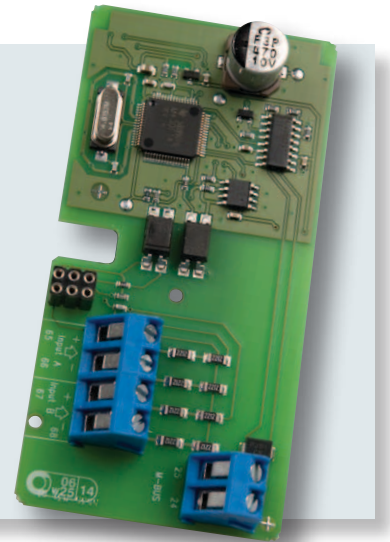


M-Bus Module

for MULTICAL® 62/602 with Medium Data Package

DATA SHEET

- Supplied via M-Bus Master
- Two pulse inputs
- 300/2400/9600 baud
- Programming of primary address, M-Bus ID number, date/time and pulse inputs via the M-Bus Network
- Collision detection
- Supports primary/secondary/enhanced secondary addressing and wild card search
- Fulfils EN 13757



Application

Kamstrup has developed a M-Bus module for MULTICAL® 62/602.

The module is mounted in the meter's module area and is used for remote reading and programming of MULTICAL® 602.

The module is galvanically separated from the meter and is supplied via the

M-Bus master. Thus, the supply of the meter is not burdened by the module.

The module is fitted with two pulse inputs for reading other meters, e.g. water or electricity meters.

By means of the M-Bus module primary address, M-Bus ID number, date/time and pulse inputs (In-A and

In-B) can be programmed via the M-Bus network.

The primary and secondary M-Bus addresses of the module are displayed in the meter.

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Address fields

Primary (000-250)

When supplied from Kamstrup, M-Bus module will automatically use the 2-3 last digits of the meters' customer number as primary address. Otherwise there is no bond between customer number and M-Bus address. MULTICAL® 62/602 has separate registers for the primary M-Bus Addresses of the module.

Secondary (00000000-99999999)

Creating the secondary address the last eight digits of the customer number are used as M-Bus ID number. Furthermore, eight additional digits from the module's software, incl. Kamstrup's manufacturer's ID, can be added, thus extending the secondary address to 16 digits.

Enhanced secondary (00000000-99999999)

The meter's serial number is used for enhanced secondary addressing. This number is unique of each meter and cannot be changed.

Wild card search

Some or all digits of the M-Bus module's secondary or enhanced secondary addresses can be replaced by wild cards.

The M-Bus module will not compare the wild cards to the corresponding digits of its own secondary or enhanced secondary addresses, and it is possible to communicate with the M-Bus module if the other digits fit.

Connections

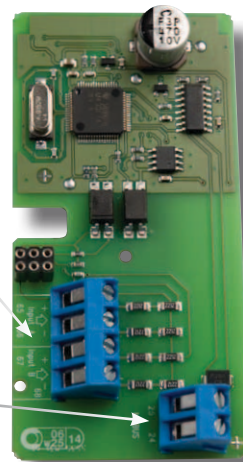
Module

Pulse inputs

Terminal 65	Pulse input A/In-A (+)
Terminal 66	Pulse input A/In-A (-)
Terminal 67	Pulse input B/In-B (+)
Terminal 68	Pulse input B/In-B (-)

M-Bus connections

Terminal 24	M-Bus connection
Terminal 25	M-Bus connection



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Technical data

Data telegram

M-Bus data	Actual data	Target data default settings: monthly values	Manufacturer specific data
Meter number Manufacturer ID Versions ID Meter type Reading counter Configuration	Serial No. Energy E1 Volume V1 Hour counter Error hour counter $T_{forward}$ T_{return} $T_{diff.}$ Actual power Max. power Actual flow Max. flow In-A In-B Cooling Energy E3 Date/Time	Energy E1 Volume V1 Max. power Max. flow VA/In-A VB/In-B Cooling Energy E3 Target date	Info code Prog. No. Config. No. 1 Config. No. 2 Meter No. 1 Meter No. 2 Meter type + revision Module type + revision

Physical features

Power consumption	1 unit load (1.5 mA) per M-Bus Slave
Supply	From M-Bus Master
R_{in} / C_{in}	410 Ω /0.5 nF
Max. cable resistance	29 Ω / 180 nF per pair
Temperature arear	0 - 60°C

Markings/approvals

EN 1434
EN 13757
CE approval

M-Bus Module for MULTICAL® 62/602

with Medium Data Package

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Ordering

Description	Type No.
M-Bus module for MULTICAL® 62/602	670028000000
M-Bus Master MultiPort 250D	MBM-M210000