

# Data sheet

## BMT-F-DO4 BACnet MS/TP

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P/N

110886132170

EAN 4251394620602

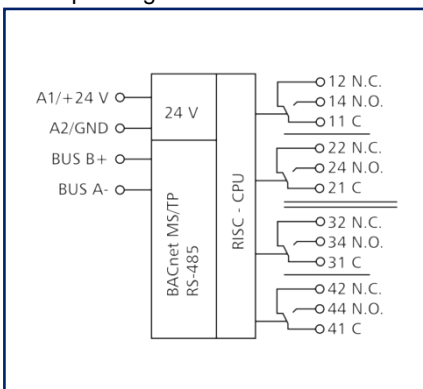
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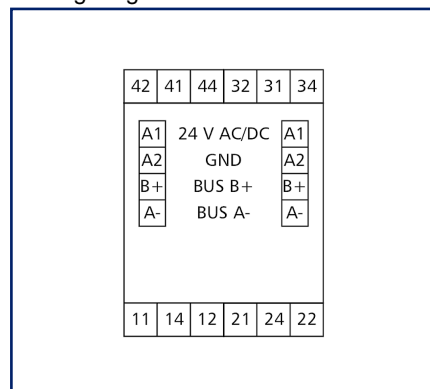
## Illustrations



Principle diagram



Wiring diagram



See enlarged drawings at the end of document

## Product specification

The BACnet MS/TP module with 4 digital outputs was developed for decentralized switching tasks. It is suitable for switching electrical components, such as motors, contactors, lamps, louvers, etc. In this case it is necessary to protect the relay contacts by appropriate load-dependent measures. The module is provided with a manual control for manually switching the relays. The outputs can be switched by means of standard objects via a BACnet client. The module is addressed and the baud rate is set by means of two address switches on the front. Suitable for decentralized mounting on DIN TH35 rail according to IEC 60715 in electrical distribution cabinets.

- Connection with spring clamp terminal blocks (push-in)

## Technical Data

### Approvals



Open Energy Management Equipment 34TZ



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### RS485 interface

Protocol	BACnet MS/TP
Address range	00 - F9
Bus interface	RS485 two wire bus with potential equalization in bus or line topology, terminate with 120 Ohm
Transmission parameters	
Transmission rate	min. 9600 Bit/s (Bd) - max. 115200 Bit/s (Bd)
Transmission rate default setting	9600 Bit/s (Bd)
Parity	None
Stopbits	1

### Supply

Operating voltage	24 V AC/DC +/- 10 % (SELV)
Power consumption	
Power consumption AC (max.)	200 mA
Power consumption DC (max.)	70 mA
Duty cycle relative	100 %

### Outputs

Digital outputs	4
Relay output	4 changeover contacts
Switching voltage relay output (max.)	250 V AC
Continuous current relay output	5 A / relay
Total current across all outputs	12 A
Switching frequency	360 switching cycles/h
Mechanical life	15x10 <sup>6</sup> switching cycles
Electrical life	1x10 <sup>5</sup> switching cycles



## Technical Data

Insulation coil - contact set	
Nominal voltage of the power supply system	230 / 400 V AC
Overvoltage category	III   II
Degree of pollution	2   2
Rated test voltage	4 kV   2.5 kV
Type of insulation	basic insulation   reinforced insulation
Housing	
Dimensions	
Dimension (W x H x D)	35 mm x 69.3 mm x 60 mm
Dimension (W x H x D)	1.378 in. x 2.728 in. x 2.362 in.
Total depth with switch/plug	69 mm
Weight	95 g
Mounting style	Standard rail TH35
Mounting position	any
Apposition	The maximum quantity of BACnet modules connected side-by-side is limited to 15 or to a maximum power consumption of 2 Amps (AC or DC) per connection to the power supply. For any similar block of additional modules a separate connection to the power supply is necessary., without distance
Connection type	Spring clamp terminal blocks
Indicator	green, red and yellow LED
Terminal blocks	
Supply and bus	
Terminal block	4-pole
Solid wire (AWG)	max. 1.5 mm <sup>2</sup> / max. 16 AWG
Stranded wire (AWG)	max. 1 mm <sup>2</sup> / max. 18 AWG
Wire diameter	max. 1.4 mm - min. 0.3 mm
Module connection	
Wire cross section solid	0.2 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 24-14
Wire cross section multi	0.25 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 24-12
Wire cross section with wire ferrule	0.25 mm <sup>2</sup> - 1.5 mm <sup>2</sup> / AWG 24-16
Stripping length (min.)	8 mm
Protection circuit	Polarity reversal protection for DC operating voltage, Protection against interchanging power supply and bus

### Technical Data

#### Material

Material - Housing	Polyamid 6.6 V0
Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polycarbonat

#### Protection category according to IEC 60529

Protection category - housing (acc. to IEC 60529)	IP40
Protection category - terminal blocks (acc. to IEC 60529)	IP20

#### Temperature range

##### Operating

Temperature - Operating °C	-5 °C - 55 °C
Temperature - Operating °F	23 °F - 131 °F

##### Storage

Temperature - Storage °C	-20 °C - 70 °C
Temperature - Storage °F	-4 °F - 158 °F

#### Classifications

ETIM 7.0	EC001097
ETIM 8.0	EC001097
ETIM 9.0	EC001097

#### Software and additional documents

Software and documentation	Further documentation is available for free download at <a href="http://www.metz-connect.com">www.metz-connect.com</a>
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## Accessories

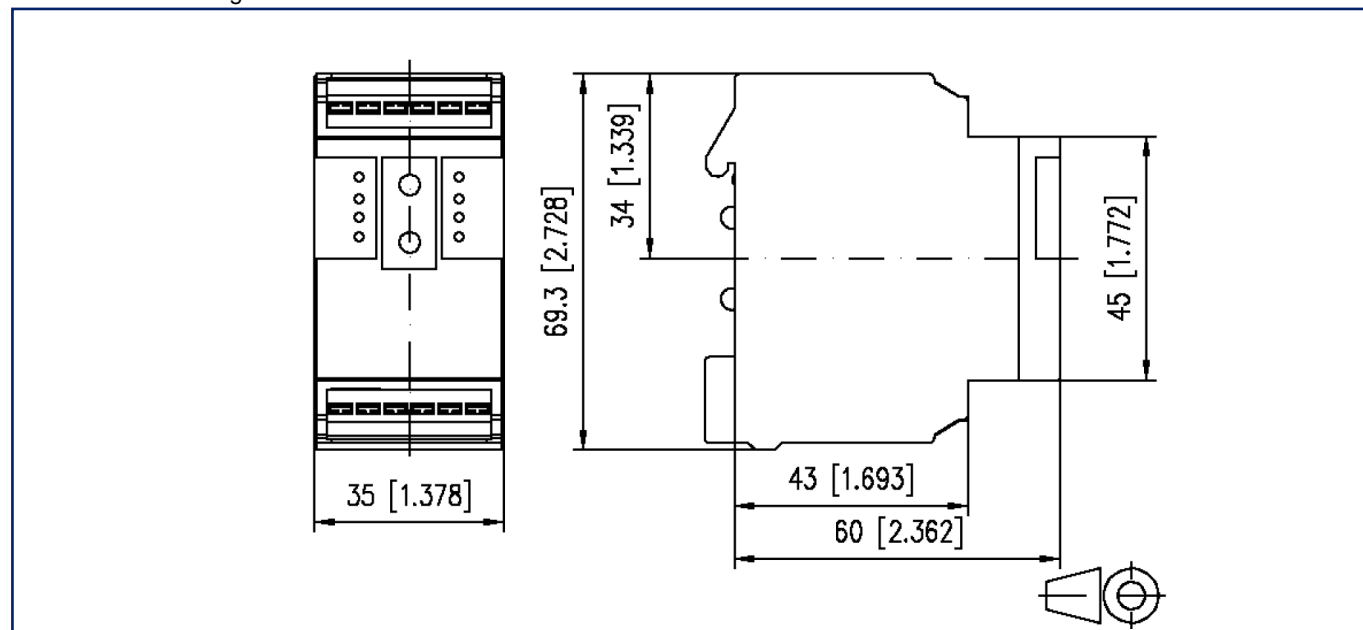
P/N	Designation
110369	Terminal block Type 259
11056170	Power supply NG4-F 24 V DC
31135104	Typ 135 RIACON 135_3.5

### Accessories from

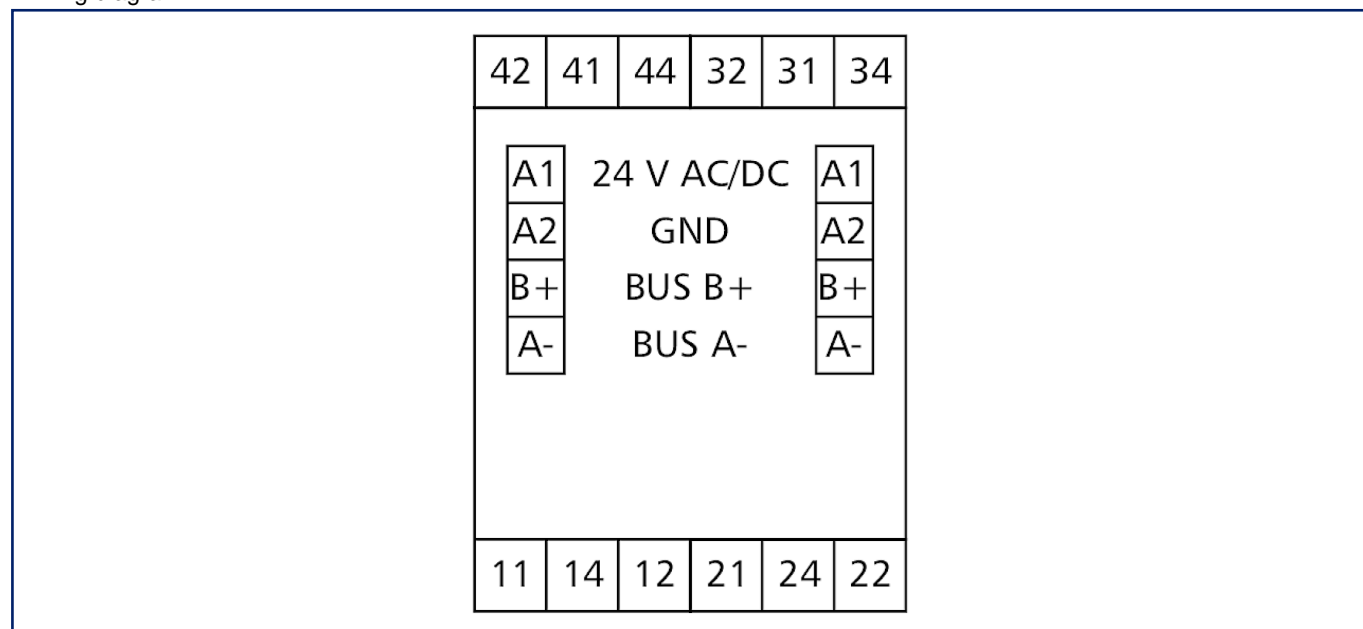
P/N	Designation
11088001	BMT-RTR BACnet-Router
1108800170	BMT-F-RTR BACnet-Router

### Illustrations

#### Dimensional drawing

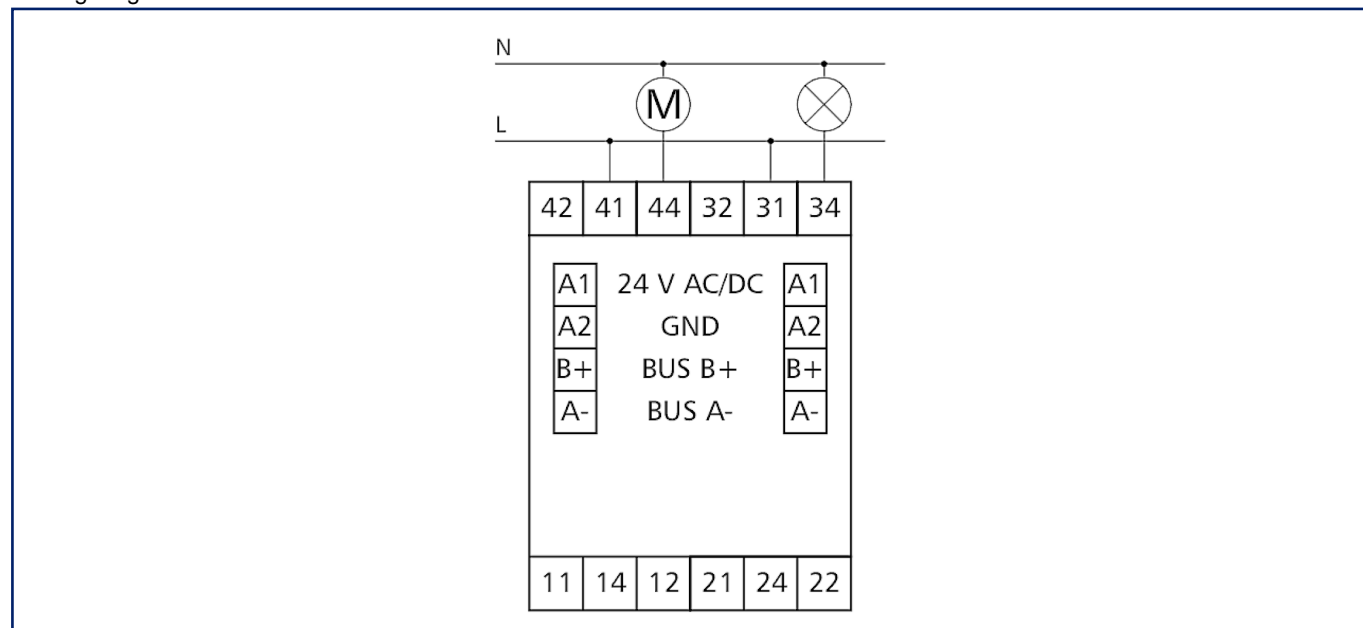


#### Wiring diagram



### Illustrations

Wiring diagram



Principle diagram

