

## Bus coupler - AXL F BK PN - 2701815

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

### Product Description

The bus coupler is the link between a PROFINET network and the Axioline F system. Up to 63 Axioline F devices can be connected to an existing Ethernet system using the bus coupler.

### Your advantages

- ✓ Up to 63 additional Axioline devices can be connected
- ✓ PROFIsafe support
- ✓ 2 RJ45 connections
- ✓ BootP and DCP
- ✓ Diagnostic and status indicators
- ✓ Firmware can be updated
- ✓ Typical cycle time of the Axioline F local bus is around 10 µs
- ✓



### Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356845601

### Technical data

#### Dimensions

Width	45 mm
Height	126.1 mm
Depth	74 mm
Note on dimensions	The depth is valid when a TH 35-7,5 DIN rail is used (according to EN 60715).

#### Ambient conditions

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C (Mounting position: wall mounting on horizontal DIN rail)
	-25 °C ... 55 °C (Mounting position: any)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
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 connection
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline F: system and installation" user manual.
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm

### General

Mounting type	DIN rail mounting
Net weight	222 g
Note on weight specifications	with connector and bus base module

### Interfaces

Designation	PROFINET
No. of channels	2
Connection method	RJ45 socket
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	100 Mbps (full duplex)
Transmission physics	Ethernet in RJ45 twisted pair
Designation	Axioline F local bus
Connection method	Bus base module
Transmission speed	100 Mbps
Designation	Service
Connection method	Micro USB type B

### System limits of the bus coupler

Number of supported devices	max. 63 (per station)
Number of local bus devices that can be connected	max. 63

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### Technical data

#### Axioline potentials

Designation	Communications power $U_L$ feed-in (the supply of the Axioline F local bus $U_{Bus}$ is generated from $U_L$ )
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 570 mA (with 2 A at $U_{Bus}$ for the I/Os and $U_L = 24$ V)
Power consumption	max. 13.7 W (with 2 A load at $U_{Bus}$ for the I/Os)
Designation	Axioline F local bus supply ( $U_{Bus}$ )
Supply voltage	5 V DC (via bus base module)
Power supply unit	2 A
Type of protection	Surge protection of the supply voltage
	Polarity reversal protection of the supply voltage

#### Digital inputs

Connection technology	Push-in connection
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#### Standards and Regulations

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 30g
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

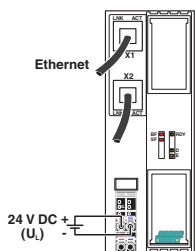
#### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

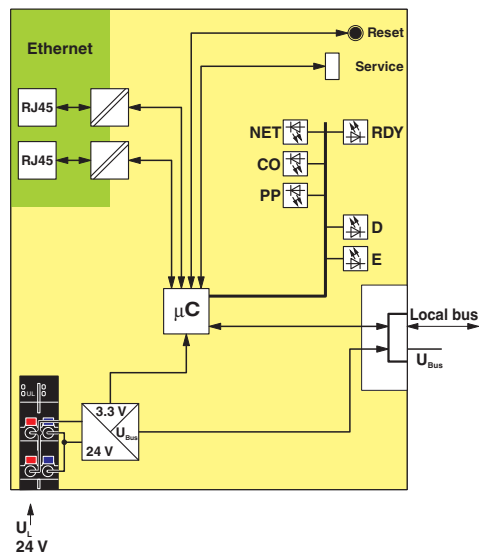
### Drawings

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Connection diagram

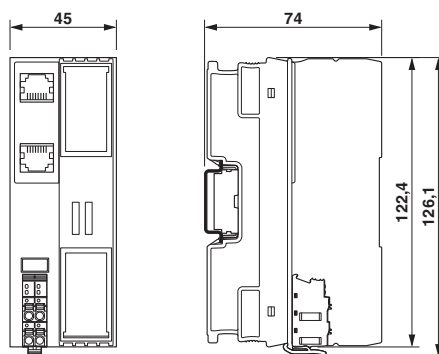


Block diagram



Internal wiring of the terminal points

Dimensional drawing



## Approvals

Approvals

Approvals

DNV GL / BV / LR / KR / NK / ABS / RINA / UL Listed / cUL Listed / PROFINET / EAC / cULus Listed

Ex Approvals

## Approval details

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## Approvals

BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	36433/A2 BV
LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	14-20019
KR		<a href="http://www.krs.co.kr/eng/main/main.aspx">http://www.krs.co.kr/eng/main/main.aspx</a>	HMB17372-AC002
NK		<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	14A006
ABS		<a href="http://www.eagle.org/eagleExternalPortalWEB/">http://www.eagle.org/eagleExternalPortalWEB/</a>	18-HG1767360-PDA
RINA		<a href="http://www.rina.org/en">http://www.rina.org/en</a>	ELE256518XG
UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
PROFINET			Z10813
EAC			EAC-Zulassung
cULus Listed			

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PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>