

Bus coupler - AXL F BK EIP



2688394

<https://www.phoenixcontact.com/de/produkte/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 documentation. Our General Terms of Use for Downloads are valid.



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](https://www.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
- Firmware can be updated
- Runtime in bus coupler is negligible (almost 0 μ s)
- Typical cycle time of the Axioline F local bus is around 10 μ s
- Web-based management
- Supports the operation of Axioline Smart Elements
- Supports passive Smart Elements (firmware version 1.30 or later)
- Supports IOL-CONF (firmware version 1.30 and later)
- Supports Diag+
- Supported protocols: EtherNet/IP™, SNMP, HTTP, TFTP, FTP, BootP, DHCP, DCP

Commercial Data

Item number	2688394
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	O1 - Automatisierungssys.
Product Key	DRI21D
Catalog Page	Page 70 (C-6-2019)
GTIN	4046356606486
Weight per Piece (including packing)	223 g
Weight per Piece (excluding packing)	177 g
Customs tariff number	85176200
Country of origin	DE

Bus coupler - AXL F BK EIP

2688394

<https://www.phoenixcontact.com/de/produkte/2688394>

Technical Data

Dimensions

Dimensional drawing	
Width	45 mm
Height	126.1 mm
Depth	74 mm
Note on dimensions	The depth applies when a TH 35-7.5 DIN rail is used (in accordance with EN 60715).

Material specifications

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

Interfaces

EtherNet/IP™

Number of interfaces	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

Axioline F local bus

Number of interfaces	1
Connection method	Bus base module
Transmission speed	100 Mbps

Service

Number of interfaces	1
Connection method	USB type C (from HW 05) Micro USB type B (up to HW 04)

Fieldbus: Local bus gateway

Max. number of local bus devices	63 (Consider the logic current consumed by the devices)
----------------------------------	---

System properties

System limits

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

Product properties

Type	block modular
Product type	I/O component
Mounting position	any (observe temperature derating)
Scope of delivery	including bus base module and Axioline F connector

Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

Electrical properties

Maximum power dissipation for nominal condition	14 W
---	------

Potentials: 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 draw	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)
Protective circuit	Surge protection; electronic
	Reverse polarity protection; electronic

Potentials: 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 (from HW 05)

Connection data

Connection technology

Connection name	Axioline F connector
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline F: system and installation" user manual.

Conductor connection

Connection method	Push-in connection
Conductor cross section solid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

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, rigid	0.2 mm ² ... 1.5 mm ²

Bus coupler - AXL F BK EIP



2688394

<https://www.phoenixcontact.com/de/produkte/2688394>

Conductor cross section, flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C (Mounting position: wall mounting on horizontal DIN rail)
	-25 °C ... 55 °C (Mounting position: any)
Degree of protection	IP20
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)
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)
------------------	---------------------------------------

Mounting

Mounting type	DIN rail mounting
Mounting position	any (observe temperature derating)

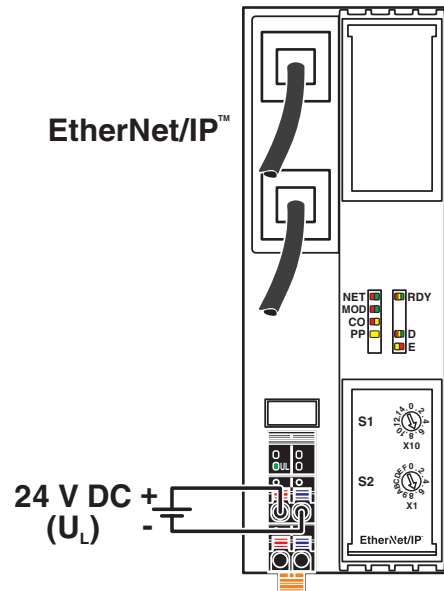
Bus coupler - AXL F BK EIP

2688394

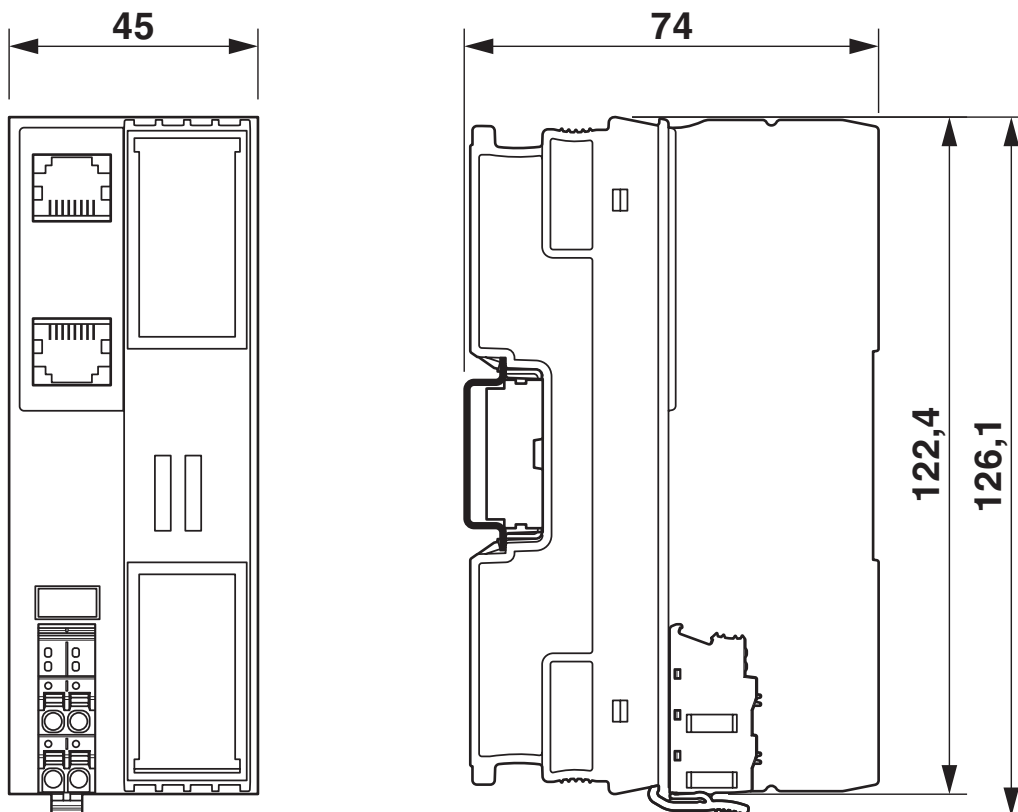
<https://www.phoenixcontact.com/de/produkte/2688394>

Drawings

Connection diagram



Dimensional drawing

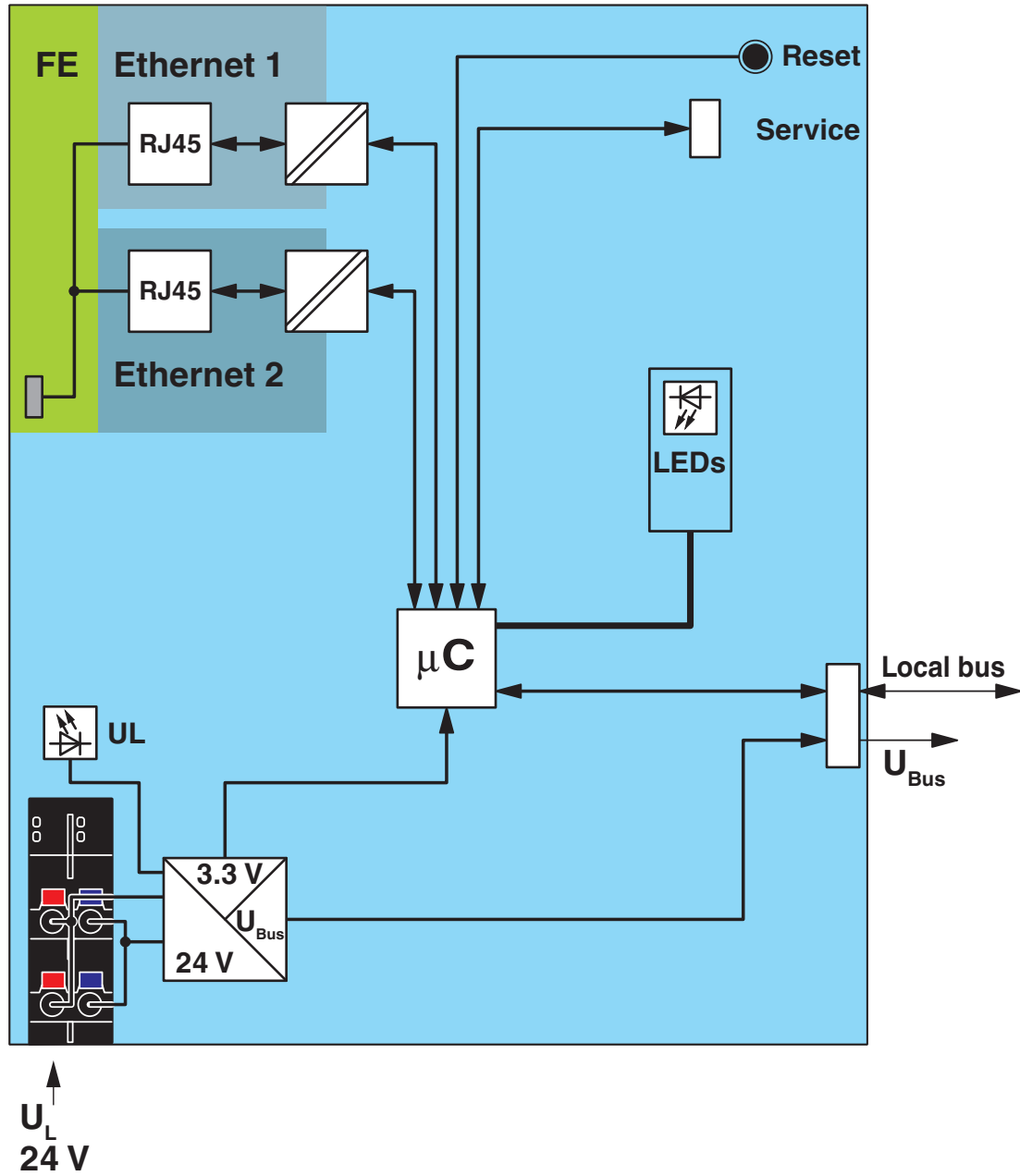


Bus coupler - AXL F BK EIP

2688394

<https://www.phoenixcontact.com/de/produkte/2688394>

Block diagram



Internal wiring of the terminal points

Bus coupler - AXL F BK EIP



2688394

<https://www.phoenixcontact.com/de/produkte/2688394>

Approvals



DNV GL

Approval ID: TAA00000DF



LR

Approval ID: LR2001902TA



NK

Approval ID: 14A006



BV

Approval ID: 36433/B4 BV



PRS

Approval ID: TE/1020/880590/21



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705

BSH

Approval ID: 840



RINA

Approval ID: ELE283021XG

ABS

Approval ID: 20-2059154-PDA



cUL Listed

Approval ID: FILE E 238705



UL Listed

Approval ID: FILE E 238705

Bus coupler - AXL F BK EIP

2688394

<https://www.phoenixcontact.com/de/produkte/2688394>



EtherNet/IP CONFORMANCE TESTED TM

Approval ID: 11399.01

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Declaration of conformity			-	-

Bus coupler - AXL F BK EIP

2688394

<https://www.phoenixcontact.com/de/produkte/2688394>



Classifications

ECLASS

ECLASS-9.0	27242608
ECLASS-10.0.1	27242608
ECLASS-11.0	27242608

ETIM

ETIM 8.0	EC001604
----------	----------

UNSPSC

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

Bus coupler - AXL F BK EIP



2688394

<https://www.phoenixcontact.com/de/produkte/2688394>

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT Deutschland GmbH

Flachsmarktstraße 8

D-32825 Blomberg

+49 52 35/3-1 20 00

info@phoenixcontact.de