

# I/O module - AXL DO 8/2-2A - 2688381

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Axioline digital output terminal, 8 outputs, 24 V DC, 2 A, 2-wire connection method (including bus base module and plugs)

## Product Description

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

## Product Features

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

## Key commercial data

<b>package_quantity</b>	1
<b>GTIN</b>	4046356606479

## Technical data

### Dimensions

<b>Width</b>	35 mm
<b>Height</b>	126.1 mm
<b>Depth</b>	54 mm
<b>Note on dimensions</b>	The depth is valid when a TH 35-7.5 DIN rail is used (according to EN 60715).

### Ambient conditions

<b>Ambient temperature (operation)</b>	-25 °C ... 60 °C
<b>Ambient temperature (storage/transport)</b>	-40 °C ... 85 °C
<b>Permissible humidity (operation)</b>	5 % ... 95 % (no condensation)
<b>Permissible humidity (storage/transport)</b>	5 % ... 95 % (no condensation)
<b>Air pressure (operation)</b>	70 kPa ... 106 kPa (up to 3000 m above sea level)
<b>Air pressure (storage/transport)</b>	70 kPa ... 106 kPa (up to 3000 m above sea level)
<b>Degree of protection</b>	IP20

### General

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## Technical data

### General

<b>Weight</b>	136 g
<b>Note on weight specifications</b>	with plugs and bus base module
<b>Mounting type</b>	DIN rail
<b>Protection class</b>	III, IEC 61140, EN 61140, VDE 0140-1
<b>Test section</b>	5 V communications power (logic), 24 V supply (I/O) 500 V AC 50 Hz 1 min
<b>Test section</b>	5 V supply (logic)/functional earth ground 500 V AC 50 Hz 1 min
<b>Test section</b>	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min
<b>Conformance with EMC directives</b>	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B; 6 kV contact discharge, 8 kV air discharge
<b>Conformance with EMC directives</b>	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A; Field intensity: 10 V/m
<b>Conformance with EMC directives</b>	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion B, 2 kV
<b>Conformance with EMC directives</b>	Noise immunity test in accordance with EN 61000-6-2 Transient surge voltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B; DC supply lines: $\pm 0.5$ kV/ $\pm 0.5$ kV (symmetrical/asymmetrical)
<b>Conformance with EMC directives</b>	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A; Test voltage 10 V
<b>Conformance with EMC directives</b>	Noise emission test according to EN 61000-6-3 Radio interference properties EN 55022 Class B
<b>Mechanical tests</b>	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5 g
<b>Mechanical tests</b>	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g, 11 ms period, half-sine shock pulse
<b>Mechanical tests</b>	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10 g
<b>Diagnostics messages</b>	Short-circuit / overload of the digital outputs Yes

### Interfaces

<b>Name</b>	Axioline F local bus
<b>Connection method</b>	Bus base module
<b>Transmission speed</b>	100 MBit/s

### Axioline potentials

<b>Communications power <math>U_{bus}</math></b>	5 V DC (via bus base module)
<b>Current consumption from <math>U_{bus}</math></b>	max. 150 mA
<b>Supply of digital output modules <math>U_o</math></b>	24 V DC
<b>Current consumption from <math>U_o</math></b>	16 A (Provide external protection; if the total current of 8 A is exceeded, connect the supply at the power plug parallel via both terminal points.)

### Digital outputs

<b>Output name</b>	Digital outputs
<b>Connection method</b>	Direct plug-in method
<b>Connection method</b>	2-wire

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### Digital outputs

<b>Number of outputs</b>	8
<b>Protective circuit</b>	Short-circuit protection, overload protection of the outputs Electronic
<b>Output voltage</b>	24 V
<b>Nominal output voltage</b>	24 V DC
<b>Maximum output current per channel</b>	2 A
<b>Maximum output current per module</b>	16 A (external fuse)
<b>Nominal load, inductive</b>	max. 48 VA (1.2 H, 12 Ω; at nominal load)
<b>Nominal load, lamp</b>	max. 48 W (at nominal voltage)
<b>Nominal load, ohmic</b>	max. 48 W (12 Ω; at nominal load)

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27240404
<b>eCl@ss 4.1</b>	27240404
<b>eCl@ss 5.0</b>	27242204
<b>eCl@ss 5.1</b>	27242604
<b>eCl@ss 6.0</b>	27242604
<b>eCl@ss 7.0</b>	27242604
<b>eCl@ss 8.0</b>	27242604

### ETIM

<b>ETIM 3.0</b>	EC001599
<b>ETIM 4.0</b>	EC001599
<b>ETIM 5.0</b>	EC001599

### UNSPSC

<b>UNSPSC 6.01</b>	43172015
<b>UNSPSC 7.0901</b>	43201404
<b>UNSPSC 11</b>	39121311
<b>UNSPSC 12.01</b>	39121311
<b>UNSPSC 13.2</b>	39121311

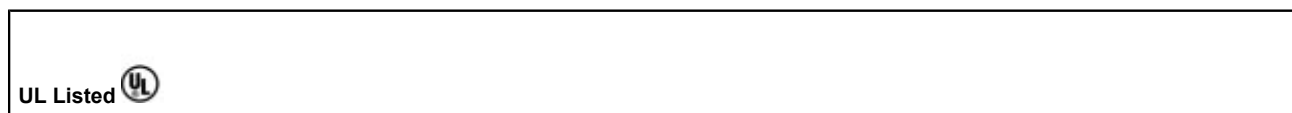
## approvals

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UL Listed / cUL Listed / cULus Listed /

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### Approval details



## I/O module - AXL DO 8/2-2A - 2688381

approvals

cUL Listed 

cULus Listed 

accessories

**DIN rail connector**

AXL F BS H - 2700992



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**Connector set**

AXL CNS 2L-OB0B/D/UO/E1 - 2700987



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**Terminal marking**

ZB 20,3 AXL UNPRINTED - 0829579



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ZBF 10/5,8 AXL UNPRINTED - 0829580



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accessories

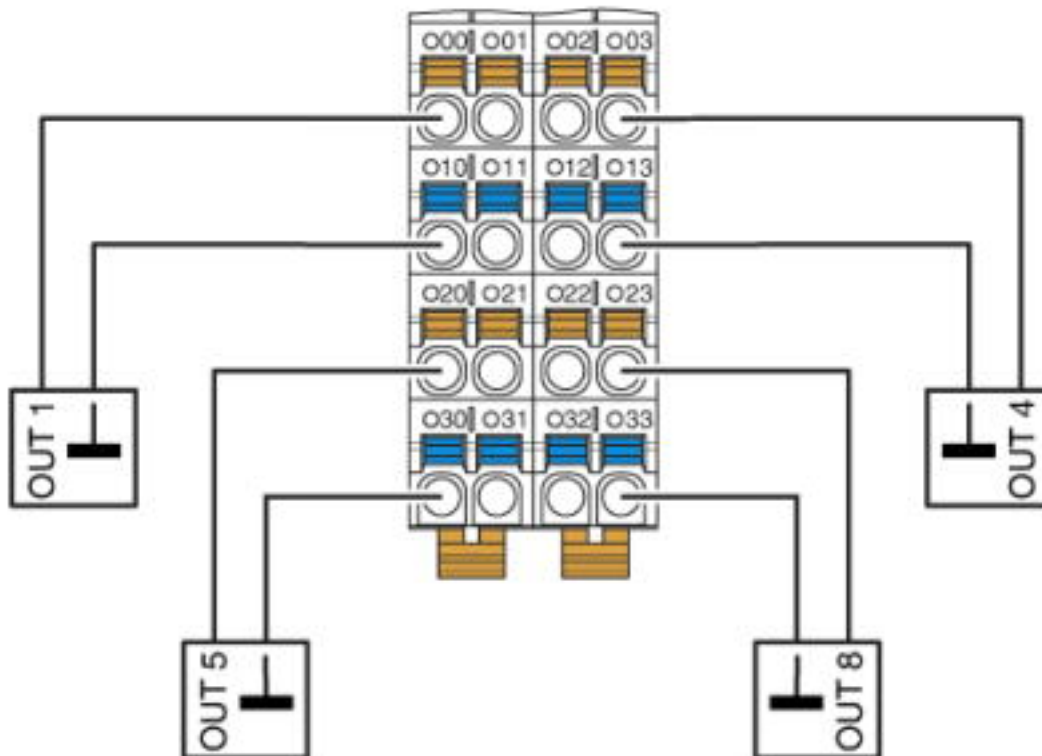
## Device marking

EMT (35X28)R - 0801602



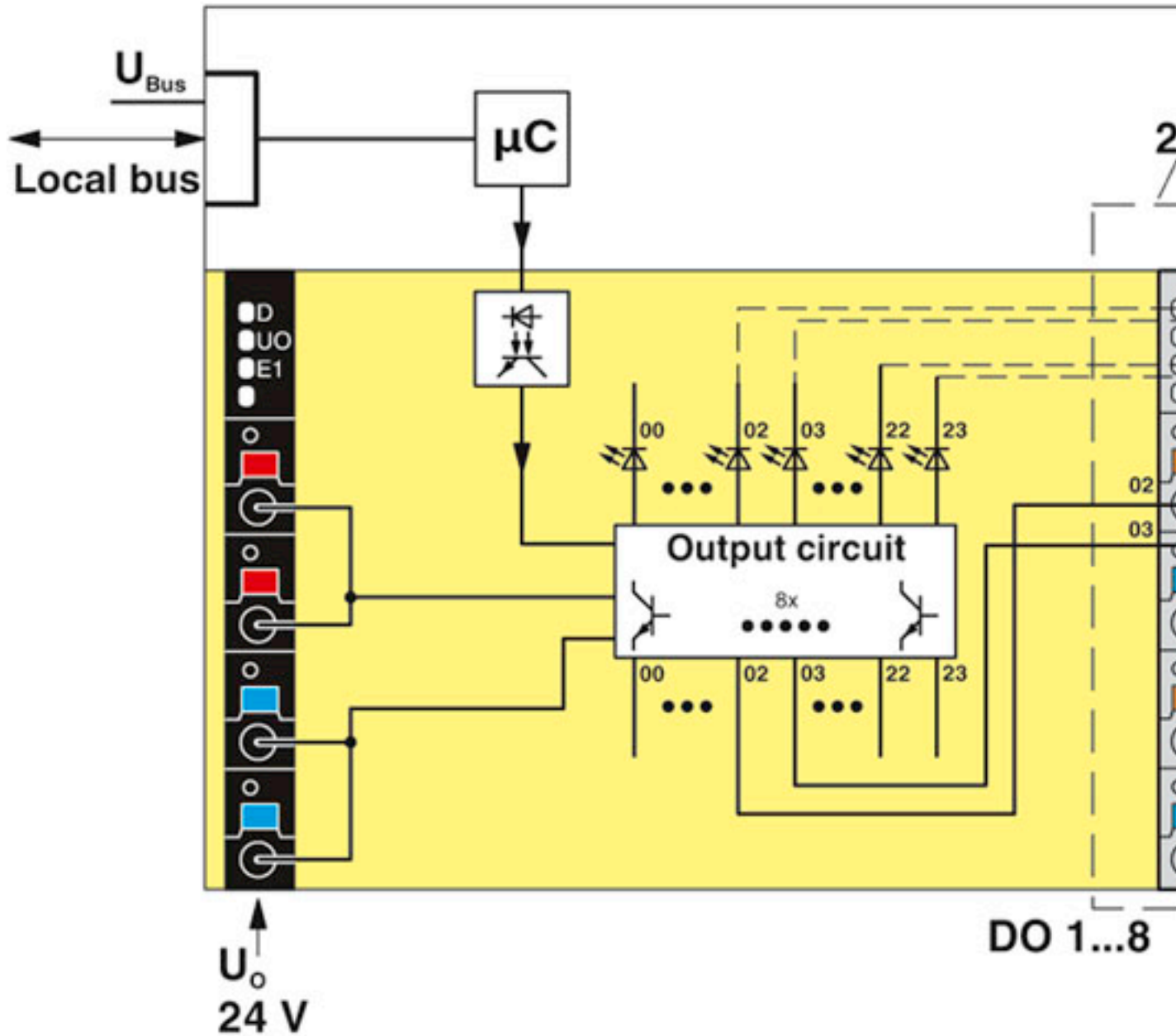
## Drawings

Connection diagram



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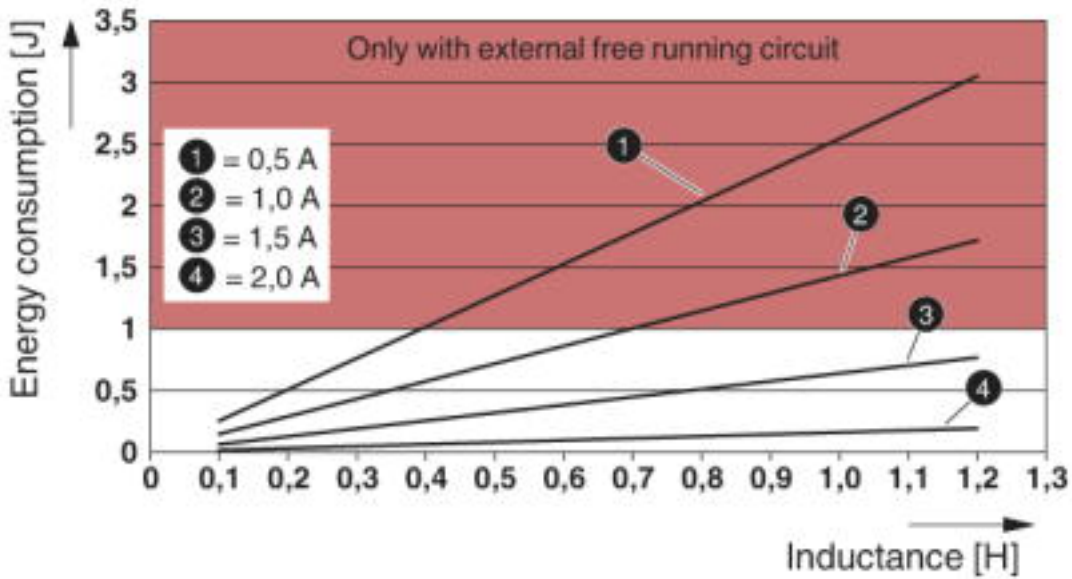
Block diagram



Internal wiring of the terminal points

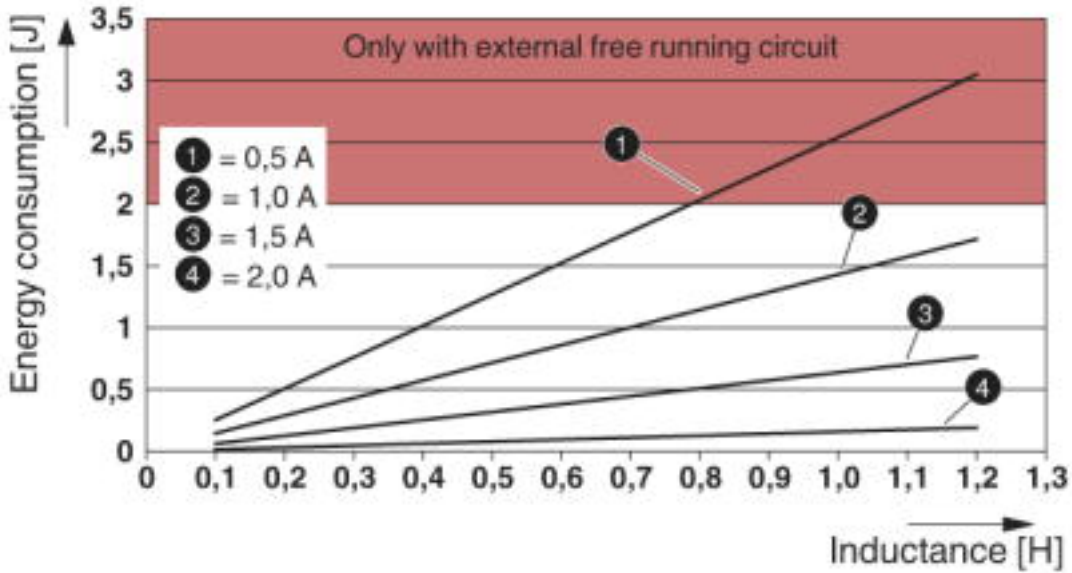
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Diagram



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

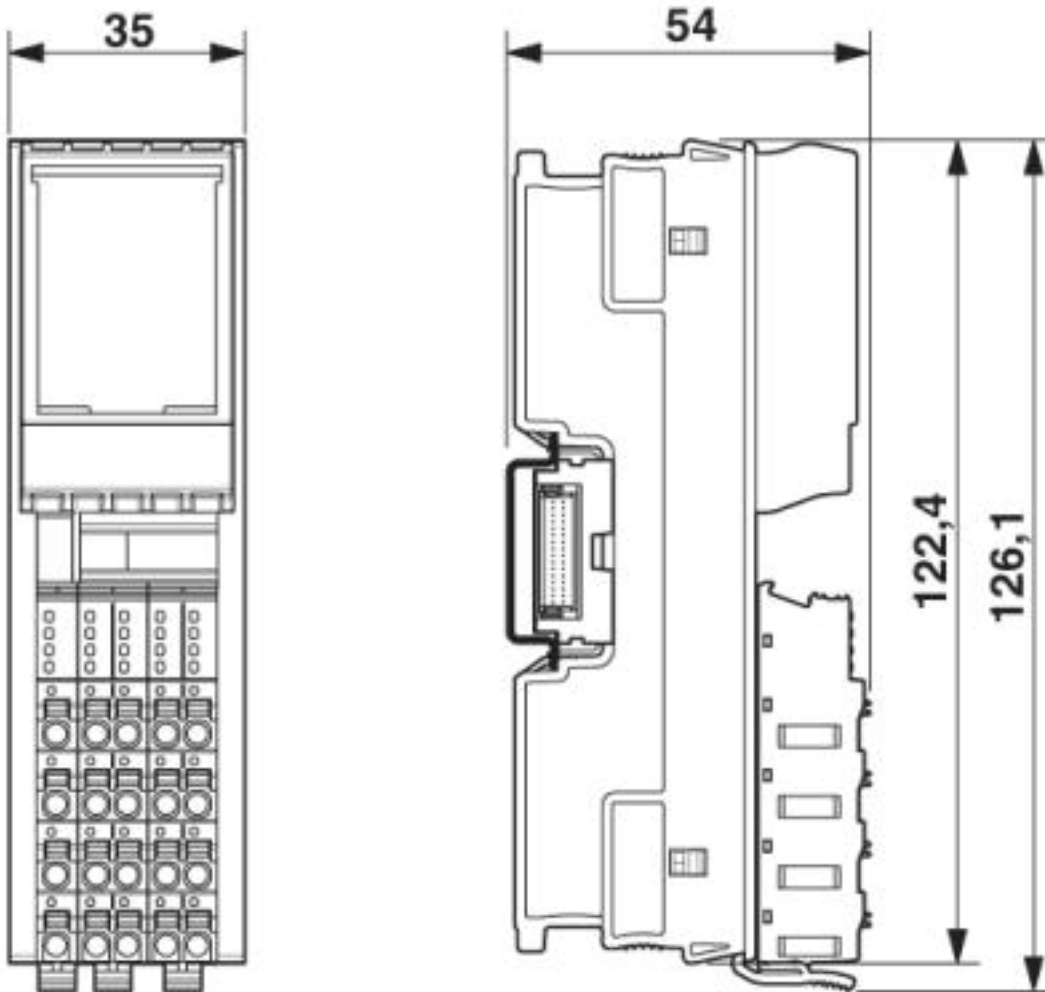
Diagram



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

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Dimensioned drawing



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