

Bus coupler - AXL F BK ETH - 2688459

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Axioline F, Bus coupler, Modbus/TCP(UDP), RJ45 socket, transmission speed in the local bus: 100 Mbps, including bus base module and Axioline F connector

Product Description

The bus coupler is intended for use within a Modbus/TCP (UDP) network and represents the link to the Axioline F I/O system. Up to 63 Axioline F devices can be connected to the bus coupler.


Why buy this product

- ✓ 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
- ✓ Modbus/TCP (UDP) support
- ✓ BootP and DHCP
- ✓ Firmware can be updated
- ✓ Runtime in the bus coupler is negligible (almost 0 μs) (for Modbus/UDP)
- ✓ Typical cycle time of the Axioline F local bus is around 10 μs



Modbus/TCP (UDP)

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 710770
GTIN	4046356710770

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 ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm

General

Mounting type	DIN rail
Net weight	177 g
Note on weight specifications	with connector and bus base module

Interfaces

Designation	Modbus/TCP (UDP)
No. of channels	2
Connection method	RJ45 socket
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	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. 583 mA (with 2 A at U_{Bus} for the I/Os and $U_L = 24$ V)
Power consumption	max. 14 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

Standards and Regulations

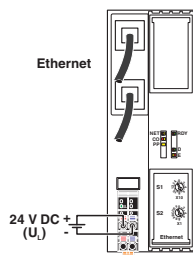
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

Environmental Product Compliance

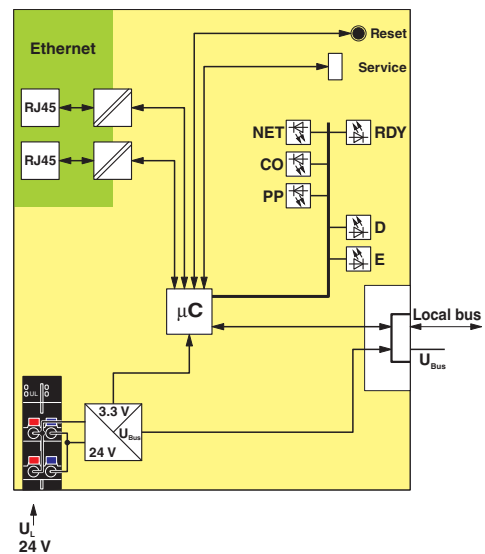
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Connection diagram



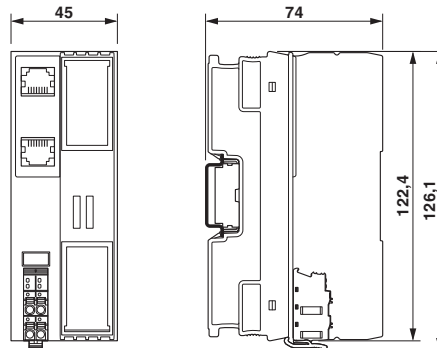
Block diagram



Internal wiring of the terminal points

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Dimensional drawing



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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>