

Data sheet

BMT-F-AI8 BACnet MS/TP

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P/N

1108821370

EAN 4251394620633

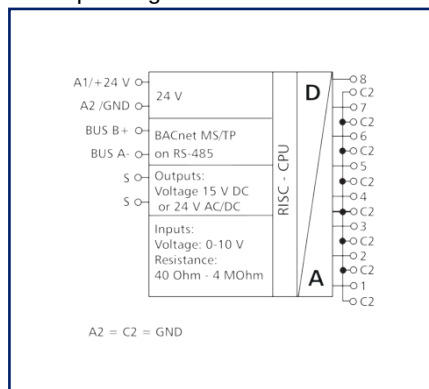
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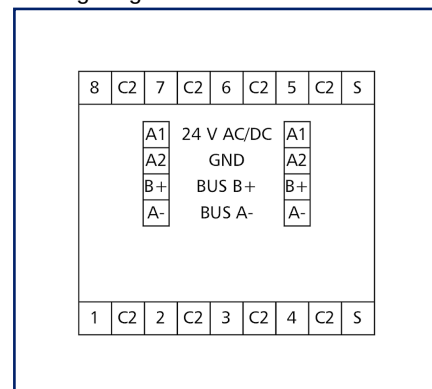
Illustrations



Principle diagram



Wiring diagram



See enlarged drawings at the end of document

Product specification

The BACnet MS/TP module with 8 individually configurable resistance or voltage inputs was developed for decentralized switching tasks. It is suitable for detecting resistances and voltages of, for example, passive and active temperature sensors, electrical vent and mixing valves, valve positions, etc. The inputs can be configured universally 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)



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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.)	65 mA
Power consumption DC (max.)	25 mA
Duty cycle relative	100 %

Inputs

Analog inputs	8, individually configurable
Resistance range	40 Ohm - 4 MOhm
Error resistance input < 12 kOhm	0.1 %
Error resistance input >= 12 kOhm	1 %
Voltage range	0 V - 10 V DC
Resolution voltage input	10 mV / digit
Error voltage input	10 mV



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Housing

Dimensions

Dimension (W x H x D)	50 mm x 69.3 mm x 60 mm
Dimension (W x H x D)	1.969 in. x 2.728 in. x 2.362 in.

Weight	104 g
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Mounting style	Standard rail TH35
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Mounting position	any
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Apposition	without distance 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.
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Connection type	Spring clamp terminal blocks
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Indicator	green and red LED
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Terminal blocks

Supply and bus

Terminal block	4-pole
Solid wire (AWG)	max. 1.5 mm ² / max. 16 AWG
Stranded wire (AWG)	max. 1 mm ² / max. 18 AWG
Wire diameter	min. 0.3 mm max. 1.4 mm

Module connection

Wire cross section solid	0.2 mm ² - 2.5 mm ² / AWG 24-14
Wire cross section multi	0.25 mm ² - 2.5 mm ² / AWG 24-12
Wire cross section with wire ferrule	0.25 mm ² - 1.5 mm ² / AWG 24-16
Stripping length (min.)	8 mm

Protection circuit	Polarity reversal protection for DC operating voltage Protection against interchanging power supply and bus
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Material

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



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Protection category according to IEC 60529

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

Climatic Data

Operating

Temperature - Operating °C -5 °C - 55 °C

Temperature - Operating °F 23 °F - 131 °F

Relative humidity max. 85 % non-condensing

Storage

Temperature - Storage °C -20 °C - 70 °C

Temperature - Storage °F -4 °F - 158 °F

Classifications

ETIM 7.0	EC000794
ETIM 8.0	EC000794
ETIM 9.0	EC000794
ETIM 10.0	EC000794

Software and additional documents

Software and documentation	Further documentation is available for free download at www.metz-connect.com
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Application note

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way. At METZ CONNECT's request, the Customer shall submit and make available meaningful evidence (e.g. test and laboratory protocols, certifications, etc.).



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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



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Accessories from

P/N	Designation
11088001	BMT-RTR BACnet-Router
1108800170	BMT-F-RTR BACnet-Router
11088101	BMT-RTR/SC BACnet/SC Router
1108810170	BMT-F-RTR/SC BACnet/SC Router



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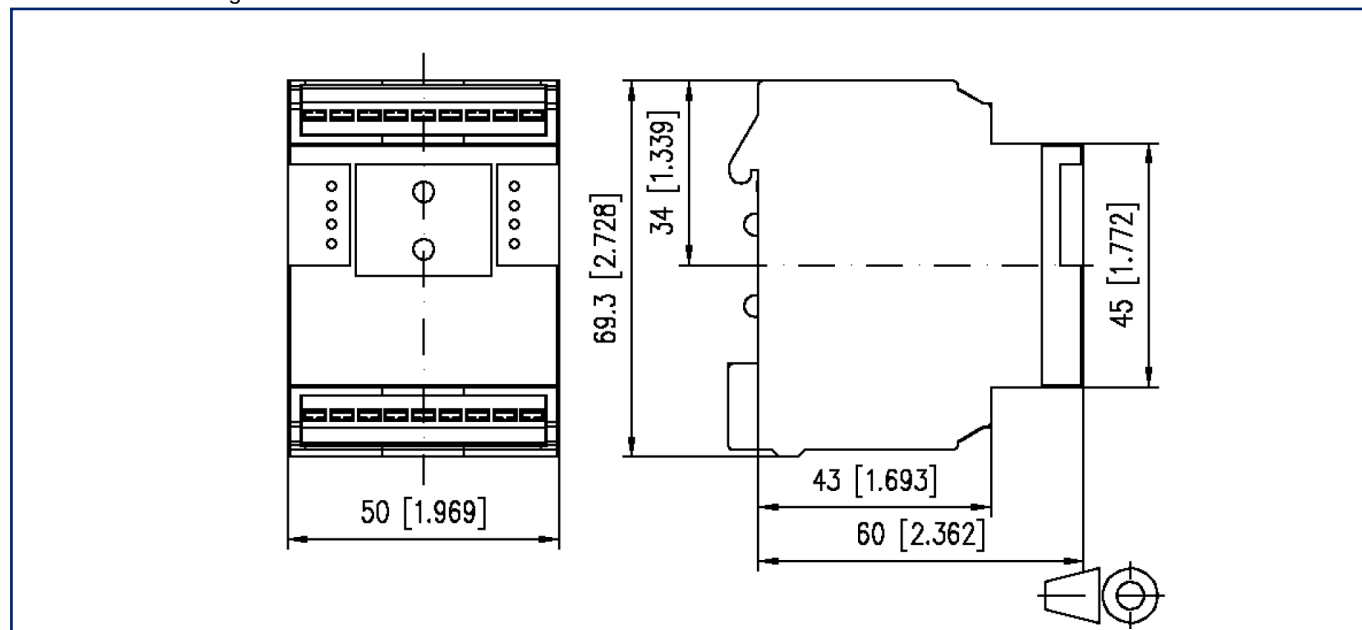
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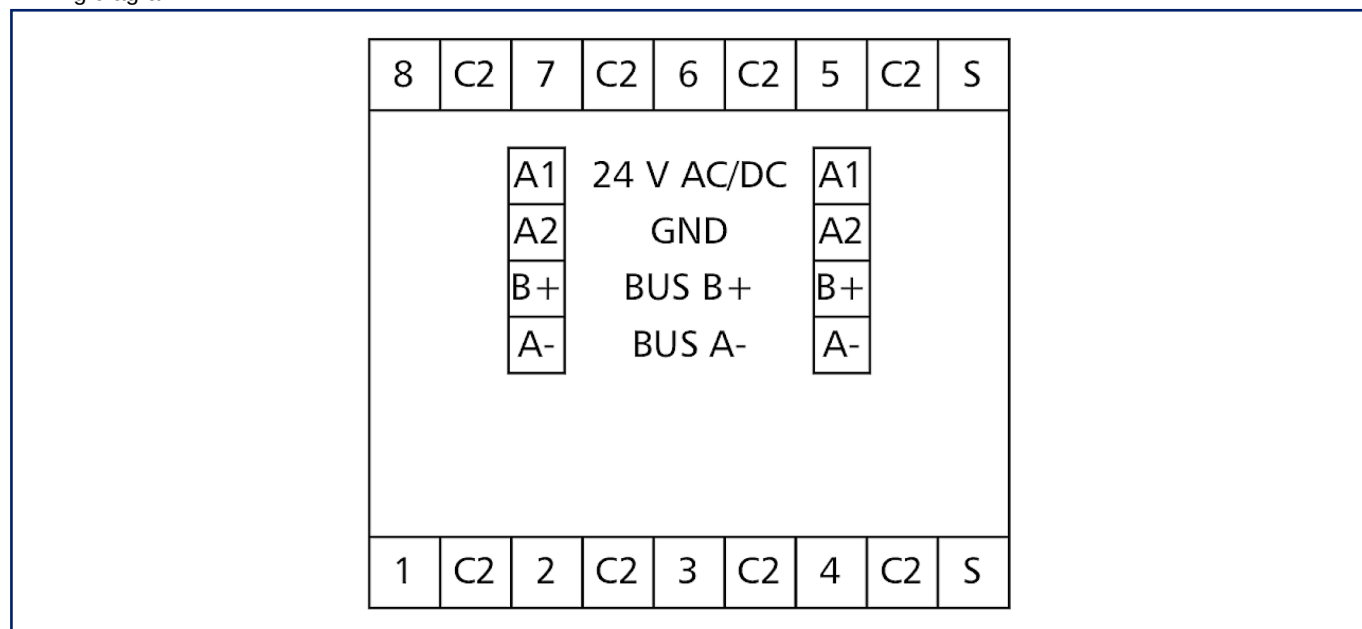
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Illustrations

Dimensional drawing



Wiring diagram



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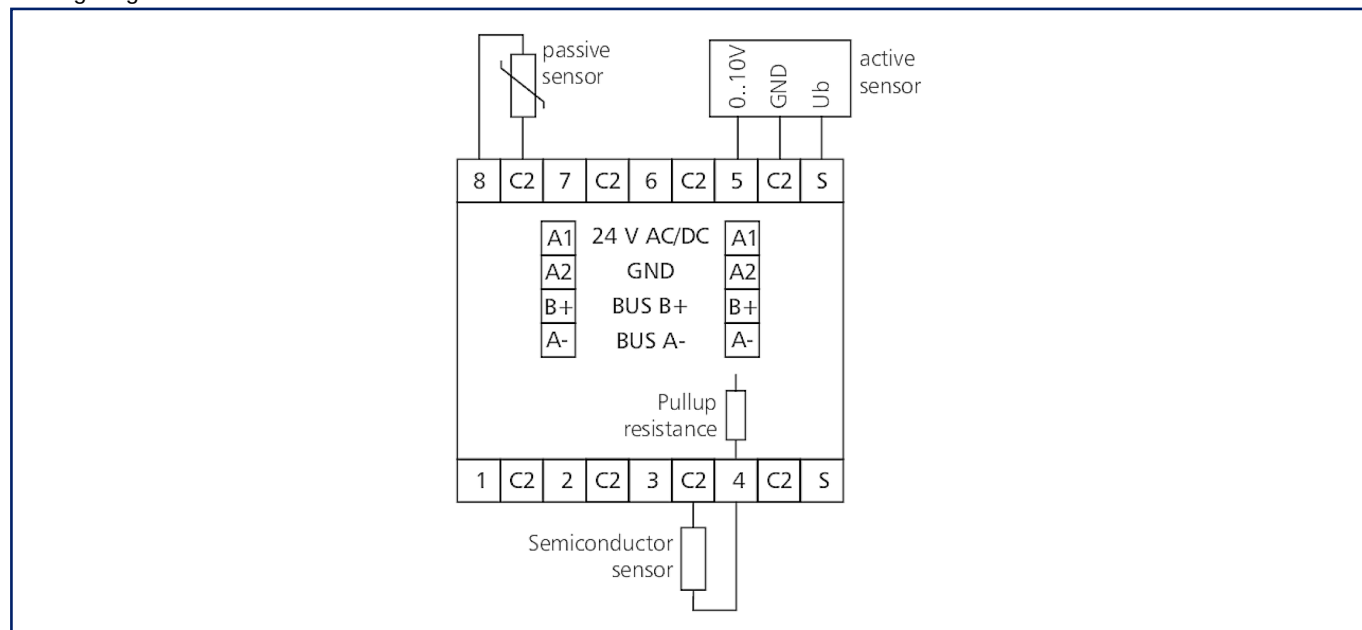
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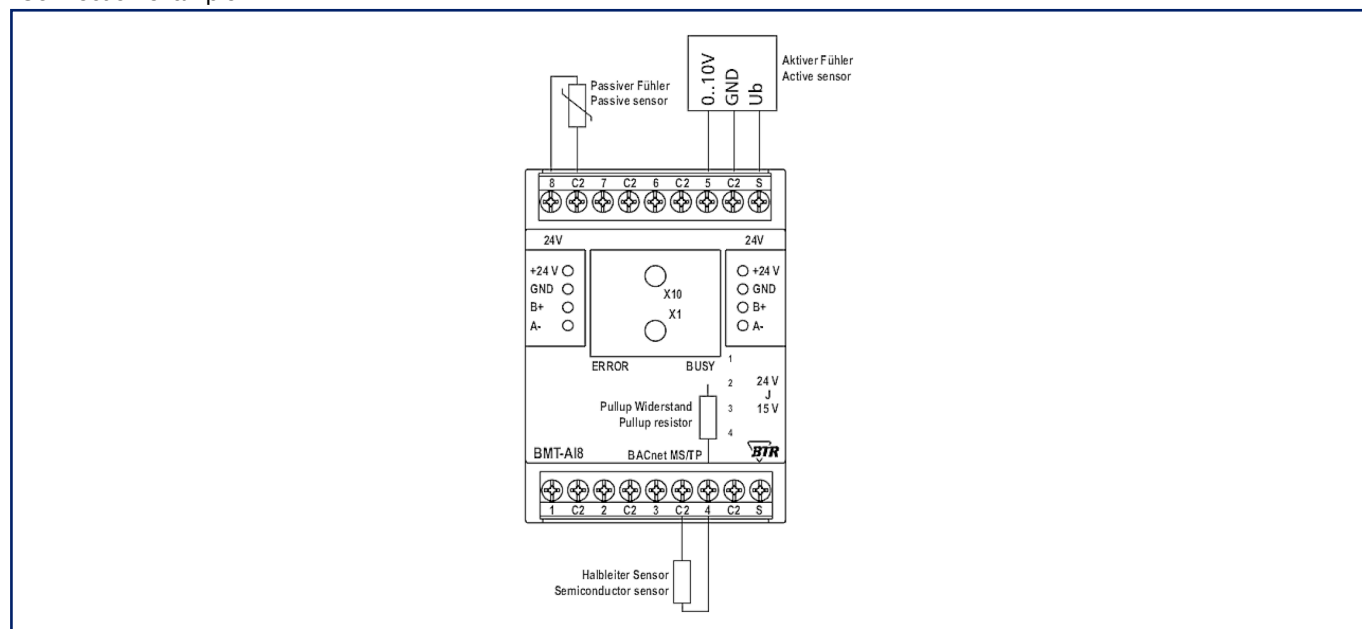
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Wiring diagram



Connection example



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