C | Logline

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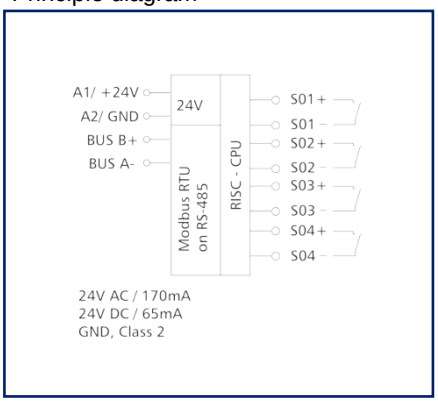
Data sheet
MR-SI4 Modbus RTU

P/N 11083913
EAN 4250184161035
2022/04/20
Version: I

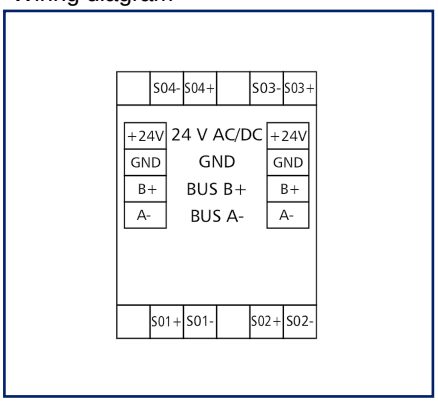
Illustrations



Principle diagram



Wiring diagram



See enlarged drawings at the end of document

Product specification

The Modbus module with 4 S0 inputs to DIN EN 62053-31 class A was developed for decentralized switching tasks. It is suitable for counting S0 counter pulses. This allows very good integration of the module into an energy controlling system. In case of a power failure, the last counter readings are saved. The inputs can be scanned by means of standard registers via a Modbus master. Module address, bit rate and parity are set with two rotary switches on the front or by software. Suitable for decentralized mounting on DIN TH35 rail according to IEC 60715 in electrical distribution cabinets.

- Connection with screw type terminal blocks

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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	24 V AC/DC +/- 10 % (SELV)
Power consumption	
Power consumption AC (max.)	170 mA
Power consumption DC (max.)	65 mA
Duty cycle relative	100 %
Inputs	
S0 inputs acc. to DIN EN 62053-31 Class A	4
Housing	
Dimensions	
Dimension (W x H x D)	35 mm x 69.3 mm x 60 mm
Dimension (W x H x D)	1.378 in. x 2.728 in. x 2.362 in.
Weight	83 g
Mounting style	Standard rail TH35
Mounting position	any
Apposition	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., without distance
Connection type	Screw type terminal blocks
Indicator	green, red and yellow LED

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Technical Data

Terminal blocks	
Supply and bus	
Terminal block	4-pole
Solid wire (AWG)	max. 1.5 mm² / max. 16 AWG
Stranded wire (AWG)	max. 1 mm² / max. 18 AWG
Wire diameter	max. 1.4 mm - min. 0.3 mm
Module connection	
Wire cross section solid	0.2 mm² - 2.5 mm² / AWG 22-12
Wire cross section multi	0.25 mm² - 2.5 mm² / AWG 22-12
Wire cross section with wire ferrule	0.25 mm² - 2.5 mm² / AWG 22-12
Screw torque (max.)	0.5 Nm
Stripping length (min.)	8 mm
Circuit de protection	Polarity reversal protection for DC operating voltage, Protection against interchanging power supply and bus
Material	
Material - Housing	Polyamid 6.6 V0
Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polycarbonat
REACh	compliant
REACh - substance (SVHC)	Lead / 7439-92-1
Protection category according to IEC 60529	
Protection category - housing (acc. to IEC 60529)	IP40
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

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Technical Data

Classifications	
ETIM 7.0	EC000688
ETIM 8.0	EC000688
Software and additional documents	
Software and documentation	Further documentation is available for free download at www.metz-connect.com

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Accessories

P/N	Designation
110369	Terminal block Type 259
110486	HUB DC
110561	Power supply NG4 24 V DC
31135104	Typ 135 RIACON 135_3.5

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Accessories from

P/N	Designation
11083001	MR-GW Modbus RTU / Modbus TCP Gateway
1108300170	MR-F-GW Modbus RTU / Modbus TCP Gateway

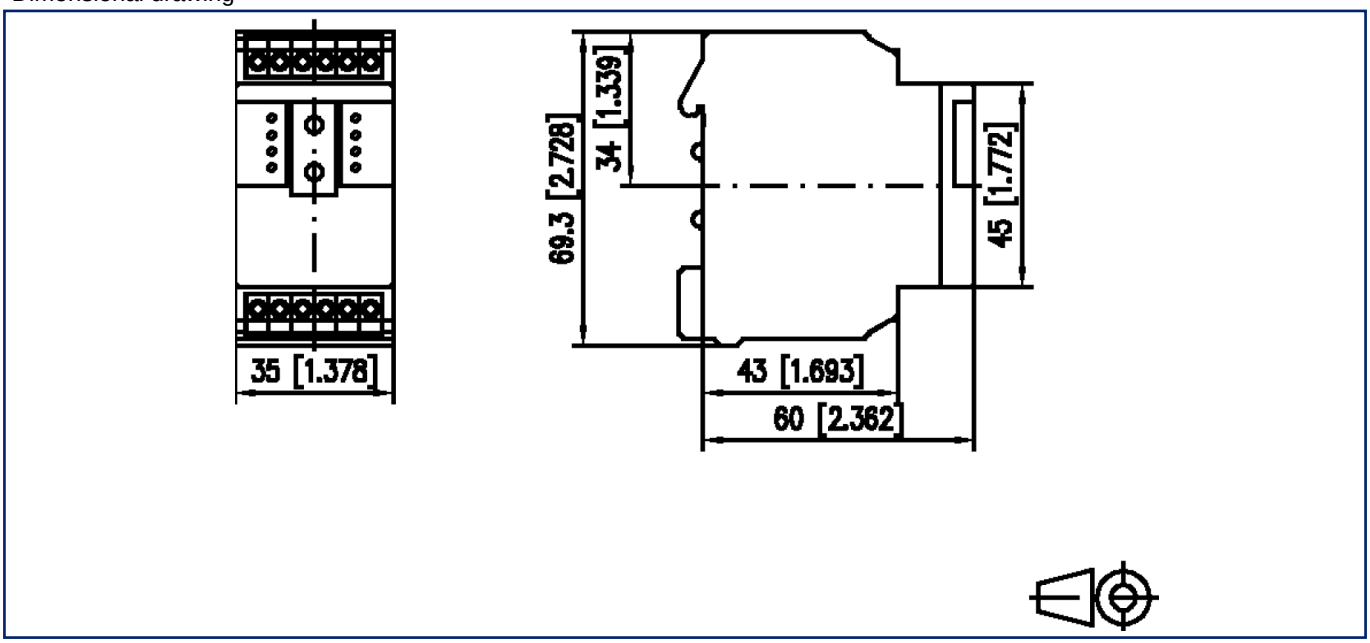
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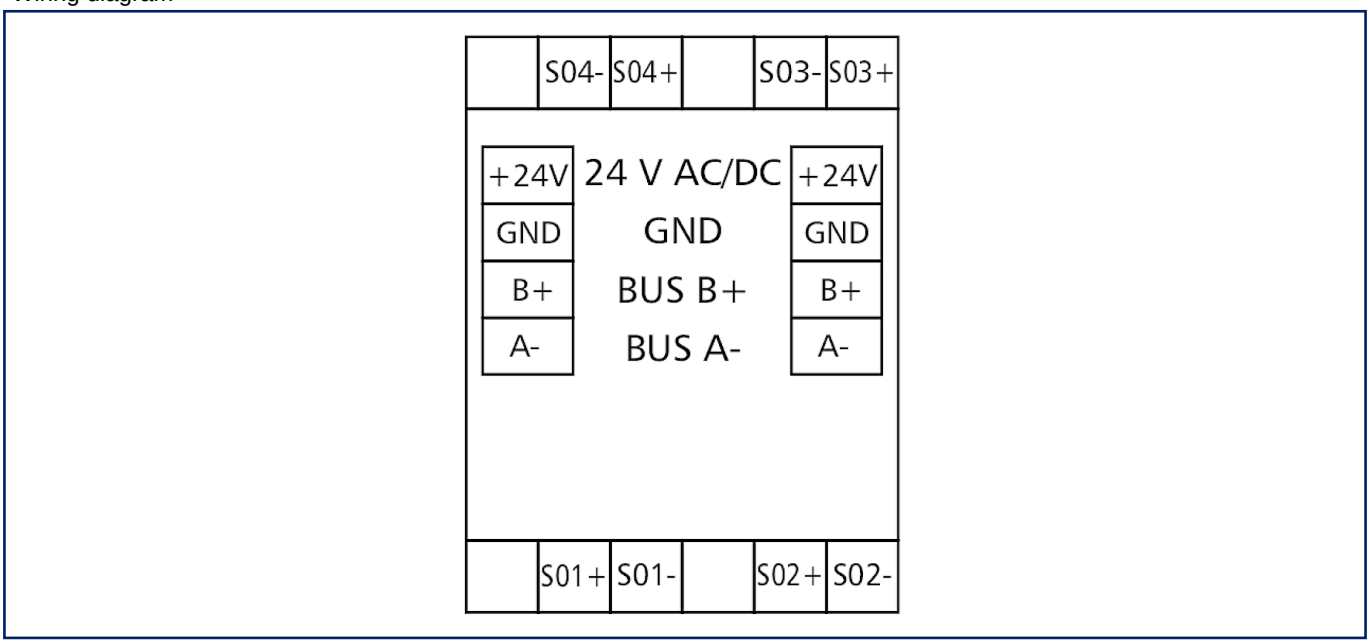
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Illustrations

Dimensional drawing



Wiring diagram



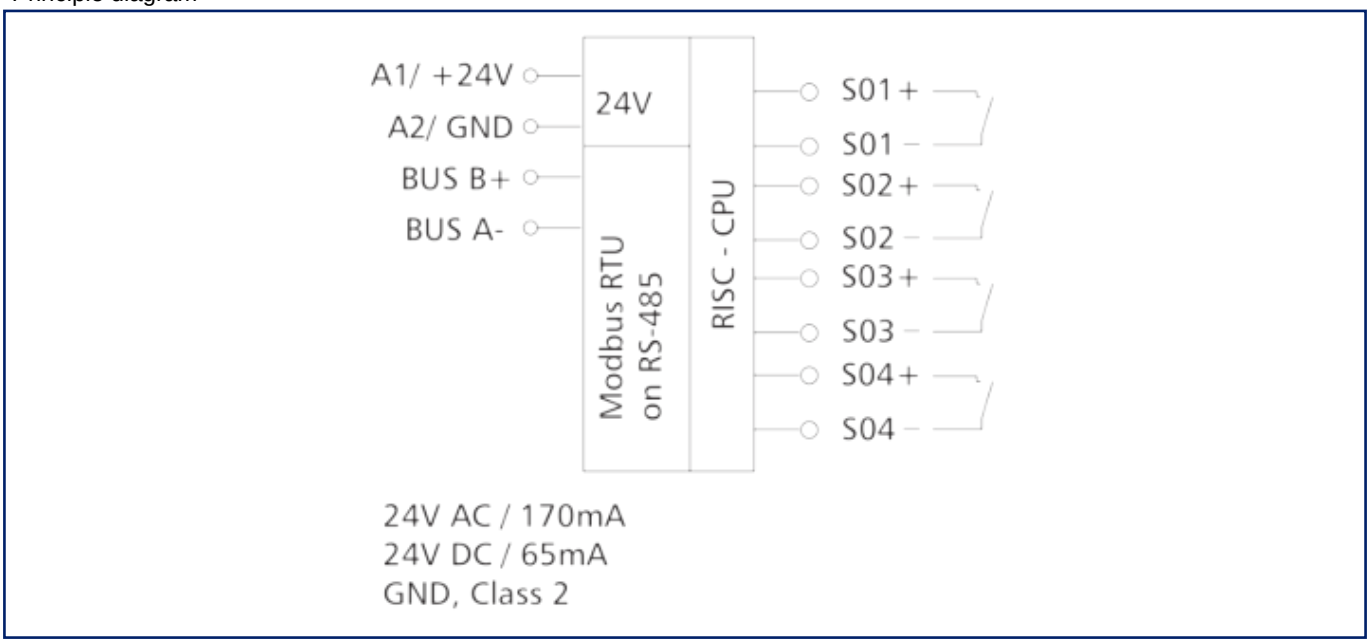
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