

AXC 1050 XC - Controller



2701295

<https://www.phoenixcontact.com/us/products/2701295>

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Axioccontrol for the direct control of Axioline I/Os. With 2 Ethernet interfaces, extended temperature range, and programming options according to IEC 61131-3. Complete with connector connector and marking field.

Product description

The AXC 1050/XC modular small-scale 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 in the extended temperature range from -40°C to +70°C.

Your advantages

- PROFINET controller for up to 16 devices and/or PROFINET device functionality
- Memory extendable by up to 2 GB via plug-in SD card
- Free engineering with PC Worx Express (IEC 61131-3)
- Modbus/TCP-Client
- Integrated FTP and HTML5 web server
- Numerous protocols supported such as: HTTP, FTP, SNTP, SNMP, SMTP, SQL, MySQL, etc.
- Extended temperature range of -40 °C ... 70 °C (with derating)
- Maritime approvals (GL, DNV, LR, BV, RINA, ABS)

Commercial data

Item number	2701295
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR10
Product key	DRAAEA
Catalog page	Page 44 (C-6-2019)
GTIN	4055626000091
Weight per piece (including packing)	247 g
Weight per piece (excluding packing)	244 g
Customs tariff number	85371091
Country of origin	DE

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

Type	modular
Product type	Controller
Product family	Axiocontrol

Insulation characteristics

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Display

Diagnostics display	No
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System properties

Processor	Altera Nios [®] II 1x 100 MHz
Retentive data storage	48 kByte (NVRAM)

IEC 61131 runtime system

Program memory	2 Mbyte
Data storage system	2 Mbyte
Number of control tasks	8

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. 32 ms (16 devices)
	min. 32 ms (8 devices)
	min. 16 ms (4 devices)
	min. 8 ms (2□devices)
	min. 4 ms (1 device)
Conformance Class	A
Number of supported devices	max. 16 (at PROFINET controller)
Supported functions	MRP

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	MRP
Device ID	0093 _{hex}
Vendor ID	00B0 _{hex}

Function

Diagnostics display	No
Controller redundancy	yes
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 Worx
	PC Worx Express
Configuration tool	Config+ Version 1.01 or later
Diagnostics tool	DIAG+
Runtime system	eCLR
Application interface	OPC

Electrical properties

Real-time clock

Realtime clock	Yes
Description realtime clock	1.73 s/day = 20 ppm at 25 °C

Potentials

Protective circuit	Surge protection of the supply voltage; electronic
	Polarity reversal protection of the supply voltage; electronic

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. 650 mA (with 2 A at U_{Bus} for the I/Os and $U_L = 24$ V)
	typ. 100 mA (without I/Os and $U_L = 24$ V)
Power consumption	max. 13.2 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

Connection data

Connection method	Push-in connection
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Connection method	Push-in connection
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

Interfaces

Web server	yes
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Axioline F local bus

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

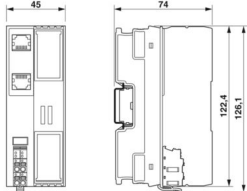
Ethernet

Bus system	RJ45
Number of interfaces	2
Connection method	RJ45 jack
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps (half or full duplex (automatic detection))
Transmission physics	Ethernet in RJ45 twisted pair
No. of channels	2

Service

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

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	gray (RAL 7042)
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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C up to 2000 m above mean sea level (observe derating) -40 °C ... 65 °C up to 3000 m above mean sea level (observe derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (according to DIN EN 61131-2, non-condensing, no ice formation)
Permissible humidity (storage/transport)	5 % ... 95 % (according to DIN EN 61131-2, non-condensing, no ice formation)
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)

Approvals

ATEX

Identification	Ex II 3 G Ex ec IIC T4 Gc
Certificate	TÜV 21 ATEX 8677 X


UKEX

Identification	Ex II 3 G Ex ec IIC T4 Gc
Certificate	PxCIMA23UKEX2701295X

IECEX

Identification	Ex ec IIC T4 Gc
Certificate	IECEX TUR 21.0025X

CCC / China-Ex

Identification	Ex ec IIC T4 Gc
Certificate	

UL, USA/Canada

Identification	cULus
Certificate	E238705

Corrosive gas test

Identification	ISA S71.04.2013 G3 Harsh Group A, DIN EN 60068-2-60:2016-06 Method 4
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EMC data

Conformance with EMC directives	Immunity test in accordance with EN IEC 61000-6-2 Electrostatic discharge (ESD) IEC 61000-4-2 Criterion B, ±6 kV contact discharge, ±8 kV air discharge
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	Immunity test in accordance with EN IEC 61000-6-2 Electromagnetic fields IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
	Immunity test in accordance with EN IEC 61000-6-2 Fast transients (burst) IEC 61000-4-4 Criterion B, ± 2 kV
	Immunity test in accordance with EN IEC 61000-6-2 Transient overvoltage (surge) IEC 61000-4-5 Criterion B; DC supply lines: ± 0.5 kV/ ± 1.0 kV (symmetrical/asymmetrical), fieldbus cable shielding: ± 1.0 kV
	Immunity test in accordance with EN IEC 61000-6-2 Conducted interference IEC 61000-4-6 Criterion A, Test voltage 10 V
	Noise emission test in accordance with EN IEC 61000-6-3 Class B
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU

Mounting

Mounting type	DIN rail mounting
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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

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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