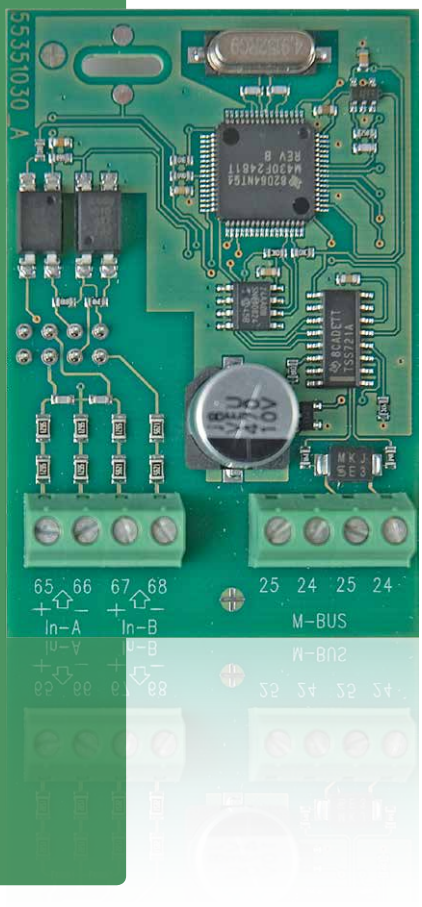
kamstrup

Data sheet

M-Bus Module

for MULTICAL® 402 with MULTICAL® III compatible data package

- 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

A variety of M-Bus modules are avail-able for the Kamstrup MULTICAL® 402 meter.

The contents of the M-Bus data package in the module are similar to the data for the M-Bus modules for MULTICAL® III and MULTICAL® Compact, allowing installation in older applications originally designed for e.g. MULTICAL® III.

The module can also be used together with the old 40 slaves M-Bus Master with display from Kamstrup as well as older regulators and reading software.

The module is mounted in the meter's module area and is used for remote reading and programming of MULTICAL® 402.

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's primary address, the 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.

Address fields

Primary (000-250)

When supplied from Kamstrup, the M-Bus module will automatically use the 2-3 last digits of the meter's customer number as primary address. Otherwise, there is no bond between customer number and M-Bus address. MULTICAL® 402 has separate registers for the primary M-Bus address of the module.

Secondary (00000000-99999999)

When the secondary address is created, 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 to 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

Tekniska data

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 area	0 - 60 °C

Markings/approvals

EN 1434
EN 13757
CE approval

Technical data

M-Bus data	Actual data	Target data default settings: yearly values	Manufacture specified data
Meter number Manufacturer ID Versions ID Meter type Reading counter Configuration	Heat energy E1 or cooling energy E3 Volume Hour counter T1 T2 T1-T2 Power Flow	Heat energy E1 or cooling energy E3 Volume Target date	Customer number Peak power Info code TA2 TA3 TL2 TL3 In A In B Program number Config number Date

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Ordering

Description	Order No.	Module No.
M-Bus module for MULTICAL® 402 with MULTICAL® III compatible data package	4020290000000	5550-1140
M-Bus Master MultiPort 250D	MBM-M210000	
M-Bus Master MultiPort 250L	MBM-M200000	

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