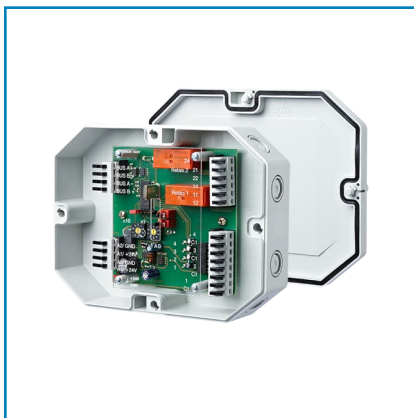


Data sheet

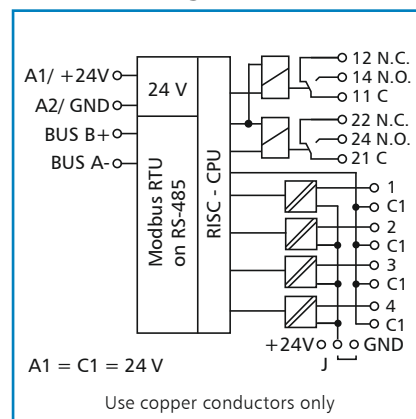
MR-DIO4/2-IP

Modbus module with digital inputs and outputs

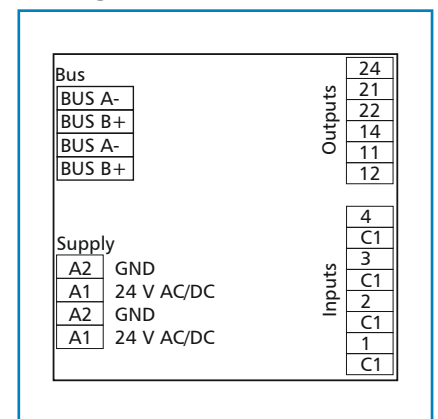
Illustrations



Principle diagram



Wiring



Product description

The Modbus module in an IP65 housing with 4 digital inputs and 2 relay outputs was developed for decentralized switching tasks.

It is suitable for accommodating, for example, light switches and window contacts in a room, switching two light strips or controlling louvers. It can also be used to control 2 motorized fire dampers. With strong inductive loads, we recommend protecting the relay contacts with an RC element.

The inputs can be used as contact or voltage inputs. The inputs and outputs can be switched and scanned by means of standard registers via a Modbus master.

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

Data sheet
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Modbus module with digital inputs and outputs

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Technical data

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 \pm 10 % (SELV)	
Current consumption	200 mA (AC) / 75 mA (DC)	
Relative duty cycle	100 %	
Inputs		
Digital inputs	4	
Voltage input	30 V AC/DC	
High signal recognition	>8 V AC/DC	
Outputs		
Output contacts	2 changeover contacts (DPST)	
Switching voltage max.	250 V AC	
Continuous current max.	10 A per relay (80 A for 20 ms)	
Total current for all contacts	25 A	
General informations		
Rated insulation voltage	230/400 V AC	
Overvoltage category	III	II
Pollution degree	2	2
Rated surge voltage	4 kV	2.5 kV
Type of insulation	basic insulation	reinforced insulation

Data sheet
MR-DIO4/2-IP
Modbus module with digital inputs and outputs

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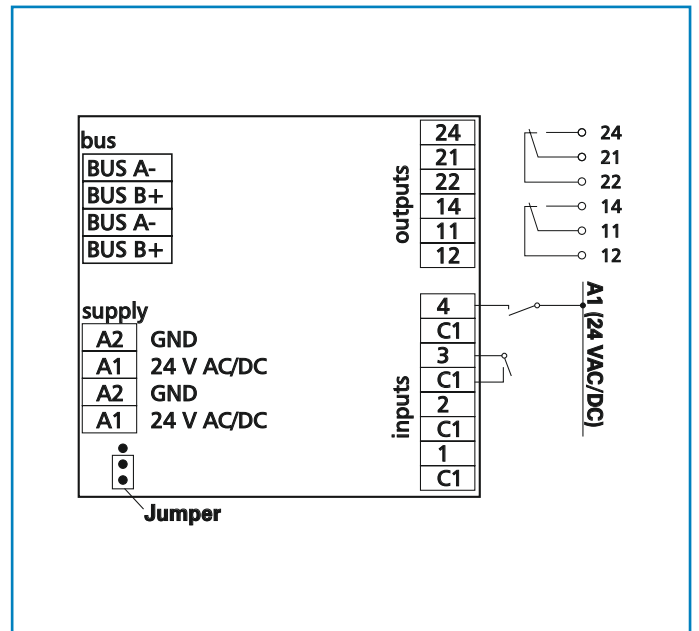
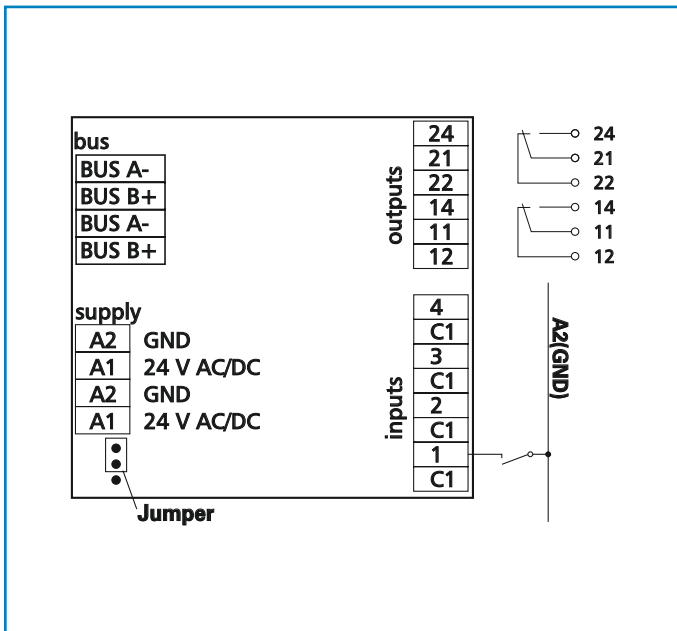
2016-21-07

Technical data

Housing	
Dimensions WxHxD	6.299 x 1.602 x 4.724 in. (160 x 40.7 x 120 mm)
Weight	350 g
Mounting position	any
Mounting	directly on a flat surface 8 knock-out openings for M12 and M16 cable glands
Material	
Housing	ASA + polycarbonate
Terminal blocks	polyamide 6.6 V0
Cover plate	polycarbonate
Type of protection (IEC 60529)	IP65
Terminal Blocks	
Supply and bus	
Terminal block	4-pole
Solid wire	max. AWG 16 (1.5 mm ²)
Stranded wire	max. AWG 18 (1.0 mm ²)
Wire diameter	0.3 mm to max. 1.4 mm
Module connection, digital inputs and outputs	
Solid wire	max. AWG 16 (1.5 mm ²)
Stranded wire	max. AWG 18 (1.0 mm ²)
Wire diameter	0.3 mm to max. 1.4 mm
Protective circuitry	Polarity reversal protection of operating voltage Polarity reversal protection of supply and 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
Status of inputs and outputs	yellow LEDs
Additional documents	
Software description, mounting note, certificates	All additional documents are available for download at www.metz-connect.com



Connection examples



Dimensional drawing

