

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

## 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
---------------------	-------------------------

### Material specifications

Color (Housing)	gray (RAL 7042)
-----------------	-----------------

### Interfaces

#### Axioline F local bus

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

### System properties

#### Programming data (LocalbusSlave)

Input address area	0 Byte
Output address area	1 Byte

#### Fieldbus data telegram (PROFIBUS)

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

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

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

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

	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 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
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)

### Mechanical test

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	20g (contact interruption) / 5g (contact closure)
Continuous shock in accordance with EN 60068-2-27/IEC 60068-2-27	10g

## Standards and regulations

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

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)

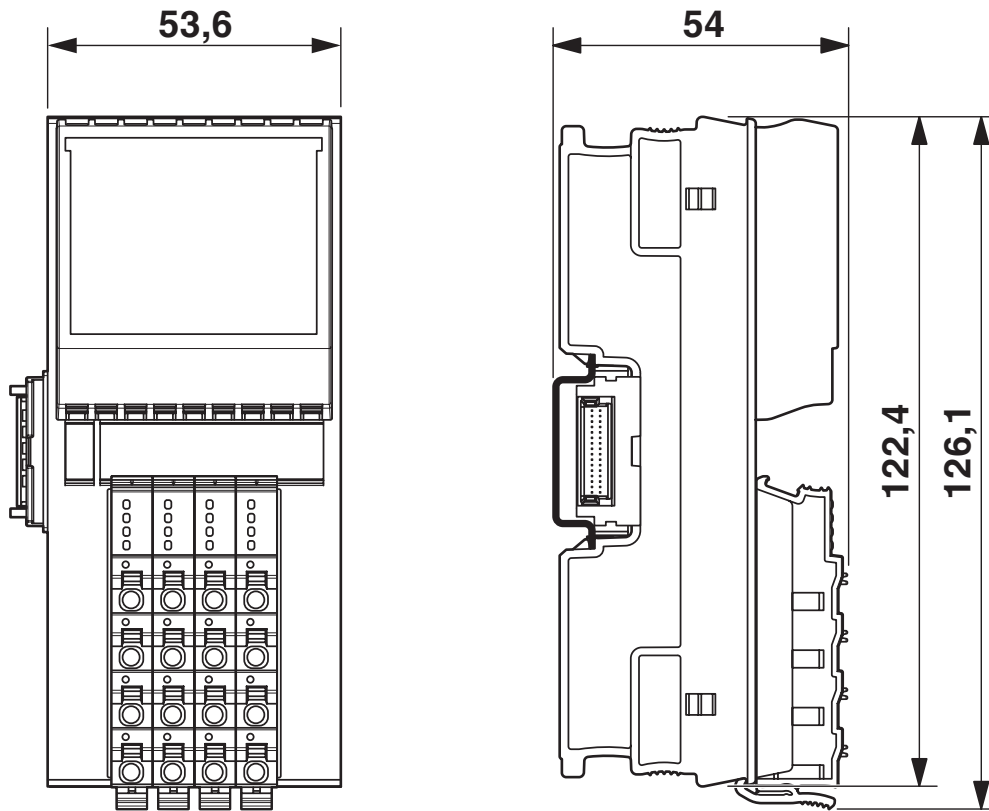
# AXL F DOR4/2 AC/220DC 1F - Relay module

2700608

<https://www.phoenixcontact.com/us/products/2700608>

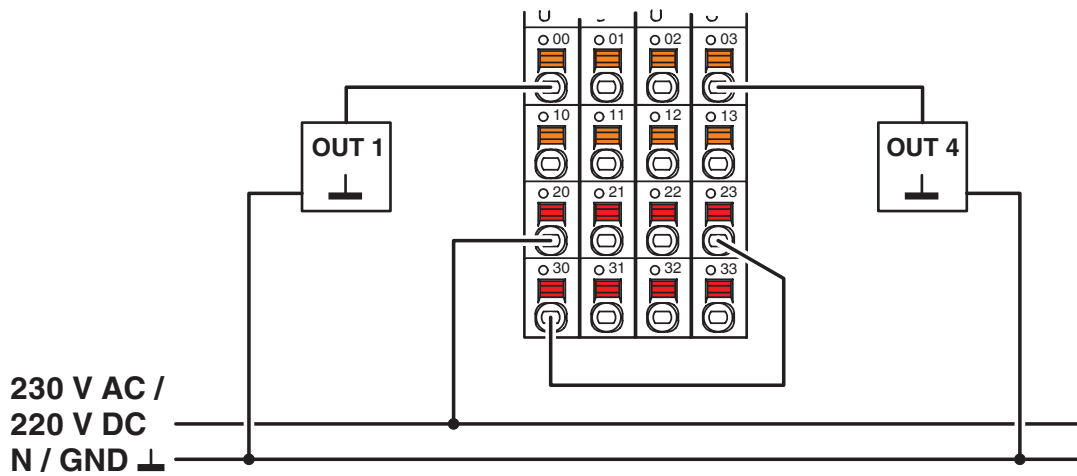
## Drawings

Dimensional drawing



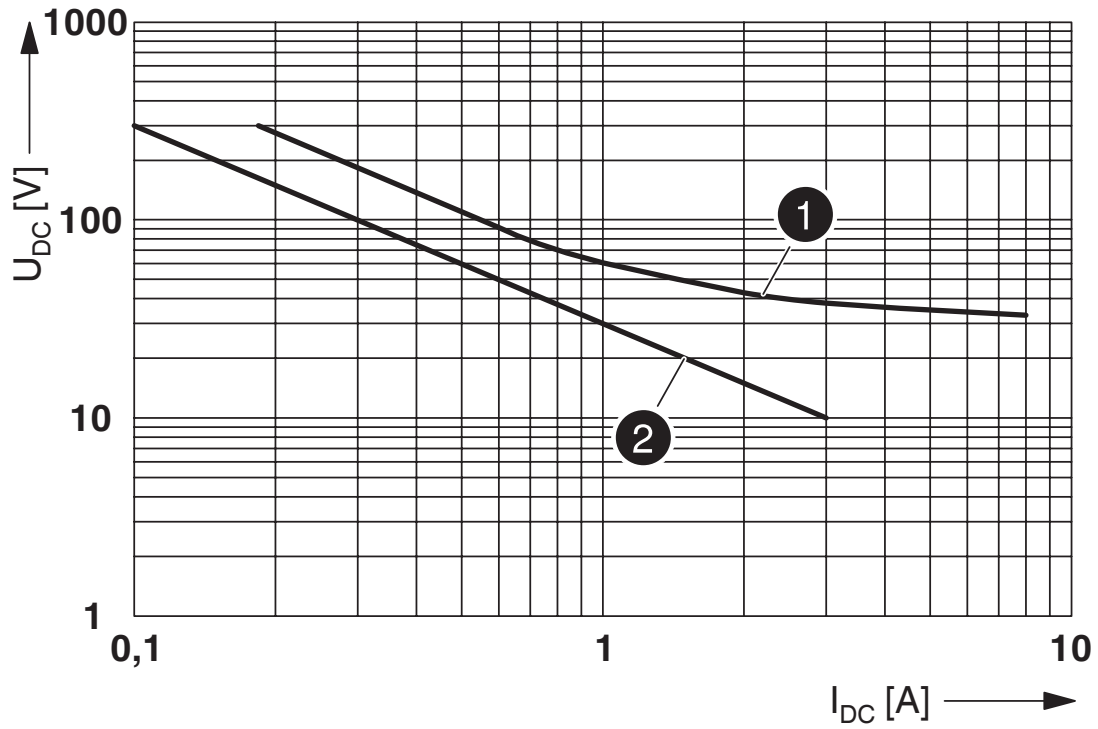
Dimensions

Connection diagram



Connection of actuators

Diagram



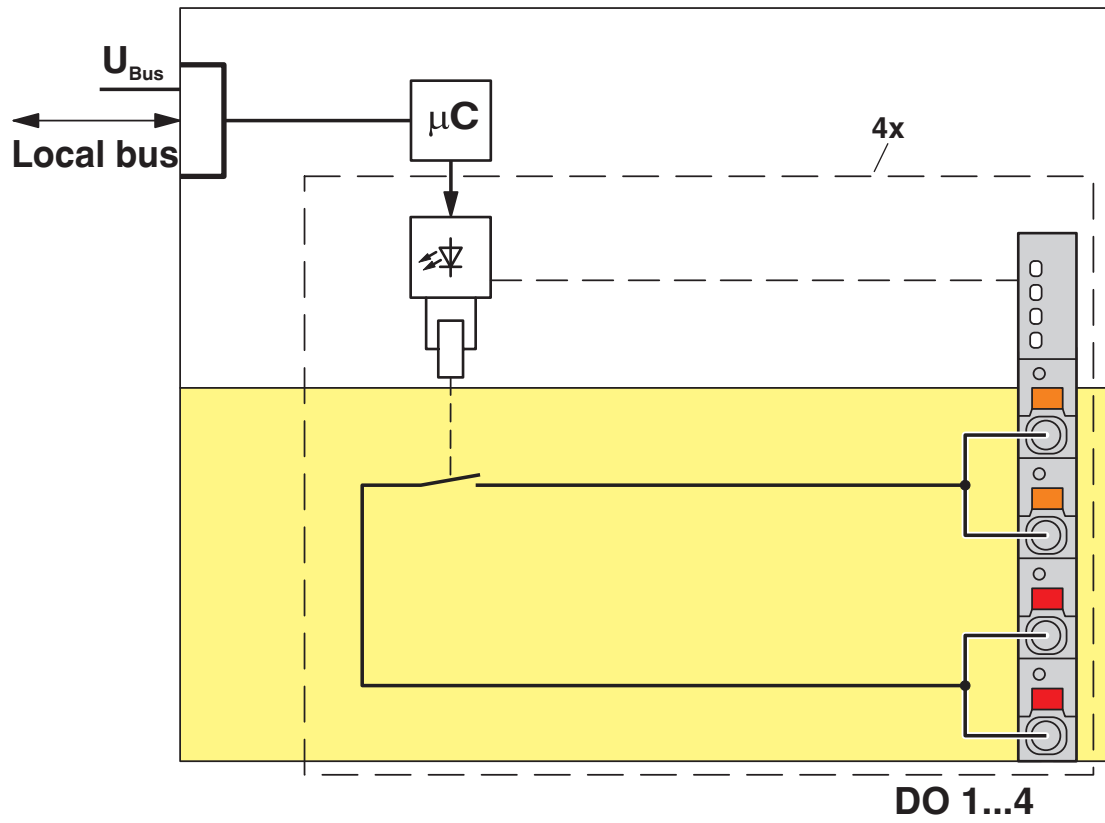
DC load limit curve for REL-MLR-1X1/G 5 (1 - ohmic load, 2 - inductive load L/R = 50 ms)

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

2700608

<https://www.phoenixcontact.com/us/products/2700608>

Block diagram



Internal wiring of the terminal points

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

## Approvals

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



**cULus Listed**

Approval ID: E238705

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

## Classifications

### ECLASS

ECLASS-13.0	27242604
ECLASS-15.0	27242604

### ETIM

ETIM 10.0	EC001599
-----------	----------

### UNSPSC

UNSPSC 21.0	32151600
-------------	----------

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



2700608

<https://www.phoenixcontact.com/us/products/2700608>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)