

AXL P EX IS DO4 SD 21-60 1F - Digital module



1087078

<https://www.phoenixcontact.com/us/products/1087078>

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Axioline P, Digital output module, Digital outputs: 4, 21 V, connection technology: 2-conductor, Solenoid drive, Intrinsically safe, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and connectors

Product description

The module is an Axioline P I/O module for use in the Axioline P modular I/O system. The module is a modular I/O device that can be affixed to the Axioline P local bus, to communicate I/O data up to the Axioline P bus coupler, which forms the head of the station. As an intrinsic safety I/O module, this device allows direct connection from intrinsically safe field I/O to the terminals of the module. The module is fully hot-swappable on the Axioline P local bus, which also provides power to the module. The module digital output characteristics of 21 V DC and 60 mA allow the connection of up to four solenoid driven, digital output signals.

Your advantages

- Four 21 V DC - 60 mA digital output-powered control signals for solenoid drives
- Intrinsically safe digital outputs with connection to Zone 1, Zone 0 or Division 1
- Temperature range: -40 °C ... +70 °C
- Hot-swappable

Commercial data

Item number	1087078
Packing unit	1 pc
Sales key	DR06
Product key	DRIP32
GTIN	4055626882062
Weight per piece (including packing)	392.5 g
Weight per piece (excluding packing)	263.5 g
Customs tariff number	85389099
Country of origin	US

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Technical data

Dimensions

Dimensional drawing	
Width	53.6 mm
Height	126.1 mm
Depth	77.14 mm
Note on dimensions	The depth applies when a TH 35-7.5 DIN rail is used (in accordance with EN 60715).

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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Material specifications

Color	traffic grey A RAL 7042
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Interfaces

Axioline P local bus

Connection method	Connection for bus base module
Transmission speed	100 Mbps

Output data

Digital

Output name	Digital outputs
Connection method	Push-in connection
Connection technology	2-conductor
Number of outputs	4
Protective circuit	Polarity reversal protection of the outputs
Output voltage	21 V
Maximum output current per channel	60 mA
Nominal output voltage	21 V

Product properties

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Type	block modular
Product type	I/O component
Product family	Axioline P
Mounting position	any (no temperature derating)
Scope of delivery	including bus base module and connectors

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Electrical properties

Potentials: Supply of the logic voltage U_L

Supply voltage range	19.2 V DC ... 30 V DC (via bus base module (U_L) at AXL P BK...)
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Potentials: Supply of the Axioline P local bus U_{Bus}

Supply voltage	5 V DC (via bus base module)
Current draw	max. 135 mA

Potentials: Axioline P extension module supply voltage

Supply voltage	U_L (via bus base module)
Current draw	max. 455 mA (via bus base module)

Connection data

Connection technology

Connection name	Axioline P connector
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline P: system and installation" user manual.

Conductor connection

Connection method	Push-in connection
Conductor cross section rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Axioline P connector

Connection method	Push-in connection
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline P: system and installation" user manual.
Conductor cross section, rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross section, flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

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Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C (Standard)
Degree of protection	IP20
Air pressure (operation)	70 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 2000 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

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Approvals

ATEX

Identification	II 3(1) G Ex ec [ia IIB Ga] IIC T4 Gc II (1) D [Ex ia Da] IIIC
Certificate	DEMKO 20 ATEX 2370X

IECEX

Identification	Ex ec [ia IIB Ga] IIC T4 Gc [Ex ia Da] IIIC
Certificate	IECEX UL 20.0044X

UKCA Ex (UKEX)

Identification	II 3(1) G Ex ec [ia IIB Ga] IIC T4 Gc II (1) D [Ex ia Da] IIIC
Certificate	UL22UKEX2508X

Ex data

UL, USA / Canada	Ind. Cont. Eq. (E238705) also Listed Ind. Cont. Eq. for haz. loc. E196811 Install in: Class I, Div. 2, Groups A, B, C, D T4 Intrinsically safe outputs for: Class I, Groups C, D; Class II, Groups E, F, G; Class III; [Ex ia] Haz loc Class I, Zone 2, AEx ec [ia IIB Ga] IIC T4 Gc [AEx ia Da] IIIC Ex ec [ia IIB Ga] IIC T4 Gc [Ex ia Da] IIIC
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Mounting

Mounting type	DIN rail mounting
Mounting position	any (no temperature derating)

Ex data

Safety data

Max. output voltage U_o	24.8 V
Max. output current I_o	180 mA
Max. output power P_o	1116 mW

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Safety-related maximum voltage U_m	250 V
C/IIB, IIIC: Max. external inductivity L_o / Max. external capacitance C_o	/ 0.86 μ F
D/IIA, E, F, G, Class III: Max. external inductivity L_o / Max. external capacitance C_o	/ 3.05 μ F
C/IIB, IIIC: Max. external inductivity L_o / Max. external capacitance C_o	2.779 mH
D/IIA, E, F, G, Class III: Max. external inductivity L_o / Max. external capacitance C_o	7.168 mH

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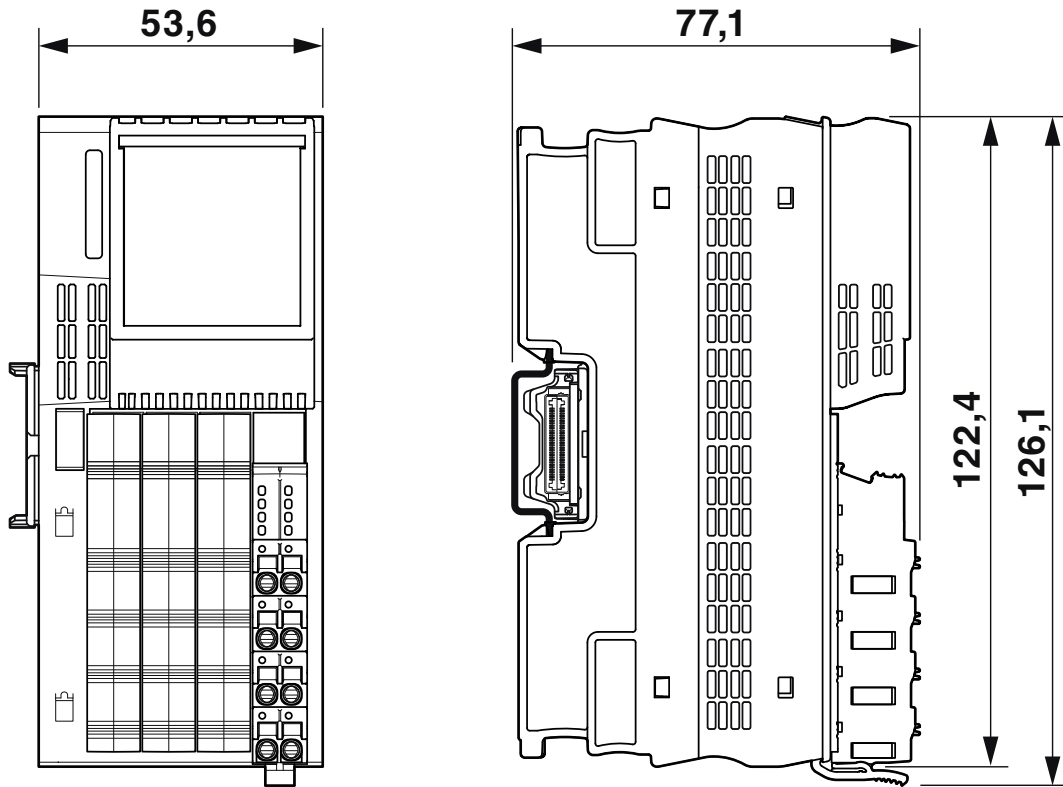


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Drawings

Dimensional drawing



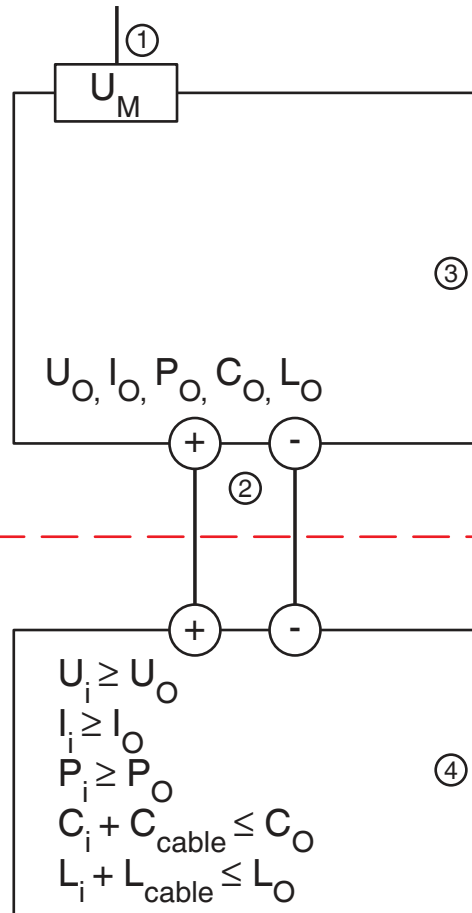
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Schematic diagram

Safe area

Class I, Division 2, Groups ABCD, T4
 Class I, Zone 2, IIC, T4
 Zone 2, IIC, T4



Class I/II/III, Division 1, Groups CDEFG
 Class I, Zone 0, IIB
 Class II, Zone 20, IIIC
 Zone 0, IIB
 Zone 20, IIIC

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1087078>



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705



IECEX

Approval ID: IECEX UL 20.0044X



cUL Listed

Approval ID: FILE E 196811



UL Listed

Approval ID: FILE E 196811



ATEX

Approval ID: DEMKO 20 ATEX 2370X



CCC

Approval ID: 2021122316114727

cULus Listed

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Classifications

ECLASS

ECLASS-11.0	27242604
ECLASS-12.0	27242604
ECLASS-13.0	27242604

ETIM

ETIM 8.0	EC001599
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
	Dechlorane Plus
China RoHS	Environmentally Friendly Use Period = 25;
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

AXL P BS F2 - Bus connector

1052428

<https://www.phoenixcontact.com/us/products/1052428>



Axioline P bus base module for housing type F2

AXL SHIELD SET - Shield connection

2700518

<https://www.phoenixcontact.com/us/products/2700518>



Axioline shield connection set (contains 2 shield bus holders and 2 SK 5 shield connection clamps)

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AXL F/P IO EX PP - Separating plate

1100201

<https://www.phoenixcontact.com/us/products/1100201>

Axioline F/P partition plate for intrinsically safe modules



AXL P TERM PAIR - Termination block

2316402

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Axioline P terminator pair



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ZB 20,3 AXL UNPRINTED - Zack marker strip

0829579

<https://www.phoenixcontact.com/us/products/0829579>



Zack marker strip for Axioline F (device labeling), in 2 x 20.3 mm pitch, unprinted, 25-section, for individual labeling with B-STIFT 0.8, X-PEN, or CMS-P1-PLOTTER

AXL P TERM PAIR - Termination block

2316402

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Axioline P terminator pair

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AXL P BS F2 - Bus connector

1052428

<https://www.phoenixcontact.com/us/products/1052428>

Axioline P bus base module for housing type F2



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