



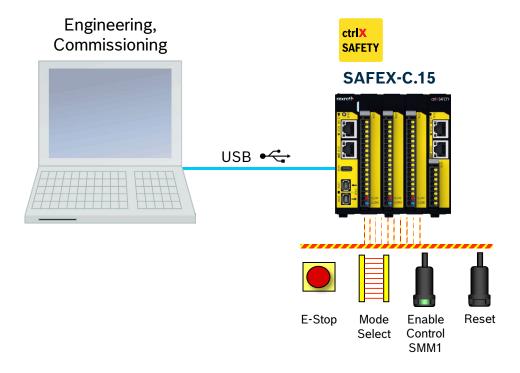
ctrlX SAFETY Engineering for SAFEX-C.12/15



Equipment Topology



ctrlX SAFETY Workshop Equipment Topology





02

ctrlX SAFETY Engineering Overview



ctrlX SAFETY Workshop ctrlX SAFETY Engineering Overview

- 1 Menu ribbon
 - Engineering Steps
 - Central Function

- **2** Project browser
 - Used Devices &
 - Function blocks

- **3** Editor workspace
 - Network
 - Wiring and
 - Logic sheets



- **4** Library
 - Available Devices &
 - Function blocks
- **5** Properties
 - Display selected block
 - Modify block
- 6 Editor tabs
 - Network
 - Wiring and
 - Logic plans
- 7 Logic sheets (modular structured)

- 8 Search dialog and Message window
- 9 Status line

- **Engineering interfaces**
 - Serial-over-USB
 - Ethernet-over-EtherCAT (EoE)



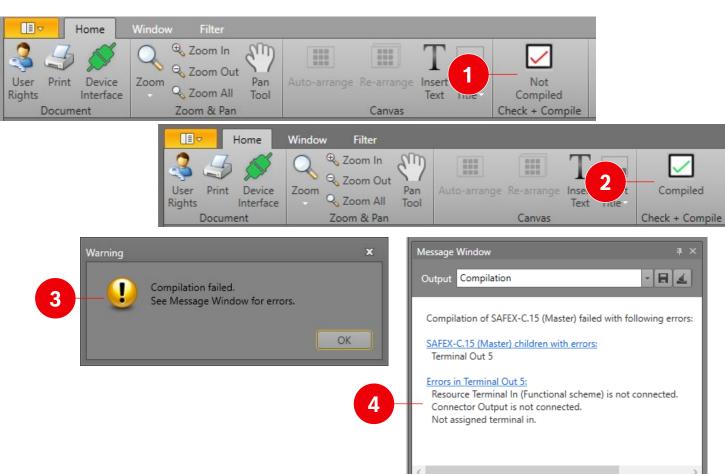
03

ctrlX SAFETY Engineering **Compile Project Connect to Controller Send Configuration Verify Configuration Lock Configuration** Log Book



ctrlX SAFETY Workshop Compile Project

- 1. Click Not Compiled Check + Compile in Menu Ribbon
- 2. If compile is successful the button will change from Not Compiled Check + Compile with red check mark to Compiled with green check mark
- 3. If compile is not successful a warning box will be shown
- 4. Compiler errors will be shown in the Message Window, correct errors then repeat step number 1

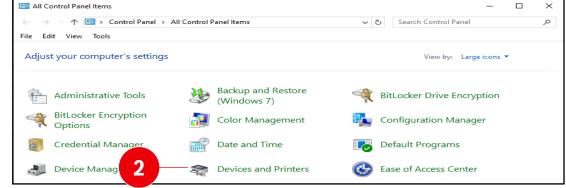




ctrlX SAFETY Workshop Determine USB Com Port

- 1. The PC should detect SAFEX-C1x controller when plugged and display connected COM port
- 2. If not open Control Panel, then select Devices and Printers
- 3. SAFEX-C1x controller will be displayed near the bottom under Unspecified (1) with connected COM port



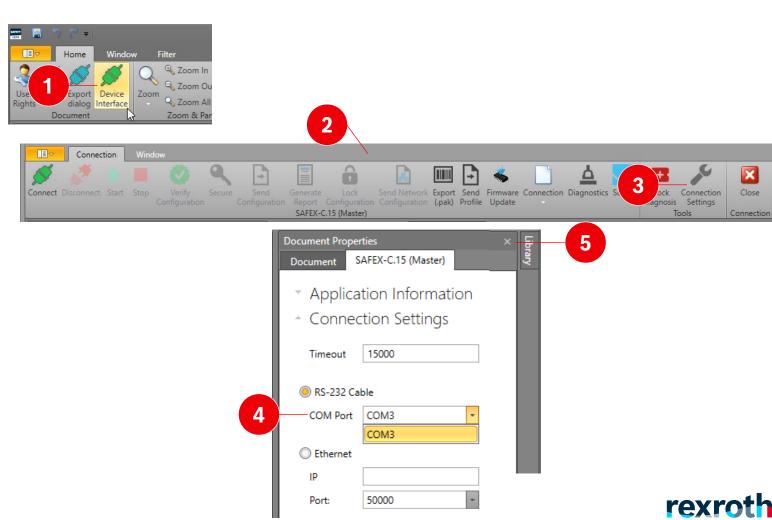






ctrlX SAFETY Workshop Select USB Com Port

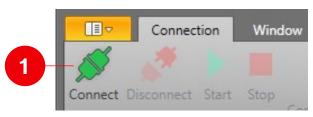
- 1. Click Device Interface in the Menu Ribbon
- 2. The Menu Ribbon changes to the Device Connection Functions
- 3. To check COM port settings or to select a different COM port click Connection Settings
- 4. The desired COM port can be selected using the pull-down menu
- 5. The Connection Settings window can be closed by clicking the small "x" in the upper right of the window



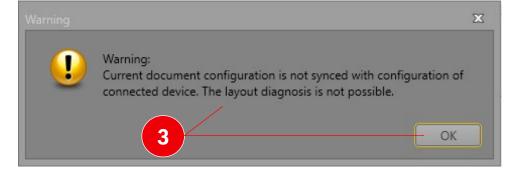
A Bosch Company

ctrlX SAFETY Workshop Connect to SAFEX-C12/15 Controller

- Click Connect in the Menu Ribbon
- 2. Enter SAFEX-C1x serial number the click Ok
- 3. A Warning message will be displayed if the open project does not match the project currently loaded in the SAFEX-C1x controller, click OK



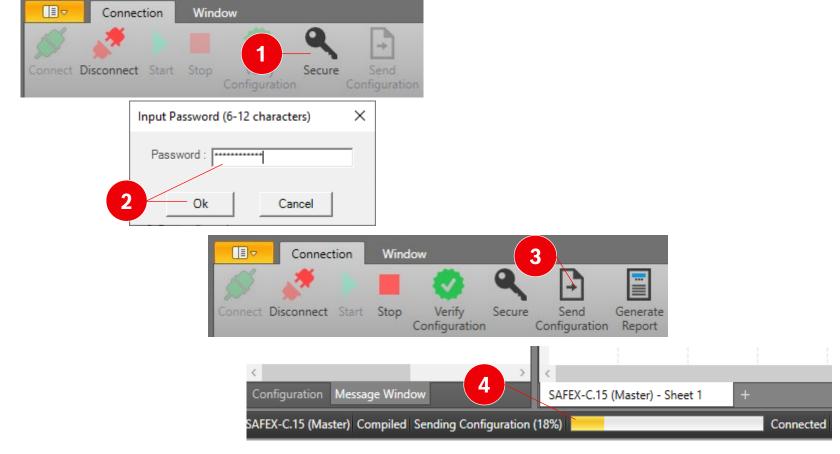






ctrlX SAFETY Workshop Send Configuration to SAFEX-C12/15 Controller

- 1. Click Secure icon to enter device password, this will unlock the transfer tools
- 2. Enter device password then click Ok, default password is: **boschrexroth**
- 3. The transfer tool icons are now available, click Send Configuration
- 4. The send configure transfer is started, current progress is shown in the status bar





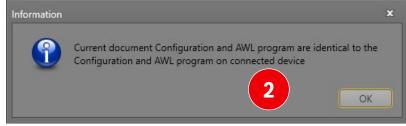
ctrlX SAFETY Workshop Verify and Lock Configuration

- 1. Click Verify Configuration in Menu Ribbon
- 2. Check information in popup dialog then click OK

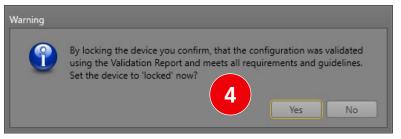
The controller can be locked after verification and validation of the system. This step must be completed by qualified personal

- 3. Click Lock Configuration in Menu Ribbon
- 4. Check information in popup dialog then click Yes or No











ctrlX SAFETY Workshop

Logic Status

- 1. Click Diagnostics in Menu Ribbon
- 2. Logic status HIGH (on or 1) is shown with yellow lines and LOW (off or 0) with red lines on the Wiring, Functional, and FastChannel Scheme tabs
- 3. If the Function Block tab is deselected the Logic Status will be disabled, i.e. yellow status is not shown

