C | Logline

Data sheet

MR-AOP4
Modbus module with analog outputs

Illustrations

Open Energy Management Equipment 34TZ

Principle diagram

A2 = C2 = GND

Use copper conductors only

Wiring

Product description

The Modbus module with 4 analog outputs was developed for decentralized switching tasks.

It is suitable as encoder for control variables, for example for electrical vent and mixing valves, valve positions, etc.

The outputs can be output by means of standard registers via a Modbus master. Each output can be set for automatic or manual operation by means of 4 potentiometers on the front.

Module address, bit rate and parity are set by means of two address switches on the front or by software.

Suitable for decentralized mounting on DIN TH35 rail according to IEC 60715 in electrical distribution cabinets.

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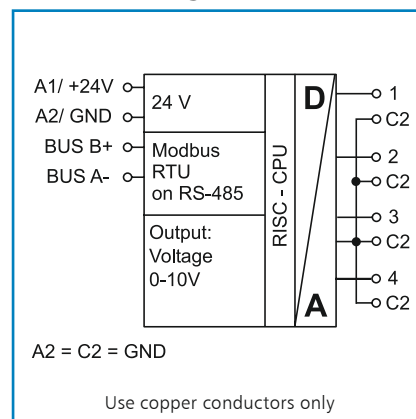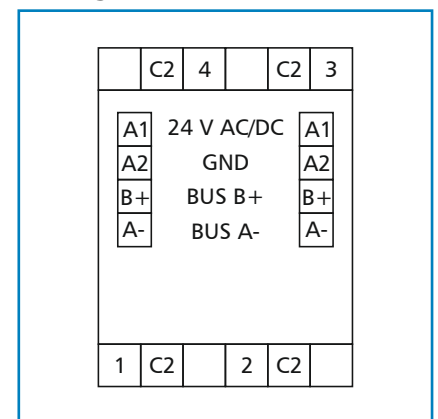*We realize ideas*

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Technical data

Approvals	
C-UL Certification	Open Energy Management Equipment 34TZ

Modbus interface	
Protocol	Modbus RTU
Address range	00 to 99
Transmission rate	1200 to 115200 bit/s, factory setting 19200 bit/s Even
Bus interface	RS485 two wire bus with potential equalization in bus or line topology terminate with 120 Ohm

Supply	
Operating voltage	24 V AC/DC ± 10 % (SELV)
Current consumption	50 mA (AC) / 20 mA (DC)
Relative duty cycle	100 %

Outputs	
Analog outputs	4
Voltage output	4x 0 to 10 V DC
Output current	5 mA to 10 V DC
Resolution	0.625 mV / Digit
Error	100 mV

Housing	
Dimensions WxHxD	1.378 x 2.728 x 2.362 in. (35 x 69.3 x 60 mm)
Depth including potentiometers	2.520 in. (64 mm)
Weight	72 g
Mounting position	any
Mounting	on TH35 rail per IEC 60715
Side-by-side mounting	Without space The maximum quantity of Modbus 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
Material	
Housing	polyamide 6.6 V0
Terminal blocks	polyamide 6.6 V0
Cover plate	polycarbonate
Type of protection (IEC 60529)	
Housing	IP40
Terminal blocks	IP20

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Technical data

Terminal Blocks

Supply and bus	
Terminal block	4-pole
Solid wire	max. AWG 16 (1.5 mm²)
Stranded wire	max. AWG 18 (1.0 mm²)
Wire diameter	0.3 mm to max. 1.4 mm
Inputs, module connection	
Solid wire	max. AWG 12 (4 mm²)
Stranded wire	max. AWG 14 (2.5 mm²)
Wire diameter	0.3 mm to max. 2.7 mm
Protective circuitry	Polarity reversal protection of operating voltage
	Polarity reversal protection of supply and bust du bus

Temperature range

Operation	23 °F to 131 °F (-5 °C to +55 °C)
Storage	-4 °F to +158 °F (-20 °C to +70 °C)

Display

Operating and bus activity	green LED
Error indication	red LED

Additional documents

Software description, mounting note, certificates	All additional documents are available for download at www.metz-connect.com

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Dimensional drawing

35 [1.378]

69.3 [2.728]

34 [1.339]

45 [1.772]

43 [1.693]

60 [2.362]

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