

Bus coupler - AXL F BK S3

2701686

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Axioline F, Bus coupler, Sercos, 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 a third-generation Sercos[®] network. It is the link to the Axioline F I/O system. The bus coupler creates the link to the Axioline F I/O system and the industrial I/O signals connected to it. Up to 63 Axioline F devices can be connected to the bus coupler. A corresponding SDDML file is available for integrating the Axioline F station into the programming system. It can be downloaded at: [phoenixcontact.net/product/2701686](https://www.phoenixcontact.com/net/product/2701686)

Your advantages

- 2 Ethernet ports (with integrated switch)
- FSP-IO (Function Specific Profile-IO) for modular I/O devices
- 8 connections
- Minimum Sercos III cycle time of 31.25 μ s
- Typical cycle time of the Axioline F local bus is around 10 μ s
- Synchronization between fieldbus and local bus
- Runtime in bus coupler is negligible (almost 0 μ s)
- Firmware can be updated
- Supports the operation of Axioline Smart Elements
- Supports passive Smart Elements (firmware version 1.35 or later)
- Supports IOL-CONF (firmware version 1.35 or later)

Commercial Data

Item number	2701686
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	DRI21C
Product Key	DRI21C
Catalog Page	Page 69 (C-6-2019)
GTIN	4046356790109
Weight per Piece (including packing)	227.1 g
Weight per Piece (excluding packing)	177 g
Customs tariff number	85176200
Country of origin	DE

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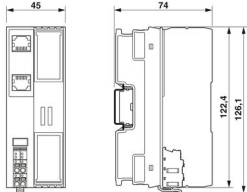
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Technical Data

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
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Interfaces

Sercos

Number of interfaces	2
Connection method	RJ45 jack
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	100 Mbps (full duplex)
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)

Sercos

Equipment type	Sercos slave
System-specific protocols	Sercos protocols Sercos
Specification	Sercos specification 1.31

System properties

System limits

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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

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. 570 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. 13.7 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
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Conductor cross section, rigid	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

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)
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Mounting

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

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Classifications

ECLASS

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

ETIM

ETIM 8.0	EC001604
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UNSPSC

UNSPSC 21.0	32151600
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