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Axioline E-EtherCAT® device in a plastic housing with 8 IO-Link ports and 4 digital inputs, 24 V DC, M12 fast connection technology

Product Description

The Axioline E device is designed for use within an EtherCAT® network. It enables the operation of up to eight IO-Link sensors/actuators and is also used to acquire digital signals.

Why buy this product

- ☑ Connection to EtherCAT® network using M12connectors (D-coded)
- ☑ Connection of four IO-Link devices with additional digital input
- ☑ Connection of four IO-Link actuators with additional power supply
- ☑ Connection of IO-Link ports using M12connectors (A-coded, 5-pos.)
- ☑ Diagnostic and status indicators
- Short-circuit and overload protection of the sensor supply
- ☑ IP65/IP67 degree of protection



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 763745
GTIN	4046356763745

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	60 mm
Height	185 mm
Depth	30.5 mm



Technical data

Dimensions

Note on dimensions	The height is 212 mm including fixing clips.
Drill hole spacing	198.5 mm

Ambient conditions

Ambient temperature (operation)	-25 °C 60 °C
Ambient temperature (storage/transport)	-25 °C 85 °C
Permissible humidity (operation)	5 % 95 %
Permissible humidity (storage/transport)	5 % 95 %
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	IP65/IP67

General

Housing material	Pocan [®]
Mounting type	Wall mounting
Net weight	551.4 g

Interfaces

Designation	EtherCAT [®]
No. of channels	2
Connection method	M12 fast connection technology
Note on the connection method	D-coded
Designation connection point	Copper cable
Transmission speed	100 Mbps (with auto negotiation)
Number of positions	4

System limits of the bus coupler

Designation	EtherCAT [®]
Equipment type	EtherCAT [®] slave
System-specific protocols	Mailbox protocols CANopen [®] over EtherCAT [®]
	Mailbox protocols File access over EtherCAT®
Type of addressing	Auto-increment addressing
	Fixed position addressing
	Logical addressing
Specification	ETG.1000 V1.02

Supply

Designation	Module electronics and sensors (U _S)
Connection method	M12 connector (T-coded)
Number of positions	4
Supply voltage	24 V DC
Nominal supply voltage range	18 V DC 31.2 V DC (including all tolerances, including ripple)
Current consumption	max. 12 A



Technical data

Supply

Typical current consumption	180 mA ±15 % (at 24 V DC)
Designation	Actuators (U _A)
Connection method	M12 connector (T-coded)
Number of positions	4
Supply voltage	24 V DC
Nominal supply voltage range	18 V DC 31.2 V DC (including all tolerances, including ripple)
Current consumption	max. 12 A
Typical current consumption	28 mA ±15 % (at 24 V DC)

Digital inputs

Description of the input	IO-Link ports in digital input (DI) mode
Connection method	M12 connector, X01 X04 have double occupancy
Connection technology	3-wire
Nominal input voltage U _{IN}	24 V DC
Input voltage range "0" signal	-0.3 V DC 5 V DC
Input voltage range "1" signal	15 V DC 30 V DC
Nominal input current	typ. 3 mA
Sensor current per channel	max. 200 mA (from L+/L-)
Total sensor current	max. 1.6 A (from L+/L-)
Input filter time	< 1000 µs
Input frequency	0.5 kHz
Type of protection	Overload protection
	Short-circuit protection for the sensor supply

Digital outputs

Output description	IO-Link ports in digital output (DO) mode
Connection method	M12 connector, X01 X04 have double occupancy
Connection technology	3-wire
Number of outputs	max. 8
Nominal output voltage	24 V DC
Maximum output current per channel	150 mA
Maximum output current per device	1.2 A
Nominal load, ohmic	3.6 W (160 Ω, at nominal load)
Nominal load, inductive	3.6 VA (0.8 H, 160 Ω, at nominal load)
Signal delay	max. 150 µs (when switched on)
	max. 200 µs (when switched off)
Switching rate	1 per second, maximum (at nominal inductive load)
Limitation of the voltage induced on circuit interruption	-15 V DC
Output voltage when switched off	max. 1 V
Output current when switched off	max. 300 μA
Type of protection	Overload protection
	Short-circuit protection

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Technical data

Digital outputs

Behavior with overload	Shutdown with automatic restart
Electrical isolation	
Test section	24 V supply (communications power and sensor supply, IO-Link ports)/ bus connection (Ethernet 1) 500 V AC 50 Hz 1 min.
	24 V supply (communications power and sensor supply, IO-Link ports)/bus connection (Ethernet 2) 500 V AC 50 Hz 1 min.
	24 V supply (communications power and sensor supply, IO-Link ports)/ FE 500 V AC 50 Hz 1 min.
	Bus connection (Ethernet 1)/FE 500 V AC 50 Hz 1 min.
	Bus connection (Ethernet 2)/FE 500 V AC 50 Hz 1 min.
	Bus connection (Ethernet 1)/bus connection (Ethernet 2) 500 V AC 50 Hz 1 min.
	24 V supply (actuator supply)/24 V supply (communications power and sensor supply, IO-Link ports) 500 V AC 50 Hz 1 min.
	24 V supply (actuator supply)/bus connection (Ethernet 1) 500 V AC 50 Hz 1 min.
	24 V supply (actuator supply)/bus connection (Ethernet 2) 500 V AC 50 Hz 1 min.
	24 V supply (actuator supply)/FE 500 V AC 50 Hz 1 min.

Standards and Regulations

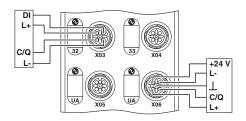
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g, 11 ms period, half-sine shock pulse
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

Environmental Product Compliance

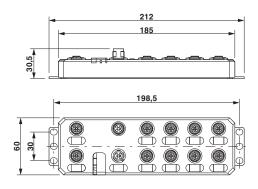
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Connection diagram

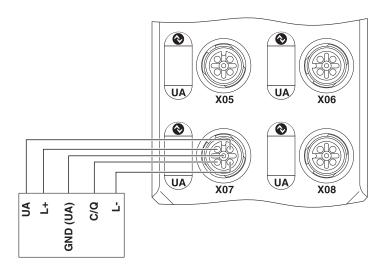


Dimensional drawing





Connection diagram



Approvals

Approvals

Approvals

UL Listed / cUL Listed / EtherCAT / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 140324

cUL Listed cUL Listed http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 140324

EtherCAT 0x84_002

cULus Listed CULus Listed



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