# I/O module - AXL F DO8/2 2A 1H - 2688381

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

Axioline F, Digital output module, Digital outputs: 8, 24 V DC, 2 A, connection method: 2-wire, transmission speed in the local bus: 100 Mbps, including bus base module and Axioline F connectors

## Product Description

The module is designed for use within an Axioline F station.
It is used to output digital signals.
The outputs are protected against short circuit and overload.

## Why buy this product

- 8 digital outputs
- 24 V DC, 2 A
- Connection of actuators in 2-wire technology
- Minimum update time of < 150 µs
- Device rating plate stored

RoHS

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 pc |
| GTIN | 4 046356 606479 |
| GTIN | 4046356606479 |

## Technical data

### Dimensions

| | |
|---|---|
| Width | 35 mm |
| Height | 126.1 mm |
| Depth | 54 mm |
| Note on dimensions | The depth is valid when a TH 35-7,5 DIN rail is used (according to EN 60715). |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

# I/O module - AXL F DO8/2 2A 1H - 2688381

## Technical data

### Ambient conditions

| | |
|---|---|
| Permissible humidity (operation) | 5 % ... 95 % (non-condensing) |
| Permissible humidity (storage/transport) | 5 % ... 95 % (non-condensing) |
| 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) |
| Degree of protection | IP20 |

### Connection data

| | |
|---|---|
| Designation | 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. |
| Conductor cross section solid min. | 0.5 mm² |
| Conductor cross section solid max. | 1.5 mm² |
| Conductor cross section flexible min. | 0.5 mm² |
| Conductor cross section flexible max. | 1.5 mm² |
| Conductor cross section AWG min. | 20 |
| Conductor cross section AWG max. | 16 |
| Stripping length | 8 mm |

### General

| | |
|---|---|
| Mounting type | DIN rail |
| Net weight | 189 g |
| Note on weight specifications | with connectors and bus base module |

### Interfaces

| | |
|---|---|
| Designation | Axioline F local bus |
| No. of channels | 2 |
| Connection method | Bus base module |
| Transmission speed | 100 Mbps |

### Axioline potentials

| | |
|---|---|
| Designation | Axioline F local bus supply ($U_{Bus}$) |
| Supply voltage | 5 V DC (via bus base module) |
| Current consumption | max. 150 mA |
| Power consumption | max. 750 mW |
| Designation | Supply for digital output modules ($U_O$) |
| Supply voltage | 24 V DC |
| Supply voltage range | 19.2 V DC ... 30 V DC (including all tolerances, including ripple) |
| Current consumption | max. 16 A (Provide external protection; if the total current of 8 A is exceeded, connect the supply at the power connector parallel via both terminal points.) |
| Power consumption | max. 480 W (of which 625 mW with internal losses) |
| Type of protection | Surge protection of the supply voltage |
| | Polarity reversal protection of the supply voltage |

# I/O module - AXL F DO8/2 2A 1H - 2688381

## Technical data

### Axioline potentials

| | |
|---|---|
| Protection | max. 16 A (polarity reversal protection up to 5 A) |

### Digital outputs

| | |
|---|---|
| Output name | Digital outputs |
| Connection method | Push-in connection |
| Connection technology | 2-wire |
| Number of outputs | 8 |
| Type of protection | Short-circuit protection, overload protection of the outputs |
| Output voltage | 24 V |
| Nominal output voltage | 24 V DC |
| Maximum output current per channel | 2 A |
| Maximum output current per module | 16 A (external fuse) |
| Nominal load, inductive | max. 48 VA (1.2 H, 12 Ω, at nominal load) |
| Nominal load, lamp | max. 48 W (at nominal voltage) |
| Nominal load, ohmic | max. 48 W (12 Ω, at nominal load) |

### Electrical isolation

| | |
|---|---|
| Test section | 5 V communications power (logic), 24 V supply (I/O) 500 V AC 50 Hz 1 min. |
| | 5 V supply (logic)/functional earth ground 500 V AC 50 Hz 1 min. |
| | 24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min. |

### Standards and Regulations

| | |
|---|---|
| Mechanical tests | Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g |
| | Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g |
| | Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g |
| Protection class | III, IEC 61140, EN 61140, VDE 0140-1 |

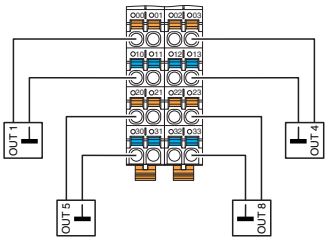
### Environmental Product Compliance

| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

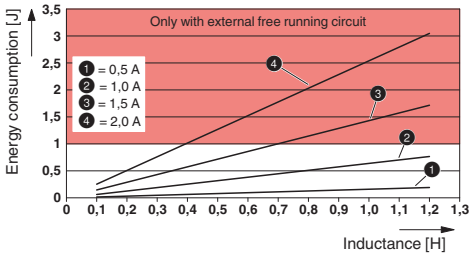
## Drawings

# I/O module - AXL F DO8/2 2A 1H - 2688381

Connection diagram

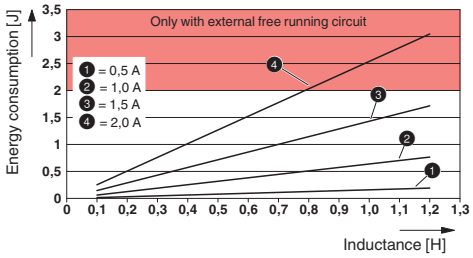



Diagram



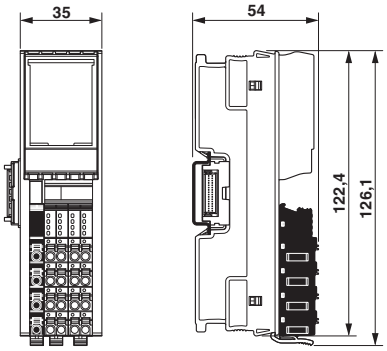

Maximum energy consumption of the outputs when switching off inductive loads with 100 % simultaneity

Diagram

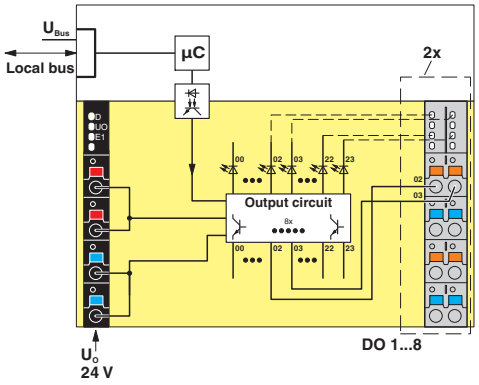



Maximum energy consumption of the outputs when switching off inductive loads with 50 % simultaneity

Dimensional drawing




Block diagram




Internal wiring of the terminal points

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / EAC / RINA / NK / BSH / DNV GL / ABS / KR / cULus Listed

# I/O module - AXL F DO8/2 2A 1H - 2688381

## Approvals

Ex Approvals

### Approval details

| | | |
|---|---|---|
| UL Listed | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
| cUL Listed | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
| EAC | | EAC-Zulassung |
| RINA | http://www.rina.org/en | ELE0078216XG |
| NK | http://www.classnk.or.jp/hp/en/ | 14A006 |
| BSH | http://www.bsh.de/de/index.jsp | 840 |
| DNV GL | http://exchange.dnv.com/tari/ | TAA00000DF |
| ABS | http://www.eagle.org/eagleExternalPortalWEB/ | 18-HG1767360-PDA |
| KR | http://www.krs.co.kr/eng/main/main.aspx | HMB17372-AC002 |
| cULus Listed | | |

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
http://www.phoenixcontact.com

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact:

2688381