

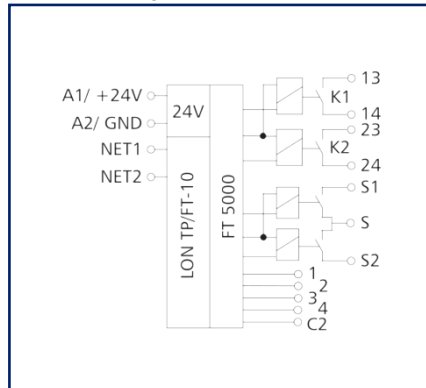
Data sheet

LF-F-DM4/4 LON

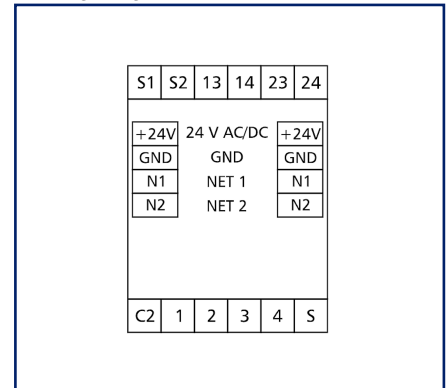
Illustrations



Principle diagram



Wiring diagram



See enlarged drawings at the end of document

Product specification

The LON I/O module with 4 digital inputs, 2 relay outputs and 2 digital outputs was developed for decentralized switching tasks. It is suitable for querying, for example, switching states and, as a result, switching motors or other actuators. In this case it is necessary to protect the relay contacts by appropriate load-dependent measures. The inputs and outputs are scanned and activated by SNVT network variables. The input terminals 1 to 4 are wired with the C2 terminals on two poles to potential-free switches or contacts. In addition, a wipe function is integrated. Suitable for decentralized mounting on DIN TH35 rail according to IEC 60715 in electrical distribution cabinets.

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

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P/N
110856132670
EAN 4251394610023
2026/02/02
Version: G

Technical Data

Approvals



Open Energy Management Equipment 34TZ

RS485 interface

Protocol	TP/FT-10, free topology
Neuron	FT5000
Data format	Standard network variables (SNVT)
Transmission parameters	
Transmission rate	78 Kbit/s
Line topology	2700 m / 64 nodes
Free topology	500 m / 64 nodes
Cabling	Twisted Pair

Supply

Operating voltage	24 V AC/DC +/- 10 % (SELV)
Power consumption	
Power consumption AC (max.)	200 mA
Power consumption DC (max.)	65 mA
Duty cycle relative	100 %
Recovery time	550 ms

Inputs

Digital inputs	4, potential-free
High signal detection	> 4.5 V DC

Outputs

Digital outputs	4
Relay output	2 normally open contacts
Switching voltage relay output (max.)	250 V AC
Continuous current relay output	6 A / relay
Semiconductor output	2 normally open contacts
Switching voltage semiconductor output (max.)	40 V AC/DC
Continuous current semiconductor output	100 mA
Switch-on current semiconductor output (max.)	500 mA
Switching frequency	360 switching cycles/h
Mechanical life	30x10 ⁶ switching cycles

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Outputs	
Electrical life	9x10 ⁴ switching cycles
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)	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	90 g
Mounting style	Standard rail TH35
Mounting position	any
Apposition	without distance The maximum quantity of LON 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.
Connection type	Spring clamp terminal blocks
Indicator	green 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	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

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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)	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	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 www.metz-connect.com
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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.).

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P/N	Designation
110214	U10 USB Network Interface - TP/FT-10 Channel
110369	Terminal block Type 259
11056170	Power supply NG4-F 24 V DC
11087913	LF-FAM LON
31135104	Typ 135 RIACON 135_3.5

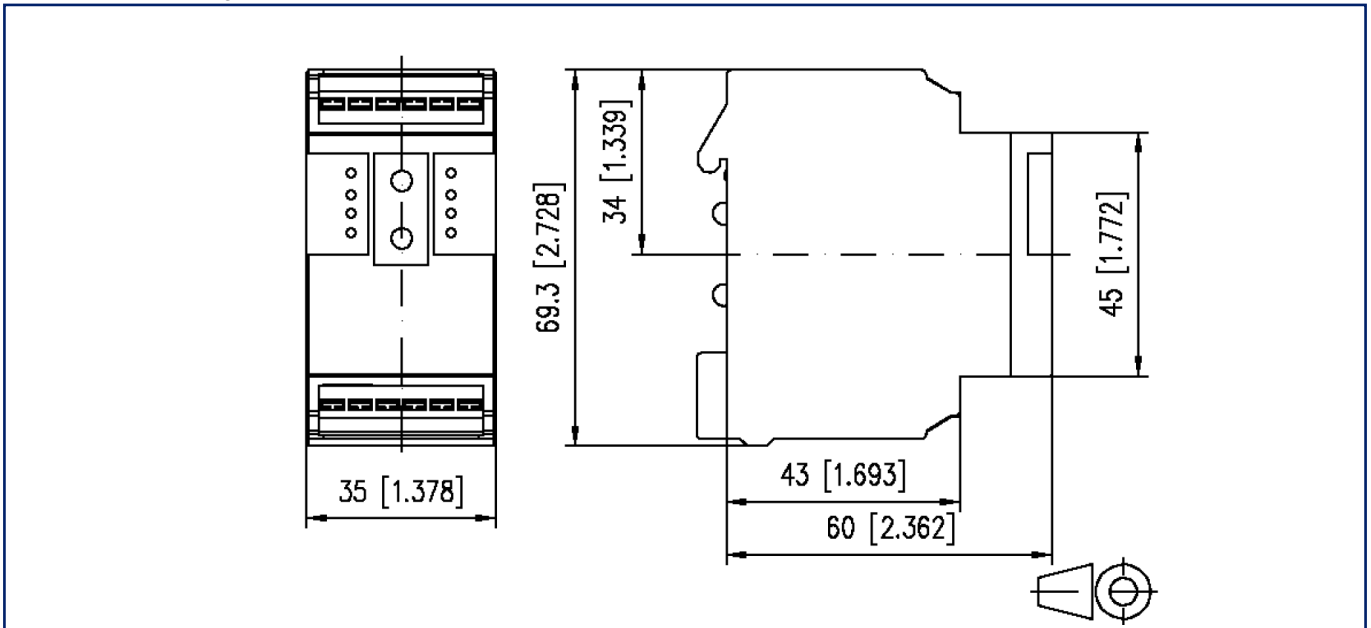


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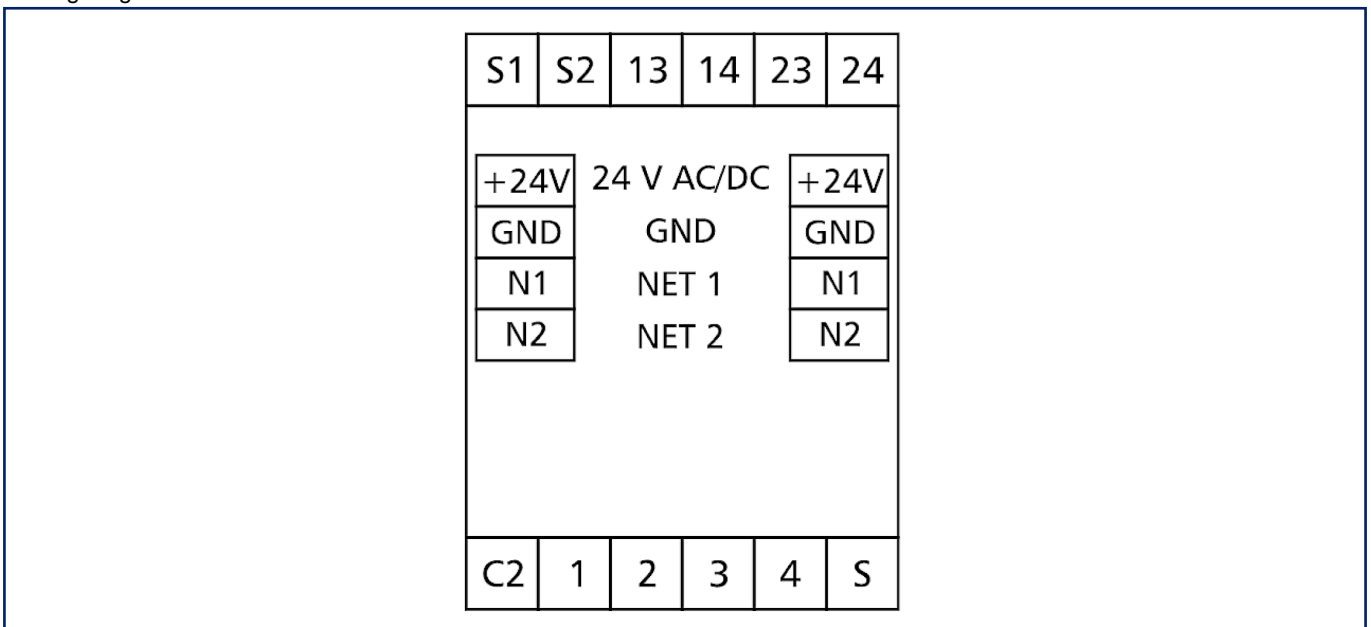
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Dimensional drawing



Wiring diagram



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