AXL F DOR4/2 AC/220DC 1F - Relay module

2700608

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Axioline F, Relay module, Relay outputs: 4 (floating), N/O contact, 220 V DC, 230 V AC, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and Axioline F connectors

Product description

The module is designed for use within an Axioline F station. It has four floating relay N/O contacts which are independent of one another. Low-voltage and extra-low-voltage modules can be used side by side within an Axioline F station.

Your advantages

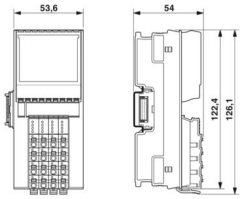
- Meets the requirements of IEC 61850-3 and IEEE 1613
- 4 monostable relays
- Floating connections for 4 actuators
- Nominal current of each output: 8 A
- Total current of the module: 32 A (4 x 8 A)
- Device rating plate stored

Commercial data

Item number	2700608
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR02
Product key	DRI232
GTIN	4046356916486
Weight per piece (including packing)	255.7 g
Weight per piece (excluding packing)	222 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Dimensions

Dimensional drawing	
Width	53.6 mm
Height	126.1 mm
Depth	54 mm
Note on dimensions	The depth applies when a TH 35-7.5 DIN rail is used (in accordance with EN 60715).

Notes

Note on application

Note on application	Only for industrial use

Interfaces

Axioline F local bus

Number of interfaces	2
Connection method	Bus base module
Transmission speed	100 Mbps

System properties

Module

Input address area	0 Byte
Output address area	1 Byte
Required parameter data	1 Byte
Required configuration data	6 Byte

Output data

Relay

Number of outputs	4 (floating)
Connection method	Push-in connection
Connection technology	2-conductor
Contact switching type	N/O contact
Switching current	max. 8 A AC (cos phi = 1)
	For DC see load limit curve, e.g., the following values:
	max. 8 A DC (≤ 30 V, ohmic load)

	max. 500 mA DC (110 V, ohmic load)
	max. 250 mA DC (220 V DC, ohmic load)
	max. 220 mA DC (125 V DC, L/R ≤ 50 ms, applications with UL approval)
	max. 110 mA DC (250 V DC, L/R ≤ 50 ms, applications with UL approval)
Switching power	max. 2000 VA
	For DC see load limit curve, e.g., the following values:
	max. 240 W (30 V DC)
	max. 55 W (≥ 60 V DC)
	max. 25 W (125 V DC, 250 V DC, applications with UL approval)
Switching capacity in accordance with IEC 60947-5-1	6 A (120 V (AC15))
	3 A (240 V (AC15))
	0.22 A (125 V (DC13))
	0.1 A (250 V (DC-13))
Switching frequency	max. 6 (per minute)
Mechanical service life	10x 10^6 cycles

Product properties

Product type	I/O component
Product family	Axioline F
Type	block modular
Mounting position	any (observe temperature and current derating)
Scope of supply	including bus base module and Axioline F connectors

Insulation characteristics

Overvoltage category	III (EN 61010-2-201/UL 61010-2-201), up to 2000 m above sea level II (EN 61010-2-201/UL 61010-2-201), up to 3000 m above sea level
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	1.4 W

Potentials: Axioline F local bus supply (U_{Bus})

Supply voltage	5 V DC (via bus base module)
Current draw	max. 280 mA (all relays pick up)

Electrical isolation/isolation of the voltage ranges

Test voltage: Relay contact / logic	4 kV
	5 kV
Test voltage: Relay contact / functional ground	4 kV
	5 kV
Test voltage: Relay contact/relay contact (open contact)	1 kV, 50 Hz, 1 min
Test voltage: Relay contact/relay contact (adjacent male connectors)	2.5 kV

Connection data

Connection technology

Connection name	Axioline F connector
Note on the connection method	Please observe the information provided on conductor cross-sections in the “Axioline F: system and installation” user manual. When selecting the cables, please note that in the case of a small conductor cross-section and high current, the terminal point temperature may be up to 30 K above the ambient temperature.

Axioline F connector

Connection method	Push-in connection
Note on the connection method	Please observe the information provided on conductor cross-sections in the “Axioline F: system and installation” user manual. When selecting the cables, please note that in the case of a small conductor cross-section and high current, the terminal point temperature may be up to 30 K above the ambient temperature.
Conductor cross-section, rigid	0.2 mm² ... 1.5 mm²
Conductor cross-section, flexible	0.2 mm² ... 1.5 mm²
Conductor cross-section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C (max. 6 A/channel for panel mounting on horizontal DIN rail; max. 4 A/channel for any mounting position)
	-25 °C ... 50 °C (max. 8 A/channel for panel mounting on horizontal DIN rail; max. 6 A/channel for any mounting position)
	-25 °C ... 40 °C (max. 8 A/channel for any mounting position)
Degree of protection	IP20
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)

Standards and regulations

Developed according to standard	Immunity to ESD
	Immunity to EF
	Immunity to burst
	Immunity to surge
	Immunity to conducted interference
Standard designation	Ambient conditions
Standards/specifications	IEC 61850-3

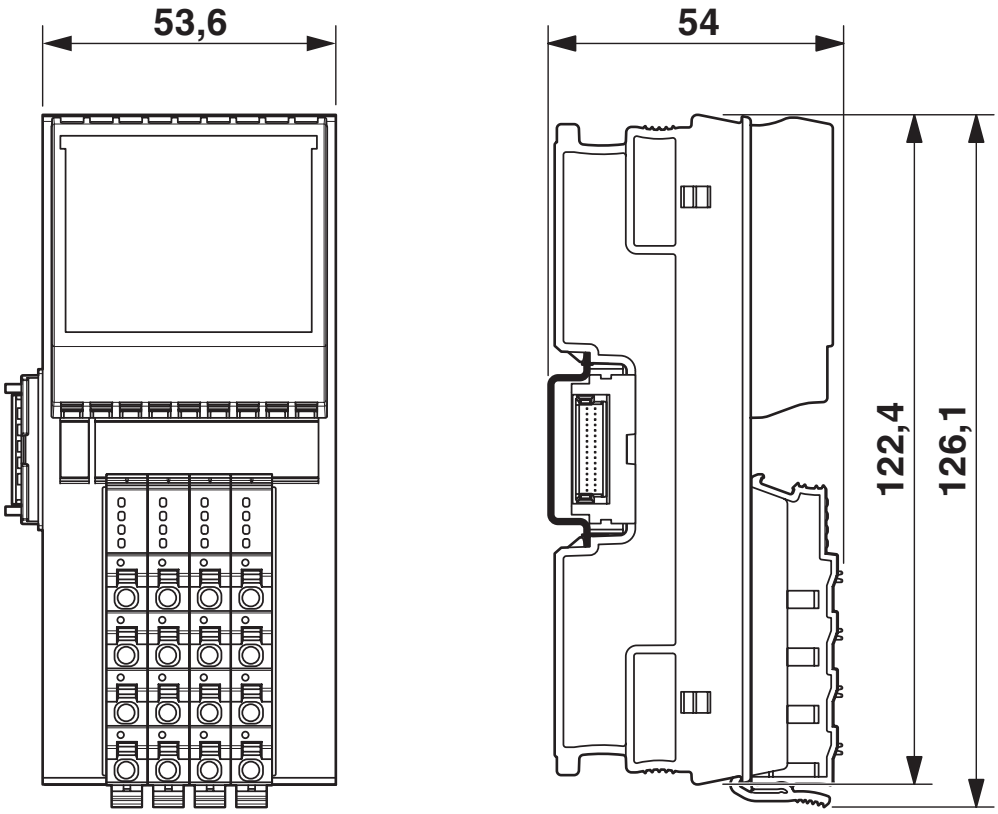
Mounting

Mounting type	DIN rail mounting

Mounting position	any (observe temperature and current derating)

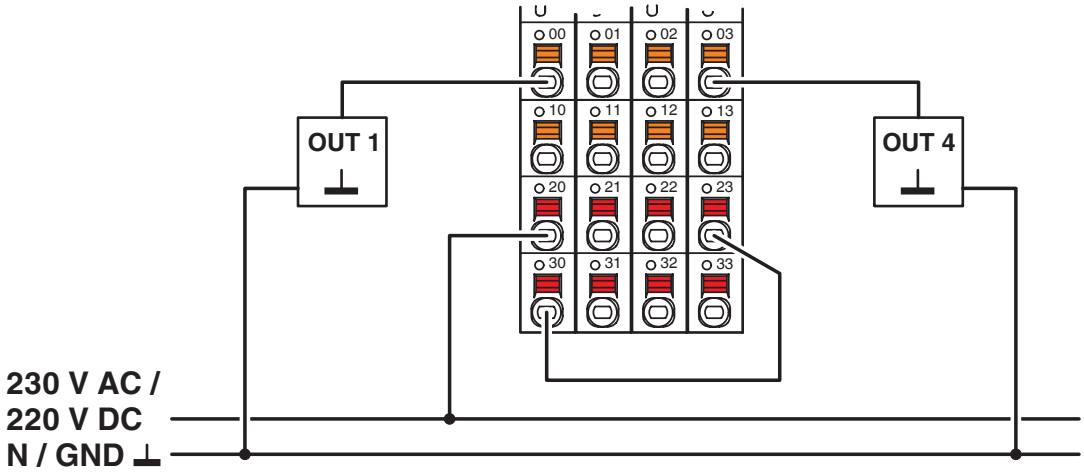
Drawings

Dimensional drawing



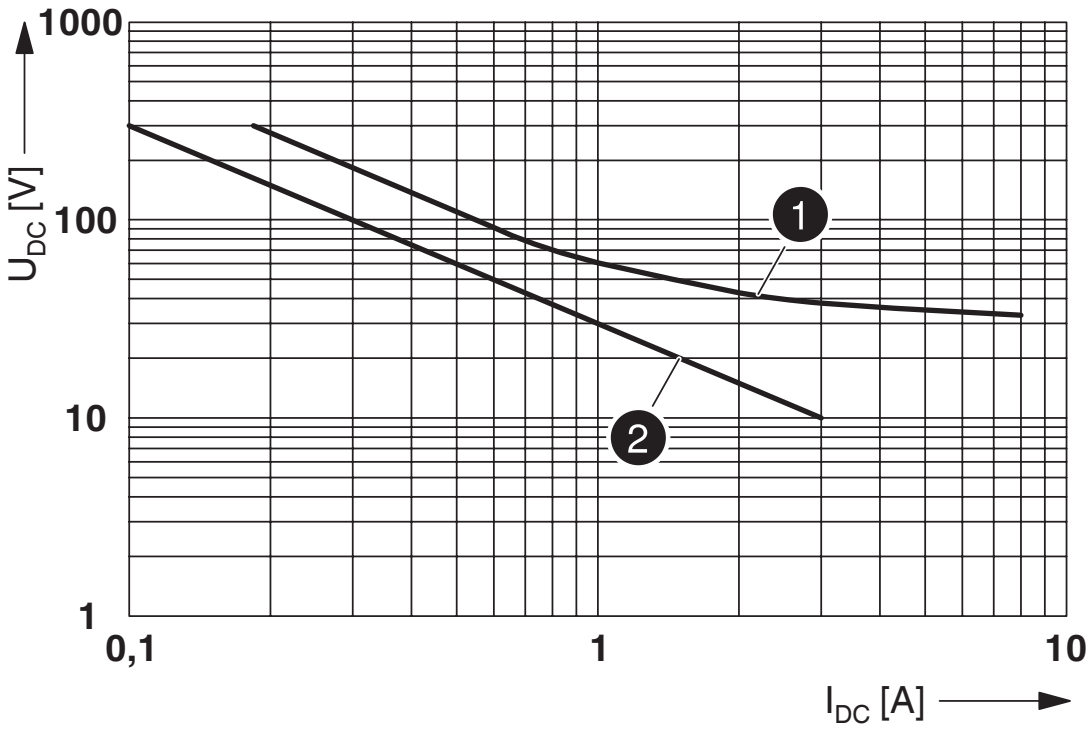
Dimensions

Connection diagram



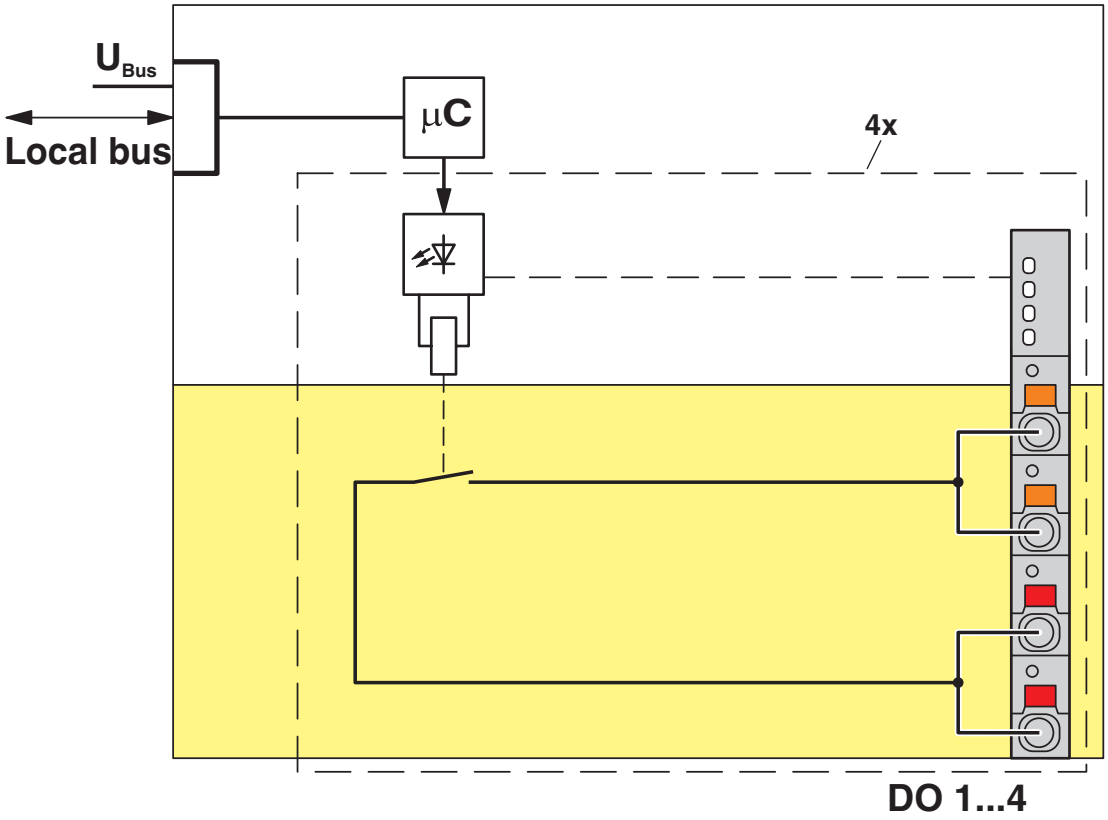
Connection of actuators

Diagram



DC load limit curve for REL-MLR-1X1/G 5 (1 - ohmic load, 2 - inductive load L/R = 50 ms)

Block diagram



Internal wiring of the terminal points

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2700608

cULus Listed
Approval ID: E238705

Classifications

ECLASS

ECLASS-13.0	27242604
ECLASS-15.0	27242604

ETIM

ETIM 10.0	EC001599

UNSPSC

UNSPSC 21.0	32151600

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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