

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, Sercos, RJ45 socket, 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 designed for use within a third generation Sercos network and represents the link to the Axioline F system. 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

Your advantages

- ☑ 2 RJ45 connections
- ☑ Rotary encoding switch
- ✓ Supports Sercos V1.3
- FSP-IO (Function Specific Profile-IO) for modular I/O devices
- ▼ 8 connections
- Firmware can be updated
- Firmware can be updated
- Typical cycle time of the Axioline F local bus is around 10 μs
- Typical cycle time of the Axioline F local bus is around 10 μs



Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 790109
GTIN	4046356790109

Technical data

Dimensions

Width	45 mm
Height	126.1 mm
Depth	74 mm



Technical data

Dimensions

Note on dimensions The depth is valid when a TH 35-7,5 DIN rail is used (according to		
EN 60715).	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 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	Sercos
No. of channels	2
Connection method	RJ45 socket
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	100 Mbps (Full duplex)
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



Technical data

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
Designation	Sercos
Equipment type	Sercos slave
Device profile	FSP_IO
System-specific protocols	Sercos protocols Sercos
Specification	Sercos specification 1.31

Axioline potentials

Designation	Communications power U_L feed-in (the supply of the Axioline F local bu 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. 570 mA (with 2 A at U_{Bus} for the I/Os and U_L = 24 V)	
Power consumption	max. 13.7 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 s	
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

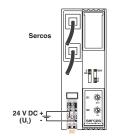
Environmental Product Compliance

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

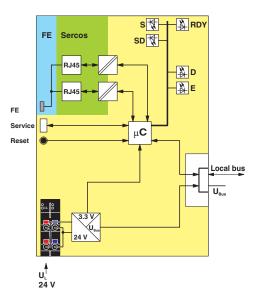
Drawings



Connection diagram

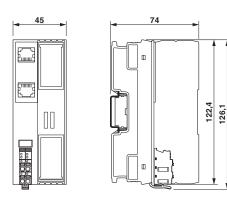


Block diagram



Internal wiring of the terminal points

Dimensional drawing



Approvals

Approvals

Approvals

DNV GL / LR / KR / NK / ABS / BSH / RINA / UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

DNV GL http://exchange.dnv.com/tari/ TAA00000DF



Approvals

LR	Lloyd's Register	http://www.lr.org/en	14-20019
KR	KRR KOREAN REGISTER	http://www.krs.co.kr/eng/main/main.aspx	HMB17372-AC002
NK	ClassNK	http://www.classnk.or.jp/hp/en/	14A006
ABS		http://www.eagle.org/eagleExternalPortalWEB/	18-HG1767360-PDA
BSH		http://www.bsh.de/de/index.jsp	840
RINA		http://www.rina.org/en	ELE256518XG
UL Listed	UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Listed	C UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cULus Listed	CUL US		

Phoenix Contact 2018 © - 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