

I/O module - AXL F DO16/2 2H - 1027904

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, Digital output module, Digital outputs: 16, 24 V DC, 500 mA, connection method: 2-wire, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and Axioline F connectors

Product Description


The module is designed for use within an Axioline F station. It is used to output digital signals. The outputs are protected against short circuit and overload.

Your advantages

- 16 digital outputs
- 24 V DC, 500 mA
- Connection of actuators in 2-wire technology
- Single-channel diagnostics
- Minimum update time of < 100 µs
- Device rating plate stored



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 523767
GTIN	4055626523767
Weight per Piece (excluding packing)	212.800 g
Custom tariff number	85389091
Country of origin	Germany

Technical data

Dimensions

Width	35 mm
Height	129.9 mm
Depth	54 mm

I/O module - AXL F DO16/2 2H - 1027904

Technical data

Dimensions

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
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
Color	traffic grey A RAL 7042
Net weight	212.8 g
Note on weight specifications	with connectors and bus base module
Mounting position	any (no temperature derating)

Interfaces

Designation	Axioline F local bus
No. of channels	2
Connection method	Bus base module
Transmission speed	100 Mbps

Axioline potentials

Designation	Axioline F local bus supply (U _{Bus})
Supply voltage	5 V DC (via bus base module)
Current consumption	max. 60 mA
Power consumption	max. 300 mW
Designation	Supply for digital output modules (U _O)

I/O module - AXL F DO16/2 2H - 1027904

Technical data

Axioline potentials

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 8 A (provide external protection)
Power consumption	max. 240 W (of which 1.3 W constitute internal losses)
Protective circuit	Surge protection of the supply voltage electronic (35 V, 0.5 s)
	Polarity reversal protection of the supply voltage parallel diode; with external 5 A fuse (only for commissioning)
Protection	max. 8 A (polarity reversal protection up to 5 A)

Digital outputs

Output name	Digital outputs
Connection method	Push-in connection
Connection technology	2-wire
Number of outputs	16
Protective circuit	Short-circuit protection, overload protection of the outputs electronic
Output voltage	24 V DC
Nominal output voltage	24 V DC
Maximum output current per channel	500 mA
Maximum output current per module	8 A (provide external protection)
Nominal load, inductive	max. 12 VA (1.2 H, 48 Ω, with nominal voltage)
Nominal load, lamp	max. 12 W (at nominal voltage)
Nominal load, ohmic	max. 12 W (48 Ω, with nominal voltage)
Switching frequency	max. 10000 per second (with at least 50 mA load current)
Load min.	10 kΩ
Output voltage when switched off	max. 1 V
Output current when switched off	max. 300 μA
Behavior with overload	Shutdown with automatic restart
Behavior with inductive overload	Output can be destroyed
Reverse voltage resistance to short pulses	limited protection up to 0.5 A for 1 s

Electrical isolation

Test section	5 V supply of the local bus (U_{BUS}) / 24 V supply (I/Os) 500 V AC 50 Hz 1 min.
	5 V supply of the local bus (U_{BUS}) / functional ground 500 V AC 50 Hz 1 min.
	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min.

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

I/O module - AXL F DO16/2 2H - 1027904

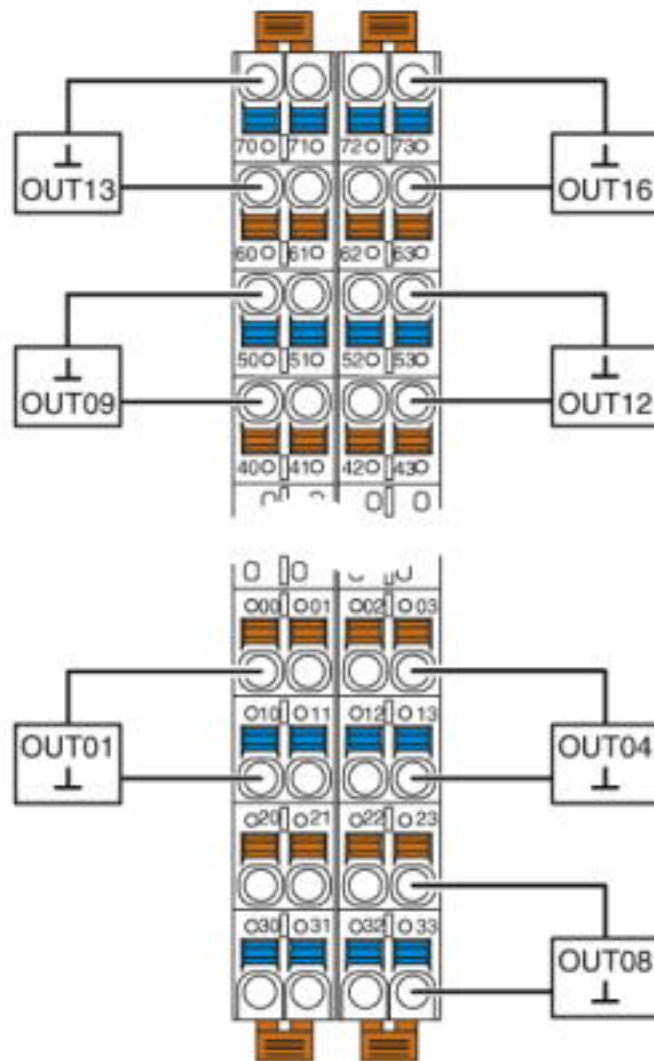
Technical data

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

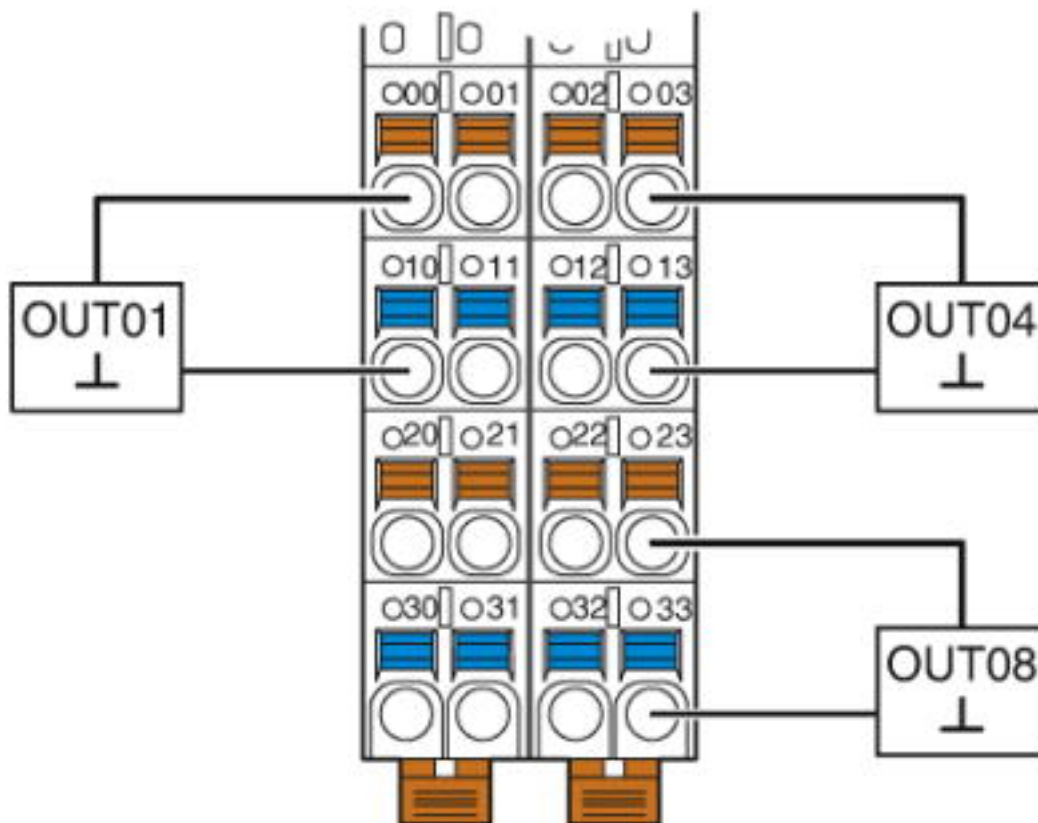
Connection diagram



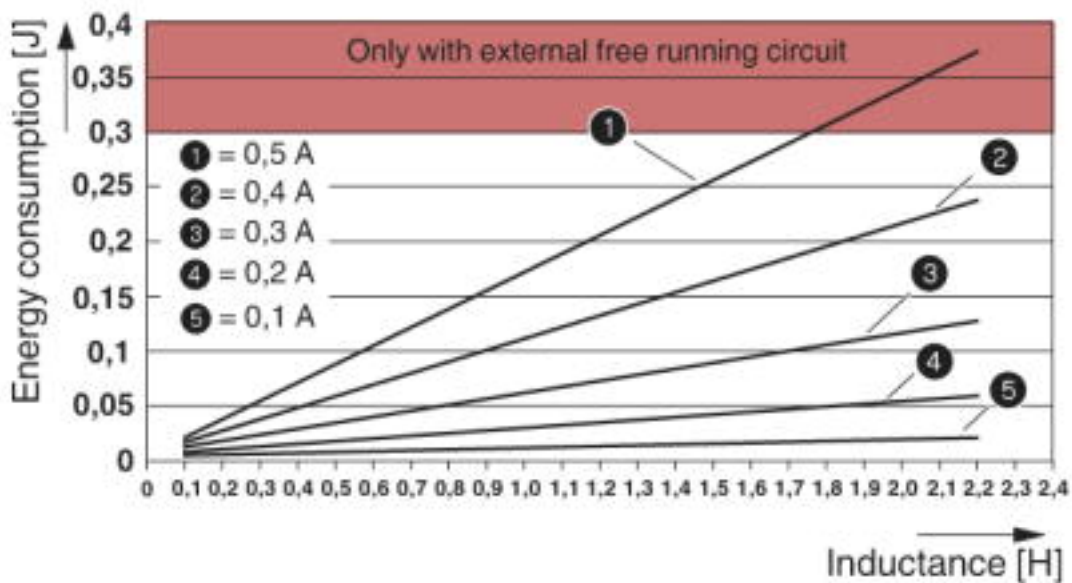
Connection with 2-wire technology

I/O module - AXL F DO16/2 2H - 1027904

Connection diagram



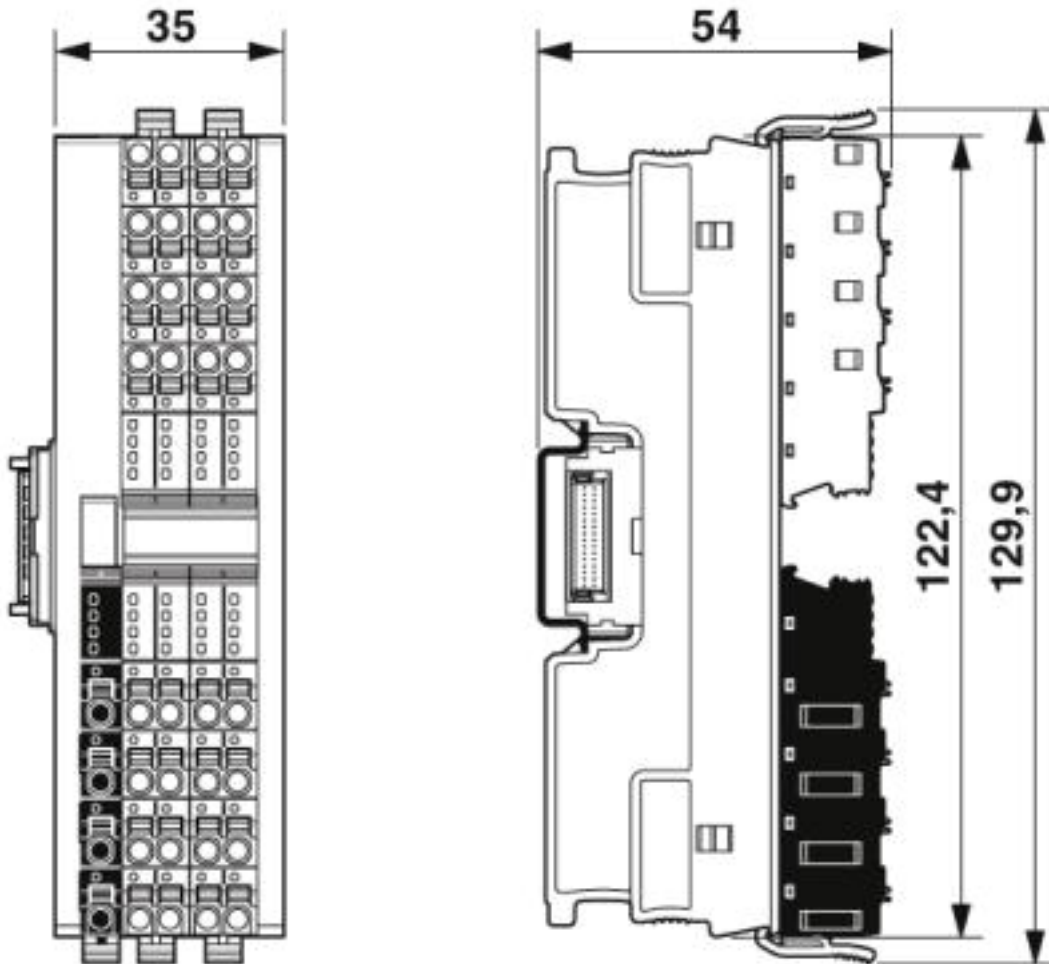
Diagram



Maximum outputs power consumption when inductive loads are switched off

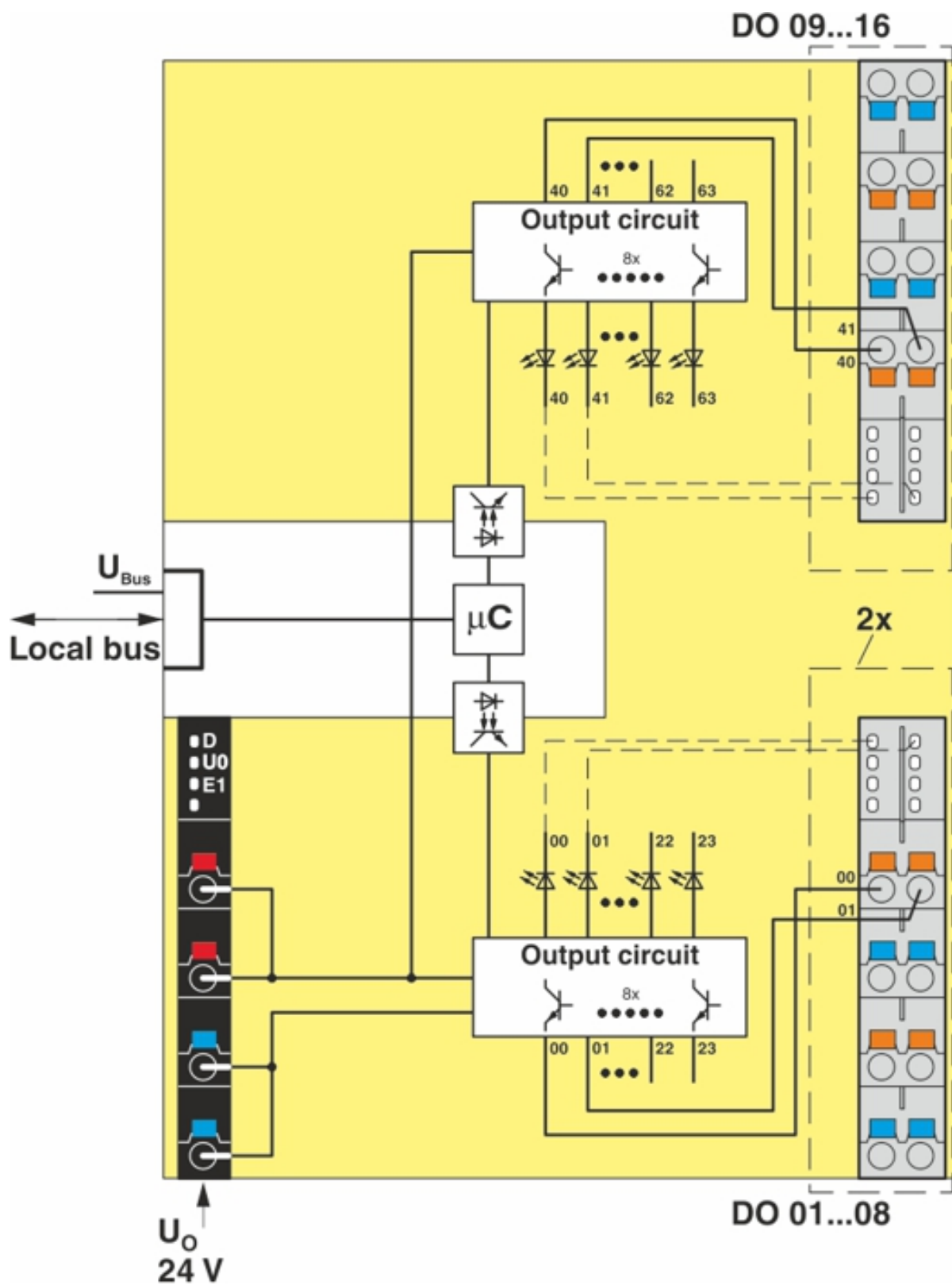
I/O module - AXL F DO16/2 2H - 1027904

Dimensional drawing



I/O module - AXL F DO16/2 2H - 1027904

Block diagram



I/O module - AXL F DO16/2 2H - 1027904

Classifications

eCl@ss

eCl@ss 6.0	27242600
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

ETIM

ETIM 5.0	EC001599
ETIM 6.0	EC001599
ETIM 7.0	EC001599

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
-----------	--	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
------------	--	---	---------------

DNV GL		https://approvalfinder.dnvgl.com/	TAA00000DF
--------	--	---	------------

ABS	http://www.eagle.org/eagleExternalPortalWEB/	18-HG1767360-PDA
-----	---	------------------

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

RINA		http://www.rina.org/en	ELE256518XG
------	--	---	-------------

I/O module - AXL F DO16/2 2H - 1027904

Approvals

PRS		http://www.prs.pl/	TE/2239/880590/19
BV		http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	36433/B0 BV
NK	ClassNK	http://www.classnk.or.jp/hp/en/	14A006
KR		http://www.krs.co.kr/eng/main/main.aspx	HMB17372-AC002
LR		http://www.lr.org/en	14-20019
LR		http://www.lr.org/en	14-20019
UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
NK	ClassNK	http://www.classnk.or.jp/hp/en/	14A006
ABS		http://www.eagle.org/eagleExternalPortalWEB/	18-HG1767360-PDA
PRS		http://www.prs.pl/	TE/2239/880590/19

I/O module - AXL F DO16/2 2H - 1027904

Approvals

DNV GL		https://approvalfinder.dnvgl.com/	TAA00000DF
BV		http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	36433/B0 BV
RINA		http://www.rina.org/en	ELE256518XG
BSH			840
KR		http://www.krs.co.kr/eng/main/main.aspx	HMB17372-AC002

Accessories

Accessories

DIN rail connector

Bus connector - AXL F BS H - 2700992



Axioline F bus base module for housing type H

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

I/O module - AXL F DO16/2 2H - 1027904

Accessories

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