

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



1087078

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

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 P, Digital output module, Digital outputs: 4, 21 V, 60 mA, 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/Os to the terminals of the module. The module is fully hot-swappable and can be removed while under power. 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	5 pc
Minimum order quantity	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

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

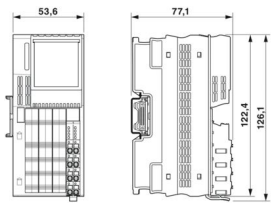


1087078

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

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

Note on application

Note on application	Only for industrial use
---------------------	-------------------------

Utilization restriction

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

Utilization restriction

CCCEX note	Use in potentially explosive areas is not permitted in China.
------------	---

Material specifications

Color	traffic grey A RAL 7042
-------	-------------------------

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
Output current	60 mA (Per channel)

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



1087078

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

Maximum output current per channel	60 mA
Nominal output voltage	21 V

Product properties

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

Data management status

Article revision	02
------------------	----

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Electrical properties

Potentials: Supply voltage (U_L)

Supply voltage	24 V DC (via bus base module)
Supply voltage range	19.2 V DC ... 30 V DC
Current draw	max. 455 mA (via bus base module)

Potentials: Axioline P local bus supply (U_{Bus})

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

Electrical isolation/isolation of the voltage ranges

Test voltage: 5 V supply of the local bus (U_{Bus}) / functional ground	500 V AC, 62 Hz, 1 min.
Test voltage: 24 V supply (I/O) / functional ground	500 V AC, 62 Hz, 1 min.
Test voltage: Field to functional earth	500 V AC, 62 Hz, 1 min.
Test voltage: Field to 5 V and 24 V supplies	1500 V AC, 62 Hz, 1 min.

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

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



1087078

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

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 mm² ... 1.5 mm²
Conductor cross section, flexible	0.2 mm² ... 1.5 mm²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

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)
------------------	---------------------------------------

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

UL, USA/Canada

Identification	cULus
Certificate	E238705

UL Ex, USA / Canada

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



1087078

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

Identification	Class I, Division 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 [ja IIB Ga] IIC T4 Gc
	[AEx ia Da] IIIC
	Ex ec [ja IIB Ga] IIC T4 Gc
Certificate	E196811

CCC / China-Ex

Identification	Ex ec [ja IIB Ga] IIC T4 Gc
	[Ex ia Da] IIIC

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 [ja IIB Ga] IIC T4 Gc [AEx ia Da] IIIC Ex ec [ja IIB Ga] IIC T4 Gc [Ex ia Da] IIIC
------------------	--

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

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

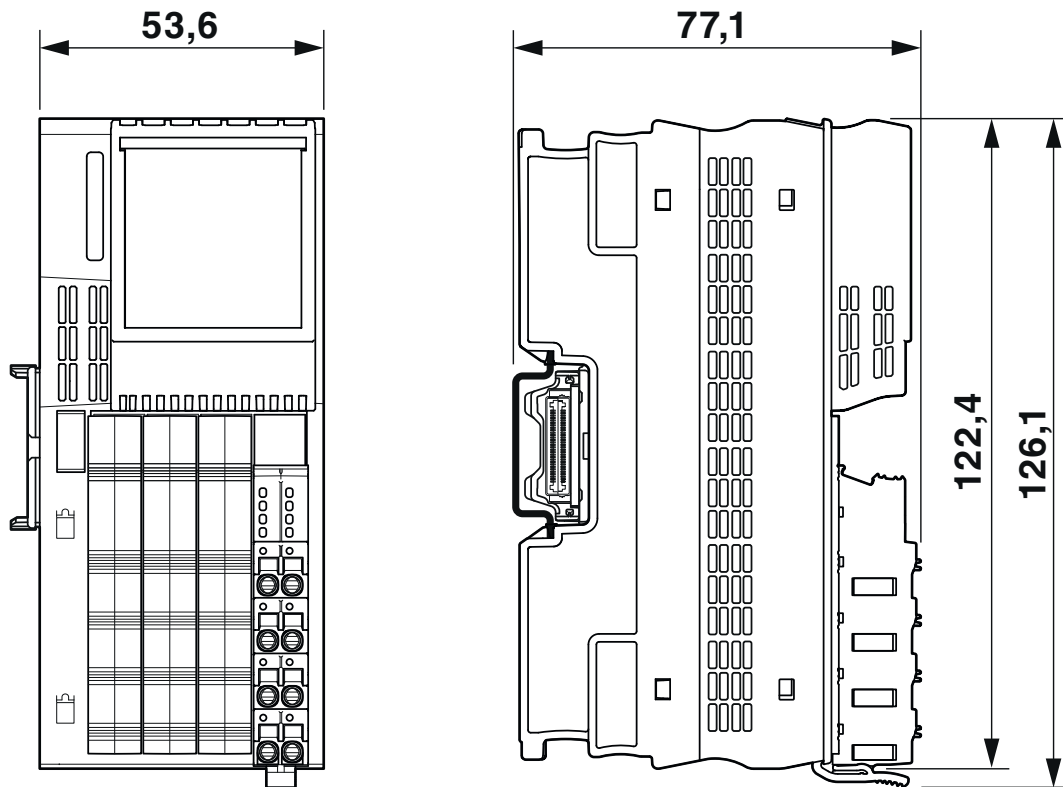


1087078

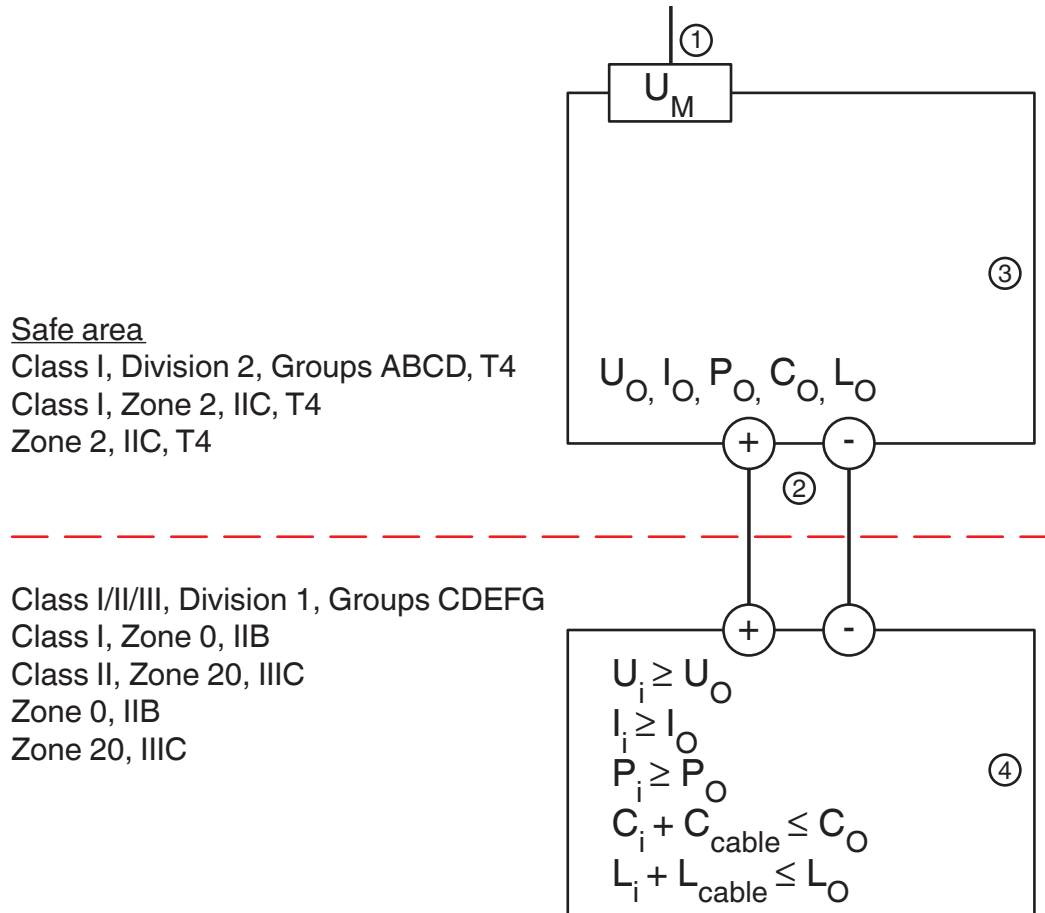
<https://www.phoenixcontact.com/us/products/1087078>

Drawings

Dimensional drawing



Schematic diagram



1087078

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

Approvals

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

	UL Listed Approval ID: E238705
	cUL Listed Approval ID: FILE E 238705
	IECEX Approval ID: IECEX UL 20.0044X
	cUL Listed Approval ID: FILE E196811
	UL Listed Approval ID: FILE E196811
	ATEX Approval ID: DEMKO 20 ATEX 2370X
	CCC Approval ID: 2021122316114727
	UKCA-EX Approval ID: UL22UKEX2508X
	cULus Listed
	cULus Listed

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



1087078

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

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001599
----------	----------

UNSPSC

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

1087078

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

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-25
	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.)	Lead(CAS: 7439-92-1)
SCIP	23ffcfe7-6722-4e05-806f-4c21f0998c7e

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



1087078

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

Accessories

AXL P BS F2 - Bus connector

1052428

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

Axioline P bus base module for housing type F2

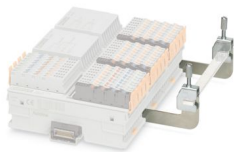


AXL SHIELD SET - Shield connection

2700518

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

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



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

1087078

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



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 - Terminal block

2316402

<https://www.phoenixcontact.com/us/products/2316402>

Axioline P terminator pair



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

1087078

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



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 - Terminal block

2316402

<https://www.phoenixcontact.com/us/products/2316402>



Axioline P terminator pair

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

1087078

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



AXL P BS F2 - Bus connector

1052428

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

Axioline P bus base module for housing type F2



Phoenix Contact 2024 © - 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