

# Data sheet

## MR-AOP4

Part number

## Modbus module with analog outputs

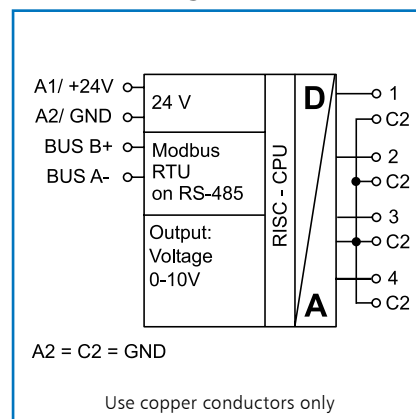
1108371302

2015-03-17

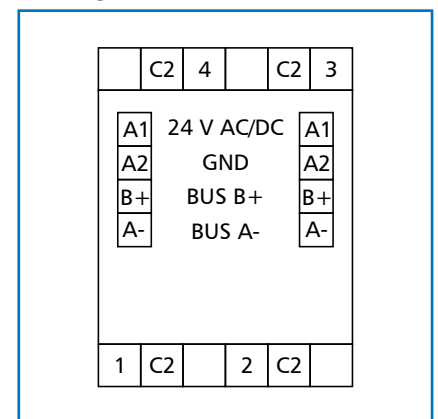
### Illustrations



### Principle diagram



### 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 objects via a Modbus master. Each output can be set for automatic or manual operation by means of 4 potentiometers at the front.

The module address, the baud rate and the parity are 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.

**Data sheet**  
**MR-AOP4**  
**Modbus module with analog outputs**

Page 2/4  
**Part number**  
**1108371302**

2015-03-17

**Technical data**

<b>Approvals</b>	
C-UL Certification	Open Energy Management Equipment 34TZ
<b>Modbus interface</b>	
Protocol	Modbus RTU
Address range	00 to 99
Transmission rate	1200 to 115200 Bd, factory setting 19200 Bd Even
Bus interface	RS485 two wire bus with potential equalization in bus or line topology terminate with 120 Ohm
<b>Supply</b>	
Operating voltage range	20 to 28 V AC/DC (SELV)
Current consumption	50 mA (AC) / 20 mA (DC)
Relative duty cycle	100 %
<b>Outputs</b>	
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
<b>Housing</b>	
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

**Data sheet**  
**MR-AOP4**  
**Modbus module with analog outputs**

Page 3/4  
**Part number**  
**1108371302**

2015-03-17

**Technical data**

<b>Terminal Blocks</b>	
Supply and bus	
Terminal block	4-pole
Solid wire	max. AWG 16 (1.5 mm <sup>2</sup> )
Stranded wire	max. AWG 18 (1.0 mm <sup>2</sup> )
Wire diameter	0.3 mm to max. 1.4 mm
Inputs, module connection	
Solid wire	max. AWG 12 (4 mm <sup>2</sup> )
Stranded wire	max. AWG 14 (2.5 mm <sup>2</sup> )
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
<b>Temperature range</b>	
Operation	23 °F to 131 °F (-5 °C to +55 °C)
Storage	-4 °F to +158 °F (-20 °C to +70 °C)
<b>Display</b>	
Operating and bus activity	green LED
Error indication	red LED
<b>Additional documents</b>	
Software description, mounting note, certificates	All additional documents are available for download at <a href="http://www.metz-connect.com">www.metz-connect.com</a>



**Data sheet**  
**MR-AOP4**  
**Modbus module with analog outputs**

Page 4/4

Part number  
**1108371302**

2015-03-17

**Dimensional drawing**

