

# Controller - AXC F 1152 - 1151412

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PLCnext Control for the direct control of Axioline F I/Os. With two Ethernet interfaces. Complete with connector and bus base module.

## Product Description

The controllers of the PLCnext Control AXC F 1152 family for the Axioline I/O system are fast, robust, and easy to use. They were consistently designed for maximum performance, easy handling and use in harsh industrial environments.

## Your advantages

- ✓ Linux operating system
- ✓ Supports high-level languages
- ✓ Up to 63 AXIO I/O modules can be mounted side by side
- ✓ 2x Ethernet interfaces (integrated switch)
- ✓ Increased resistance to EMI
- ✓ Extended temperature range of -25°C ... +60°C
- ✓ PROFINET support
- ✓ Connection to PROFICLOUD
- ✓ Numerous protocols supported such as: http, https, FTP, OPC UA, SNMP, SMTP, SQL, MySQL, DCP, etc.
- ✓ Connection to the PLCnext Store



## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4063151149420
Weight per Piece (excluding packing)	223.000 g
Weight per piece (including packing)	286.300 g
Custom tariff number	85371091
Country of origin	Germany
Note	Made to Order (non-returnable)

# Controller - AXC F 1152 - 1151412

## Technical data

### Note

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

Width	45 mm
Height	126.93 mm
Depth	75 mm

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C up to 2000 m above mean sea level (observe derating)
	-25 °C ... 55 °C up to 3000 m above mean sea level (observe derating)
	≤ 55 °C (with max. 1 A on U <sub>Bus</sub> )
	> 55 °C ... 60 °C (only in conjunction with an Axioline F power module AXL F PWR 1H (order number 2688297))
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	5 % ... 95 % (according to DIN EN 61131-2)
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)

### IoT capability

Supports cloud computing	yes
IoT platform	PROFICLOUD

### Control system

Engineering tool	PLCnext Engineer
	Eclipse
	MATLAB® Simulink®
Programming languages supported	Programming in acc. with IEC 61131-3
	C++
	C#
	Java
	Manufacturer-specific

### General data

Processor	Arm® Cortex®-A9 1x 800 MHz
Operating system	Linux
RAM	512 Mbyte DDR3 SDRAM

### IEC 61131 runtime system

Engineering tool	PLCnext Engineer
	Eclipse
	MATLAB® Simulink®

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## Technical data

### IEC 61131 runtime system

Program memory	8 Mbyte
Data storage	16 Mbyte
Retentive data storage	48 kByte (NVRAM)
Realtime clock	Yes
Accuracy realtime clock	1.73 s/day = 20 ppm at 25 °C

### Fieldbus function

Amount of process data	max. 1482 Byte (per station (total input and output data))
	max. 1024 Byte (Axioline F local bus (input))
	max. 1024 Byte (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)
Program memory	8 Mbyte

### Data interfaces

Interface	Axioline F local bus
Number	1
Connection method	Bus base module
Transmission speed	100 Mbps
Interface	Ethernet
Number	2
Connection method	RJ45 jack
Transmission speed	10/100 Mbps (full duplex)
Protocols supported	HTTP
	HTTPS
	SFTP
	SNTP
	SNMP
	IPsec
	syslog
	OPC UA

### PROFINET

Device function	PROFINET controller, PROFINET device
Specification	Version 2.3
Update rate	min. 1 ms (4 devices)
	min. 4 ms (16 devices)

### Mechanical design

Weight	223 g
Note on weight specifications	with connector and bus base module
Diagnostics display	No
Controller redundancy	No

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## Technical data

### Mechanical design

Safety function	No
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### Standards and Regulations

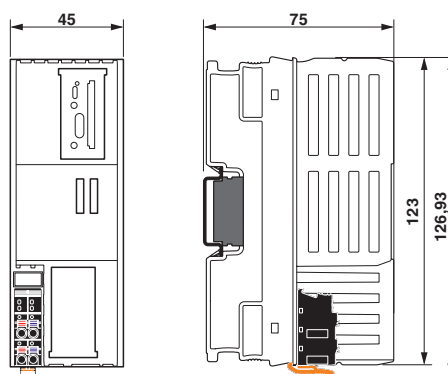
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Interference emission	Noise emission test in accordance with EN 61000-6-4/IEC 61000-6-4
Immunity to surge	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, DC supply lines: $\pm 0.5$ kV/ $\pm 0.5$ kV (symmetrical/asymmetrical), fieldbus cable shield: $\pm 1$ kV
Immunity to burst	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 to EF	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
Immunity to ESD	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 to conducted interference	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V
Vibration (operation)	5g (according to EN 60068-2-6/IEC 60068-2-6)
Shock (operation)	30g (according to EN 60068-2-27/IEC 60068-2-27)

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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## Drawings

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 10.0.1	27242207
eCl@ss 11.0	27242207
eCl@ss 4.0	27240602

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## Classifications

### eCl@ss

eCl@ss 4.1	27240602
eCl@ss 5.0	27242700
eCl@ss 5.1	27242700
eCl@ss 6.0	27242200
eCl@ss 7.0	27242207
eCl@ss 9.0	27242207

### ETIM

ETIM 3.0	EC001045
ETIM 4.0	EC001435
ETIM 6.0	EC000236
ETIM 7.0	EC000236

### UNSPSC

UNSPSC 18.0	39122114
UNSPSC 19.0	39122114
UNSPSC 20.0	39122114
UNSPSC 21.0	39122114

## Approvals

### Approvals

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Approvals

UL Listed / cUL Listed / EAC / cULus Listed

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Ex Approvals

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### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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## Approvals

EAC		RU*DE*08.B.00529/19
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cULus Listed	
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## Accessories

### Accessories

#### I/O component

Extension module - AXC F IL ADAPT - 1020304



Right-alignable Inline adapter terminal (INTERBUS master) for one PLCnext Control device for setting up a PLCnext Technology Inline station

Power module - AXL F PWR 1H - 2688297



Axioline F, Power module for the logic supply  $U_{Bus}$ , max. 4 A, degree of protection: IP20, including bus base module and Axioline F connector

## Programming

Software - PLCNEXT ENGINEER - 1046008



Engineering software platform for Phoenix Contact automation controllers. PLCnext Engineer is IEC 61131-3-compliant and is available free of charge under Downloads. Its functionality can be extended using paid add-ins. To do this, open the license configurator via the "Configure" button. [Free download of PLCnext Engineer software](https://phoe.co/download_plcnext_engineer)

## Storage medium

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### Accessories

Program / configuration memory - SD FLASH 8GB PLCNEXT MEMORY - 1061701



Program and configuration memory for storing the application programs and other files in the file system of the PLC, plug-in, 8 GB.

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Program / configuration memory - SD FLASH 2GB PLCNEXT MEMORY - 1043501



Program and configuration memory for storing the application programs and other files in the file system of the PLC, plug-in, 2 GB.

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Program / configuration memory - SD FLASH 8GB PLCNEXT MEMORY LIC - 1151112



Program and configuration memory for storing the application programs, licenses, and other files in the file system of the PLC, plug-in, 8 GB.

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Program / configuration memory - SD FLASH 32GB PLCNEXT MEMORY LIC - 1151111



Program and configuration memory for storing the application programs, licenses, and other files in the file system of the PLC, plug-in, 32 GB.

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### Spare parts

Bus connector - AXL BS BK - 2701422



Axioline F bus base module for housing type BK

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