**

**Local and currently valid legislation must be observed!**

**Layout of POL907.00/xxx  
communication module**

