

M-Bus for Kamstrup electricity meter

Remote reading of up to 250 meters

2-wire connection

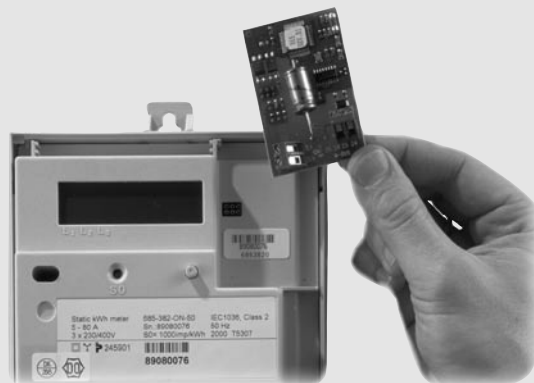
Plug & play module

Galvanically separated from the electricity meter

2-way communication (300/2400 baud)

Additional pulse input

Complies with EN 1434-3



Application

The M-Bus module for electricity meters Kamstrup 162/382/351 Combi is easily mounted - like a simple plug & play module - directly into the module area of the electricity meter.

M-Bus is a local network which makes it possible to read up to 250 meters from a centrally located M-Bus Master. The communication is made through a twisted pair cable.

In this way it is possible to add electricity meters equipped with an M-Bus module to the system without closing down.

The M-Bus communicates with the meter via opto-couplers, ensuring galvanic separation. The M-Bus module will automatically acquire data from the meter every hour and at reset, start-up, initiation and after reading, and will store the data in its memory.

The M-Bus module is able to communicate at 300 and 2400 baud with automatic detection of the speed. The meter address is used as the M-Bus address.

The system is particularly suitable for apartment buildings, but can also be used in other connections as the cable length between the master and the M-Bus module can be as long as 1800 meters.

By means of Cascade modules the cable length can be up to 12000 m with a 0.8 mm² cable.

The module is furnished with a pulse input for connection of an additional electricity meter or e.g. a water meter.



Kamstrup

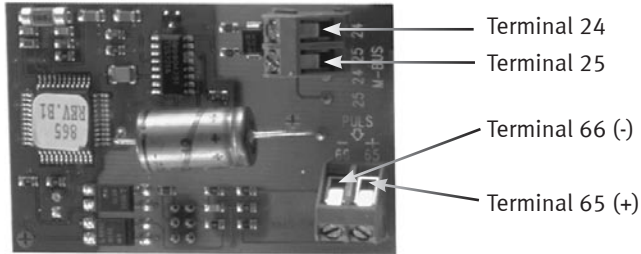
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Data

Following electricity meter data are transferred via the M-Bus module from electricity meters Kamstrup 162/382/351 Combi: Accumulated energy, hour counter, actual power, peak power, tariff 1, tariff 2 and meter number.

In addition, following manufacturer specific data are transferred: resettable counter, pulse input, customer data, and info code.

Connection diagram



Technical data

Electrical data

Supply	Via the M-Bus
Voltage supply	21-42 VDC
Power consumption	1.5 mA (1 Unit Load)
R_{in}/C_{in}	410 Ω /0.5 nF
Data accumulation	Every hour
Address fields	001-250
Communication	300/2400 baud with auto detection 1 start bit, 8 data bits, 1 parity bit, 1 stop bit
Cable length	1000/1800 m
R_{max}/C_{max}	29 Ω /180 nF
Recommended cable cross section	0.5/0.8 mm ²

Mechanical data

Dimensions W x H	63 x 42
Ambient temperature	0 - 55°C
Installation	To be inserted into the module area of the electricity meter

Markings/approvals

Standard	EN 1434 -3
CE-marking	The M-Bus module complies with the requirements, when fitted in the Kamstrup electricity meter.
Signal quality	ISO 7480 section 3.6

Pulse input

Potential free to reed contact and relay.

Limit values

Meter configuration	Normal	Fast
Cable length, max.	20 m	20 m
Cable capacity, max.	100 nF	10 nF
Leak current, contact, max.	0.5 μ A	0.5 mA
Frequency, max.	0.5 Hz	16 Hz
Pulse time, min.	1 s	10 ms
Interval time, min.	1 s	90 ms
Pulses before shift in display reading	1	8

Order specifications

Description	Type No.
M-Bus Module	68-50-005
M-Bus Master without display	66-98-110-xxx
M-Bus Cascade	66-98-001-100
RS232 cable	66-99-106