C | Logline

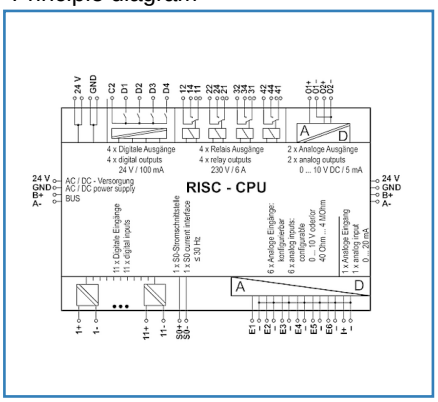
Data sheet

BMT-Multi I/O BACnet MS/TP

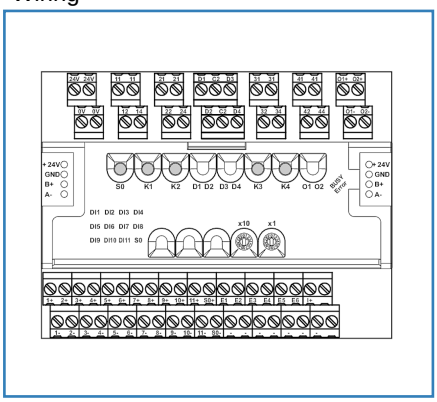
P/N 11089313
EAN 4251394600901
2020/12/02
Version: A

Illustrations

Principle diagram



Wiring



See enlarged drawings at the end of document

Product specification

The BACnet module BMT-Multi I/0 is a compact and rapidly to install solution to connect digital and analog signals from the actor and sensor level directly to a control unit in building automation via BACnet MS/TP protocol. 29 I/Os, some of them are configurable, are available for different tasks. The inputs and outputs can be controlled and scanned by standard objects via a BACnet Client. Module address and bit rate are set with two rotary switches on the front or by software. The relays K1 to K4 are equipped with a manual control and allow manual intervention. In this case it is necessary to protect the relay contacts by appropriate load-dependent measures. Suitable for decentralized mounting on DIN TH35 rail according to IEC 60715 in electrical distribution cabinets.

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Weitere Dokumentation siehe / additional documentation see / documentation supplémentaire voir www.metz-connect.com

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Approvals

BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International (BI). BTL is a registered trademark of BI.

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.)	220 mA
Power consumption DC (max.)	110 mA
Duty cycle relative	100 %

Inputs

Analog inputs	7
Current input	1
Resistance / temperature / voltage input	6, individually configurable
Digital inputs	11 x optocoupler, galvanically isolated
S0 inputs acc. to DIN EN 62053-31 Class A	1
High signal detection	> 7 V AC/DC
Voltage range	0 V - 10 V DC
Current range	0 (4) - 20 mA DC (adjustable)
Resistance range	40 Ohm - 4 MOhm
Resolution	15 Bit (current), 15 Bit (resistance), 15 Bit (voltage)
Error	(< 12 kOhm) 0,1%, (> 12 kOhm) 1% (resistance), 10 mV (voltage), 20 µA (current)
Temperature range (-50 °C to 150 °C)	PT100, PT500, PT1000, NI1000-TC5000, NI1000-TC6180, BALCO500, KTY81_110, KTY81_210, NTC1k8-T, NTC5k-T, NTC10k-T, NTC20k-T
Temperature range (-40 °C to 120 °C)	LM235Z sensor

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Outputs	
Analog outputs	2, potential-free
Digital outputs	8
Relay output	4 changeover contacts
Semiconductor output	4
Switching voltage	24 V AC/DC (semiconductor), 250 V AC (relay)
Voltage range	0 V - 10 V DC
Continuous current	5 mA at 10 V DC (analog), 100 mA (semiconductor)
Resolution	10 mV / digit
Insulation coil - contact set	
Nominal voltage of the power supply system	230 / 400 V AC
Overvoltage category	III | II
Pollution degree	2 | 2
Rated test voltage	4 kV | 4 kV
Type of insulation	basic insulation | reinforced insulation
Housing	
Dimensions	
Dimension (W x H x D)	125 mm x 93 mm x 60.81 mm
Dimension (W x H x D)	4.921 in. x 3.661 in. x 2.394 in.
Weight	385 g
Mounting style	Standard rail TH35
Built-in	any
Apposition	without distance
Connection type	Screw type terminal blocks
Indicator	green, red and yellow LED
Terminal blocks	
Supply and bus	
Terminal block	4-pole
Solid wire	max. 1.5 mm² / max. 16 AWG
Stranded wire	max. 1 mm² / max. 18 AWG
Wire diameter	min. 0.3 mm - max. 1.4 mm
Module connection	
Wire cross section solid	0.34 mm² - 2.5 mm² / AWG 22-12
Wire cross section multi	0.34 mm² - 2.5 mm² / AWG 22-12
Wire cross section with wire ferrule	0.34 mm² - 2.5 mm² / AWG 22-12
Wire diameter	min. 0.66 mm - max. 1.78 mm

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Terminal blocks	
Module connection	
Screw torque (max.)	0.5 Nm
Stripping length (min.)	8 mm
Protective circuit	Polarity reversal protection for DC operating voltage, Protection against interchanging power supply and bus
Material	
Material - Housing	Polycarbonat + Polyamid
Color	gray/black
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polycarbonat
REACH - substance (SVHC)	Lead / 7439-92-1
Protection category according to IEC 60529	
Protection category - housing (acc. to IEC 60529)	IP20
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	-25 °C - 70 °C
Temperature - Storage °F	-13 °F - 158 °F
Classifications	
ETIM 7.0	EC001584
Software and additional documents	
Logiciels et documentation	Further documentation is available for free download at www.metz-connect.com

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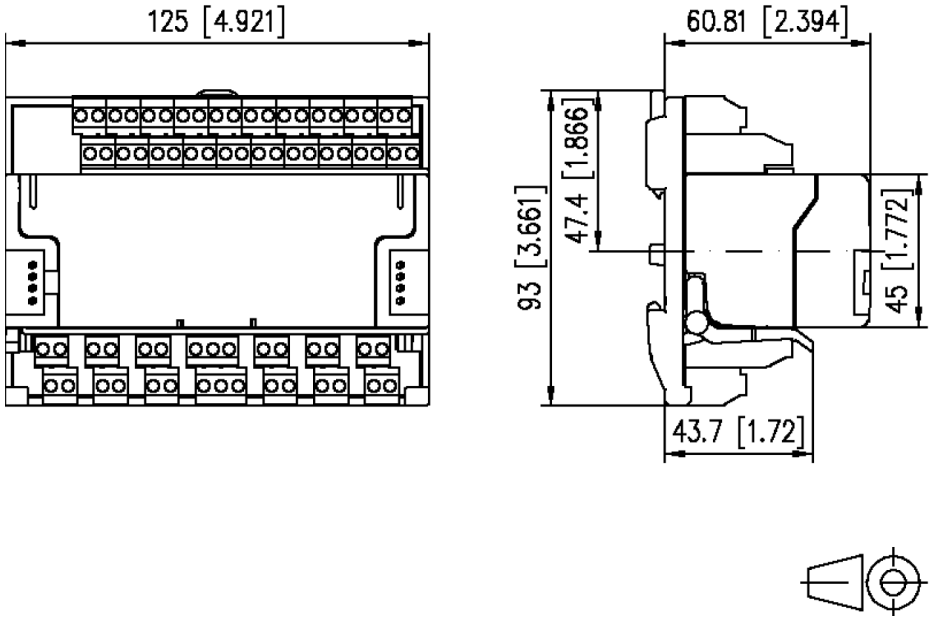
Dimensional drawing



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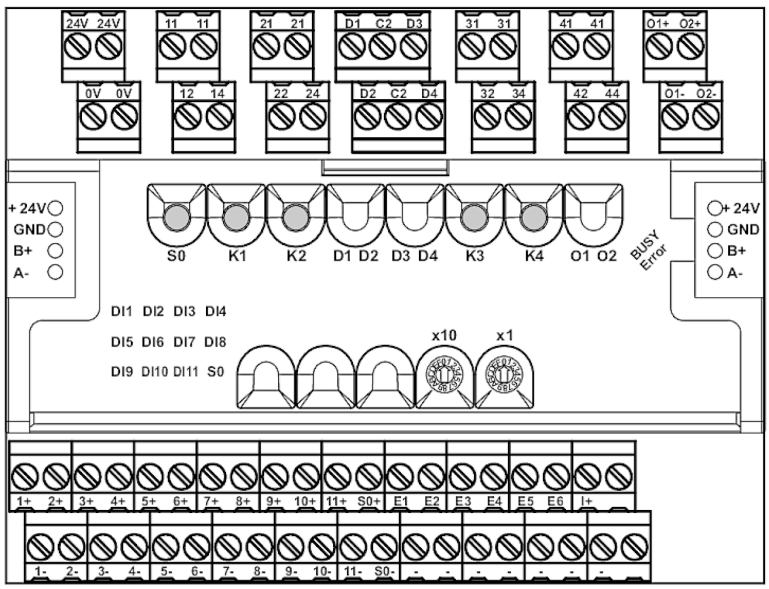

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