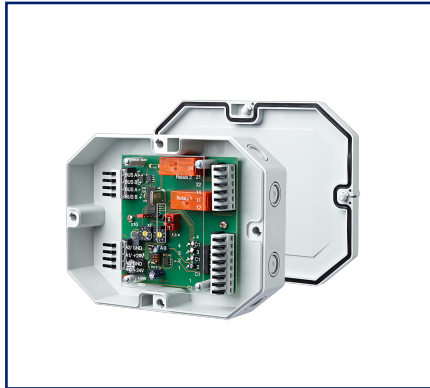


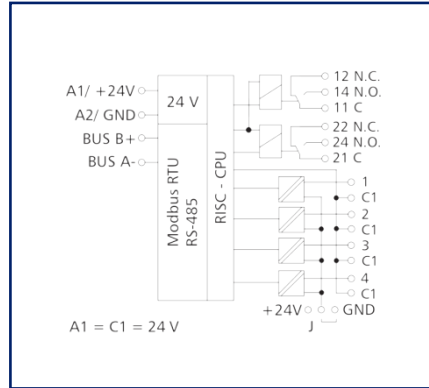
# Data sheet

## MR-DIO4/2-IP65 Modbus RTU

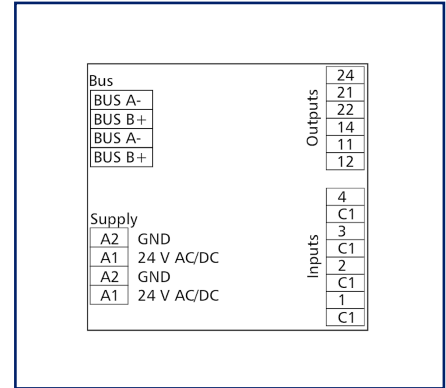
### Illustrations



Principle diagram



Wiring diagram



See enlarged drawings at the end of document

### Product specification

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. In this case it is necessary to protect the relay contacts by appropriate load-dependent measures. 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.



# MR-DIO4/2-IP65 Modbus RTU

P/N

1108331326IP

EAN 4250184135630

2025/08/19

Version: M

## Technical Data

RS485 interface	
Protocol	Modbus RTU
Address range	00 - 99
Bus interface	RS485 two wire bus with potential equalization in bus or line topology terminate with 120 Ohm
Transmission parameters	
Transmission rate	min. 1200 Bit/s (Bd) max. 115200 Bit/s (Bd)
Transmission rate default setting	19200 Bit/s (Bd)
Parity	Odd Even (default setting) None
Stopbits	1 (default setting) 2
Supply	
Operating voltage	24 V AC/DC +/- 10 % (SELV)
Power consumption	
Power consumption AC (max.)	200 mA
Power consumption DC (max.)	75 mA
Duty cycle relative	100 %
Inputs	
Digital inputs	4
Voltage input	30 V AC/DC
High signal detection	> 8 V AC/DC
Outputs	
Digital outputs	2
Relay output	
Relay output	2 changeover contacts
Switching voltage relay output (max.)	250 V AC
Continuous current relay output	10 A / relay
Switch-on current relay output (max.)	80 A < 20 ms
Total current across all outputs	25 A

# MR-DIO4/2-IP65 Modbus RTU

P/N

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Version: M

## Technical Data

Isolation	
Nominal voltage of the power supply system	230 / 400 V AC
Overvoltage category	III   II
Degree of pollution	2   2
Rated test voltage	4 kV   2.5 kV
Type of insulation	basic insulation   reinforced insulation
Housing	
Dimensions	
Dimension (W x H x D)	160 mm x 40.7 mm x 120 mm
Dimension (W x H x D)	6.299 in. x 1.602 in. x 4.724 in.
Weight	350 g
Mounting style	directly on a flat surface, 8 knock-out openings for M12 and M16 cable glands
Mounting position	any
Connection type	Spring clamp terminal blocks
Indicator	green, red and yellow LED
Terminal blocks	
Supply and bus	
Terminal block	4-pole
Solid wire (AWG)	max. 1.5 mm <sup>2</sup> / max. 16 AWG
Stranded wire (AWG)	max. 1 mm <sup>2</sup> / max. 18 AWG
Wire diameter	min. 0.3 mm max. 1.4 mm
Module connection	
Wire cross section solid	0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup> / AWG 28-18
Wire cross section multi	0.08 mm <sup>2</sup> - 0.75 mm <sup>2</sup> / AWG 28-18
Wire cross section with wire ferrule	0.08 mm <sup>2</sup> - 0.75 mm <sup>2</sup> / AWG 28-20
Stripping length (min.)	4 mm
Protection circuit	Polarity reversal protection for DC operating voltage Protection against interchanging power supply and bus

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# MR-DIO4/2-IP65 Modbus RTU

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2025/08/19

Version: M

## Technical Data

### Material

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

### Protection category according to IEC 60529

Protection category - housing (acc. to IEC 60529)	IP65
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	EC001584
ETIM 8.0	EC001584
ETIM 9.0	EC001584
ETIM 10.0	EC001584

### Software and additional documents

Software and documentation	Further documentation is available for free download at <a href="http://www.metz-connect.com">www.metz-connect.com</a>
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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.).

Data sheet

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## MR-DIO4/2-IP65 Modbus RTU

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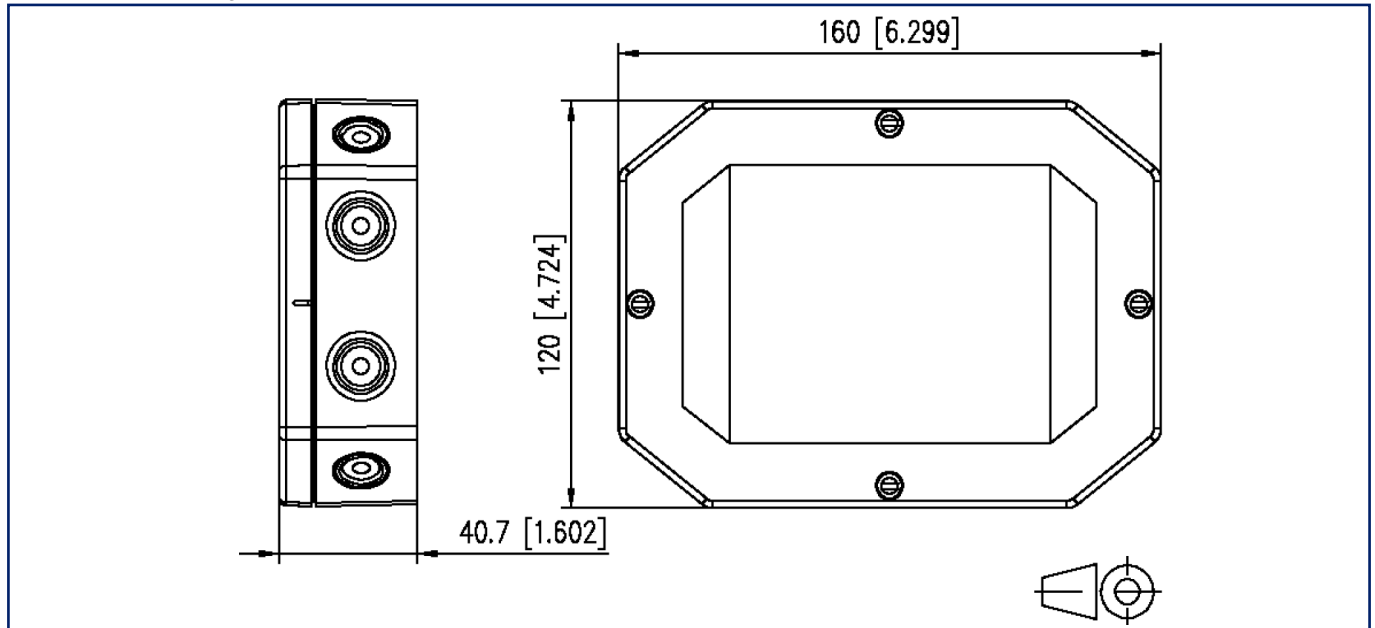
Version: M

### Accessories

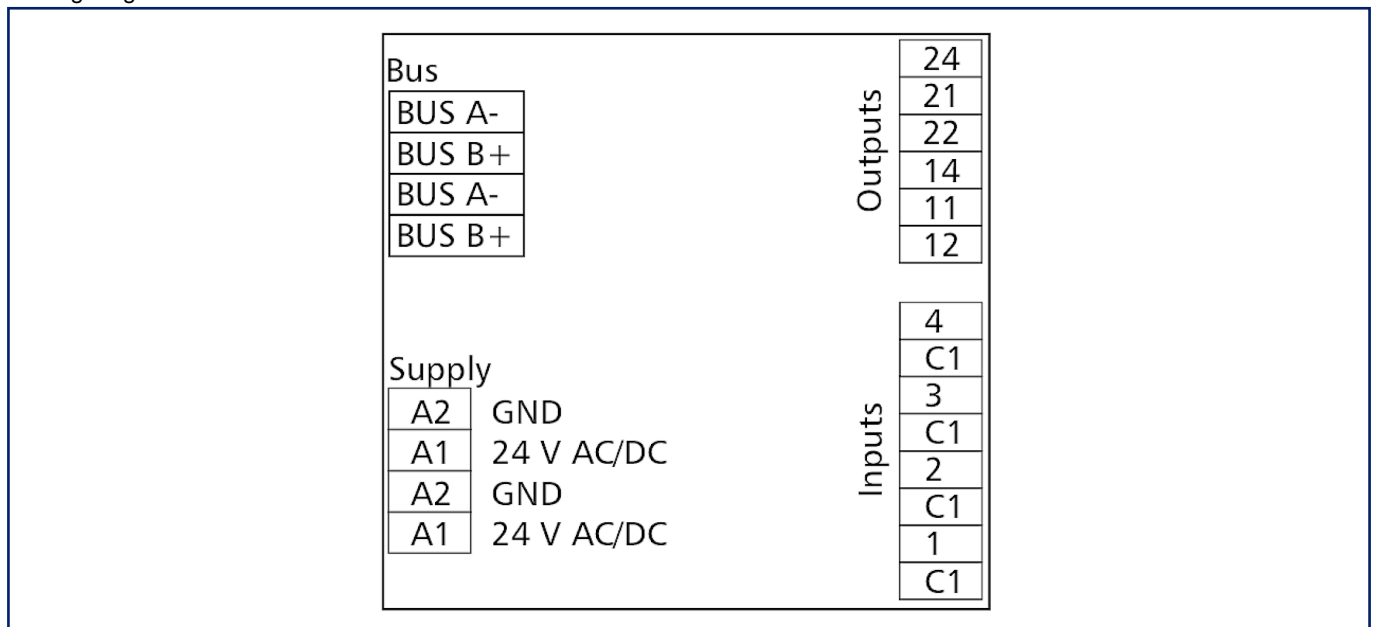
P/N	Designation
110368	TSH 35 Hutschienenhalter für IP65
110486	HUB DC
110561	Power supply NG4 24 V DC
ASP0250404	SP025xxHDNC ASP025

## Illustrations

### Dimensional drawing

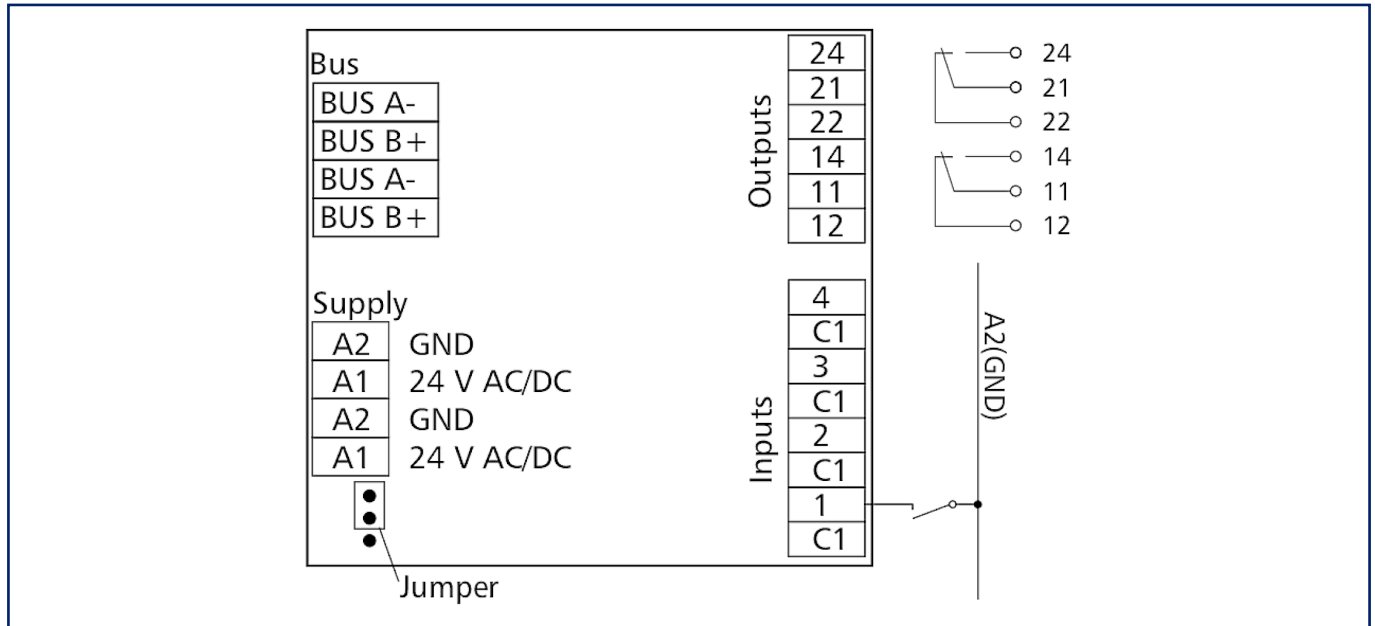


### Wiring diagram

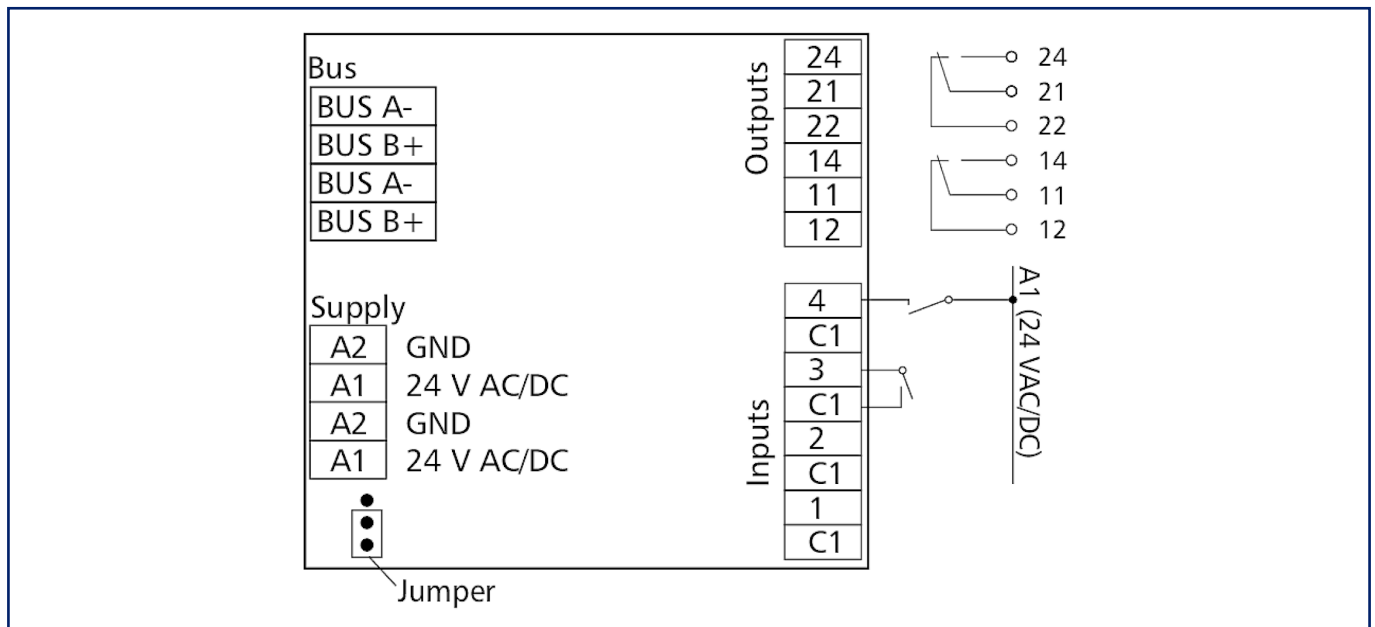


Illustrations

Grafik



Grafik



**Illustrations**

Principle diagram

