I/O module - AXL DO 32/1 - 2688051

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Axioline digital output module, 32 outputs, 24 V DC, 500 mA, single-wire connection method (including bus base module and connectors)

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

- 32 digital outputs
- 24 V DC, 500 mA
- Connection of actuators in single-wire technology
- Minimum update time of < 100 µs, bus synchronous
- Device rating plate stored
- Diagnostic and status indicators

Key commercial data

package_quantity	1
GTIN	4046356501576

Technical data

Dimensions

Width	53.6 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
Permissible humidity (operation)	5 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	5 % ... 95 % (according to DIN EN 61131-2)
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

General

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Technical data

General

Weight	191 g
Note on weight specifications	with plugs and bus base module
Mounting type	DIN rail
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Test section	5 V communications power (logic), 24 V supply (I/O) 500 V AC 50 Hz 1 min
Test section	5 V supply (logic)/functional earth ground 500 V AC 50 Hz 1 min
Test section	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min
Conformance with EMC directives	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
Conformance with EMC directives	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
Conformance with EMC directives	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
Conformance with EMC directives	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: ±0.5 kV/±0.5 kV (symmetrical/asymmetrical)
Conformance with EMC directives	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
Conformance with EMC directives	Noise emission test according to EN 61000-6-3 Radio interference properties EN 55022 Class B
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5 g
Mechanical tests	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 25 g, 11 ms period, half-sine shock pulse
Mechanical tests	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10 g
Diagnostics messages	Short-circuit / overload of the digital outputs Yes

Interfaces

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

Axioline potentials

Communications power U_{bus}	5 V DC (via bus base module)
Current consumption from U_{bus}	max. 180 mA
Supply of digital output modules U_O	24 V DC
Current consumption from U_O	8 A (external fuse)

Digital outputs

Output name	Digital outputs
Connection method	Direct plug-in method
Connection method	1-wire
Number of outputs	32

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Digital outputs

Protective circuit	Short-circuit protection, overload protection of the outputs Electronic
Output voltage	24 V
Nominal output voltage	24 V DC
Maximum output current per channel	500 mA
Maximum output current per module	8 A (external fuse)
Nominal load, inductive	max. 12 VA (1.2 H; 48 Ω; with nominal voltage)
Nominal load, lamp	max. 12 W (at nominal voltage)
Nominal load, ohmic	max. 12 W (48 Ω; with nominal voltage)

classifications

eCl@ss

eCl@ss 4.0	27240404
eCl@ss 4.1	27240404
eCl@ss 5.0	27242204
eCl@ss 5.1	27242604
eCl@ss 6.0	27242604
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604

ETIM

ETIM 4.0	EC001601
ETIM 5.0	EC001601

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	39121311
UNSPSC 12.01	39121311
UNSPSC 13.2	39121311

approvals

UL Listed / cUL Listed / cULus Listed /

Approval details

UL Listed

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approvals

cUL Listed

cULus Listed

accessories

DIN rail connector

AXL BS - 2688129

Connector set

AXL CNS 4L-O/D/UO1/UO2/E1 - 2700983

Terminal marking

ZB 20,3 AXL UNPRINTED - 0829579

ZBF 10/5,8 AXL UNPRINTED - 0829580

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accessories

Device marking

EMT (35X46)R - 0801604

System cable

VIP-CAB-FLK14/AXIO/0,14/0,5M - 2901604

VIP-CAB-FLK14/AXIO/0,14/1,0M - 2901605

VIP-CAB-FLK14/AXIO/0,14/1,5M - 2901606

VIP-CAB-FLK14/AXIO/0,14/2,0M - 2901607

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accessories

VIP-CAB-FLK14/AXIO/0,14/2,5M - 2901608

VIP-CAB-FLK14/AXIO/0,14/3,0M - 2901609

VIP-CAB-FLK14/AXIO/0,14/4,0M - 2901610

VIP-CAB-FLK14/AXIO/0,14/6,0M - 2901611

Controller board

PLC-V8/FLK14/OUT - 2295554

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accessories

PLC-V8L/FLK14/OUT - 2299660

Interface module

VIP-2/SC/FLK20 - 2315049

VIP-2/SC/FLK20/LED - 2322074

VIP-2/PT/FLK20 - 2903790

VIP-2/PT/FLK20/LED - 2904251

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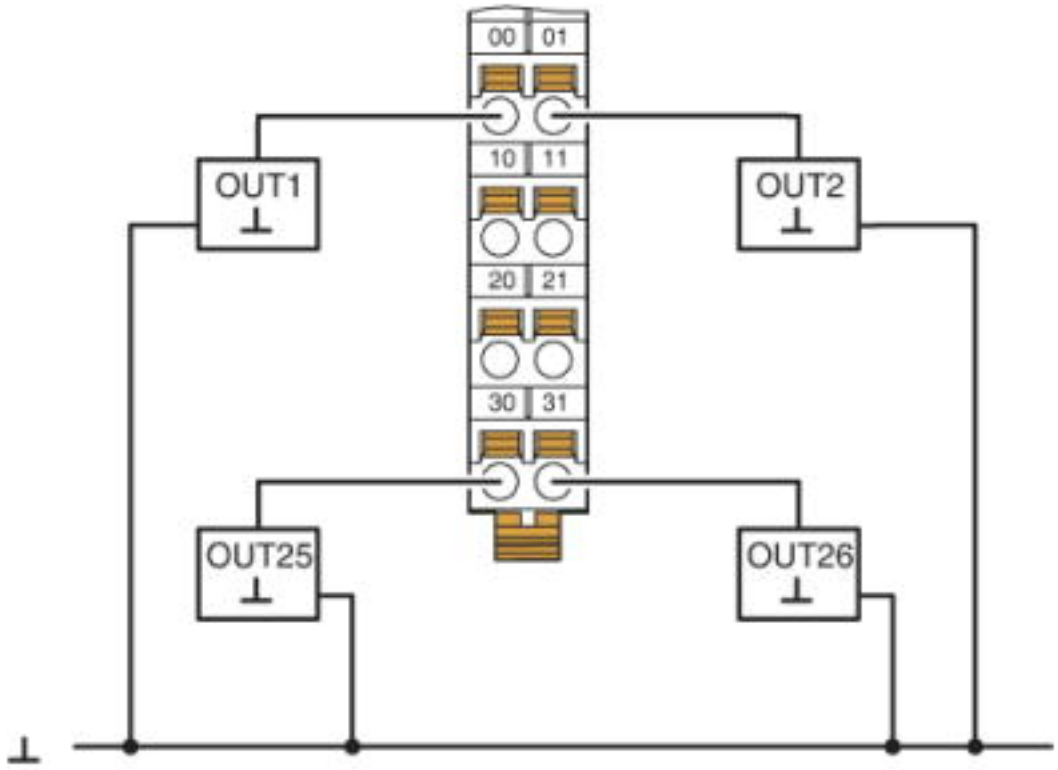
accessories

UM 25-FLK20/FRONT/Q - 2959515

Drawings

Connection diagram



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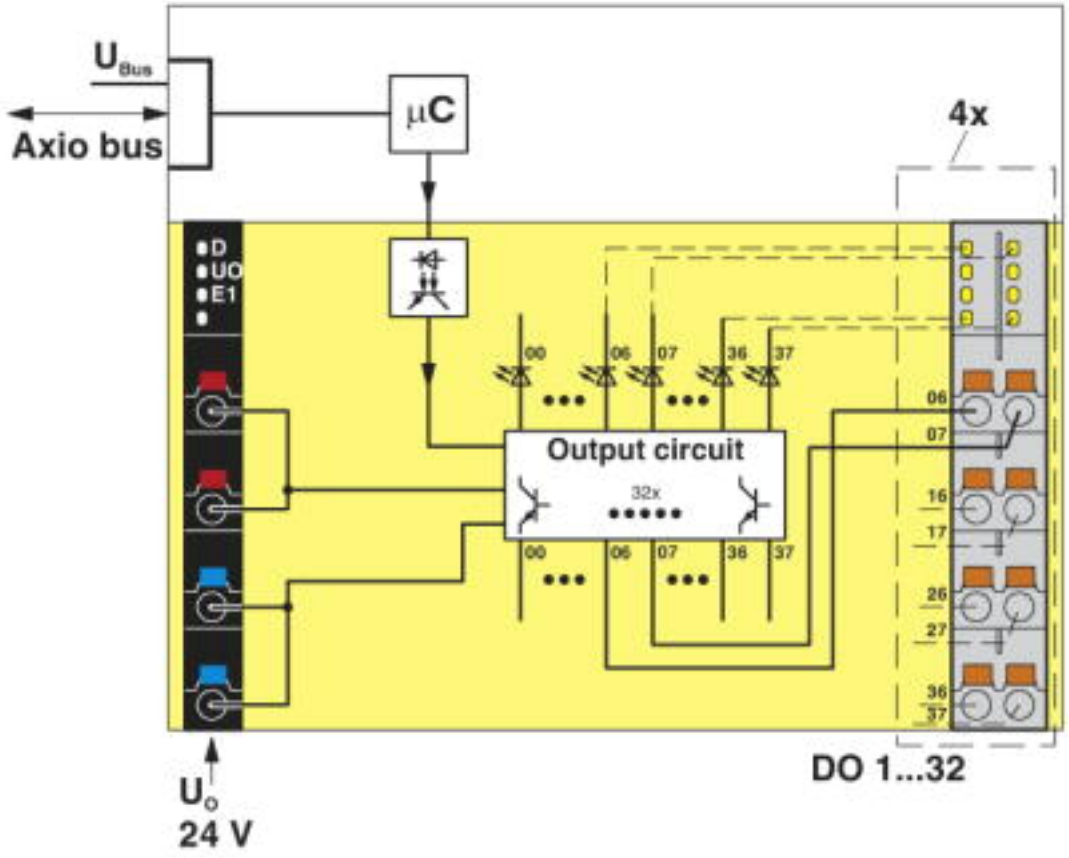
Block diagram



Internal wiring of the terminal points

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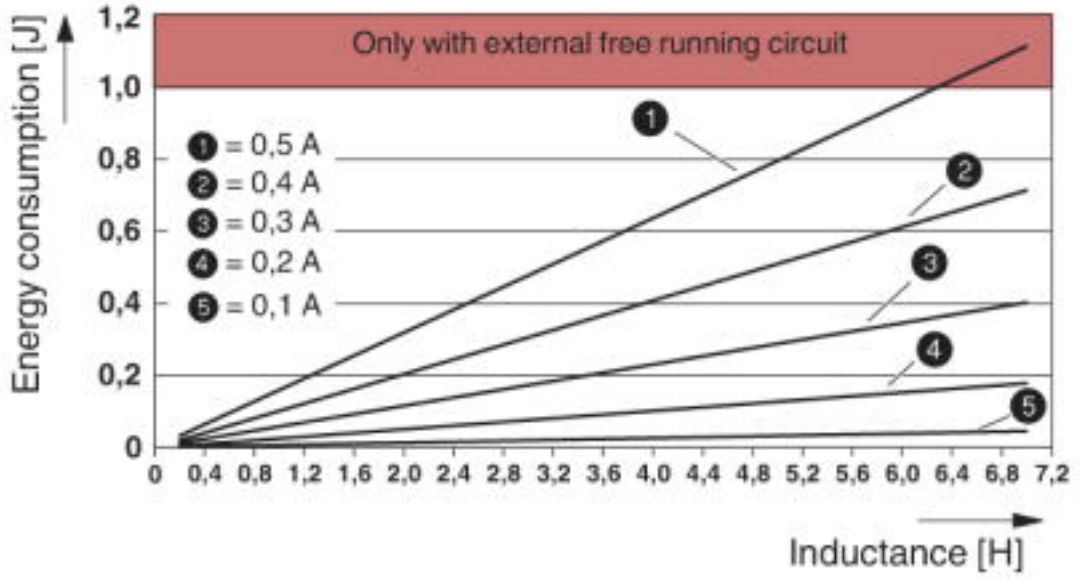
Diagram



Maximum energy consumption of the outputs when switching off inductive loadsThe diagram shows the maximum amount of energy that may be fed back into the corresponding output groups (outputs 1 to 8, 9 to 16, 17 to 24, 25 to 32) for each switch off procedure when switching off an inductive load without external freewheeling circuit.The current data refers to the ohmic DC voltage component of the inductive load.Note: Restrict freewheeling voltage to a maximum of -17 V when using an external freewheeling circuit. The external freewheeling circuit has no function in the event of a higher negative voltage.

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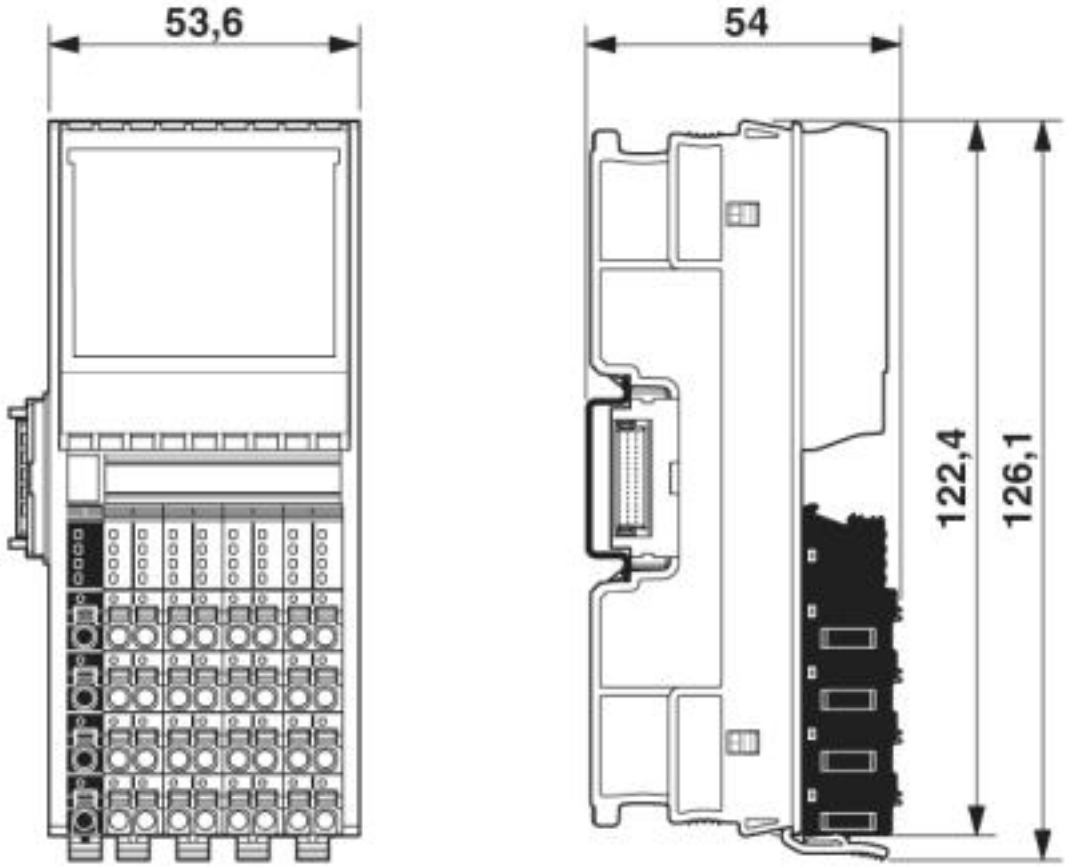
Dimensioned drawing



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