

Data sheet

MR-F-CI4 Modbus RTU

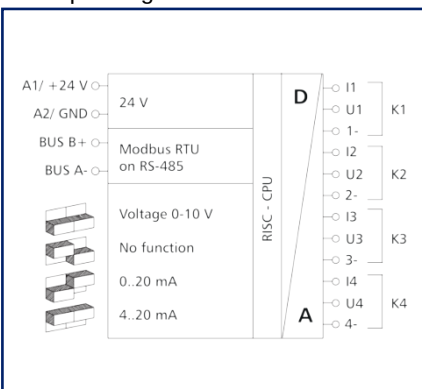
Page 1/8

P/N
110840133270
EAN 4251394620756
2026/09/24
Version: L

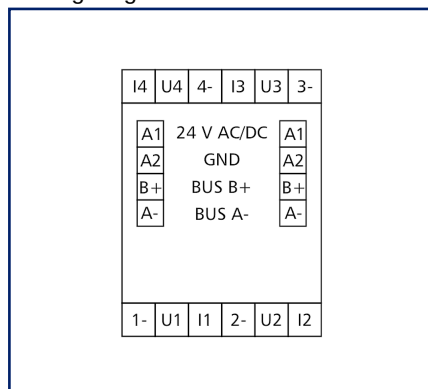
Illustrations



Principle diagram



Wiring diagram



See enlarged drawings at the end of document

Product specification

The Modbus module with 4 analog inputs was developed for decentralized switching tasks. It is suitable for detecting currents and voltages of, for example, active temperature sensors, electrical vent and mixing valves, valve positions, etc. Each input can be set as current or voltage input by DIP switches on the front. The inputs can be scanned with standard registers via a Modbus master. The module address, the baud rate and the parity are set with 2 rotary switches on the front or by software. Suitable for decentralized mounting on TH35 rails according to IEC 60715 in electrical distribution cabinets.

- Connection with spring clamp terminal blocks (push-in)

Data sheet

MR-F-CI4 Modbus RTU

Page 2/8

P/N
110840133270
EAN 4251394620756
2026/09/24
Version: L

Technical Data

Approvals



Open Energy Management Equipment 34TZ

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.)	35 mA
Power consumption DC (max.)	12 mA
Duty cycle relative	100 %

Inputs

Analog inputs	4, individually configurable
Current range	0 (4) - 20 mA DC (adjustable)
Resolution current input	2 µA
Error current input	20 µA
Voltage range	0 V - 10 V DC
Resolution voltage input	1 mV
Error voltage input	10 mV



Data sheet

MR-F-CI4 Modbus RTU

Page 3/8

P/N
110840133270
EAN 4251394620756
2026/09/24
Version: L

Technical Data

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	95 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	Spring clamp terminal blocks
Indicator	green and red 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	min. 0.3 mm max. 1.4 mm
Module connection	
Wire cross section solid	0.2 mm ² - 2.5 mm ² / AWG 24-14
Wire cross section multi	0.25 mm ² - 2.5 mm ² / AWG 24-12
Wire cross section with wire ferrule	0.25 mm ² - 1.5 mm ² / AWG 24-16
Stripping length (min.)	8 mm
Protection circuit	Polarity reversal protection for DC operating voltage Protection against interchanging power supply and bus
Material	
Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polycarbonat

Data sheet

MR-F-CI4 Modbus RTU

Page 4/8

P/N
110840133270
EAN 4251394620756
2026/09/24
Version: L

Technical Data

Protection category according to IEC 60529

Protection category - housing (acc. to IEC 60529)	IP40
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	EC000794
ETIM 8.0	EC000794
ETIM 9.0	EC000794
ETIM 10.0	EC000794

Software and additional documents

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

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.



Data sheet
MR-F-CI4 Modbus RTU

Page 5/8

P/N
110840133270
EAN **4251394620756**
2026/09/24
Version: L

Accessories

P/N	Designation
110369	Terminal block Type 259
11056170	Power supply NG4-F 24 V DC
11080101	USB/RS485 Converter
31135104	Typ 135 RIACON 135_3.5



Data sheet
MR-F-CI4 Modbus RTU

Page 6/8

P/N
110840133270
EAN **4251394620756**
2026/09/24
Version: L

Accessories from

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



Data sheet

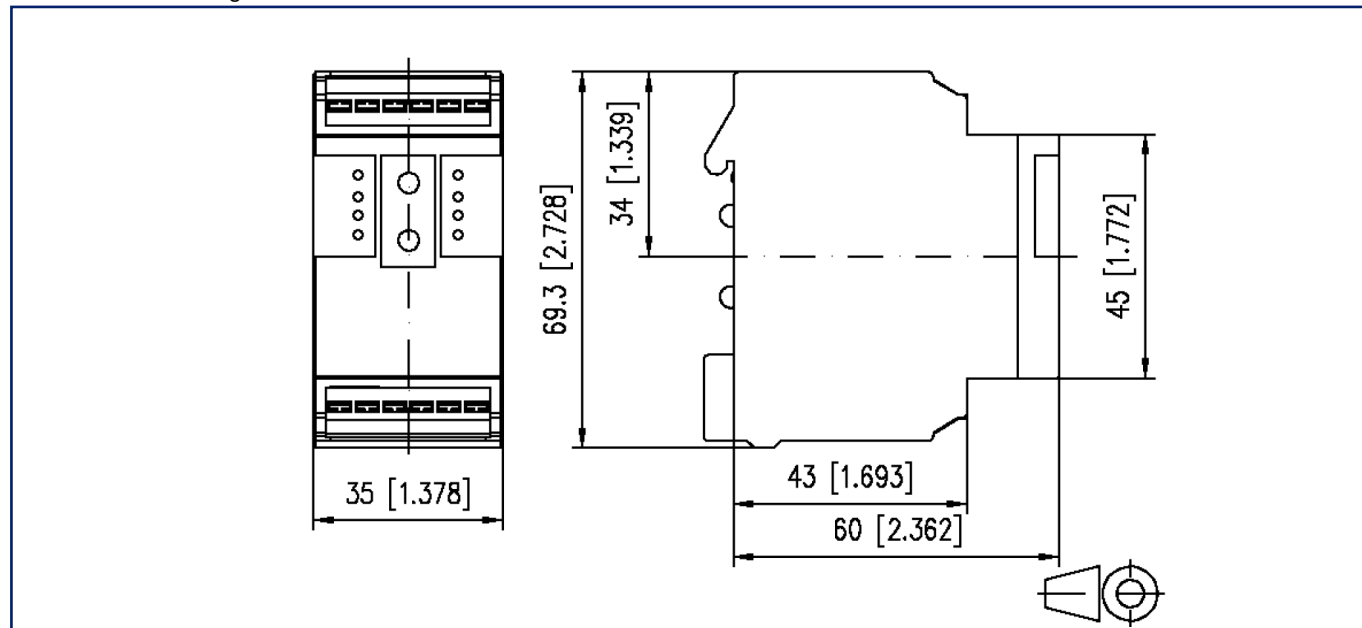
MR-F-CI4 Modbus RTU

Page 7/8

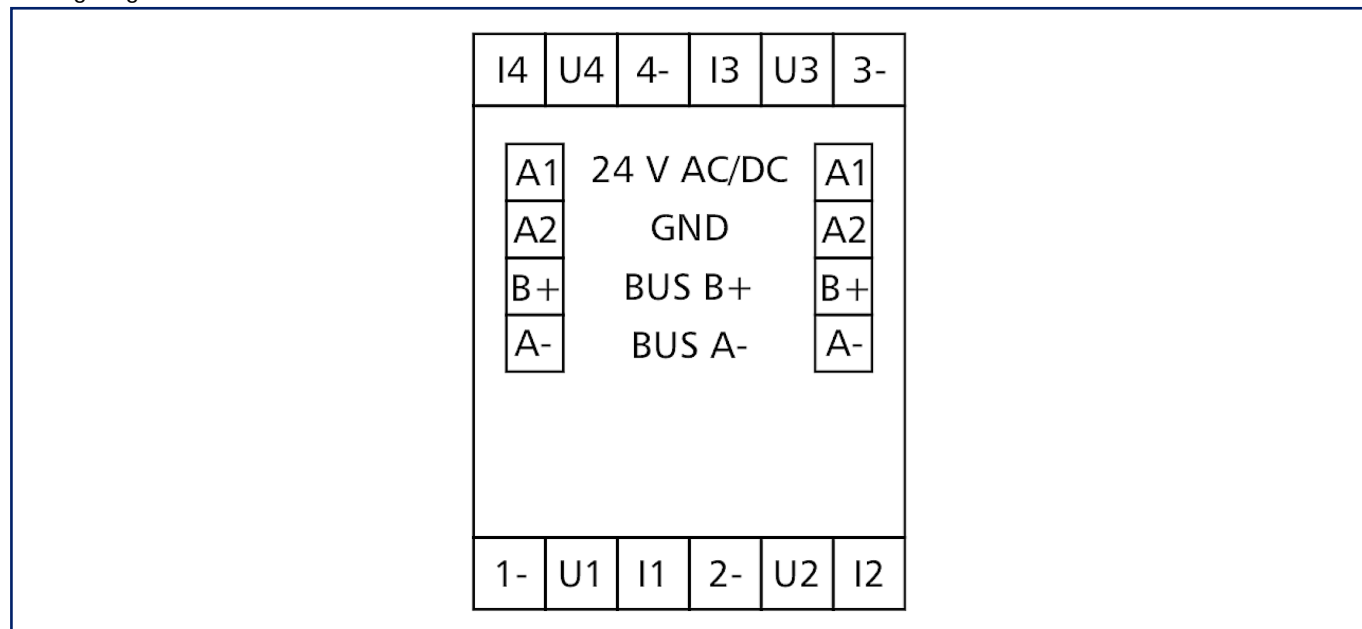
P/N
110840133270
EAN 4251394620756
2026/09/24
Version: L

Illustrations

Dimensional drawing



Wiring diagram



Data sheet MR-F-CI4 Modbus RTU

Page 8/8

P/N
110840133270
EAN 4251394620756
2026/09/24
Version: L

Illustrations

Principle diagram

