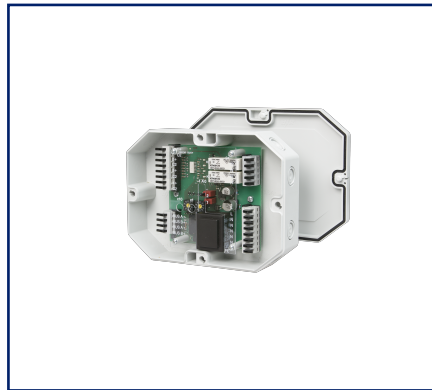


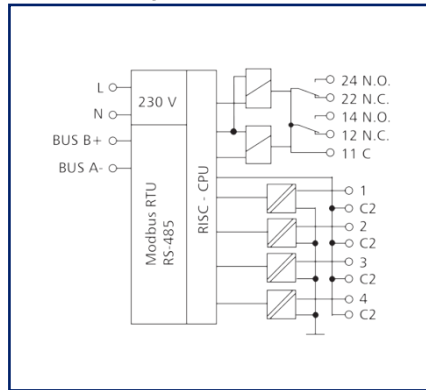
Data sheet

MR-DIO4/2-IP65 Modbus RTU 230 V

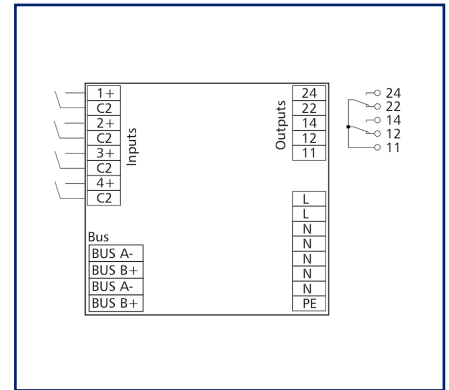
Illustrations



Principle diagram



Grafik



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 with manual control 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 have to be connected to potential-free contacts. 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 with two rotary switches. Bit rate and parity are also set by software.



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	None, Even (default setting), Odd
Stopbits	1 (default setting), 2
Supply	
Operating voltage	230 V AC -10% ... +10%
Power consumption	
Power consumption (max.)	12 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.)	65 A < 20 ms
Insulation coil - contact set	
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

Technical Data

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 ² / max. 16 AWG
Stranded wire (AWG)	max. 1 mm ² / max. 18 AWG
Wire diameter	max. 1.4 mm - min. 0.3 mm
Module connection	
Wire cross section solid	0.2 mm ² - 1.5 mm ² / AWG 28-18
Wire cross section multi	0.08 mm ² - 0.75 mm ² / AWG 28-18
Wire cross section with wire ferrule	0.08 mm ² - 0.75 mm ² / AWG 28-20
Stripping length (min.)	4 mm
Protection circuit	Polarity reversal protection for DC operating voltage, Protection against interchanging power supply and bus
Material	
Material - Housing	ASA + Polycarbonat
Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polycarbonat



Technical Data

Protection category according to IEC 60529

Protection category - housing (acc. to IEC 60529)	IP65
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	-20 °C - 70 °C
Temperature - Storage °F	-4 °F - 158 °F

Classifications

ETIM 7.0	EC001584
ETIM 8.0	EC001584
ETIM 9.0	EC001584

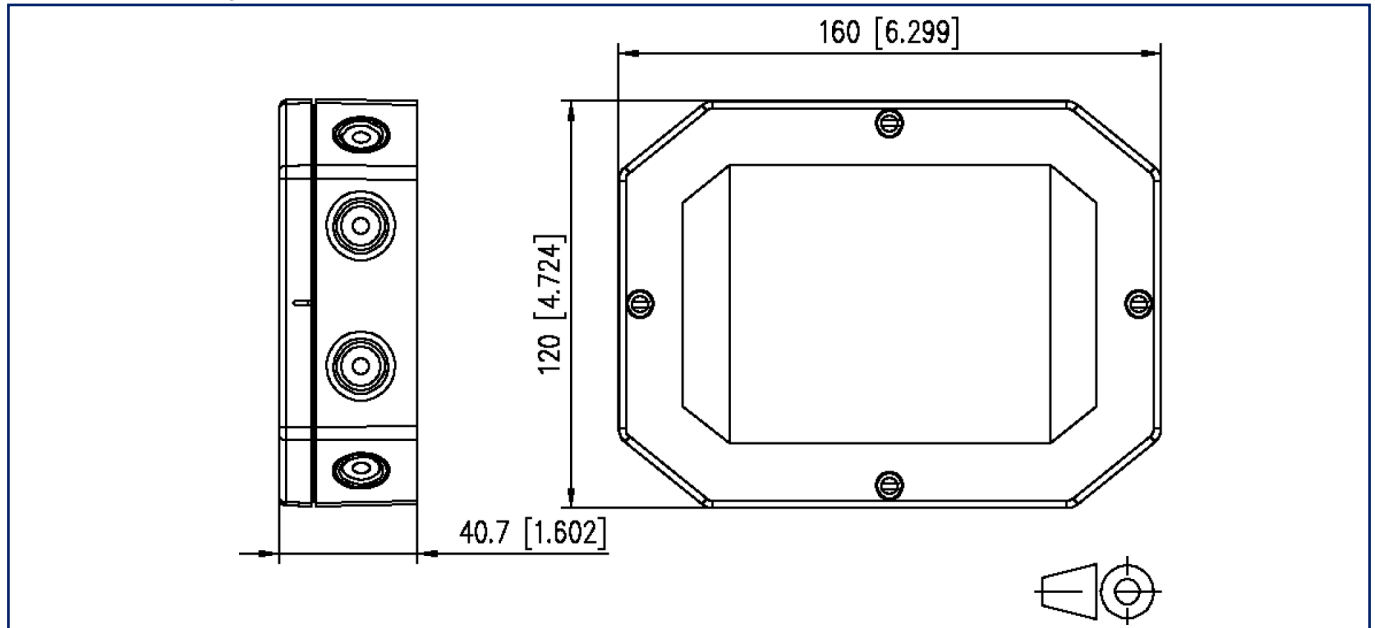
Software and additional documents

Software and documentation	Further documentation is available for free download at www.metz-connect.com
----------------------------	--

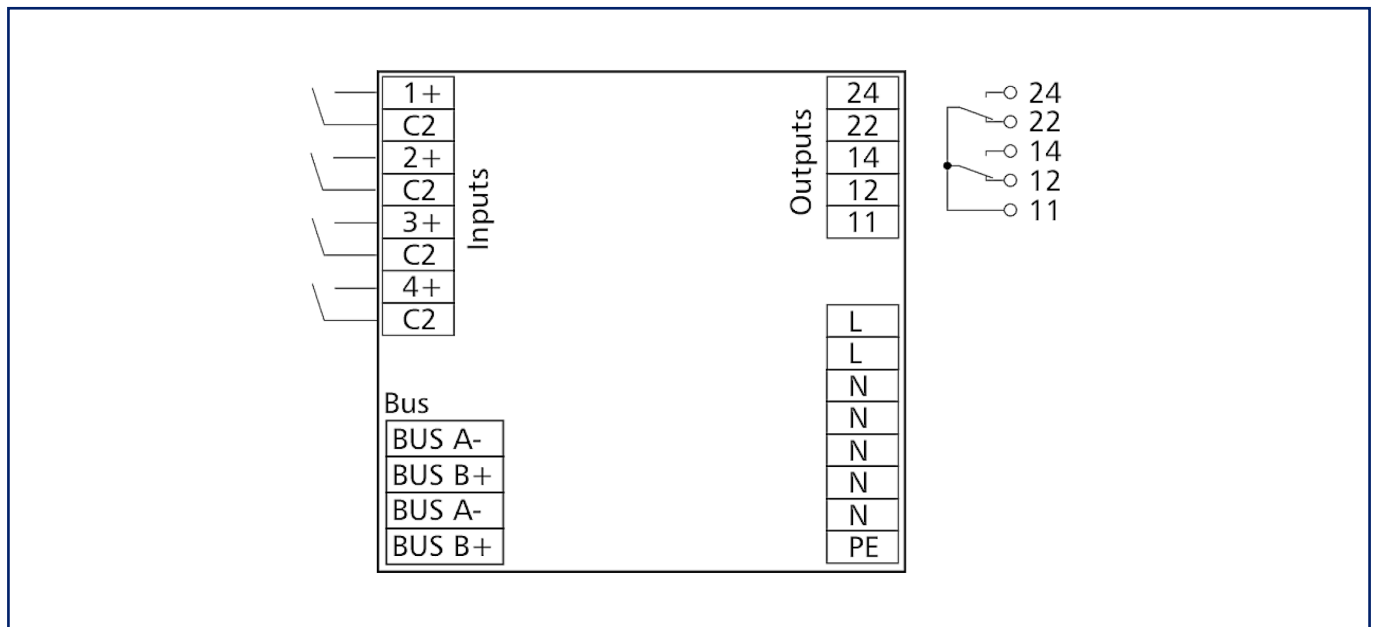


Illustrations

Dimensional drawing

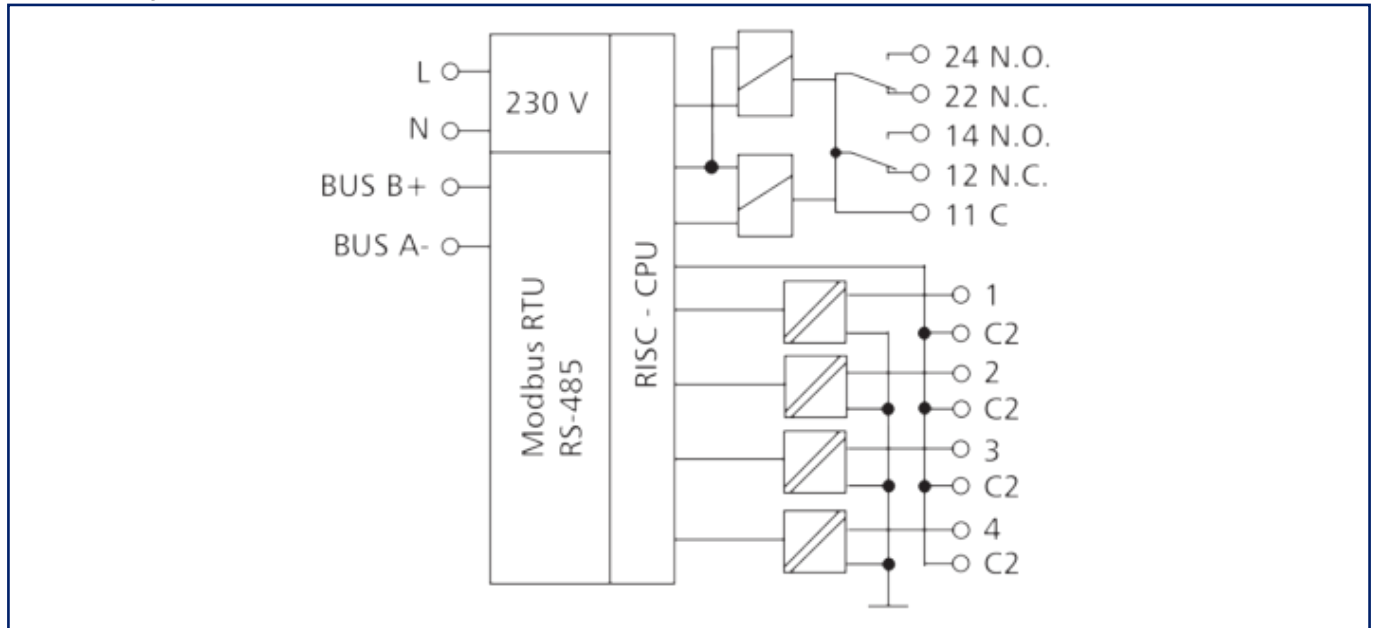


Grafik



Illustrations

Principle diagram



© 2023 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!