

## Bus coupler - AXL F BK EIP EF - 2702782

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Axioline F, Bus coupler, EtherNet/IP™, RJ45 jack, extended function, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and Axioline F connector

### Product Description


The bus coupler is intended for use within an EtherNet/IP™ network. It is the link to the Axioline F I/O system. Up to 63 Axioline F devices can be connected to the bus coupler. A corresponding EDS file is available for integrating the Axioline F station into the programming system. It can be downloaded at: [phoenixcontact.net/product/2702782](http://phoenixcontact.net/product/2702782)

### Your advantages

- ✓ 2 Ethernet ports (with integrated switch)
- ✓ Transmission speed of 10 Mbps and 100 Mbps
- ✓ Rotary coding switches for setting the IP address assignment and other functions
- ✓ Supported protocols: EtherNet/IP#, DLR, SNMP, HTTP, TFTP, FTP, BootP, DHCP, DCP
- ✓ 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	 4 055626 320533
GTIN	4055626320533
Weight per Piece (excluding packing)	240.000 g
Custom tariff number	85176200
Country of origin	Germany

### Technical data

#### Dimensions

# Bus coupler - AXL F BK EIP EF - 2702782

## 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

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
Color	traffic grey A RAL 7042
Net weight	230.7 g
Note on weight specifications	with connector and bus base module
Mounting position	any (observe temperature derating)

### Interfaces

Designation	EtherNet/IP™
No. of channels	2
Connection method	RJ45 jack

# Bus coupler - AXL F BK EIP EF - 2702782

## Technical data

### Interfaces

Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps (Half or full duplex mode (automatic detection, can be adjusted manually))
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	USB type C (as of HW 01)
	Micro USB type B (HW 00)

### 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

### 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. 583 mA (2 A at $U_{BUS}$ , $U_L = 24$ V, HW 00)
	max. 670 mA (2.5 A at $U_{BUS}$ , $U_L = 24$ V, HW 01 or later)
Power consumption	max. 14 W (2 A at $U_{BUS}$ , $U_L = 24$ V, HW 00)
	max. 16 W (2.5 A at $U_{BUS}$ , $U_L = 24$ V, HW 01 or later)
Designation	Axioline F local bus supply ( $U_{BUS}$ )
Supply voltage	5 V DC (via bus base module)
Power supply unit	max. 2 A (HW 00)
	max. 2.5 A (as of HW 01)
Protective circuit	Surge protection of the supply voltage electronic
	Polarity reversal protection of the supply voltage electronic

### 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

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years

# Bus coupler - AXL F BK EIP EF - 2702782

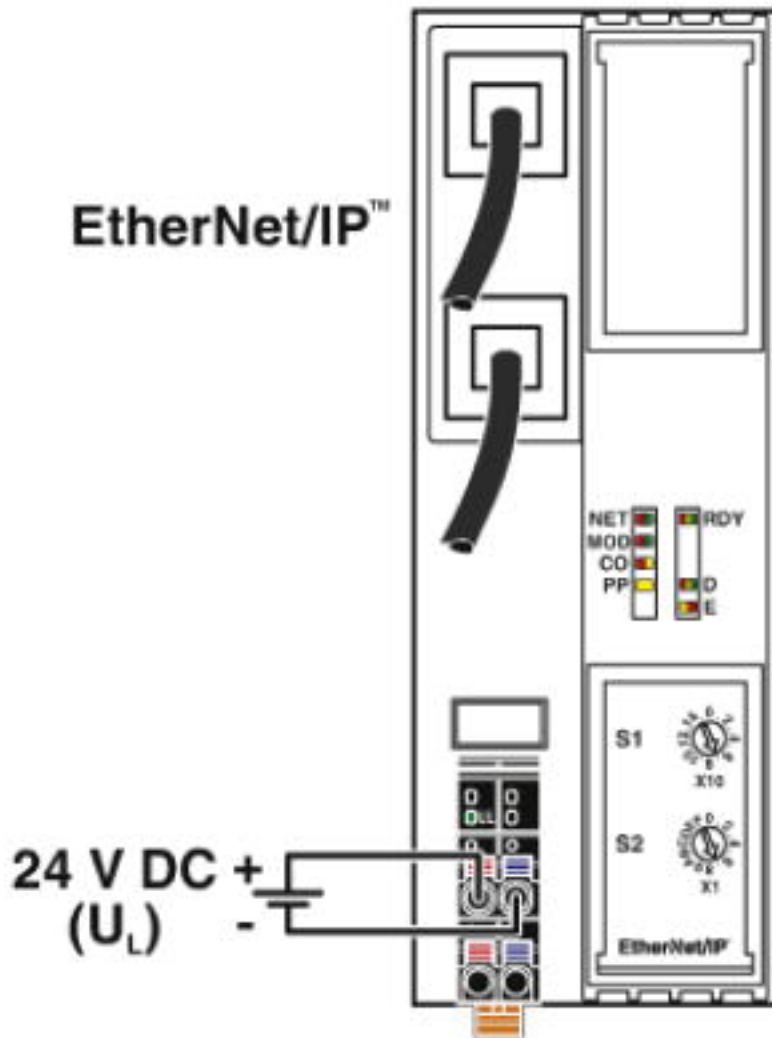
Technical data

Environmental Product Compliance

For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

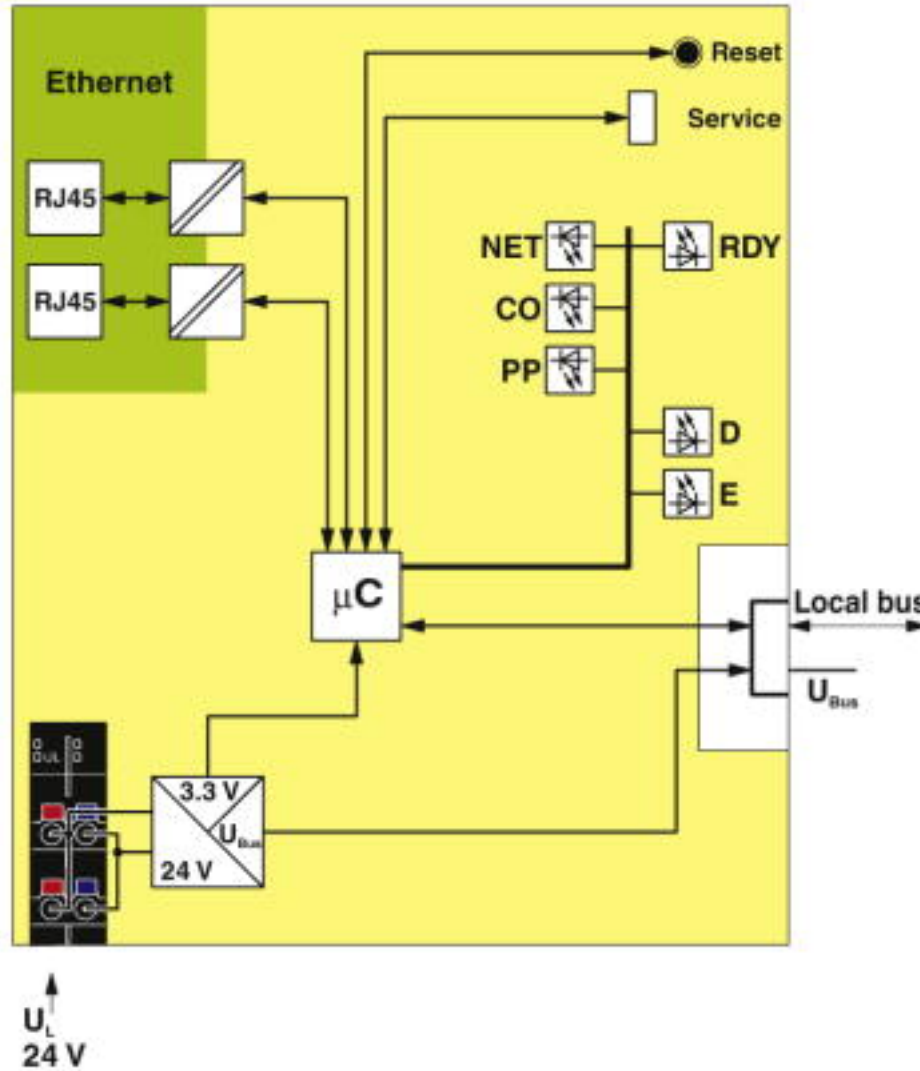
Drawings

Connection diagram



# Bus coupler - AXL F BK EIP EF - 2702782

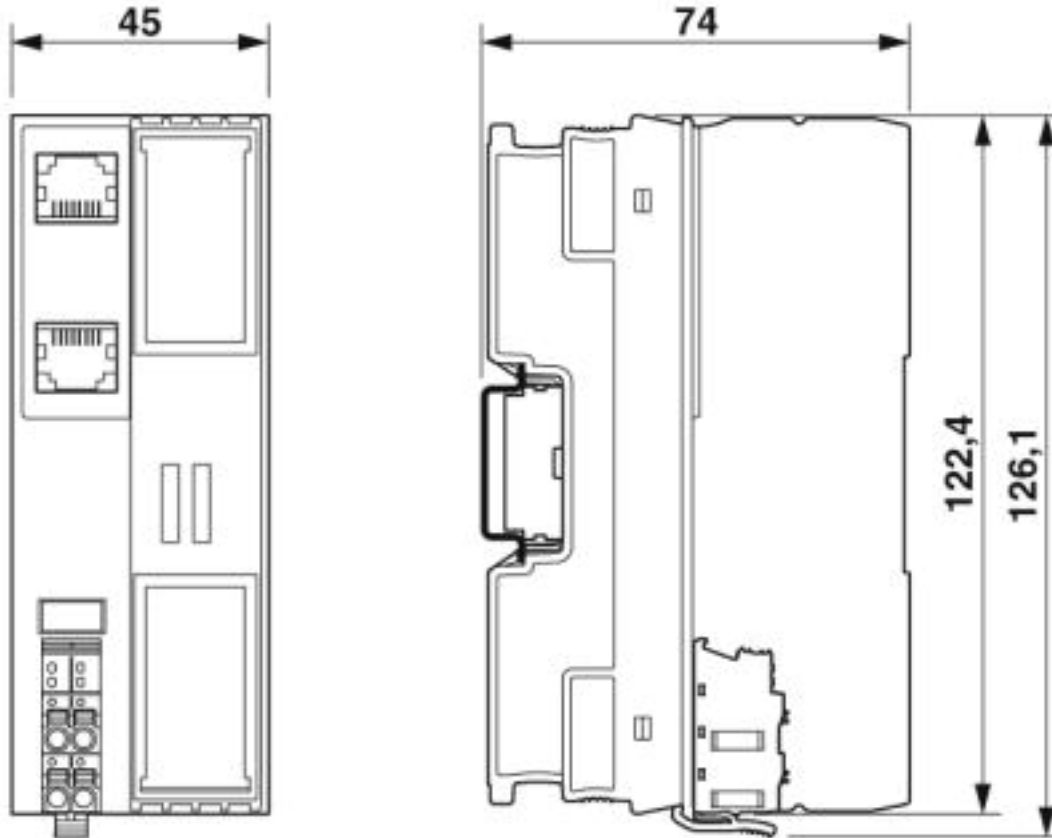
Block diagram



Internal wiring of the terminal points

## Bus coupler - AXL F BK EIP EF - 2702782

Dimensional drawing



### Classifications

#### eCl@ss

eCl@ss 10.0.1	27242608
eCl@ss 5.1	27242608
eCl@ss 6.0	27242600
eCl@ss 7.0	27242608
eCl@ss 8.0	27242608
eCl@ss 9.0	27242608

#### ETIM

ETIM 5.0	EC001604
ETIM 6.0	EC001604
ETIM 7.0	EC001604

# Bus coupler - AXL F BK EIP EF - 2702782

## Classifications

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	39121311
UNSPSC 12.01	39121311
UNSPSC 13.2	39121311
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / DeviceNet / cULus Listed

Ex Approvals

### Approval details

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
------------	--	---	---------------

DeviceNet		<a href="http://www.odva.org">http://www.odva.org</a>	11509.02
-----------	--	---	----------

cULus Listed			
--------------	--	--	--

## Bus coupler - AXL F BK EIP EF - 2702782

### Accessories

#### Accessories

#### Data cable by the meter

##### Network cable - FL CAT5 HEAVY - 2744814



CAT5-SF/UTP cable (J-02YS(ST)C HP 2 x 2 x 24 AWG), heavy-duty installation cable, 2 x 2 x 0.22 mm<sup>2</sup>, solid conductor, shielded, outer sheath: 7.8 mm diameter, inner sheath: 5.75 mm ± 0.15 mm diameter

---

##### Network cable - FL CAT5 FLEX - 2744830



CAT5-SF/UTP cable (J-LI02YS(ST)C H 2 x 2 x 26 AWG), light-duty, flexible installation cable 2 x 2 x 0.14 mm<sup>2</sup>, stranded, shielded, outer sheath: 5.75 mm ± 0.15 mm diameter

---

#### Device marking

##### Insert label - EMT (35X18,7)R - 0801831



Insert label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: snapped into marker carrier, lettering field size: 35 x 18.7 mm, Number of individual labels: 500

---

#### DIN rail connector

##### Bus connector - AXL BS BK - 2701422



Axioline F bus base module for housing type BK

---

#### Plug



## Bus coupler - AXL F BK EIP EF - 2702782

### Accessories

#### RJ45 connector - FL PLUG RJ45 GR/2 - 2744856



RJ45 connector, shielded, with bend protection sleeve, 2 pieces, gray for straight cables, for assembly on site. For connections that are not crossed, it is recommended that you use the connector set with gray bend protection sleeve.

---

#### RJ45 connector - FL PLUG RJ45 GN/2 - 2744571



RJ45 connector, shielded, with bend protection sleeve, 2 pieces, green for crossed cables, for assembly on site. For connections that are crossed, it is recommended that the connector set with green bend protection sleeves is used.

---

### Programming cable

#### Connecting cable - CAB-USB A/MICRO USB B/2,0M - 2701626



Connecting cable, for connecting the controller to a PC for PC Worx and LOGIC+, USB A to micro USB B, 2 m in length.

---

### Terminal marking

#### Zack marker strip - ZB 20,3 AXL UNPRINTED - 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

---

#### Zack Marker strip, flat - ZBF 10/5,8 AXL UNPRINTED - 0829580



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 10.15 mm, lettering field size: 4 of 10.15 x 5 mm and 1 of 5.8 x 5 mm, Number of individual labels: 50

## Bus coupler - AXL F BK EIP EF - 2702782

### Accessories

---

Assembly tool - FL CRIMPTOOL - 2744869



Crimping pliers, for assembling the RJ45 plugs FL PLUG RJ45..., for assembly on site

---

---