AXC F 1252 – RELEASE NOTES

Release notes for the firmware 2025.6.1 on the AXC F 1252 controller

Application note
112303_en_00

1 General information

This document contains important information specifically for **firmware 2025.6.1** of the AXC F 1252 controller (item no. 1646469).

Observe the following general notes:

Toolchain

To be able to use all new functions of a firmware version, always use all elements of the PLCnext Technology toolchain in the same version. The toolchain includes, for example, PLCnext Engineer, SDK and PLCnCLI.

Documentation

- Make sure you always use the latest documentation. It can be downloaded at phoenixcontact.com/product/1646469.
- Further information on the PLCnext Runtime and programming can be found under plcnext.help
- Further information on security in the context of PLCnext Technology can be found under security.plcnext.help

PLCnext Engineer

To be able to use all new functions of this firmware when working with PLCnext Engineer, you need its version 2025.9 or newer.
Note: Because for this firmware version there‘s not an AXC F 1252 template available in the Start Page of any PLCnext Engineer version, proceed as follows:

- Create a blank project („File, New Project“)
- In the „COMPONENT“ panel on the right side, navigate to the entry „AXC F 1252 Rev. >= 00/2025.6.0“ in the „Network, Axiocontrol, Devices, Phoenix Contact, Axiocontrol, Controller“ folder.
- Drag-and-drop the AXC F 1252 onto the „Project“ node in the „PLANT“ panel on the left side.

↪ The AXC F 1252 is added to the project.

2 Release notes

User management and passwords

- Users with an assigned user role „Admin“ cannot download files into certain directories (e.g. /opt/plcnext/custom or /opt/plcnext/projects/PCWE). This is different from the generic PLCnext user „admin“ which can download files to the device.
- When setting a new password, the password policy obligates that the latest 5 passwords cannot be used. When the PLC is power off and on again the current date and time of the PLC are reset because this PLC does not feature a battery buffered real time clock. Consequently, the firmware cannot determine reliably the latest 5 passwords.
- In an upcoming firmware release the Linux user ID and group ID need to be refactored. As this will most probably lead to incompatibilities, after updating to that firmware a „Reset type 1“ needs to be performed. Please check the change notes for the next firmware releases for details.

Memory utilization

If the internal parameterization memory is nearly occupied then the PLC may crash. A „Reset type 1“ needs to be performed. Unfortunately, this will also remove the log files and consequently impedes searching the logs for the reason why so much memory is being used.

Ethernet

With some Ethernet devices no connection link can be established. This has been observed if the communication partner (e.g. a LAN switch) did not use "auto negotiation"

for setting the speed mode and duplex mode. Therefore, it is recommended to use only switches that feature "auto negotiation" and is configured to use it.

PROFINET

For PROFINET controller function, the minimum cycle times are 8 ms (with 4 devices) and 32 ms (with 16 devices). With a future firmware version these minimum cycle times will improve.

INTERBUS

In combination with the AXC F IL ADAPT extension when a short INTERBUS line is configured (e.g. only one IL DO 2) and the read baud rate is configured to 2 MBaud, many errors are written to the log file by component "Arp.Io.Modules.Interbus.MasterAccess.Internal.IbMasterLog".

2.1 Known limitations and errors

The known limitations and errors can be found in the PLCnext Technology – Info Center at:
https://www.plcnext.help/te/Known_issues.htm
There you will find a constantly updated overview of all known issues.

2.2 Security

Information on the Phoenix Contact „PSIRT“ can be found at: https://www.phoenixcontact.com/psirt