

## Bus coupler - AXL F BK EIP - 2688394

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, 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/2688394](http://phoenixcontact.net/product/2688394)


### 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#, SNMP, HTTP, TFTP, FTP, BootP, DHCP, DCP
- Firmware can be updated
- Typical cycle time of the Axioline F local bus is around 10 µs



ETHERNET/IP™ COMPLETE BUS

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 606486
GTIN	4046356606486

### 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

# Bus coupler - AXL F BK EIP - 2688394

## 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
Color	traffic grey A RAL 7042
Net weight	177 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
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
No. of channels	1
Connection method	Bus base module
Transmission speed	100 Mbps
Designation	Service
Connection method	USB type C (as of HW 05)

# Bus coupler - AXL F BK EIP - 2688394

## Technical data

### Interfaces

	Micro USB type B (up to HW 04)
--	--------------------------------

### Network/bus system

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 (2.0 A at $U_{BUS}$ , $U_L = 24$ V, up to HW 04)
	max. 670 mA (2.5 A at $U_{BUS}$ , $U_L = 24$ V, HW 05 or later)
Power consumption	max. 14 W (2.0 A at $U_{BUS}$ , $U_L = 24$ V, up to HW 04)
	max. 16 W (2.5 A at $U_{BUS}$ , $U_L = 24$ V, HW 05 or later)
Type of protection	Surge protection
	Reverse polarity protection
Designation	Axioline F local bus supply ( $U_{BUS}$ )
Supply voltage	5 V DC (via bus base module)
Power supply unit	max. 2 A (up to HW 04)
	max. 2.5 A (as of HW 05)

### 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)

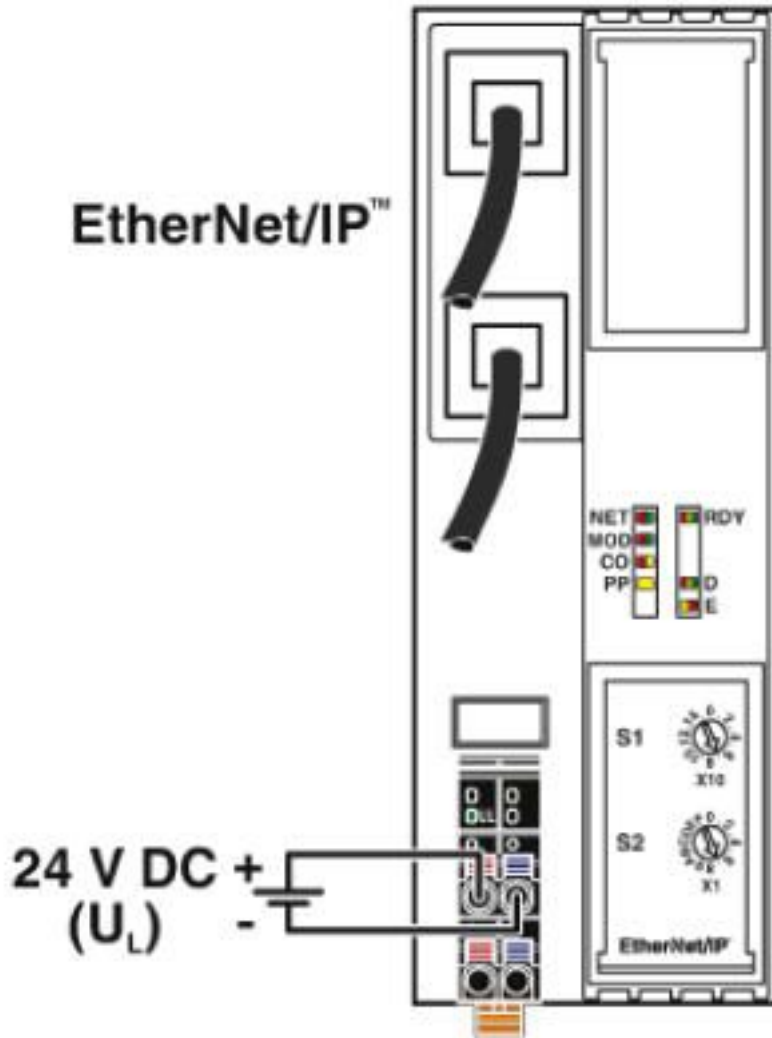
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

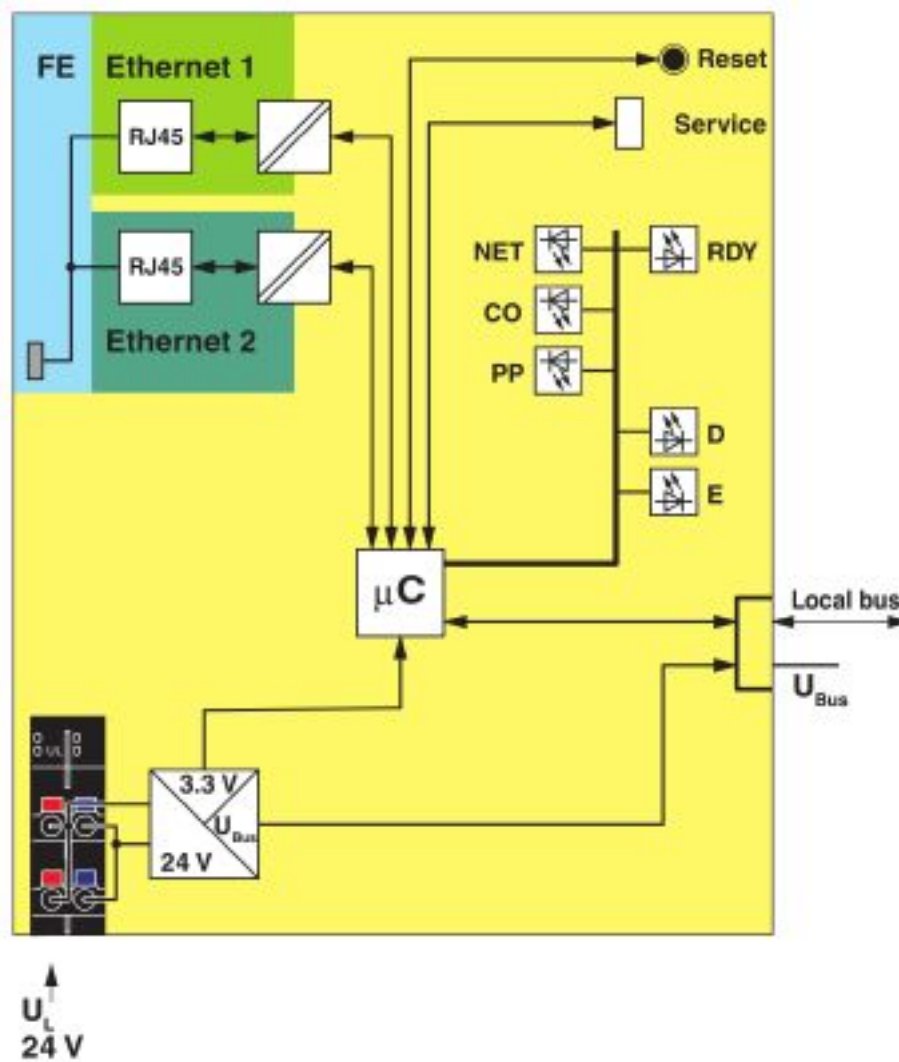
# Bus coupler - AXL F BK EIP - 2688394

Connection diagram



# Bus coupler - AXL F BK EIP - 2688394

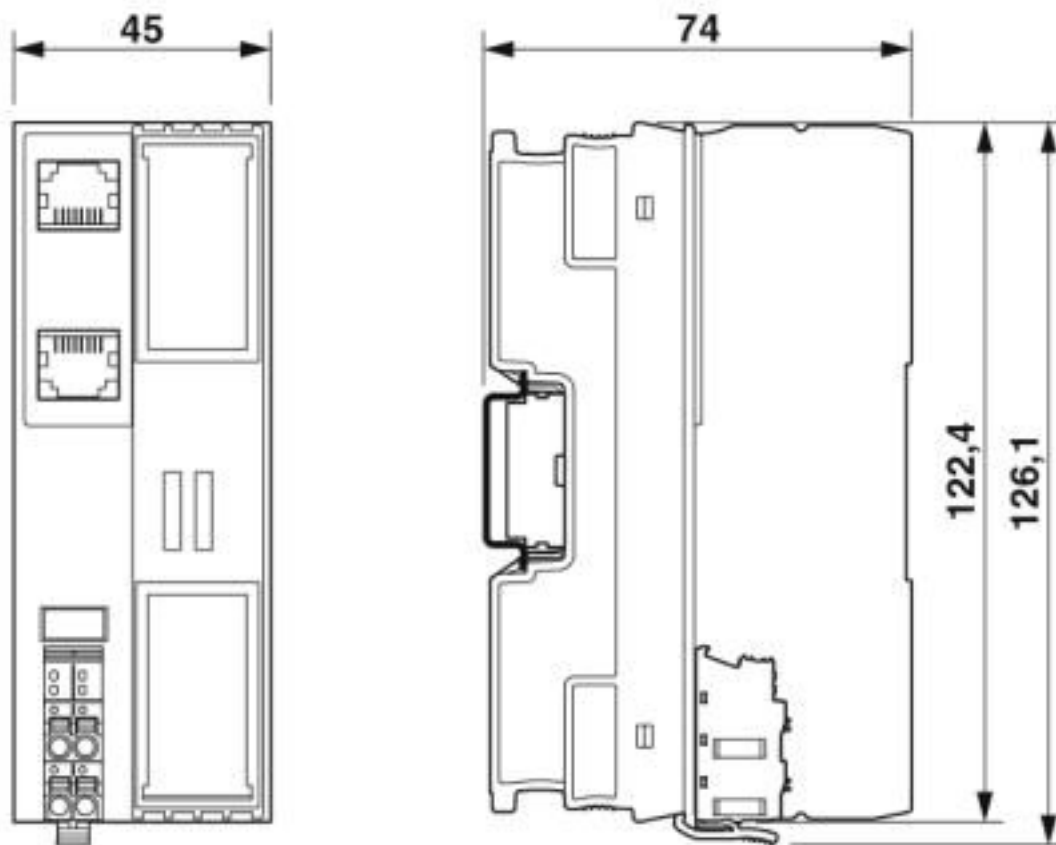
Block diagram



Internal wiring of the terminal points

# Bus coupler - AXL F BK EIP - 2688394

Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 10.0.1	27242608
eCl@ss 4.0	27240400
eCl@ss 4.1	27240400
eCl@ss 5.0	27242200
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242608
eCl@ss 8.0	27242608
eCl@ss 9.0	27242608

### ETIM

ETIM 3.0	EC001604
ETIM 4.0	EC001604
ETIM 5.0	EC001604
ETIM 6.0	EC001604
ETIM 7.0	EC001604

# Bus coupler - AXL F BK EIP - 2688394

## Classifications

### UNSPSC

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

## Approvals

### Approvals

#### Approvals

DNV GL / EtherNet/IP CONFORMANCE TESTED TM / KR / NK / BSH / RINA / UL Listed / cUL Listed / LR / PRS / cULus Listed

#### Ex Approvals

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA00000DF
--------	---	---	------------

EtherNet/IP CONFORMANCE TESTED TM			11399.01
---	--	--	----------

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

BSH			840
-----	--	--	-----

# Bus coupler - AXL F BK EIP - 2688394

## Approvals

RINA		<a href="http://www.rina.org/en">http://www.rina.org/en</a>	ELE030120XG
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
LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	LR2001902TA
PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2239/880590/19
cULus Listed			

## 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

##### Installation cable - FL CAT5 FLEX - 2744830



By the meter, Installation cable, Ethernet CAT5 (100 Mbps), shielded, PUR halogen-free, water blue RAL 5021, 4-wire (2x2xAWG26/7; SF/UTP), color single wire: white/orange-orange, white/green-green, cable length: Free entry (1.0 ... 1000.0 m)



## Bus coupler - AXL F BK EIP - 2688394

### Accessories

#### Data plug

Assembly tool - FL CRIMPTOOL - 2744869



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

---

#### 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

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.

## Bus coupler - AXL F BK EIP - 2688394

### Accessories

#### 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

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [I/O Modules](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[70L-IDC5S](#) [70L-OAC-L](#) [70Z3289-4](#) [G21960000700](#) [G21960002700](#) [G34960002700](#) [G88104401](#) [OACU](#) [C4SWOUT](#) [PB16H](#)  
[G34960001700](#) [G3TA-OA101SZ-1](#) [DC24](#) [G77-S](#) [G78-16-E](#) [5607189](#) [DA5](#) [ODC-24A](#) [IDC5P](#) [FC6A-N16B1](#) [6421](#) [70MRCQ32-HL](#)  
[G3TAOD201SDC24](#) [C200H-LK201-V1](#) [G3TA-OA202SZ-US](#) [DC12](#) [GT1-OD16](#) [GT1-AD04CST](#) [B7AM-6BS](#) [70GRCQ24-HS](#) [6422](#)  
[84110410](#) [GT1-OD16MX](#) [G7VC-OC16-B7](#) [70MRCK24-DIN](#) [6202](#) [6402](#) [PI/NI-2D/24](#) [FC6A-J2C1](#) [FC6A-KC1C](#) [FC6A-R081](#) [FC6A-](#)  
[J8CU1](#) [GP32900003700](#) [641-480-5022](#) [PB16H](#) [84145010](#) [84110210](#) [FRUSB1601](#) [PCL-720+-BE](#) [FRRJ451601](#) [AP24MX3DB25F](#) [ADAM-](#)  
[5053S-AE](#)