

AXC 3050 - Controller

2700989



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Axiocontrol for the direct control of Axioline F I/Os. With 3 Ethernet interfaces for the additional connection of distributed I/Os via PROFINET, Modbus/TCP or TCP/IP. Programming according to IEC 61131-3. Includes connector plug and marking field.

Product description

The AXC 3050 modular controller for the Axioline I/O system is fast, robust, and easy, i.e., it is consistently designed for maximum performance, easy handling, and use in harsh industrial environments.

Your advantages

- PROFINET controller and PROFINET device
- Memory extendable by up to 2 GB via plug-in SD card
- 3 independent Ethernet interfaces
- Modbus/TCP-Client
- Integrated FTP and HTML5 web server
- Numerous protocols supported such as: http, https, FTP, SNMP, SMTP, SQL, MySQL, DCP, etc.
- Integrated UPS for targeted shutdown of the application
- Maritime approvals (GL, DNV, LR, BV, RINA, ABS)

Commercial data

Item number	2700989
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DRAAEC
Product key	DRAAEC
Catalog page	Page 45 (C-6-2019)
GTIN	4046356731201
Weight per piece (including packing)	461.7 g
Weight per piece (excluding packing)	444 g
Customs tariff number	85371091
Country of origin	DE

Technical data

Notes

Note on application

Note on application	Only for industrial use
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Product properties

Product type	Controller
Product family	Axioccontrol
Type	modular

Display

Diagnostics display	no
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System properties

Processor	Intel®Atom® E660, 1x 1.3 GHz
Retentive data storage	128 kByte
IEC 61131 runtime system	
Program memory	4 Mbyte
Data storage system	8 Mbyte
Number of control tasks	16

Axioline

Amount of process data	max. 8192 bit (per station) max. 4096 bit (Axioline F local bus (input)) max. 4096 bit (Axioline F local bus (output))
Number of supported devices	max. 63 (per station)
Number of local bus devices that can be connected	max. 63 (observe current consumption)

PROFINET

Device function	PROFINET controller, PROFINET device
Specification	Version 2.3
Update rate	min. 1 ms (16 devices) min. 2 ms (32 participants) min. 4 ms (64 devices) min. 8 ms (32 participants) min. 16 ms (256 participants)
Conformance Class	B
Number of supported devices	max. 256 (at PROFINET controller)
Device ID	0095 _{hex}
Vendor ID	00B0 _{hex}

Function

Diagnostics display	no
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Controller redundancy	yes
Note on controller redundancy	applicative system redundancy possible
Safety function	no

Functionality

Programming languages supported	Instruction list (IL)
	Symbolic flowchart (SFC)
	Ladder diagram (LD)
	Function block diagram (FBD)
	Structured text (ST)

System requirements

Engineering tool	PC Work
Configuration tool	Config+ Version 1.01 or later
Diagnostics tool	DIAG+
Runtime system	eCLR
Application interface	OPC

Electrical properties

Maximum power dissipation for nominal condition	max. 9.8 W
Supply	
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC
Residual ripple	± 5 %
Max. current consumption	max. 976 mA (with 2 A at U_{BUS} for the I/Os and $U_L = 24$ V)
Typical current consumption	typ. 408 mA (without I/Os and $U_L = 24$ V)

Real-time clock

Realtime clock	yes
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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. 976 mA (with 2 A at U_{BUS} for the I/Os and $U_L = 24$ V)
Power consumption	max. 23.5 W (2.0 A on U_{BUS} , $U_L = 24$ V)

Potentials: Axioline F local bus supply (U_{BUS})

Supply voltage	5 V DC (via bus base module)
Power supply unit	2 A

Potentials

Supply voltage	24 V DC -15 % / +20 % (in accordance with EN 61131-2)
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Input data

Counter:

Input name	Counter input for 24 V signals
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Number of inputs	max. 2 (via any digital inputs of the Axioline F modules)
Input frequency	max. 100 kHz (with AXL F DI16/1 HS 1H module)

Connection data

Connection method	Push-in connection
Axioline F connector	
Connection method	Push-in connection
Conductor cross section, rigid	0.2 mm² ... 1.5 mm²
Conductor cross section, flexible	0.2 mm² ... 1.5 mm²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Interfaces

Web server	yes
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Ethernet

Bus system	RJ45
Number of interfaces	3
Connection method	RJ45 jack
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps
Transmission physics	Ethernet in RJ45 twisted pair
No. of channels	3

Axioline F local bus

Number of interfaces	1
Connection method	Bus base module
Transmission speed	100 Mbps

Parameterization/operation/diagnostics

Bus system	USB
Number of interfaces	1
Connection method	Micro USB type B
Transmission speed	max. 115.2 kbps
No. of channels	1

Service

Bus system	USB
Number of interfaces	1
Connection method	USB type A, socket

Dimensions

Width	100 mm
Height	125.9 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).
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Material specifications

Color	gray (RAL 7042)
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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C (up to 2000 m above sea level)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Ambient temperature (assembly)	-5 °C ... 60 °C
Permissible humidity (operation)	5 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	5 % ... 95 % (according to DIN EN 61131-2)
Shock (operation)	10g (Bump endurance test according to DIN EN 60068-2-27)
Vibration (operation)	5g
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	58 kPa ... 106 kPa (up to 4500 m above mean sea level)

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Conformance with EMC directives	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Electrostatic discharge (ESD)EN 61000-4-2/IEC 61000-4-2 Criterion B, ± 6 kV contact discharge, ± 8 kV air discharge Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Electromagnetic fieldsEN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Fast transients (burst)EN 61000-4-4/IEC 61000-4-4 Criterion B, ± 2 kV Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Transient overvoltage (surge)EN 61000-4-5/IEC 61000-4-5 Criterion B, DC supply lines: ± 0.5 kV/± 0.5 kV (symmetrical/asymmetrical), fieldbus cable shield: ± 1 kV Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Conducted interferenceEN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V Noise emission test in accordance with EN 61000-6-3/IEC 61000-6-3 Radio interference properties EN 55022 Class A

Mounting

Mounting type	DIN rail mounting
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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2700989>



EAC

Approval ID: RU*DE*08.B.00529/19



DNV GL

Approval ID: TAA00000BH



LR

Approval ID: LR22129062TA



BV

Approval ID: 43778/B0 BV



RINA

Approval ID: ELE141419XG

ABS

Approval ID: 22-2212575-PDA



cULus Listed

Approval ID: E238705



Classifications

ECLASS

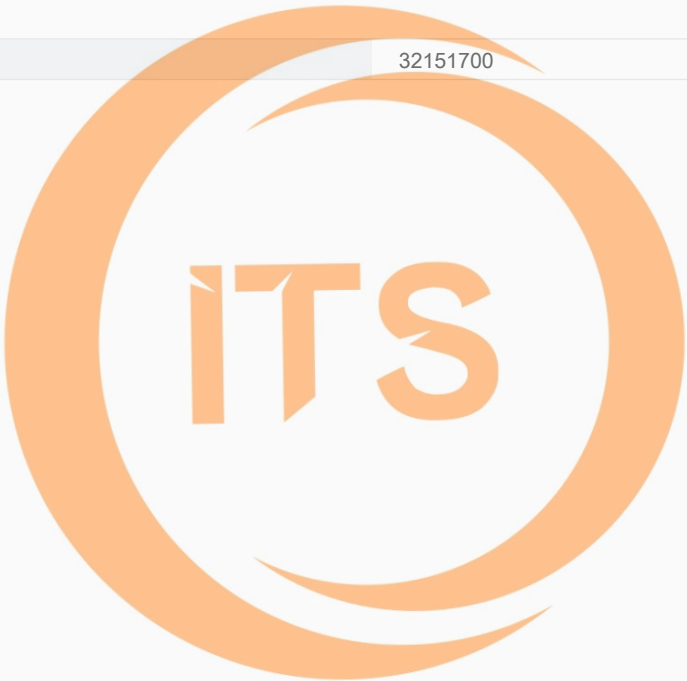
ECLASS-11.0	27242207
ECLASS-12.0	27242207
ECLASS-13.0	27242207

ETIM

ETIM 9.0	EC000236
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UNSPSC

UNSPSC 21.0	32151700
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.0 Climate Change	
CO2e kg	10.12 kg CO2e

