

Bus coupler - AXL BK PN - 2688019

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Axioline bus coupler for PROFINET (including bus base module and connector)

Product description

The bus coupler links a PROFINET network with the Axioline system.

Up to 63 Axioline devices can be connected at any point to an existing PROFINET system using the bus coupler.

For startup tests you can put the Axioline station into operation independent of the higher-level network either using the service interface or an Ethernet port at the bus coupler.

Product Features

- ✓ Up to 63 additional Axioline devices can be connected
- ✓ Firmware can be updated
- ✓ Minimum cycle time of PROFINET for RT is 250 μ s
- ✓ Diagnostic and status indicators
- ✓ Runtime in bus coupler is negligible (almost 0 μ s)
- ✓ PROFINET RT
- ✓ Typical cycle time of the Axioline system bus is around 10 μ s
- ✓ 2 RJ45 connections (with integrated switch)
- ✓ Module replacement without software



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	200.0 GRM
Custom tariff number	85389091
Country of origin	Germany

Technical data

Dimensions

Width	40 mm
Height	123.6 mm

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Technical data

Dimensions

Depth	75 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

Connection data

Designation	Axioline F connector
Connection method	Push-in technology
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16

General

Weight	173 g
Note on weight specifications	with connector
Mounting type	DIN rail
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
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
	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
	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
	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); fieldbus cable shield: ±1 kV
	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
	Noise emission test according to EN 61000-6-3 Radio interference properties EN 55022 Class B

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Technical data

General

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 25g, 11 ms period, half-sine shock pulse
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g

Interfaces

Fieldbus system	PROFINET
Designation	PROFINET
Connection method	RJ45 socket, auto negotiation and autocrossing
Transmission speed	100 MBit/s (Full duplex)
Transmission physics	Ethernet in RJ45 twisted pair
Fieldbus system	Lokalbus
Designation	Axioline F local bus
Connection method	Connection for bus base module
Transmission speed	100 MBit/s
Designation	Service
Connection method	IFS-USB-PROG-ADAPTER

System limits of the bus coupler

Amount of process data	1485 Byte (for each data direction)
Number of supported devices	max. 63 (per station)
Number of local bus devices that can be connected	max. 63

Power supply for module electronics

Current consumption	max. 600 mA (from U_{BK})
Power loss	typ. 2 W ((without I/Os))

Axioline potentials

Supply of communications power U_L	24 V DC
Current consumption from U_L	typ. 86 mA (without I/Os and $U_L = 24$ V)
	max. 600 mA (with 2 A at U_{Bus} for the I/Os and $U_L = 24$ V)
	max. 750 mA (with 2 A load at U_{Bus} for the I/Os and $U_L = 19$ V)
Communications power U_{Bus}	5 V DC (via bus base module)
Current supply at U_{Bus}	2 A

Digital inputs

Connection method	Push-in connection
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Classifications

eCl@ss

eCl@ss 4.0	27240490
eCl@ss 4.1	27240490
eCl@ss 5.0	27242208
eCl@ss 5.1	27242608
eCl@ss 6.0	27242608
eCl@ss 7.0	27242608
eCl@ss 8.0	27242608

ETIM

ETIM 3.0	EC001604
ETIM 4.0	EC001604
ETIM 5.0	EC001604

UNSPSC

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

Approvals

Approvals


Approvals

UL Listed / cUL Listed / PROFIBUS / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed 

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Approvals

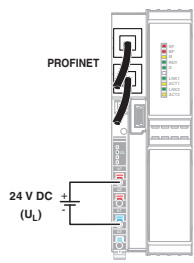
cUL Listed

PROFIBUS

cULus Listed

Drawings

Connection diagram



Dimensioned drawing

