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1. Introduction

Observation: For traceability reasons, the product revision is changed when there is an enhancement in its functional features or any change of the manufactory process and/or raw material. In the case that the user cannot find on the following tables the reason of the product revision, it is implicit that there was a change in the internal manufactory process at Altus and/or hardware, without affects the product functionality/compatibility.

To update any Altus software contact Altus Support Service.
 Telephone numbers an updated contact are available at www.altus.com.br.

2. Nexto Series

2.1 BCS-XP300 – COMPACT PLC 16DI 16DO – BJ

REV	Description	Version	Date
BC	<ul style="list-style-type: none"> ▪ Fixed a problem where the Ethernet port could eventually fail to communicate when connecting the controller directly to a computer (point-to-point). ▪ Fixed CANopen Slave problem where the controller could not resume the communication after a failure in the CAN bus. 	1.12.5.5	16/01/2023
BB	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed a problem where 3G/4G Modem could fail to reconnect after a communication failure. ▪ Increased the storage capability for the source code, stored now on a 64MB space that is shared with application and Webvisu files. It is necessary to reboot the controller without application to make this new space available. The source code size verification (warning message) was updated accordingly on BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). 	1.12.5.3	15/12/2022
BA	<ul style="list-style-type: none"> ▪ Minor hardware changes in order to improve the product. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the 	1.11.10.0	06/12/2022

	<p>website. This change makes it unnecessary to follow the Installation Guide with the product.</p> <ul style="list-style-type: none"> UKCA Certification marking included on product. 		
AZ	<ul style="list-style-type: none"> Improvement in the production process. Changed RTD settings in product testing. 	1.11.10.0	04/07/2022
AY	<ul style="list-style-type: none"> Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	27/05/2022
AX	<ul style="list-style-type: none"> Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	04/03/2022
AW	<ul style="list-style-type: none"> Changes in the source code shared with other products that doesn't affect this product behavior. 	1.11.10.0	18/01/2022
AV	<ul style="list-style-type: none"> Improved startup stability under specific situations with low power supply voltage. 	1.11.2.0	27/10/2021
AU	<ul style="list-style-type: none"> New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. Added protection against CSRF (cross-site request forgery) for management pages in web interface. Included login mechanism for operation mode page in web interface. Included a new reset mechanism to solve connection failures of USB modem. 	1.11.2.0	26/07/2021
-	<ul style="list-style-type: none"> Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. Included support for PROFINET Controller. Included support to CAN J1939. 	1.9.29.0	26/07/2021
AT	<ul style="list-style-type: none"> Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. Removed the hidden page “getlogs” from the system web page to improve cyber security. 	1.9.25.0	13/01/2021
AS	<ul style="list-style-type: none"> Change in the product hardware to support minimum operation temperature of - 20°C. 	1.9.17.0	28/12/2020
AR	<ul style="list-style-type: none"> Included support for USB WiFi adapters. Included support for additional USB modem devices: Huawei E3276 and E8372. Fixed a problem on the PTO fast output that could potentially turn on the next normal digital output. Fixed a problem where the digital input value was not updated on the execution of external interrupt task. Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. Updated the product label for compliance of the UL certification, File Number E496087. Included protectors for the product connectors. 	1.9.17.0	18/08/2020
AQ	<ul style="list-style-type: none"> Improved performance (CPU clock increased by 85% with bootloader version 1.0.0.15 included on this version). Included support to USB modem. Included support to TLS v1.2 and client certificate in the Function Block MQTT Client (the last one requires the BCS Tools 3.23 or greater). Improved immunity level of RTD inputs against external electromagnetic interferences. Fixed a problem that could cause corruption of operating system in case of energy interruption during a specific moment of power-up process, leading the controller to a permanent inoperative state. Fixed a problem on CANopen Remote I/O mode which could eventually prevent the controller from starting up. Fixed a problem that could make the DG LED to blink 4x with no 	1.9.9.0	29/05/2020

	<ul style="list-style-type: none"> reason. ▪ Improvements on CANopen Remote I/O mode. ▪ Improvements on serial communication. 		
AP	<ul style="list-style-type: none"> ▪ Included support for USB Serial RS-232 converter ▪ Included support for the latest version of LibSQLClient library. 	1.8.11.0	09/01/2020
AO	<ul style="list-style-type: none"> ▪ Included support for CANopen Manager (requires BCS Tools 3.19 or greater). ▪ Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). ▪ Fixed the diagnostic tDetailed.Serial.COM1.wRXPendingBytes which stopped to work on previous version, affecting the Function Block of Serial communication. ▪ Fixed a situation that could cause a drift of RTC time higher than the specified. ▪ Included support for CAN termination configuration, introduced on BCS Tools 3.19. 	1.8.5.0	11/12/2019
AN	<ul style="list-style-type: none"> ▪ Included bootloader version 1.0.0.11, which increases the immunity level against external electromagnetic interferences. The bootloader is now included inside the firmware image file, and will be updated automatically during the firmware update process ONLY if the controller is running with version 1.7.49.0 or greater. If the firmware update process is performed on a controller with an installed firmware lower than 1.7.49.0, it is required to perform the update procedure AGAIN (i.e, twice, to the same version) to have the bootloader updated. ▪ Included support for Ethernet/IP Scanner. ▪ Included support for I/O expansion through CANopen (CANopen Slave mode). ▪ Included support for 2400 and 4800 bits/s baudrates on the serial communication. ▪ Improvements on MODBUS RTU Slave timing, where sporadic communication errors could occur on a RS-485 network composed by several slaves. ▪ Changed maximum source code size from 16MB to 26MB (requires a reboot with no application to apply this increase; the warning message updated on version 3.18 of BCS Tools). ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. ▪ Improved mounting of USB mass storage devices, increasing the compatibility with certain models of flash drives. ▪ Fixed maximum number of ARTI/OPC DA connections from 4 to 8. 	1.7.49.0	27/09/2019
AM	<ul style="list-style-type: none"> ▪ Fixed generation of counter interrupt. 	1.7.40.0	07/09/2019
AL	<ul style="list-style-type: none"> ▪ Replacement for the overlay flat cable connector part number and change in the insertion procedure. 	1.7.35.0	06/06/2019
AK	<ul style="list-style-type: none"> ▪ Included support for new homologated memories 	1.7.35.0	21/05/2019
AJ	<ul style="list-style-type: none"> ▪ Fixed external input I02, which stopped to work on previous version. ▪ Improvements on fast inputs and outputs. ▪ Improvements on the USB mass storage mounting system. ▪ Improved EMC immunity level 	1.7.32.0	09/05/2019
AI	<ul style="list-style-type: none"> ▪ Included support for OPC UA protocol ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) ▪ Included support for Fast I/O (counters, external interrupts, PTO/PWM outputs). ▪ Included support for FAT32 LBA filesystem, used on big capacity USB mass storage devices. ▪ Fixed a problem on function GetTimeZone, which could cause an 	1.7.17.0	15/03/2019

	<ul style="list-style-type: none"> exception leading the CPU to STOP. ▪ Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. ▪ Fixed a problem on RS-485 serial driver, which could cause random errors on MODBUS RTU communication. ▪ Fixed an RTD reading error that affected a small group of manufactured units ▪ Changed the value of some resistors and capacitors for standarization with other products (does not affects product's technical characteristics) 		
AH	<ul style="list-style-type: none"> ▪ Change in manufacturing documentation to include additional information for soldering the CPU crystal. 	1.7.7.0	30/01/2019
AG	<ul style="list-style-type: none"> ▪ Changed to update status of digital input LEDs even with no application loaded ▪ Changed to blink 1x the DG LED when no application is loaded ▪ Fixed company name on “Target Vendor” field on gateway scan ▪ Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) 	1.7.7.0	05/12/2018
AF	<ul style="list-style-type: none"> ▪ Improved LED diagnostic indication 	1.7.5.0	12/11/2018
AE	<ul style="list-style-type: none"> ▪ Included support for USB mass storage devices 	1.7.3.0	26/10/2018
AD	<ul style="list-style-type: none"> ▪ Initial revision. 	1.7.0.12	10/10/2018

2.2 BCS-XP315 – COMPACT PLC 16DI 16DO 5AI 2RTD – BJ

REV	Description	Version	Date
BC	<ul style="list-style-type: none"> ▪ Fixed a problem where the Ethernet port could eventually fail to communicate when connecting the controller directly to a computer (point-to-point). ▪ Fixed CANopen Slave problem where the controller could not resume the communication after a failure in the CAN bus. 	1.12.5.5	16/01/2023
BB	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed a problem where 3G/4G Modem could fail to reconnect after a communication failure. ▪ Increased the storage capability for the source code, stored now on a 64MB space that is shared with application and Webvisu files. It is necessary to reboot the controller without application to make this new space available. The source code size verification (warning message) was updated accordingly on BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). ▪ Included support for additional analog inputs using LibIntegratedIoExt introduced on BCS Tools 3.40. 	1.12.5.3	15/12/2022
BA	<ul style="list-style-type: none"> ▪ Minor hardware changes in order to improve the product. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.11.10.0	06/12/2022
AZ	<ul style="list-style-type: none"> ▪ Improvement in the production process. Changed RTD settings in product testing. 	1.11.10.0	04/07/2022
AY	<ul style="list-style-type: none"> ▪ Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	27/05/2022
AX	<ul style="list-style-type: none"> ▪ Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	04/03/2022
AW	<ul style="list-style-type: none"> ▪ Changes in the source code shared with other products that doesn't 	1.11.10.0	18/01/2022

	affect this product behavior.		
AV	<ul style="list-style-type: none"> Small changes in the product's hardware to improve font startup behavior, making startup faster. 	1.11.2.0	27/10/2021
AU	<ul style="list-style-type: none"> New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. Added protection against CSRF (cross-site request forgery) for management pages in web interface. Included login mechanism for operation mode page in web interface. Included a new reset mechanism to solve connection failures of USB modem. 	1.11.2.0	26/07/2021
-	<ul style="list-style-type: none"> Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. Included support for PROFINET Controller. Included support to CAN J1939. 	1.9.29.0	26/07/2021
AT	<ul style="list-style-type: none"> Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. Removed the hidden page “getlogs” from the system web page to improve cyber security. 	1.9.25.0	13/01/2021
AS	<ul style="list-style-type: none"> Change in the product hardware to support minimum operation temperature of - 20°C. 	1.9.17.0	28/12/2020
AR	<ul style="list-style-type: none"> Included support for USB WiFi adapters. Included support for additional USB modem devices: Huawei E3276 and E8372. Fixed a problem on the PTO fast output that could potentially turn on the next normal digital output. Fixed a problem that could lead to a negative offset on RTD reading. Fixed a problem where the digital input value was not updated on the execution of external interrupt task. Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. Updated the product label for compliance of the UL certification, File Number E496087. Included protectors for the product connectors. 	1.9.17.0	18/08/2020
AQ	<ul style="list-style-type: none"> Improved performance (CPU clock increased by 85% with bootloader version 1.0.0.15 included on this version). Included support to USB modem. Included support to TLS v1.2 and client certificate in the Function Block MQTT Client (the last one requires the BCS Tools 3.23 or greater). Improved immunity level of RTD inputs against external electromagnetic interferences. Fixed a problem that could cause corruption of operating system in case of energy interruption during a specific moment of power-up process, leading the controller to a permanent inoperative state. Fixed a problem on CANopen Remote I/O mode which could eventually prevent the controller from starting up. Improvements on CANopen Remote I/O mode. Improvements on serial communication. 	1.9.9.0	29/05/2020
AP	<ul style="list-style-type: none"> Included support for USB Serial RS-232 converter Included support for the latest version of LibSQLClient library. 	1.8.11.0	09/01/2020
AO	<ul style="list-style-type: none"> Included support for CANopen Manager (requires BCS Tools 3.19 or greater). Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). Fixed the diagnostic tDetailed.Serial.COM1.wRXPendingBytes which stopped to work on previous version, affecting the Function 	1.8.5.0	11/12/2019

	<p>Block of Serial communication.</p> <ul style="list-style-type: none"> ▪ Fixed a situation that could cause a drift of RTC time higher than the specified. ▪ Included support for CAN termination configuration, introduced on BCS Tools 3.19. 		
AN	<ul style="list-style-type: none"> ▪ Included bootloader version 1.0.0.11, which increases the immunity level against external electromagnetic interferences. The bootloader is now included inside the firmware image file, and will be updated automatically during the firmware update process ONLY if the controller is running with version 1.7.49.0 or greater. If the firmware update process is performed on a controller with an installed firmware lower than 1.7.49.0, it is required to perform the update procedure AGAIN (i.e, twice, to the same version) to have the bootloader updated. ▪ Included support for Ethernet/IP Scanner. ▪ Included support for I/O expansion through CANopen (CANopen Slave mode). ▪ Included support for 2400 and 4800 bits/s baudrates on the serial communication. ▪ Improvements on MODBUS RTU Slave timing, where sporadic communication errors could occur on a RS-485 network composed by several slaves. ▪ Changed maximum source code size from 16MB to 26MB (requires a reboot with no application to apply this increase; the warning message updated on version 3.18 of BCS Tools). ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. ▪ Improved mounting of USB mass storage devices, increasing the compatibility with certain models of flash drives. ▪ Fixed maximum number of ARTI/OPC DA connections from 4 to 8. 	1.7.49.0	27/09/2019
AM	<ul style="list-style-type: none"> ▪ Fixed generation of counter interrupt. 	1.7.40.0	07/09/2019
AL	<ul style="list-style-type: none"> ▪ Replacement for the overlay flat cable connector part number and change in the insertion procedure. 	1.7.35.0	06/06/2019
AK	<ul style="list-style-type: none"> ▪ Included support for new homologated memories 	1.7.35.0	21/05/2019
AJ	<ul style="list-style-type: none"> ▪ Fixed external input I02, which stopped to work on previous version. ▪ Improvements on fast inputs and outputs. ▪ Improvements on the USB mass storage mounting system. ▪ Improved EMC immunity level 	1.7.32.0	09/05/2019
AI	<ul style="list-style-type: none"> ▪ Included support for OPC UA protocol ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) ▪ Included support for Fast I/O (counters, external interrupts, PTO/PWM outputs, ...) ▪ Included support for FAT32 LBA filesystem, used on big capacity USB mass storage devices ▪ Fixed a problem on function GetTimeZone, which could cause an exception leading the CPU to STOP. ▪ Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. ▪ Fixed a problem on RS-485 serial driver, which could cause random errors on MODBUS RTU communication ▪ Fixed an RTD reading error that affected a small group of manufactured units ▪ Changed the value of some resistors and capacitors for standarization with other products (does not affects product's technical characteristics) 	1.7.17.0	15/03/2019
AH	<ul style="list-style-type: none"> ▪ Change in manufacturing documentation to include additional 	1.7.7.0	30/01/2019

	information for soldering the CPU crystal.		
AG	<ul style="list-style-type: none"> ▪ Changed to update status of digital input LEDs even with no application loaded ▪ Changed to blink 1x the DG LED when no application is loaded ▪ Fixed company name on “Target Vendor” field on gateway scan ▪ Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) 	1.7.7.0	05/12/2018
AF	<ul style="list-style-type: none"> ▪ Improved LED diagnostic indication 	1.7.5.0	12/11/2018
AE	<ul style="list-style-type: none"> ▪ Included support for USB mass storage devices 	1.7.3.0	26/10/2018
AD	<ul style="list-style-type: none"> ▪ Initial revision. 	1.7.0.12	10/10/2018

2.3 BCS-XP325 – COMPACT PLC 16DI 16DO 5AI 4AO 2RTD – BJ

REV	Description	Version	Date
BG	<ul style="list-style-type: none"> ▪ Fixed a problem where the Ethernet port could eventually fail to communicate when connecting the controller directly to a computer (point-to-point). ▪ Fixed CANopen Slave problem where the controller could not resume the communication after a failure in the CAN bus. 	1.12.5.5	16/01/2023
BF	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed a problem where 3G/4G Modem could fail to reconnect after a communication failure. ▪ Increased the storage capability for the source code, stored now on a 64MB space that is shared with application and Webvisu files. It is necessary to reboot the controller without application to make this new space available. The source code size verification (warning message) was updated accordingly on BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). ▪ Included support for additional analog inputs using LibIntegratedIoExt introduced on BCS Tools 3.40. 	1.12.5.3	15/12/2022
BE	<ul style="list-style-type: none"> ▪ Minor hardware changes in order to improve the product. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.11.10.0	06/12/2022
BD	<ul style="list-style-type: none"> ▪ Improvement in the production process. Changed RTD settings in product testing. 	1.11.10.0	04/07/2022
BC	<ul style="list-style-type: none"> ▪ Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	27/05/2022
BB	<ul style="list-style-type: none"> ▪ Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	04/03/2022
BA	<ul style="list-style-type: none"> ▪ Changes in the source code shared with other products that doesn't affect this product behavior. 	1.11.10.0	18/01/2022
AZ	<ul style="list-style-type: none"> ▪ Small changes in the product's hardware to improve font startup behavior, making startup faster. 	1.11.2.0	27/10/2021
AY	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. ▪ Included login mechanism for operation mode page in web interface. ▪ Included a new reset mechanism to solve connection failures of USB modem. 	1.11.2.0	26/07/2021

-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Included support for PROFINET Controller. ▪ Included support to CAN J1939. 	1.9.29.0	26/07/2021
AX	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. 	1.9.25.0	13/01/2021
AW	<ul style="list-style-type: none"> ▪ Change in the product hardware to support minimum operation temperature of - 20°C. 	1.9.17.0	28/12/2020
AV	<ul style="list-style-type: none"> ▪ Updated the product label for compliance of the UL certification, File Number E496087. 	1.9.17.0	18/08/2020
AU	<ul style="list-style-type: none"> ▪ Included support for USB WiFi adapters. ▪ Included support for additional USB modem devices: Huawei E3276 and E8372. ▪ Fixed a problem on the PTO fast output that could potentially turn on the next normal digital output. ▪ Fixed a problem that could lead to a negative offset on RTD reading. ▪ Fixed a problem where the digital input value was not updated on the execution of external interrupt task. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. ▪ Included protectors for the product connectors. 	1.9.17.0	18/08/2020
AT	<ul style="list-style-type: none"> ▪ Improved performance (CPU clock increased by 85% with bootloader version 1.0.0.15 included on this version). ▪ Included support to USB modem. ▪ Included support to TLS v1.2 and client certificate in the Function Block MQTT Client (the last one requires the BCS Tools 3.23 or greater). ▪ Improved immunity level of RTD inputs against external electromagnetic interferences. ▪ Fixed a problem that could cause corruption of operating system in case of energy interruption during a specific moment of power-up process, leading the controller to a permanent inoperative state. ▪ Fixed a problem on CANopen Remote I/O mode which could eventually prevent the controller from starting up. ▪ Improvements on CANopen Remote I/O mode. ▪ Improvements on serial communication. 	1.9.9.0	29/05/2020
AS	<ul style="list-style-type: none"> ▪ Included support for USB Serial RS-232 converter ▪ Included support for the latest version of LibSQLClient library. 	1.8.11.0	01/09/2020
AR	<ul style="list-style-type: none"> ▪ Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). ▪ Fixed the diagnostic tDetailed.Serial.COM1.wRXPendingBytes which stopped to work on previous version, affecting the Function Block of Serial communication. ▪ Fixed a situation that could cause a drift of RTC time higher than the specified. ▪ Included support for CAN termination configuration, introduced on BCS Tools 3.19. 	1.8.5.0	11/12/2019
AQ	<ul style="list-style-type: none"> ▪ Included bootloader version 1.0.0.11, which increases the immunity level against external electromagnetic interferences. The bootloader is now included inside the firmware image file, and will be updated automatically during the firmware update process ONLY if the controller is running with version 1.7.49.0 or greater. If the firmware update process is performed on a controller with an installed firmware lower than 1.7.49.0, it is required to perform the update procedure AGAIN (i.e, twice, to the same version) to have 	1.7.49.0	27/09/2019

	<p>the bootloader updated.</p> <ul style="list-style-type: none"> ▪ Included support for Ethernet/IP Scanner. ▪ Included support for I/O expansion through CANopen (CANopen Slave mode). ▪ Included support for 2400 and 4800 bits/s baudrates on the serial communication. ▪ Improvements on MODBUS RTU Slave timing, where sporadic communication errors could occur on a RS-485 network composed by several slaves. ▪ Changed maximum source code size from 16MB to 26MB (requires a reboot with no application to apply this increase; the warning message updated on version 3.18 of BCS Tools). ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. ▪ Improved mounting of USB mass storage devices, increasing the compatibility with certain models of flash drives. ▪ Fixed maximum number of ARTI/OPC DA connections from 4 to 8. 		
AP	<ul style="list-style-type: none"> ▪ Fixed generation of counter interrupt. 	1.7.40.0	07/09/2019
AO	<ul style="list-style-type: none"> ▪ Replacement for the overlay flat cable connector part number and change in the insertion procedure. 	1.7.35.0	06/06/2019
AN	<ul style="list-style-type: none"> ▪ Included support for new homologated memories 	1.7.35.0	21/05/2019
AM	<ul style="list-style-type: none"> ▪ Fixed external input I02, which stopped to work on previous version. ▪ Improvements on fast inputs and outputs. ▪ Improvements on the USB mass storage mounting system. ▪ Improvements in CANopen Manager performance. ▪ Improved EMC immunity level 	1.7.32.0	09/05/2019
AL	<ul style="list-style-type: none"> ▪ Included support for OPC UA protocol ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) ▪ Included support for Fast I/O (counters, external interrupts, PTO/PWM outputs, ...) ▪ Included support for CANopen Manager ▪ Included support for FAT32 LBA filesystem, used on big capacity USB mass storage devices ▪ Fixed a problem on function GetTimeZone, which could cause an exception leading the CPU to STOP. ▪ Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. ▪ Fixed a problem on RS-485 serial driver, which could cause random errors on MODBUS RTU communication ▪ Fixed an RTD reading error that affected a small group of manufactured units ▪ Changed the value of some resistors and capacitors for standarization with other products (does not affects product's technical characteristics) 	1.7.17.0	15/03/2019
AK	<ul style="list-style-type: none"> ▪ Change in manufacturing documentation to include additional information for soldering the CPU crystal. 	1.7.7.0	30/01/2019
AJ	<ul style="list-style-type: none"> ▪ Changed to update status of digital input LEDs even with no application loaded ▪ Changed to blink 1x the DG LED when no application is loaded ▪ Fixed company name on "Target Vendor" field on gateway scan ▪ Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) 	1.7.7.0	05/12/2018
AI	<ul style="list-style-type: none"> ▪ Improved LED diagnostic indication 	1.7.5.0	12/11/2018
AH	<ul style="list-style-type: none"> ▪ Included support for USB mass storage devices 	1.7.3.0	26/10/2018
AG	<ul style="list-style-type: none"> ▪ Initial revision. 	1.7.0.12	10/10/2018

2.4 BCS-XP340 – COMPACT PLC 16DI 16DO 5AI 4AO 2RTD WEB – BJ

REV	Description	Version	Date
AO	<ul style="list-style-type: none"> ▪ Fixed a problem where the Ethernet port could eventually fail to communicate when connecting the controller directly to a computer (point-to-point). ▪ Fixed CANopen Slave problem where the controller could not resume the communication after a failure in the CAN bus. 	1.12.5.5	16/01/2023
AN	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed a problem where 3G/4G Modem could fail to reconnect after a communication failure. ▪ Increased the storage capability for the source code, stored now on a 64MB space that is shared with application and Webvisu files. It is necessary to reboot the controller without application to make this new space available. The source code size verification (warning message) was updated accordingly on BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). ▪ Included support for additional analog inputs using LibIntegratedIoExt introduced on BCS Tools 3.40. 	1.12.5.3	15/12/2022
AM	<ul style="list-style-type: none"> ▪ Minor hardware changes in order to improve the product. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.11.10.0	06/12/2022
AL	<ul style="list-style-type: none"> ▪ Improvement in the production process. Changed RTD settings in product testing. 	1.11.10.0	04/07/2022
AK	<ul style="list-style-type: none"> ▪ Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	27/05/2022
AJ	<ul style="list-style-type: none"> ▪ Minor hardware adjustments to support a new alternative part number (due to the shortage of electronic components). 	1.11.10.0	04/03/2022
AI	<ul style="list-style-type: none"> ▪ Changes in the source code shared with other products that doesn't affect this product behavior. 	1.11.10.0	18/01/2022
AH	<ul style="list-style-type: none"> ▪ Small changes in the product's hardware to improve font startup behavior, making startup faster. 	1.11.2.0	27/10/2021
AG	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. ▪ Included login mechanism for operation mode page in web interface. ▪ Included a new reset mechanism to solve connection failures of USB modem. ▪ Fixed misaligned memory exception due to IEC104 server mappings. 	1.11.2.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Included support for PROFINET Controller. ▪ Included support to CAN J1939. 	1.9.29.0	26/07/2021
AF	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. 	1.9.25.0	13/01/2021
AE	<ul style="list-style-type: none"> ▪ Change in the product hardware to support minimum operation temperature of - 20°C. 	1.9.17.0	28/12/2020

AD	<ul style="list-style-type: none"> ▪ Included support for USB WiFi adapters. ▪ Included support for additional USB modem devices: Huawei E3276 and E8372. ▪ Fixed a problem on the PTO fast output that could potentially turn on the next normal digital output. ▪ Fixed a problem that could lead to a negative offset on RTD reading. ▪ Fixed a problem where the digital input value was not updated on the execution of external interrupt task. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. ▪ Updated the product label for compliance of the UL certification, File Number E496087. ▪ Included protectors for the product connectors. 	1.9.17.0	18/08/2020
AC	<ul style="list-style-type: none"> ▪ Improved performance (CPU clock increased by 85% with bootloader version 1.0.0.15 included on this version). ▪ Included support for IEC 104 Server protocol (requires BCS Tools 3.23 or greater) ▪ Included support to USB modem. ▪ Included support to TLS v1.2 and client certificate in the Function Block MQTT Client (the last one requires the BCS Tools 3.23 or greater). ▪ Improved immunity level of RTD inputs against external electromagnetic interferences. ▪ Fixed a problem that could eventually generate an error when downloading an application with Webvisu. ▪ Fixed a problem that could cause corruption of operating system in case of energy interruption during a specific moment of power-up process, leading the controller to a permanent inoperative state. ▪ Fixed a problem on CANopen Remote I/O mode which could eventually prevent the controller from starting up. ▪ Improvements on CANopen Remote I/O mode. ▪ Improvements on serial communication. 	1.9.9.0	29/05/2020
AB	<ul style="list-style-type: none"> ▪ Included support for USB Serial RS-232 converter ▪ Included support for the latest version of LibSQLClient library. 	1.8.11.0	09/01/2020
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.8.5.0	11/12/2019

2.5 BCS-XP350 – COMPACT PLC 16DI 16DO 5AI 2RTD MOTION – BJ

REV	Description	Version	Date
AB	<ul style="list-style-type: none"> ▪ Fixed a problem where the Ethernet port could eventually fail to communicate when connecting the controller directly to a computer (point-to-point). ▪ Fixed CANopen Slave problem where the controller could not resume the communication after a failure in the CAN bus. 	1.12.5.5	16/01/2023
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.12.5.3	15/12/2022

2.6 BCS-NX3003 – CPU 1 ETH, 1 SERIAL, 14 DI, 10 DO AND PSU 10W – BJ

REV	Descrição	Versão	Date
AS	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed the retain system to keep the values after a reboot caused by 	1.12.5.3	15/12/2022

	<ul style="list-style-type: none"> ▪ an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). 		
AR	<ul style="list-style-type: none"> ▪ In this revision there were only internal changes in the documentation. 	1.11.2.0	06/09/2022
AQ	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. 	1.11.2.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Improvements in “one touch diag” feature. ▪ Included support for PROFINET Controller. 	1.9.29.0	26/07/2021
AP	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. ▪ Fixed a problem where the digital input value was not updated on the execution of external interrupt task. ▪ Fixed a problem of delay in PTO softstop command when using LibMachineOEM.LABELING_MACHINE function block. 	1.9.25.0	13/01/2021
AO	<ul style="list-style-type: none"> ▪ Included support to TLS v1.2 and client certificate in the Function Block MQTT Client (the last one requires the BCS Tools 3.23 or greater). 	1.9.8.0	09/11//2020
AN	<ul style="list-style-type: none"> ▪ Included protectors for the product connectors. 	1.8.11.0	24/09/2020
AM	<ul style="list-style-type: none"> ▪ Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). ▪ Included support for the latest version of LibSQLClient library. ▪ Included support for Ethernet/IP Adapter and Scanner. ▪ Included support for visualization of the integrated I/O by LCD (menu Hardware). ▪ Included support for labeling function of the LibMachineOEM library (PTO). ▪ Improvements in the performance of integrated fast I/O. ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. ▪ Fixed maximum number of ARTI/OPC DA connections from 4 to 8. ▪ General fixes on User Rights Management, which was not working properly on version 1.7.x.x. 	1.8.11.0	27/01/2020
AL	<ul style="list-style-type: none"> ▪ Improvements in the performance of integrated fast I/O. ▪ Improvements in the performance of serial communication. ▪ Improvements in CPU diagnostic messages. ▪ Included watchdog reset diagnostic on the CPU display. ▪ Changed bootloader from version 1.0.0.13 to 1.0.0.14 to fix an issue where the CPU could activate (drive) the RS-485 bus during the power-up. 	1.7.36.0	11/06/2019
AK	<ul style="list-style-type: none"> ▪ Initial revision. 	1.7.20.0	01/04/2019

2.7 BCS-NX3004 – CPU 1 ETH, 1 SERIAL PORT – BJ

REV	Description	Version	Date
AU	<ul style="list-style-type: none"> ▪ Fixed a problem introduced on the previous version that was making the 	1.12.5.6	24/01/2023

	retain/persistent variables not to be saved at the power down.		
AT	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). 	1.12.5.3	15/12/2022
AS	<ul style="list-style-type: none"> ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.11.2.0	01/11/2022
AR	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.11.2.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Improvements in “one touch diag” feature. ▪ Included support for PROFINET Controller. 	1.9.29.0	26/07/2021
AQ	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. 	1.9.25.0	13/01/2021
AP	<ul style="list-style-type: none"> ▪ Included support to TLS v1.2 and client certificate in the Function Block MQTT Client (the last one requires the BCS Tools 3.23 or greater). 	1.9.8.0	09/11/2020
AO	<ul style="list-style-type: none"> ▪ Included protectors for the product connectors. 	1.8.11.0	24/09/2020
AN	<ul style="list-style-type: none"> ▪ Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). ▪ Included support for the latest version of LibSQLClient library. ▪ Included support for Ethernet/IP Adapter and Scanner. ▪ Fixed an error that could occur when performing a specific sequence of modification of the size of Retain/Persistent %Q area. ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. ▪ Fixed maximum number of ARTI/OPC DA connections from 4 to 8. ▪ General fixes on User Rights Management, which was not working properly on version 1.7.x.x. 	1.8.11.0	27/01/2020
AM	<ul style="list-style-type: none"> ▪ Included support for OPC UA protocol ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) ▪ Fixed the position of F symbol (force) on LCD ▪ Improvements on Easy Connection feature ▪ Fixed a problem on function GetTimeZone, which could cause an exception leading the CPU to STOP. ▪ Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. ▪ Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) 	1.7.17.0	11/03/2019
AL	<ul style="list-style-type: none"> ▪ Improvements on factory test system 	1.6.2.0	30/11/2018

AK	<ul style="list-style-type: none"> ▪ This revision was skipped due to integration of internal documentation 	-	-
AJ	<ul style="list-style-type: none"> ▪ Included support for NX9020 rack. ▪ Enhancements in SNMP protocol 	1.6.2.0	08/02/2018
AI	<ul style="list-style-type: none"> ▪ Added new configuration options for MODBUS Symbolic mode (Server and Slave); ▪ Added return of Easy Execution command execution status; ▪ Including support for new Nexto Jet solution modules; ▪ Improved Ethernet IP protocol; ▪ Improved support for NVLs. 	1.6.1.0	02/10/2017
AH	<ul style="list-style-type: none"> ▪ Included support to clock settings. ▪ Included support to easy connection. ▪ Included support to dynamic IP. ▪ Included support to mixed analog module NJ6005. ▪ Homologation of alternative part numbers for components used on this product. 	1.6.0.5	06/01/2017
AG	<ul style="list-style-type: none"> ▪ Enhancements in performance of the modules hot-swap circuit. 	1.5.1.2	09/11/2016
AF	<ul style="list-style-type: none"> ▪ New revision of the printed circuit board. ▪ Changed the product label to comply with the new revision of CE directive. 	1.5.1.2	21/06/2016
AE	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.5.1.2	25/05/2016
AD	<ul style="list-style-type: none"> ▪ Included the support for flexibility of retain/persistent memory areas. ▪ Included the support for Nexto Jet solution. ▪ Improvements on the presentation of module Tag on diagnostic web page. 	1.5.1.2	18/12/2015
AC	<ul style="list-style-type: none"> ▪ Included the support for SNMP (agent) protocol supporting MIBII and Private. ▪ Improvements on the UCP power down process and on data retentivity. 	1.5.0.21	01/09/2015
AB	<ul style="list-style-type: none"> ▪ Improvements on the handling of data retentivity. 	1.5.0.18	15/06/2015
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.5.0.16	06/06/2015

2.8 BCS-NX3005 – CPU 1 ETH, 1 SERIAL PORT , WEB - BJ

REV	Description	Version	Date
AQ	<ul style="list-style-type: none"> ▪ Fixed a problem introduced on the previous version that was making the retain/persistent variables not to be saved at the power down. 	1.12.5.6	24/01/2023
AP	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). 	1.12.5.3	15/12/2022
AO	<ul style="list-style-type: none"> ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.11.2.0	03/11/2022
AN	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. 	1.11.2.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Improvements in “one touch diag” feature. ▪ Included support for PROFINET Controller. 	1.9.29.0	26/07/2021
AM	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.9.25.0	26/07/2021

AL	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. 	1.9.25.0	13/01/2021
AK	<ul style="list-style-type: none"> ▪ Included support to TLS v1.2 and client certificate in the Function Block MQTT Client (the last one requires the BCS Tools 3.23 or greater). 	1.9.8.0	09/11/2020
AJ	<ul style="list-style-type: none"> ▪ Included protectors for the product connectors. 	1.8.11.0	24/09/2020
AI	<ul style="list-style-type: none"> ▪ Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). ▪ Included support for the latest version of LibSQLClient library. ▪ Fixed an error that could occur when performing a specific sequence of modification of the size of Retain/Persistent %Q area. ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. ▪ Fixed maximum number of ARTI/OPC DA connections from 4 to 8. ▪ General fixes on User Rights Management, which was not working properly on version 1.7.x.x. 	1.8.11.0	27/01/2020
AH	<ul style="list-style-type: none"> ▪ Included support for OPC UA protocol ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) ▪ Fixed the position of F symbol (force) on LCD ▪ Improvements on Easy Connection feature ▪ Fixed a problem on function GetTimeZone, which could cause an exception leading the CPU to STOP. ▪ Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. ▪ Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) ▪ Improvements on SNMP protocol 	1.7.17.0	11/03/2019
AG	<ul style="list-style-type: none"> ▪ Improvements on factory test system 	1.6.2.0	30/11/2018
AF	<ul style="list-style-type: none"> ▪ Updated the product label for compliance of the UL certification, File Number E496087. ▪ Included the licence IEC-104 in the BOM of the product. 	1.6.2.0	03/09/2018
AE	<ul style="list-style-type: none"> ▪ Included support for NX9020 rack. ▪ Enhancements in SNMP protocol 	1.6.2.0	08/02/2018
AD	<ul style="list-style-type: none"> ▪ Added new configuration options for MODBUS Symbolic mode (Server and Slave); ▪ Added return of Easy Execution command execution status; ▪ Including support for new Nexto Jet solution modules; ▪ Improved Ethernet IP protocol; ▪ Improved support for NVLs. 	1.6.1.0	02/10/2017
AC	<ul style="list-style-type: none"> ▪ Included support to IEC104 server. ▪ Included support to mixed analog module NJ6005. ▪ Homologation of alternative part numbers for components used on this product. 	1.6.0.13	06/01/2017
AB	<ul style="list-style-type: none"> ▪ Enhancements in performance of the modules hot-swap circuit. 	1.6.0.9	09/11/2016
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.6.0.9	08/09/2016

2.9 BCS-NX3008 – CPU 3 ETH, 1 USB, 1 SERIAL, 1 CAN, WEB - BJ

REV	Description	Version	Date
-	<ul style="list-style-type: none"> ▪ Included support for CODESYS MODBUS Master Serial and TCP. 	1.10.53.0	12/01/2023

	<ul style="list-style-type: none"> ▪ Fixed problem where the CPU would eventually not start after a power-on. 		
AH	<ul style="list-style-type: none"> ▪ Minor hardware changes in order to improve the product. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.10.51.0	01/12/2022
AA-AG	<ul style="list-style-type: none"> ▪ Initial revision. 	1.10.51.0	21/10/2022

2.10 BCS-NX3010 – CPU 1 ETH, 2 SERIAL – BJ

REV	Description	Version	Date
BO	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed wrong “Factory Missing” log message. 	1.10.8.0	15/12/2022
BN	<ul style="list-style-type: none"> ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.9.4.0	19/10/2022
BM	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.8.13.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. 	1.9.1.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Included fixed DNS server settings (8.8.8.8 and 8.8.4.4). ▪ Improved NIC Teaming performance. 	1.8.13.0	26/07/2021
BL	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.8.10.0	26/07/2021
BK	<ul style="list-style-type: none"> ▪ Included support for PROFINET Controller. 	1.8.10.0	21/05/2021
BJ	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. 	1.8.9.0	13/01/2021
BI	<ul style="list-style-type: none"> ▪ Fixed a problem that was not allowing the CPU to go to RUN when the application name was different from the default “Application”. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. ▪ Included protectors for the product connectors. 	1.8.8.0	24/09/2020
-	<ul style="list-style-type: none"> ▪ Included support to client certificate in the Function Block MQTT Client (requires the BCS Tools 3.23 or greater). ▪ Fixed a problem that was not allowing to perform a firmware update when the CPU had an application loaded. 	1.8.6.0	05/06/2020
BH	<ul style="list-style-type: none"> ▪ Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). ▪ Included support for the latest version of LibSQLClient library. ▪ General fixes on User Rights Management, which was not working properly on version 1.7.x.x. ▪ Updated the RJ45 connector of the Ethernet interfaces. 	1.8.3.0	27/01/2020
BF-BG	<ul style="list-style-type: none"> ▪ Fixed the copy from memory card to CPU. ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP address, resulting on returning to the IP address set by the application. 	1.7.0.14	03/10/2019

	<ul style="list-style-type: none"> ▪ Included support for EtherNet/IP Scanner and Adapter 		
BE	<ul style="list-style-type: none"> ▪ Improvement on Ethernet interface to avoid uncontrolled retransmission of ACK message on IP conflict scenarios, which could impact on CPU execution cycle. ▪ Fixed the LCD menu for copying application on Memory Card, which was missing since version 1.6.0.11. ▪ Fixed log message "Retain restore from file failed" that was incorrectly generated on power on. 	1.7.0.11	09/07/2019
BD	<ul style="list-style-type: none"> ▪ Included support for OPC UA protocol ▪ Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) ▪ Improvements on Easy Connection feature ▪ Fixed a problem on function GetTimeZone, which could cause an exception leading the CPU to STOP. ▪ Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. ▪ Fixed treatment of I/O modules on breakpoint condition on projects using machine profile. ▪ Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) 	1.7.0.8	11/03/2019
BC	<ul style="list-style-type: none"> ▪ Small text correction on Installation Guide ▪ Updated the product label for compliance of the UL certification, File Number E496087. 	1.6.1.3	15/01/2019
AS-BB	<ul style="list-style-type: none"> ▪ These revisions were skipped due to integration of internal documentation 	-	-
AR	<ul style="list-style-type: none"> ▪ Added new configuration options for MODBUS Symbolic mode (Server and Slave); ▪ Added return of Easy Execution command execution status; ▪ Including support for new Nexto Jet solution modules; ▪ Improved Ethernet IP protocol; 	1.6.1.3	02/10/2017
AQ	<ul style="list-style-type: none"> ▪ Included support to IEC104 server. ▪ Included support to clock settings. ▪ Included support to easy connection. ▪ Included support to dynamic IP. ▪ Included support to mixed analog module NJ6005. ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Homologation of alternative part numbers for components used on this product. 	1.6.0.11	06/01/2017
AP	<ul style="list-style-type: none"> ▪ Enhancement of factory test software. ▪ Components that belonged to a non-used circuit were removed to reduce the product's structure. 	1.5.1.7	10/10/2016
AO	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.5.1.7	08/06/2016
AN	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.5.1.7	01/06/2016
AM	<ul style="list-style-type: none"> ▪ Included SNTP diagnostics in MIB Private. ▪ Fixed possible exception when using projects with Basic profile. ▪ Included support for the additional option introduced on BCS Tools 2.05 that allows using Retain and Persistent variables on Function Blocks. ▪ Enhancements on EtherCAT protocol when used on situations with heavy traffic on other Ethernet ports. 	1.5.1.7	26/02/2016
AL	<ul style="list-style-type: none"> ▪ Included support for I/O modules of the Nexto Jet solution. ▪ Included support for size flexibility of Retentive and Persistent memory areas. ▪ Fixed possible loss of system logs after a power failure. ▪ Changed web message in case firmware update failure when there are too many applications running. 	1.5.1.3	11/11/2015
AK	<ul style="list-style-type: none"> ▪ Fixed a possible exception after performing hot-swap of modules on the local bus. 	1.5.0.15	04/08/2015

	<ul style="list-style-type: none"> ▪ Fixed a problem which causes exception after na online change in Symbol Configuration. ▪ Fixed a problem where the Retain and Persistent are intialized after an exception. 		
AJ	<ul style="list-style-type: none"> ▪ Included the vital failure feature for NETs on projects with half-cluster redundancy. ▪ Included the support for new 8-position rack NX9000 on diagnostics of web page. ▪ Included the support for SNTP. ▪ Changed the maximum number of communication channels simultaneously connected to CPU from 4 to 8. 	1.5.0.10	25/05/2015
AI	<ul style="list-style-type: none"> ▪ Included the support for OPC protocol. ▪ Included the support for Application CRC feature. ▪ Included two new hot swap modes: Hot Swap Disabled and Hot Swap Enabled with startup consistency. ▪ Included the support for SNMP (agent) protocol supporting MIBII and Private. ▪ Included new system logs with useful information to help diagnosis and troubleshooting. ▪ System log is now retain (i.e, the log remains on memory even after restarting the CPU). 	1.4.0.33	24/09/2014
AH	<ul style="list-style-type: none"> ▪ Fixed the synchronism of forced BIT variables on redundant systems. ▪ Included the support for NX6020 module. 	1.3.0.31	30/07/2014
AG	<ul style="list-style-type: none"> ▪ Included the support for MODBUS Symbol drivers (Client/Server and Master/Slave RTU). ▪ Included the support for the library that provides User Log on Memory Card. ▪ Fixed the diagnostic indication in case of failure of the OTD key. ▪ Improvements on the Memory Card access. ▪ Improvement of CPU boot time. ▪ Included the support for NX6010 module. 	1.3.0.22	09/01/2014
AF	<ul style="list-style-type: none"> ▪ Fixed diagnostic with quantities of system restart. ▪ Improvement of initialization time. ▪ Modified task priorities after RTS reset to keep the same behavior. ▪ Improvement in bus scan time. ▪ Improvement and fixes in memory allocation. ▪ Fixed the treatment of tasks that access the I/O simultaneously. 	1.2.4.0	30/09/2013
AE	<ul style="list-style-type: none"> ▪ Enhancement and fix in bus interruption treatment. ▪ Enhancement in the communication bus. 	1.2.2.3	28/06/2013
AD	<ul style="list-style-type: none"> ▪ Changed the bill of materials to add the earthing spring holder. 	1.2.1.0	12/04/2013
AC	<ul style="list-style-type: none"> ▪ RoHS compliant revision. ▪ Enhancement in bus interruption treatment. ▪ Modified internal identification code in the firmware. 	1.2.1.0	22/01/2013
AB	<ul style="list-style-type: none"> • Inclusion of module firmware version on web pages • Increased compatibility with some memory card models. • Fix in web presentation of architecture when used rack expansion. 	1.2.0.9	30/10/2012
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.2.0.7	23/08/2012

2.11 BCS-NX3020 – CPU 2 ETH, 2 SERIAL, RACK EXP. – BJ

REV	Description	Version	Date
BL	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed wrong “Factory Missing” log message 	1.10.8.0	15/12/2022
BK	<ul style="list-style-type: none"> ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). ▪ Fixed an exception that occurs when using DBP with its individual elements ON/OFF mapped to MODBUS. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This 	1.9.4.0	01/11/2022

	<ul style="list-style-type: none"> change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 		
BJ	<ul style="list-style-type: none"> ▪ In this revision there were only internal changes in the documentation. 	1.9.1.0	05/04/2022
BI	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.8.13.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.9.1.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Included fixed DNS server settings (8.8.8.8 and 8.8.4.4). ▪ Improved NIC Teaming performance. 	1.8.13.0	26/07/2021
BH	<ul style="list-style-type: none"> ▪ Included support for PROFINET Controller. 	1.8.10.0	21/05/2021
BG	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required. ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. 	1.8.9.0	13/01/2021
BF	<ul style="list-style-type: none"> ▪ Fixed a problem that was not allowing the CPU to go to RUN when the application name was different from the default “Application”. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. ▪ Included protectors for the product connectors. 	1.8.8.0	24/09/2020
BE	<ul style="list-style-type: none"> ▪ Updated the RJ45 connector of the Ethernet interfaces. 	1.8.6.0	29/04/2020
-	<ul style="list-style-type: none"> ▪ Included support to client certificate in the Function Block MQTT Client (requires the BCS Tools 3.23 or greater). ▪ Fixed a problem that was not allowing to perform a firmware update when the CPU had an application loaded. 	1.8.6.0	05/06/2020
BD	<ul style="list-style-type: none"> ▪ Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). ▪ Included support for the latest version of LibSQLClient library. ▪ General fixes on User Rights Management, which was not working properly on version 1.7.x.x. 	1.8.3.0	27/01/2020
BB-BC	<ul style="list-style-type: none"> ▪ Fixed the copy from memory card to CPU. ▪ Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. 	1.7.0.14	03/10/2019
BA	<ul style="list-style-type: none"> ▪ Improvement on Ethernet interface to avoid uncontrolled retransmission of ACK message on IP conflict scenarios, which could impact on CPU execution cycle. ▪ Fixed the LCD menu for copying application on Memory Card, which was missing since version 1.6.0.11. ▪ Fixed log message "Retain restore from file failed" that was incorrectly generated on power on. 	1.7.0.11	09/07/2019
AZ	<ul style="list-style-type: none"> ▪ Included support for OPC UA protocol ▪ Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) ▪ Improvements on Easy Connection feature ▪ Fixed a problem on function GetTimeZone, which could cause an exception leading the CPU to STOP. ▪ Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. ▪ Fixed treatment of I/O modules on breakpoint condition on projects using machine profile. ▪ Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) 	1.7.0.8	11/03/2019
AY	<ul style="list-style-type: none"> ▪ Small text correction on Installation Guide 	1.6.1.3	15/01/2019

	<ul style="list-style-type: none"> ▪ Updated the product label for compliance of the UL certification, File Number E496087. 		
AS-AX	<ul style="list-style-type: none"> ▪ These revisions were skipped due to integration of internal documentation 	-	-
AR	<ul style="list-style-type: none"> ▪ Included the licence IEC-104 in the BOM of the product. 	1.6.1.3	03/09/2018
AQ	<ul style="list-style-type: none"> ▪ Added new configuration options for MODBUS Symbolic mode (Server and Slave); ▪ Added return of Easy Execution command execution status; ▪ Including support for new Nexto Jet solution modules; ▪ Improved Ethernet IP protocol; 	1.6.1.3	02/10/2017
AP	<ul style="list-style-type: none"> ▪ Included support to IEC104 server. ▪ Included support to clock settings. ▪ Included support to easy connection. ▪ Included support to dynamic IP. ▪ Included support to mixed analog module NJ6005. ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Homologation of alternative part numbers for components used on this product. 	1.6.0.11	06/01/2017
AO	<ul style="list-style-type: none"> ▪ Enhancement of factory test software. ▪ Components that belonged to a non-used circuit were removed to reduce the product's structure. 	1.5.1.7	10/10/2016
AN	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.5.1.7	08/06/2016
AM	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.5.1.7	01/06/2016
AL	<ul style="list-style-type: none"> ▪ Included SNTP diagnostics in MIB Private. ▪ Fixed possible exception when using projects with Basic profile. ▪ Included support for the additional option introduced on BCS Tools 2.05 that allows using Retain and Persistent variables on Function Blocks. ▪ Enhancements on EtherCAT protocol when used on situations with heavy traffic on other Ethernet ports. 	1.5.1.7	26/02/2016
AK	<ul style="list-style-type: none"> ▪ Included support for I/O modules of the Nexto Jet solution. ▪ Included support for size flexibility of Retentive and Persistent memory areas. ▪ Fixed possible loss of system logs after a power failure. ▪ Changed web message in case firmware update failure when there are too many applications running. 	1.5.1.3	11/11/2015
AJ	<ul style="list-style-type: none"> ▪ Fixed a possible exception after performing hot-swap of modules on the local bus. ▪ Fixed a problem which causes exception after na online change in Symbol Configuration. ▪ Fixed a problem where the Retain and Persistent are intialized after an exception. 	1.5.0.15	04/08/2015
AI	<ul style="list-style-type: none"> ▪ Included the vital failure feature for NETs on projects with half-cluster redundancy. ▪ Included the support for EtherCAT Master. ▪ Included the support for new 8-position rack NX9000 on diagnostics of web page. ▪ Changed the maximum number of communication channels simultaneously connected to CPU from 4 to 8. 	1.5.0.10	25/05/2015
AH	<ul style="list-style-type: none"> ▪ Included the support for OPC protocol. ▪ Included the support for Application CRC feature. ▪ Included two new hot swap modes: Hot Swap Disabled and Hot Swap Enabled with startup consistency. ▪ Included the support for SNMP (agent) protocol supporting MIBII and Private. ▪ Included new system logs with useful information to help diagnosis and troubleshooting. 	1.4.0.33	24/09/2014

	<ul style="list-style-type: none"> ▪ System log is now retain (i.e, the log remains on memory even after restarting the CPU). 		
AG	<ul style="list-style-type: none"> ▪ Fixed the synchronism of forced BIT variables on redundant systems. ▪ Included the support for NX6020 module. 	1.3.0.31	30/07/2014
AF	<ul style="list-style-type: none"> ▪ Included the support for MODBUS Symbol drivers (Client/Server and Master/Slave RTU). ▪ Included the support for the library that provides User Log on Memory Card. ▪ Fixed the diagnostic indication in case of failure of the OTD key. ▪ Improvements on the Memory Card access. ▪ Improvement of CPU boot time. ▪ Included the support for NX6010 module. 	1.3.0.22	09/01/2014
AE	<ul style="list-style-type: none"> ▪ Fixed diagnostic with quantities of system restart. ▪ Improvement of initialization time. ▪ Modified task priorities after RTS reset to keep the same behavior. ▪ Improvement in bus scan time. ▪ Improvement and fixes in memory allocation. ▪ Fixed the treatment of tasks that access the I/O simultaneously. 	1.2.4.0	30/09/2013
AD	<ul style="list-style-type: none"> ▪ Enhancement and fix in bus interruption treatment. ▪ Enhancement in the communication bus. 	1.2.2.3	28/06/2013
AC	<ul style="list-style-type: none"> ▪ Changed the bill of materials to add the earthing spring holder. 	1.2.1.0	12/04/2013
AB	<ul style="list-style-type: none"> ▪ RoHS compliant revision. ▪ Enhancement in bus interruption treatment. ▪ Modified internal identification code in the firmware. 	1.2.1.0	22/01/2013
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.2.0.9	23/08/2012

2.12 BCS-NX3030 - CPU 2 ETH, 2 SERIAL,RACK EXP,RED-BJ

REV	Description	Version	Date
BN	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed wrong “Factory Missing” log message 	1.10.8.0	15/12/2022
BM	<ul style="list-style-type: none"> ▪ Fixed the redundancy project synchronization system when downloading an application in a Stand-By CPU with the other still in Active (an invalid operation). ▪ Fixed the retain system to keep the values after a reboot caused by an internal software error. ▪ Fixed potential exception when an application is removed (reset origin). ▪ Fixed an exception that occurs when using DBP with its individual elements ON/OFF mapped to MODBUS. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	1.9.4.0	01/11/2022
BL	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.8.13.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.9.1.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Included fixed DNS server settings (8.8.8.8 and 8.8.4.4). ▪ Improved NIC Teaming performance. 	1.8.13.0	26/07/2021
BK	<ul style="list-style-type: none"> ▪ Fixed the NX4010 redundancy diagnostics presentation on the Web interface. ▪ Included support for PROFINET Controller. 	1.8.10.0	21/05/2021
BJ	<ul style="list-style-type: none"> ▪ Included support for “<i>number of connected clients</i>” diagnostic in status 	1.8.9.0	13/01/2021

	<p>bar. To see this diagnostic, BCS-MT8500 version 3.31 or greater is required.</p> <ul style="list-style-type: none"> Removed the hidden page “getlogs” from the system web page to improve cyber security. 		
BI	<ul style="list-style-type: none"> Fixed the force diagnostic bForcedIOs, which was not being informed correctly on the stand-by PLC. Fixed a problem that was not allowing the CPU to go to RUN when the application name was different from the default “Application”. Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. Included protectors for the product connectors. 	1.8.8.0	24/09/2020
BH	<ul style="list-style-type: none"> Updated the RJ45 connector of the Ethernet interfaces. 	1.8.6.0	29/04/2020
-	<ul style="list-style-type: none"> Included support to client certificate in the Function Block MQTT Client (requires the BCS Tools 3.23 or greater). Fixed a problem that was not allowing to perform a firmware update when the CPU had an application loaded. Fixed a problem introduced on the previous version which reduced the capability of the redundant system on tolerating an internal software failure in one of the CPUs. 	1.8.6.0	05/06/2020
BG	<ul style="list-style-type: none"> Included support for MQTT Client Function Block (requires BCS Tools 3.19 or greater). Included support for the latest version of LibSQLClient library. General fixes on User Rights Management, which was not working properly on version 1.7.x.x. 	1.8.3.0	27/01/2020
BE-BF	<ul style="list-style-type: none"> Fixed the copy from memory card to CPU. Fixed EasyConnection behavior, where the application was not being erased after applying the new IP adress, resulting on returning to the IP address set by the application. 	1.7.0.14	03/10/2019
BD	<ul style="list-style-type: none"> Improvement on Ethernet interface to avoid uncontrolled retransmission of ACK message on IP conflict scenarios, which could impact on CPU execution cycle. Fixed the LCD menu for copying application on Memory Card, which was missing since version 1.6.0.11. Fixed log message "Retain restore from file failed" that was incorrectly generated on power on. Included support to the fix introduced on BCS Tools v3.14 for the error which could cause exception after a switchover of redundant PLC. 	1.7.0.11	09/07/2019
BC	<ul style="list-style-type: none"> Included support for OPC UA protocol Included a fixed DNS Server configuration (8.8.8.8 and 8.8.4.4) Improvements on Easy Connection feature Fixed a problem on function GetTimeZone, which could cause an exception leading the CPU to STOP. Improvements on GetDateAndTime and GetDayOfWeek functions, which could cause peak on execution time. Improvements on project synchronization between redundant PLCs Fixed treatment of I/O modules on breakpoint condition on projects using machine profile. Removed log message generated when the system time is updated by SNTP (to avoid log being flooded with this message) 	1.7.0.8	11/03/2019
BB	<ul style="list-style-type: none"> Small text correction on Installation Guide Updated the product label for compliance of the UL certification, File Number E496087. 	1.6.1.3	15/01/2019
AR-BA	<ul style="list-style-type: none"> These revisions were skipped due to integration of internal documentation 	-	-
AQ	<ul style="list-style-type: none"> Included the licence IEC-104 in the BOM of the product. 	1.6.1.3	03/09/2018
AP	<ul style="list-style-type: none"> Added new configuration options for MODBUS Symbolic mode (Server and Slave); Added return of Easy Execution command execution status; Including support for new Nexto Jet solution modules; 	1.6.1.3	02/10/2017

	<ul style="list-style-type: none"> ▪ Improved Ethernet IP protocol; ▪ Improved synchronization of redundant projects; 		
AO	<ul style="list-style-type: none"> ▪ Included support to IEC104 server. ▪ Included support to clock settings. ▪ Included support to easy connection. ▪ Included support to dynamic IP. ▪ Included support to mixed analog module NJ6005. ▪ Included support for MSSQL_Client Function Block for accessing Microsoft databases. ▪ Homologation of alternative part numbers for components used on this product. 	1.6.0.11	06/01/2017
AN	<ul style="list-style-type: none"> ▪ Enhancement of factory test software. ▪ Components that belonged to a non-used circuit were removed to reduce the product's structure. 	1.5.1.7	10/10/2016
AM	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.5.1.7	08/06/2016
AL	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.5.1.7	01/06/2016
AK	<ul style="list-style-type: none"> ▪ Included Sntp diagnostics in MIB Private. ▪ Fixed possible exception when using projects with Basic profile. ▪ Included support for the additional option introduced on BCS Tools 2.05 that allows using Retain and Persistent variables on Function Blocks. ▪ Enhancements on EtherCAT protocol when used on situations with heavy traffic on other Ethernet ports. ▪ Enhancements on handling of redundant variables forcing. 	1.5.1.7	26/02/2016
AJ	<ul style="list-style-type: none"> ▪ Included support for I/O modules of the Nexto Jet solution. ▪ Included support for size flexibility of Retentive and Persistent memory areas. ▪ Fixed possible loss of system logs after a power failure. ▪ Changed web message in case firmware update failure when there are too many applications running. ▪ Incremented the maximum number of redundant areas from 100 to 1024. 	1.5.1.3	11/11/2015
AI	<ul style="list-style-type: none"> ▪ Fixed a possible exception after performing hot-swap of modules on the local bus. ▪ Fixed forcing of variables on redundant system. ▪ Fixed a problem which causes exception after na online change in Symbol Configuration. ▪ Fixed a problem where the Retain and Persistent are intialized after an exception. 	1.5.0.15	04/08/2015
AH	<ul style="list-style-type: none"> ▪ Included the vital failure feature for NETs on projects with half-cluster redundancy. ▪ Included the support for EtherCAT. ▪ Included the support for new 8-position rack NX9000 on diagnostics of web page. ▪ Included the support for. ▪ Changed the maximum number of communication channels simultaneously connected to CPU from 4 to 8. 	1.5.0.10	25/05/2015
AG	<ul style="list-style-type: none"> ▪ Included the support for OPC protocol. ▪ Included the support for Application CRC feature. ▪ Included two new hot swap modes: Hot Swap Disabled and Hot Swap Enabled with startup consistency. ▪ Included the support for SNMP (agent) protocol supporting MIBII and Private. ▪ Included new system logs with useful information to help diagnosis and troubleshooting. ▪ System log is now retain (i.e, the log remains on memory even after restarting the CPU). 	1.4.0.33	29/09/2014
AF	<ul style="list-style-type: none"> ▪ Fixed the synchronism of forced BIT variables on redundant systems. ▪ Included the support for NX6020 module. 	1.3.0.31	30/07/2014

AE	<ul style="list-style-type: none"> ▪ Included the support for MODBUS Symbol drivers (Client/Server and Master/Slave RTU). ▪ Included the support for the library that provides User Log on Memory Card. ▪ Fixed the diagnostic indication in case of failure of the OTD key. ▪ Improvements on the Memory Card access. ▪ Improvement of CPU boot time. ▪ Included the support for NX6010 module. 	1.3.0.22	09/01/2014
AD	<ul style="list-style-type: none"> ▪ Fixed diagnostic with quantities of system restart. ▪ Improvement of initialization time. ▪ Modified task priorities after RTS reset to keep the same behavior. ▪ Improvement in bus scan time. ▪ Improvement and fixes in memory allocation. ▪ Fixed the treatment of tasks that access the I/O simultaneously. ▪ Fixed project synchronization after a restart of standby PLC. ▪ Fixed the timeout to synchronize the project. 	1.2.4.0	30/09/2013
AC	<ul style="list-style-type: none"> ▪ Enhancement and fix in bus interruption treatment. ▪ Enhancement in the communication bus. ▪ Fix in the redundant project synchronism. 	1.2.2.3	28/06/2013
AB	<ul style="list-style-type: none"> ▪ Changed the bill of materials to add the earthing spring holder. 	1.2.1.0	12/04/2013
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.2.1.0	22/01/2013

2.13 BCS-NX8000 - 30W 24VDC PSU - BJ

REV	Description	Version	Date
AQ	<ul style="list-style-type: none"> ▪ Minor hardware changes in order to improve the product. ▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. ▪ UKCA Certification marking included on product. 	NA	01/12/2022
AP	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	NA	26/07/2021
AO	<ul style="list-style-type: none"> ▪ Updated the product label for compliance of the UL certification, File Number E496087. 	NA	04/06/2020
AK-AN	<ul style="list-style-type: none"> ▪ These revisions were skipped due to integration of internal documentation 	-	-
AJ	<ul style="list-style-type: none"> ▪ This new product revision is related to the change in the overlay material. 	NA	12/09/2018
AI	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	NA	19/12/2016
AH	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	NA	22/09/2016
AG	<ul style="list-style-type: none"> ▪ Enhancement on test system for test of NX3004. 	NA	30/12/2015
AF	<ul style="list-style-type: none"> ▪ Enhancement on test system to improve detection of module interference on WSDE line (rack number). 	NA	17/06/2014
AE	<ul style="list-style-type: none"> ▪ Changed the maintenance procedure. 	NA	20/05/2014
AD	<ul style="list-style-type: none"> ▪ Changed the bill of materials to add the earthing spring holder. 	NA	12/04/2013
AC	<ul style="list-style-type: none"> ▪ RoHS compliant revision. 	NA	22/01/2013
AB	<ul style="list-style-type: none"> ▪ Label printed using a new printer. 	NA	30/10/2012
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	NA	31/08/2012

2.14 BCS-NX1005 - 24 VDC 8 DOT/8 DI MIXED MODULE - BJ

REV	Description	Version	Date
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AL	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.2.0.7	22/03/2022
AK	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.2.0.7	26/07/2021
AJ	▪ Updated the product label for compliance of the UL certification, File Number E496087.	1.2.0.7	24/06/2020
AI	▪ Changes in the source code shared with other products that doesn't affect the behaviour of this product.	1.2.0.7	15/08/2017
AH	▪ Enhancement in factory process. ▪ Changed the product label to comply with the new revision of CE directive.	1.2.0.4	31/08/2016
AG	▪ Homologation of alternative part numbers for components used on this product.	1.2.0.4	14/06/2016
AF	▪ Improvements in the Factory Test system.	1.2.0.4	28/10/2015
AE	▪ Approval on EtherCAT Conformance Test. ▪ Included the support for operation with Xtorm Series.	1.2.0.4	12/06/2014
AD	▪ Fixed the use of External Event on operating modes 2,3 and 4.	1.1.0.3	15/08/2013
AC	▪ Changed the bill of materials to add the earthing spring holder.	1.1.0.1	12/04/2013
AB	▪ RoHS compliant revision.	1.1.0.1	09/02/2013
AA	▪ Initial revision.	1.0.0.0	24/10/2012

2.15 BCS-NX1001 - 24 VDC 16 DI MODULE – BJ

REV	Description	Version	Date
AN	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.2.0.20	22/03/2022
AM	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.2.0.20	26/07/2021
AL	▪ Updated the product label for compliance of the UL certification, File Number E496087.	1.2.0.20	24/06/2020
AK	▪ Changes in the test system for including new product. ▪ Changes the time of Burn In.	1.2.0.20	15/08/2017
AJ	▪ Enhancements for reducing the threshold voltage of internal voltage regulator.	1.2.0.20	01/02/2017
AI	▪ Enhancement in factory process. ▪ Changed the product label to comply with the new revision of CE directive.	1.2.0.20	31/08/2016
AH	▪ Homologation of alternative part numbers for components used on this product.	1.2.0.20	14/06/2016
AG	▪ Improve the performance of the input update time. ▪ Fixed the support of filters for the inputs of Group 1.	1.2.0.20	28/10/2015
AF	▪ Approval on EtherCAT Conformance Test. ▪ Included the support for operation with Xtorm Series.	1.2.0.3	13/06/2014
AE	▪ Fixed the use of External Event on operating modes 2,3 and 4.	1.1.0.2	15/08/2013
AD	▪ Changed the bill of materials to added the the earthing spring holder.	1.1.0.1	12/04/2013
AC	▪ RoHS compliant revision.	1.1.0.1	14/02/2013
AB	▪ Changed the PCI – revision B.	1.0.0.9	30/10/2012
AA	▪ Initial revision.	1.0.0.0	21/08/2012

2.16 BCS-NX6000 - 8 AI VOLTAGE/CURRENT MODULE - BJ

REV	Description	Version	Date
BB	▪ Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the	1.4.0.0	02/12/2022

	product. ▪ UKCA Certification marking included on product.		
BA	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.4.0.0	22/03/2022
AZ	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.4.0.0	26/07/2021
AY	▪ Included support for the new option “Disabled” for the parameter “Open Loop Value”.	1.4.0.0	03/09/2019
AX	▪ This new product revision is related to test system modifications for including other module in test system.	1.3.0.7	05/12/2018
AR-AW	▪ These revisions were skipped due to integration of internal documentation	-	-
AQ	▪ This new product revision is related to the change in the product overlay to fix the opening of the display window.	1.3.0.7	24/04/2018
AP	▪ Enhancements of diagnostics detection of analog inputs. ▪ Enhancements in detection of loss of bus master.	1.3.0.7	15/02/2018
AO	▪ This new product revision is related to test system modifications for including other module in test system.	1.3.0.3	15/09/2017
AN	▪ Enhancements on immunity against electromagnetic interference.	1.3.0.3	10/08/2016
AM	▪ Changed the product label to comply with the new revision of CE directive.	1.3.0.1	08/06/2016
AL	▪ Enhancement in factory process.	1.3.0.1	13/05/2016
AK	▪ Homologation of alternative part numbers for components used on this product.	1.3.0.1	11/05/2016
AJ	▪ Enhancements on the protection circuit of analog inputs.	1.3.0.1	16/11/2015
AI	▪ Enhancements on the calibration process of the module (performed during factory test). ▪ Addition of a new scale +-5Vdc. ▪ Enhancements on the configuration process of the module.	1.3.0.1	03/11/2015
AH	▪ Enhancements on the calibration process of the analog channels (performed during factory test).	1.2.0.6	03/12/14
AG	▪ Approval on EtherCAT Conformance Test. ▪ Included the support for operation with Xterm Series.	1.2.0.4	05/06/14
AF	▪ Enhancements in the assembly instructions.	1.0.1.8	28/05/14
AE	▪ Enhancements in the Factory Test procedure.	1.0.1.8	14/03/14
AD	▪ Changed the bill of materials. ▪ Changes the software version to improve the behavior of hot swap, calibration process and reset operations.	1.0.1.8	12/07/2013
AC	▪ Changed the bill of materials to add earthing spring holder.	1.0.1.2	26/04/2013
AB	▪ RoHS compliant revision. ▪ Changed the EtherCAT vendor ID.	1.0.1.2	21/02/2013
AA	▪ Initial revision.	1.0.0.14	24/10/2012

2.17 BCS-NX6010 - 8 AI THERMOCOUPLE MODULE - BJ

REV	Description	Version	Date
AO	▪ Enhancements on immunity against electromagnetic interference.	1.0.0.16	10/05/2022
AN	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.0.0.14	22/03/2022
AM	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.0.0.14	29/07/2021
AJ-AL	▪ These revisions were skipped due to integration of internal documentation	-	-
AI	▪ Changes in the scope of the source to add the BCS NJ6011 module	1.0.0.14	17/04/2018
AH	▪ Enhancements on the calibration process of the module (performed during factory test).	1.0.0.13	15/09/2017

AG	<ul style="list-style-type: none"> ▪ Additional enhancements on immunity against electromagnetic interference. 	1.0.0.11	10/08/2016
AF	<ul style="list-style-type: none"> ▪ Enhancements on immunity against electromagnetic interference. ▪ Changed the product label to comply with the new revision of CE directive. 	1.0.0.9	08/07/2016
AE	<ul style="list-style-type: none"> ▪ Enhancement in factory process. 	1.0.0.6	13/05/2016
AD	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.0.0.6	11/05/2016
AC	<ul style="list-style-type: none"> ▪ Enhancements on the calibration process of the module (performed during factory test). ▪ Approval on EtherCAT Conformance Test. 	1.0.0.6	03/11/2015
AB	<ul style="list-style-type: none"> ▪ Enhancement on the module's calibration procedure during production process. 	1.0.0.5	03/12/2014
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.0.0.4	12/06/2014

2.18 BCS-NX6020 - 8 AI RTD MODULE - BJ

REV	Description	Version	Date
AN	<ul style="list-style-type: none"> ▪ Minor improvement in the external mechanics of the product, without significant impact. 	1.1.0.8	22/03/2022
AM	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.1.0.8	29/07/2021
AL	<ul style="list-style-type: none"> ▪ Support for the new hardware revision which introduces additional improvements to immunity against electromagnetic interferences. 	1.1.0.8	29/09/2020
AK	<ul style="list-style-type: none"> ▪ Updated the product label for compliance of the UL certification, File Number E496087 	1.1.0.3	24/06/2020
AJ	<ul style="list-style-type: none"> ▪ This revision was skipped due to integration of internal documentation 	-	-
AI	<ul style="list-style-type: none"> ▪ This new product revision is related to the change in the product overlay to fix the opening of the display window. 	1.1.0.3	24/04/2018
AH	<ul style="list-style-type: none"> ▪ This new product revision is related to modifications for including other module in test system. 	1.1.0.3	15/09/2017
AG	<ul style="list-style-type: none"> ▪ This new product revision refers to the new revision of the front label of the product, in which the indication of A next to the identification (BCS-NX6020 A) has been added so that it conforms to the standard of the Nexto Series. In addition, the Burn In time was changed. 	1.1.0.3	08/05/2017
AF	<ul style="list-style-type: none"> ▪ Improved immunity against electromagnetic interferences. 	1.1.0.3	13/01/2017
AE	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.1.0.1	20/05/2016
AD	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.1.0.1	18/05/2016
AC	<ul style="list-style-type: none"> ▪ Addition of a new scale of 10kΩ. 	1.1.0.1	03/11/2015
AB	<ul style="list-style-type: none"> ▪ Fixed the display treatment for unsigned modules. ▪ Fixed the OTD button test on factory test mode. ▪ Enhancement on the module's reconfiguration after communication loss. 	1.0.0.3	15/05/2014
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.0.0.0	21/02/2014

2.19 BCS-NX2001 - 24 VDC 16 DO TRANSISTOR MODULE - BJ

REV	Description	Version	Date
AM	<ul style="list-style-type: none"> ▪ Minor improvement in the external mechanics of the product, without significant impact. 	1.2.0.8	16/12/2021
AL	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.2.0.8	26/07/2021
AK	<ul style="list-style-type: none"> ▪ Updated the product label for compliance of the UL certification, File 	1.2.0.8	24/06/2020

	Number E496087.		
AJ	▪ This revision was skipped due to integration of internal documentation	-	-
AI	▪ Changes in the test system for including new product. ▪ Changes the time of Burn In.	1.2.0.8	15/08/2017
AH	▪ Enhancements for reducing the threshold voltage of internal voltage regulator.	1.2.0.8	17/02/2017
AG	▪ Enhancement in factory process. ▪ Changed the product label to comply with the new revision of CE directive.	1.2.0.8	31/08/2016
AF	▪ Homologation of alternative part numbers for components used on this product.	1.2.0.8	07/06/2016
AE	▪ Improved the performance of the output update time.	1.2.0.8	28/10/2015
AD	▪ Approval on EtherCAT Conformance Test. ▪ Included the support for operation with Xtorm Series.	1.2.0.3	16/06/2014
AC	▪ Included Graunding Clip Holder.	1.0.1.1	12/04/2013
AB	▪ RoHS compliant revision.	1.0.1.1	14/02/2013
AA	▪ Initial revision.	1.0.0.0	24/10/2012

2.20 BCS-NX2020 - 16 DO RELAY MODULE - BJ

REV	Description	Version	Date
AJ	▪ Changes in the test system for including new product. ▪ Changes the time of Burn In.	1.2.0.3	15/08/2017
AI	▪ Enhancements for reducing the threshold voltage of internal voltage regulator.	1.2.0.3	17/02/2017
AH	▪ Enhancement in factory process.	1.2.0.3	31/08/2016
AG	▪ Changed the product label to comply with the new revision of CE directive.	1.2.0.3	08/06/2016
AF	▪ Homologation of alternative part numbers for components used on this product.	1.2.0.3	07/06/2016
AE	▪ Improvements in the Factory Test system.	1.2.0.3	28/10/2015
AD	▪ Approval on EtherCAT Conformance Test. ▪ Included the support for operation with Xtorm Series.	1.2.0.3	23/06/2014
AC	▪ Included Graunding Clip Holder.	1.0.1.1	12/04/2013
AB	▪ RoHS compliant revision.	1.0.1.1	14/02/2013
AA	▪ Initial revision.	1.0.0.0	24/10/2012

2.21 BCS-NX6100 - 4 AO VOLTAGE/CURRENT MODULE - BJ

REV	Description	Version	Date
AU	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.2.0.9	22/03/2022
AT	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.2.0.9	26/07/2021
AS	▪ Updated the product label for compliance of the UL certification, File Number E496087.	1.2.0.9	24/06/2020
AO-AR	▪ These revisions were skipped due to integration of internal documentation	-	-
AN	▪ This new product revision is related to modifications for including other module in test system.	1.2.0.9	25/09/2017
AM	▪ This new product revision is related the inclusion in news part numbers for internal codes with same electrical characteristics and with RoHS compliance.	1.2.0.9	05/10/2016
AL	▪ Changed the product label to comply with the new revision of CE directive.	1.2.0.9	11/07/2016
AK	▪ Enhancement in factory process.	1.2.0.9	13/05/2016

AJ	▪ Homologation of alternative part numbers for components used on this product.	1.2.0.9	11/05/2016
AI	▪ Enhancements on hot swap.	1.2.0.9	27/01/2016
AH	▪ Enhancements on the calibration process of the module (performed during factory test). ▪	1.2.0.7	03/11/2015
AG	▪ Enhancements on the calibration process of the analog channels (performed during factory test).	1.2.0.5	03/12/2014
AF	▪ Approval on EtherCAT Conformance Test. ▪ Included the support for operation with Xtorm Series.	1.2.0.4	12/06/2014
AE	▪ Included the support for new hardware revision.	1.0.1.5	13/03/2014
AD	▪ Improvements on hot-swap logic. ▪ Improvements on module reconfiguration logic after a project download.	1.0.1.3	03/06/2013
AC	▪ Changed the bill of materials to add the earthing spring holder.	1.0.1.1	12/04/2013
AB	▪ RoHS compliant revision.	1.0.1.1	21/02/2013
AA	▪ Initial revision.	1.0.0.13	24/10/2012

2.22 BCS-NX4000 - BUS EXPANSION MODULE - BJ

REV	Description	Version	Date
AP	▪ Improved stability of power-on under specific conditions.	1.1.0.7	29/11/2021
AO	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.1.0.7	30/07/2021
AN	▪ Included protectors for the product connectors.	1.1.0.7	24/09/2020
AM	▪ Updated the product label for compliance of the UL certification, File Number E496087.	1.1.0.7	04/06/2020
AJ-AL	▪ These revisions were skipped due to integration of internal documentation	-	-
AI	▪ Changed the product label to comply with the new revision of CE directive.	1.1.0.7	31/08/2016
AH	▪ Homologation of alternative part numbers for components used on this product.	1.1.0.7	20/06/2016
AG	▪ Improvements on module startup.	1.1.0.7	25/01/2016
AF	▪ Approval on EtherCAT Conformance Test. ▪ Included the support for operation with Xtorm Series.	1.1.0.5	26/06/2014
AE	▪ Improvements on Factory Test system.	1.1.0.2	11/11/2013
AD	▪ Improvements in the hardware revision.	1.1.0.2	12/08/2013
AC	▪ Enhancement in the LCD test during start up. ▪ Enhancement in the OTD function of the factory test. ▪ Enhancement during start up of local diagnostics.	1.1.0.2	09/07/2013
AB	▪ RoHS compliant revision.	1.1.0.0	12/04/2013
AA	▪ Initial revision.	1.1.0.0	21/02/2013

2.23 BCS-NX4010 - REDUNDANCY LINK MODULE - BJ

REV	Description	Version	Date
AO	▪ In this revision there were only internal changes in the documentation.	1.0.17	02/08/2022
AN	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.0.17	30/07/2021
AM	▪ Included protectors for the product connectors.	1.0.1.7	24/09/2020
AL	▪ Updated the product label for compliance of the UL certification, File Number E496087.	1.0.1.7	04/06/2020
AG-AK	▪ These revisions were skipped due to integration of internal documentation	-	-

AF	▪ Changed the product label to comply with the new revision of CE directive.	1.0.1.7	08/06/2016
AE	▪ Homologation of alternative part numbers for components used on this product.	1.0.1.7	07/06/2016
AD	▪ Enhancements on test software	1.0.1.7	05/02/2016
AC	▪ Approval on EtherCAT Conformance Test.	1.0.1.7	16/06/2014
AB	▪ Changed the bill of materials to include the ground spring holder.	1.0.1.0	12/04/2013
AA	▪ Initial revision.	1.0.1.0	28/01/2013

2.24 BCS-NX9000 - 8-SLOT BACKPLANE RACK - BJ

REV	Description	Version	Date
AG	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	NA	26/07/2021
AF	▪ Included the Left/Right Side Rack Ends in the product structure.	NA	11/11/2020
AE	▪ Updated the product label for compliance of the UL certification, File Number E496087	NA	06/02/2018
AD	▪ This new product revision refers to the withdrawn of the Burn In step from the production process. In addition, the Left/Right Side Rack Ends has been removed from the product structure.	NA	26/06/2017
AC	▪ Enhancements on factory test system to improve fault detection coverage.	NA	01/08/2016
AB	▪ Changed the product label to comply with the new revision of CE directive.	NA	13/06/2016
AA	▪ Initial revision.	NA	31/07/2015

2.25 BCS-NX9001 - 12-SLOT BACKPLANE RACK - BJ

REV	Description	Version	Date
AR	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	NA	26/07/2021
AQ	▪ Included the Left/Right Side Rack Ends in the product structure.	NA	11/11/2020
AK-AP	▪ These revisions were skipped due to integration of internal documentation	-	-
AJ	▪ Updated the product label for compliance of the UL certification, File Number E496087	NA	06/02/2018
AI	▪ This new product revision refers to the withdrawn of the Burn In step from the production process. In addition, the Left/Right Side Rack Ends has been removed from the product structure.	NA	26/06/2017
AH	▪ Enhancements on factory test system to improve fault detection coverage.	NA	01/08/2016
AG	▪ Changed the product label to comply with the new revision of CE directive.	NA	13/06/2016
AF	▪ Enhancement in factory process.	NA	23/03/2016
AE	▪ Improvements on the package (included a plastic bag).	NA	09/12/2014
AD	▪ Improvements on the Factory Test system.	NA	22/01/2014
AC	▪ Improvements on the package. ▪ RoHS compliant revision.	NA	14/03/2013
AB	▪ Label printed using a new printer.	NA	30/10/2012
AA	▪ Initial revision.	NA	21/08/2012

2.26 BCS-NX9002 - 16-SLOT BACKPLANE RACK - BJ

REV	Description	Version	Date
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AT	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	NA	30/07/2021
AS	▪ Included the Left/Right Side Rack Ends in the product structure	NA	11/11/2020
AR	▪ Updated the product label for compliance of the UL certification, File Number E496087	NA	04/06/2020
AI-AQ	▪ These revisions were skipped due to integration of internal documentation	-	-
AH	▪ This new product revision refers to the withdrawn of the Burn In step from the production process. In addition, the Left/Right Side Rack Ends has been removed from the product structure.	NA	26/06/2017
AG	▪ Enhancements on factory test system to improve fault detection coverage.	NA	01/08/2016
AF	▪ Changed the product label to comply with the new revision of CE directive.	NA	02/07/2016
AE	▪ Enhancement in document of the subassembly.	NA	23/03/2016
AD	▪ Improvements on the package (included a plastic bag).	NA	09/12/2014
AC	▪ Improvements on the Factory Test system.	NA	22/01/2014
AB	▪ Improvements on the package. ▪ RoHS compliant revision.	NA	14/03/2013
AA	▪ Initial revision.	NA	24/10/2012

2.27 BCS-NX9003 - 24-SLOT BACKPLANE RACK - BJ

REV	Description	Version	Date
AT	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	NA	03/08/2021
AS	▪ Included the Left/Right Side Rack Ends in the product structure.	NA	11/11/2020
AJ-AR	▪ These revisions were skipped due to integration of internal documentation	-	-
AI	▪ Updated the product label for compliance of the UL certification, File Number E496087	NA	17/04/2018
AH	▪ This new product revision refers to the withdrawn of the Burn In step from the production process. In addition, the Left/Right Side Rack Ends has been removed from the product structure.	NA	26/06/2017
AG	▪ Enhancements on factory test system to improve fault detection coverage.	NA	01/08/2016
AF	▪ Changed the product label to comply with the new revision of CE directive.	NA	05/07/2016
AE	▪ Enhancement in document of the subassembly.	NA	23/03/2016
AD	▪ Improvements on the package (included a plastic bag).	NA	09/12/2014
AC	▪ Improvements on the Factory Test system.	NA	22/02/2014
AB	▪ Improvements on the package. ▪ RoHS compliant revision.	NA	26/04/2013
AA	▪ Initial revision.	NA	24/10/2012

2.28 BCS-NX9010 - 8-SLOT BACKPL. RACK (NO HOTSWAP)-BJ

REV	Description	Version	Date
AF	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	NA	02/08/2021
AE	▪ Included the Left/Right Side Rack Ends in the product structure.	NA	11/11/2020
AD	▪ Updated the product label for compliance of the UL certification, File Number E496087	NA	06/02/2018
AC	▪ This new product revision refers to the withdrawn of the steps of Burn	NA	26/06/2017

	In and Coating from the production process.		
AB	▪ Changed the product label to comply with the new revision of CE directive.	NA	17/11/2016
AA	▪ Initial revision.	NA	31/07/2015

2.29 BCS–NX9020 – 2-SLOT MOUNTING PANEL - BJ

REV	Description	Version	Date
AB	▪ Integration of internal documentation.	NA	29/05/2019
AA	▪ Initial revision.	NA	10/07/2018

2.30 BCS-NX9100 - LEFT/RIGHT SIDE RACK ENDS – BJ

REV	Description	Version	Date
AE	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	NA	11/08/2021
AD	▪ This revision was skipped due to integration of internal documentation	-	-
AC	▪ Updated the product label for compliance of the UL certification, File Number E496087 ▪ Simplification of the production process	NA	26/03/2018
AB	▪ Changed the product label to comply with the new revision of CE directive.	NA	05/07/2016
AA	▪ Initial revision.	NA	15/03/2013

2.31 BCS-NX9101 - 32GB MICROSDBC WITH MINISD ADAP – BJ

REV	Description	Version	Date
AC	▪ Changed from 8GB to 32GB	NA	21/11/2018
AB	▪ Updating of the documentation of the packaging procedure, which changed the internal code of the label used. ▪ Updating of the product label for compliance of the new version of the CE standard.	NA	23/01/2018
AA	▪ Initial revision.	NA	21/11/2013

2.32 BCS-NX9102 - BACKPLANE CONNECTOR COVER - BJ

REV	Description	Version	Date
AJ	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	NA	26/07/2021
AI	▪ This revision was skipped due to integration of internal documentation	-	-
AH	▪ Updated the product label for compliance of the UL certification, File Number E496087.	NA	23/01/2019
AE-AG	▪ These revisions were skipped due to integration of internal documentation	-	-
AD	▪ Updating of the documentation of the packaging procedure, which changed the internal code of the label used.	NA	23/01/2018
AC	▪ Changed the product label to comply with the new revision of CE directive.	NA	13/06/2016
AB	▪ Changed color of the packet label to gray.	NA	06/08/2013
AA	▪ Initial revision.	NA	31/10/2012

2.33 BCS-NX9401 - 6-TERMINAL CONNECTOR – BJ

REV	Description	Version	Date
AD	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	NA	11/08/2021
AC	<ul style="list-style-type: none"> ▪ This revision was skipped due to integration of internal documentation. 	-	-
AB	<ul style="list-style-type: none"> ▪ Updating of the product label for compliance of the new version of the CE standard. ▪ Updating of the documentation of the packaging procedure, which changed the internal code of the label used. 	NA	10/01/2018
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	NA	21/11/2013

2.34 BCS-NX9402 - 10-TERM. CONNECTOR WIRE HOLDER – BJ

REV	Description	Version	Date
AB	<ul style="list-style-type: none"> ▪ Updating of the product label for compliance of the new version of the CE standard. ▪ Updating of the documentation of the packaging procedure, which changed the internal code of the label used. 	NA	11/01/2018
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	NA	05/08/2013

2.35 BCS-NX9403 - 20-TERM. CONNECTOR WIRE HOLDER – BJ

REV	Description	Version	Date
AD	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	NA	11/08/2021
AC	<ul style="list-style-type: none"> ▪ This revision was skipped due to integration of internal documentation. 	-	-
AB	<ul style="list-style-type: none"> ▪ Updating of the product label for compliance of the new version of the CE standard. ▪ Updating of the documentation of the packaging procedure, which changed the internal code of the label used. 	NA	10/01/2018
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	NA	05/08/2013

2.36 BCS-NX9404 - 06-TERM.CONNECTOR SCREW FIXING - BJ

REV	Description	Version	Date
AE	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	NA	11/08/2021
AD	<ul style="list-style-type: none"> ▪ This revision was skipped due to integration of internal documentation. 	-	-
AC	<ul style="list-style-type: none"> ▪ Updating of the documentation of the packaging procedure, which changed the internal code of the label used. 	NA	23/01/2018
AB	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	NA	05/07/2016
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	NA	05/06/2014

2.37 BCS-NX9405 – 12-TERMINAL CONNECTOR SCREW FIXING - BJ

REV	Description	Version	Date
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	NA	17/07/2018

2.38 BCS–NX9406 – 18-TERMINAL CONNECTOR SCREW FIXING - BJ

REV	Description	Version	Date
AA	▪ Initial revision.	NA	17/07/2018

2.39 BCS-NX5001 - PROFIBUS DP MASTER MODULE - BJ

REV	Description	Version	Date
AZ	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.3.0.6	30/07/2021
AY	▪ Fixed a problem where the diagnostic that informs the slave presence (abySlv_State[x]) could not indicate correctly the absence of the slave on the network when the project has a large number of slaves.	1.3.0.6	16/11/2020
AX	▪ Included protectors for the product connectors.	1.3.0.5	24/09/2020
AW	▪ Updated the internal code of the flash memory of the product.	1.3.0.5	19/07/2019
AV	▪ PROFIBUS Certification.	1.3.0.5	01/07/2019
AK-AU	▪ These revisions were skipped due to integration of internal documentation.	-	-
AJ	▪ Updated the product label for compliance of the UL certification, File Number E496087. ▪ Change in the product overlay to fix the opening of the display window.	1.3.0.2	11/06/2018
AI	▪ Changed burn-in time performed on manufacturing process.	1.3.0.2	10/05/2017
AH	▪ Changed the product label to comply with the new revision of CE directive.	1.3.0.2	22/09/2016
AG	▪ Homologation of alternative part numbers for components used on this product.	1.3.0.2	20/06/2016
AF	▪ Included the support for Scan for Devices feature.	1.3.0.2	15/01/2016
AE	▪ Included the support for DPV1 commands: Read Request and Write Request. ▪ Included the support to synchronize input data and output-data of DP-Slaves (Global Control Commands: Freeze/Unfreeze/Sync/Unsync). ▪ Included the support to new Project Profile called “Machine Profile”. ▪ Enhancements on configuration process of NX5001 during the startup.	1.2.0.6	22/07/2015
AD	▪ Approval on EtherCAT Conformance Test.	1.1.1.4	13/06/2014
AB	▪ RoHS compliant revision.	1.1.1.1	31/01/2013
AA	▪ Initial revision.	1.1.0.16	24/10/2012

2.40 BCS-NX5000 - ETHERNET MODULE - BJ

REV	Description	Version	Date
AS	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.3.0.2	30/07/2021
AR	▪ Included protectors for the product connectors.	1.3.0.2	24/09/2020
AQ	▪ Updated the product label for compliance of the UL certification, File Number E496087. ▪ Updated the internal code of the flash memory of the product.	1.3.0.2	19/07/2019
AJ - AP	▪ These revisions were skipped due to integration of internal documentation.	-	-
AI	▪ Changed burn-in time performed on manufacturing process.	1.3.0.2	05/10/2017
AH	▪ Changed the product label to comply with the new revision of CE directive.	1.2.0.3	22/09/2016
AG	▪ Homologation of alternative part numbers for components used on this product.	1.2.0.3	20/06/2016
AF	▪ Fixed a compatibility issue of NIC Teaming functionality with the Ethernet module of AL Series model AL-3414.	1.2.0.3	25/01/2016

AE	▪ Added support to project profile “Machine Profile”.	1.2.0.1	23/07/2015
AD	▪ Approval on EtherCAT Conformance Test.	1.0.1.4	12/06/2014
AB	▪ RoHS compliant revision.	1.0.1.1	31/01/2013
AA	▪ Initial revision.	1.0.0.10	24/10/2012

2.41 BCS-NX5110 - PROFIBUS DP HEAD - BJ

REV	Description	Version	Date
AV	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.2.0.0	26/07/2021
-	▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions.	1.1.2.12	26/07/2021
AU	▪ Removed the hidden page “getlogs” from the system web page to improve cyber security.	1.1.2.10	13/01/2021
AT	▪ Included protectors for the product connectors.	1.1.2.8	24/09/2020
AS	▪ Fixed a problem introduced on previous version related to diagnostic indication.	1.1.2.8	01/07/2019
AR	▪ PROFIBUS Certification.	1.1.2.7	08/04/2019
AQ	<ul style="list-style-type: none"> ▪ Included support for Nexto Safety modules. ▪ Updated the product label for compliance of the UL certification, File Number E496087. 	1.1.2.5	12/02/2019
AN-AP	▪ These revisions were skipped due to integration of internal documentation.	-	-
AM	▪ Changed burn-in time performed on manufacturing process.	1.1.1.16	05/10/2017
AL	▪ Homologation of alternative part numbers for components used on this product.	1.1.1.16	11/01/2017
AK	▪ Enhancements in performance of the modules hot-swap circuit.	1.1.1.16	13/12/2016
AJ	<ul style="list-style-type: none"> ▪ New revision of the PCB due to increase the power supply’s performance (hot swap when in redundant mode). ▪ Changed the product label to comply with the new revision of CE directive. 	1.1.1.16	06/09/2016
AI	▪ Homologation of alternative part numbers for components used on this product.	1.1.1.16	25/05/2016
AH	<ul style="list-style-type: none"> ▪ Included support for Nexto Jet solution for modules BCS-NJ1001, BCS-NJ2001, BCS-NJ6000, BCS-NJ6010, BCS-NJ6020 and BCS-NJ6100. ▪ Fixed a compatibility issue with PROFIBUS Master from AL Series AL-3406 	1.1.1.16	15/01/2016
AG	<ul style="list-style-type: none"> ▪ Included support for Scan Devices feature. ▪ Included support for NX9010 rack. 	1.1.0.6	15/09/2015
AF	▪ Enhancements on the safe state of analog output channels.	1.0.0.25	06/05/2015
AE	▪ Enhancements on configuration process of I/O modules during the startup.	1.0.0.15	29/01/2015
AD	▪ Included support for NX9999 e NX9000.	1.0.0.12	15/12/2014
AA	▪ Initial revision.	1.0.0.0	10/10/2014

2.42 BCS-NX5210 – REDUNDANT PROFIBUS DP HEAD - BJ

REV	Description	Version	Date
AR	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. ▪ Updated UL Mark adding cUL (Canada). Due to the process of 	1.2.0.0	26/07/2021

	introduction on production line, this update may be present in some units before this revision.		
-	<ul style="list-style-type: none"> Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. 	1.1.2.12	26/07/2021
AQ	<ul style="list-style-type: none"> Removed the hidden page “getlogs” from the system web page to improve cyber security. 	1.1.2.10	13/01/2021
AP	<ul style="list-style-type: none"> Included protectors for the product connectors. 	1.1.2.8	24/09/2020
AO	<ul style="list-style-type: none"> Fixed a problem introduced on previous version related to diagnostic indication. 	1.1.2.8	01/07/2019
AN	<ul style="list-style-type: none"> PROFIBUS Certification. 	1.1.2.7	08/04/2019
AM	<ul style="list-style-type: none"> Included support for Nexto Safety modules. Updated the product label for compliance of the UL certification, File Number E496087. Change in the product overlay to fix the opening of the display window. 	1.1.2.5	12/01/2019
AK-AL	<ul style="list-style-type: none"> These revisions were skipped due to integration of internal documentation. 	-	-
AJ	<ul style="list-style-type: none"> Changed burn-in time performed on manufacturing process. 	1.1.1.16	05/10/2017
AI	<ul style="list-style-type: none"> Homologation of alternative part numbers for components used on this product. 	1.1.1.16	11/01/2017
AH	<ul style="list-style-type: none"> Enhancements in performance of the modules hot-swap circuit. 	1.1.1.16	13/12/2016
AG	<ul style="list-style-type: none"> Changed the product label to comply with the new revision of CE directive. 	1.1.1.16	23/09/2016
AF	<ul style="list-style-type: none"> Homologation of alternative part numbers for components used on this product. 	1.1.1.16	25/05/2016
AE	<ul style="list-style-type: none"> Included support for Nexto Jet solution for modules BCS-NJ1001, BCS-NJ2001, BCS-NJ6000, BCS-NJ6010, BCS-NJ6020 and BCS-NJ6100. Fixed a compatibility issue with PROFIBUS Master from AL Series AL-3406 Enhancements on the redundancy feature. 	1.1.1.16	15/01/2016
AD	<ul style="list-style-type: none"> Included support for Scan Devices feature. Included support for NX9010 rack. 	1.1.0.6	15/09/2015
AC	<ul style="list-style-type: none"> Enhancements on the safe state of analog output channels. 	1.0.0.25	06/05/2015
AB	<ul style="list-style-type: none"> Enhancements on configuration process of I/O modules during the startup. Enhancements to the network redundancy algorithm. 	1.0.0.15	29/01/2015
AA	<ul style="list-style-type: none"> Initial revision. 	1.0.0.12	15/12/2014

2.43 BCS-NX5100 – MODBUS TCP HEAD – BJ

REV	Descrição	Version	Date
AK	<ul style="list-style-type: none"> Support for BCS Tools 3.40. Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. Fixed potential exception when an application is removed (reset origin). 	1.12.5.3	15/12/2022
AJ	<ul style="list-style-type: none"> Minor improvement in the production process. Change of the product label, which now includes a QR Code with the path to the Technical Documentation of the product on the website. This change makes it unnecessary to follow the Installation Guide with the product. UKCA Certification marking included on product. 	1.11.2.0	28/11/2022
AI	<ul style="list-style-type: none"> New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. Added protection against CSRF (cross-site request forgery) for management pages in web interface. Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.11.2.0	26/07/2021

-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Improvements in “one touch diag” feature. 	1.9.29.0	26/07/2021
AH	<ul style="list-style-type: none"> ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. 	1.9.25.0	13/01/2021
AG	<ul style="list-style-type: none"> ▪ Included protectors for the product connectors. 	1.8.11.0	24/09/2020
AF	<ul style="list-style-type: none"> ▪ Fixed maximum number of ARTI/OPC DA connections from 4 to 8. 	1.8.11.0	09/01/2020
AE	<ul style="list-style-type: none"> ▪ Changes in the source code shared with other controllers, which doesn't affect the behaviour of this product. 	1.7.17.0	11/03/2019
AD	<ul style="list-style-type: none"> ▪ This revision was skipped due to integration of internal documentation 	-	-
AC	<ul style="list-style-type: none"> ▪ Official revision after conclusion of the development. 	1.0.0.5	29/06/2017
AA-AB	<ul style="list-style-type: none"> ▪ Initial revision. 	1.0.0.1	09/05/2017

2.44 BCS-NX5101 – MODBUS TCP HEAD, 14 DI, 10 DOT (NO HOTSWAP) - BJ

REV	Descrição	Version	Date
AG	<ul style="list-style-type: none"> ▪ Support for BCS Tools 3.40. ▪ Fixed possible issue where the Web Page turns unaccessible after using it for a very long time. ▪ Fixed potential exception when an application is removed (reset origin). 	1.12.5.3	15/12/2022
AF	<ul style="list-style-type: none"> ▪ New format of firmware update file. This update requires the controller running on firmware version 1.9.29.0 or greater. ▪ Added protection against CSRF (cross-site request forgery) for management pages in web interface. 	1.11.2.0	26/07/2021
-	<ul style="list-style-type: none"> ▪ Changed firmware update mechanism to include support for the new file format that will be introduced on upcoming versions. ▪ Improvements in “one touch diag” feature. 	1.9.29.0	26/07/2021
AE	<ul style="list-style-type: none"> ▪ Removed the hidden page “getlogs” from the system web page to improve cyber security. ▪ Fixed a problem related to the system webpage cache. This eliminates the need of clearing the cache on browser side, which was previously required under some circumstances to show the page correctly. 	1.9.25.0	13/01/2021
AD	<ul style="list-style-type: none"> ▪ Included support for visualization of the integrated I/O by LCD (menu Hardware). ▪ Fixed “wrong slot” problem related to the usage of the NX9020 rack. ▪ Fixed the problem where the Web page don't update its elements properly. 	1.9.8.0	09/11/2020
AC	<ul style="list-style-type: none"> ▪ Included protectors for the product connectors. 	1.7.9.0	24/09/2020
AB	<ul style="list-style-type: none"> ▪ Changed bootloader from version 1.0.0.13 to 1.0.0.14 due to code sharing with CPU, but with no functional modification on this product since it dont have RS-485 interface. 	1.7.9.0	06/11/2019
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.7.9.0	04/02/2019

2.45 BCS-NJ1001 – 24 VDC 16 DI MODULE NEXTO JET - BJ

REV	Description	Version	Date
AL	<ul style="list-style-type: none"> ▪ UKCA Certification marking included on product. 	1.2.0.20	14/10/2022
AK	<ul style="list-style-type: none"> ▪ Minor improvement in the external mechanics of the product, without significant impact. 	1.2.0.20	16/11/21
AG-AJ	<ul style="list-style-type: none"> ▪ These Reviews were ignored due to the integration of internal documentation 	-	-
AF	<ul style="list-style-type: none"> ▪ Inclusion of the Installation Guide in the product BOM. ▪ Updated UL Mark adding cUL (Canada). Due to the process of 	1.2.0.20	17/05/2018

	introduction on production line, this update may be present in some units before this revision.E496087		
AE	<ul style="list-style-type: none"> ▪ Changes in the test system for including new product. ▪ Changes the time of Burn In. 	1.2.0.20	15/08/2017
AD	<ul style="list-style-type: none"> ▪ Enhancement in factory process. 	1.2.0.20	31/08/2016
AC	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.2.0.20	06/06/2016
AB	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.2.0.20	19/05/2016
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.2.0.20	16/10/2015

2.46 BCS–NJ1005 – 24 VDC 8 DOT/8 DI MIXED MODULE NEXTO JET - BJ

REV	Description	Version	Date
AC	<ul style="list-style-type: none"> ▪ Minor improvement in the external mechanics of the product, without significant impact. 	1.2.0.7	22/03/2022
AB	<ul style="list-style-type: none"> ▪ Integration of internal documentation. 	1.2.0.7	15/05/2020
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.2.0.7	15/08/2017

2.47 BCS–NJ2001 – 24 VDC 16 DO TRANSISTOR MODULE NEXTO JET -BJ

REV	Description	Version	Date
AK	<ul style="list-style-type: none"> ▪ Minor improvement in the external mechanics of the product, without significant impact. 	1.2.0.8	16/12/2021
AH-AJ	<ul style="list-style-type: none"> ▪ These revisions were skipped due to integration of internal documentation. 	-	-
AG	<ul style="list-style-type: none"> ▪ Inclusion of the Installation Guide in the product BOM. ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.E496087 	1.2.0.8	17/05/2018
AF	<ul style="list-style-type: none"> ▪ Changes in the test system for including new product. ▪ Changes the time of Burn In. 	1.2.0.8	15/08/2017
AE	<ul style="list-style-type: none"> ▪ This new review of the product is related to improvements in the production process. Due to the inclusion of universal pallets in the assembly. 	1.2.0.8	17/10/2016
AD	<ul style="list-style-type: none"> ▪ Enhancement in factory process. 	1.2.0.8	31/08/2016
AC	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.2.0.8	06/06/2016
AB	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.2.0.8	19/05/2016
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.2.0.8	16/10/2015

2.48 BCS–NJ6000 – 8 AI VOLTAGE/CURRENT MODULE NEXTO JET – BJ

REV	Description	Version	Date
AM	<ul style="list-style-type: none"> ▪ Minor improvement in the external mechanics of the product, without significant impact. 	1.4.0.0	16/12/2021
AL	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.4.0.0	29/07/2021
AK	<ul style="list-style-type: none"> ▪ Enhancement in factory process. 	1.4.0.0	06/05/2020
AJ	<ul style="list-style-type: none"> ▪ Included support for the new option “Disabled” for the parameter “Open Loop Value”. 	1.4.0.0	03/09/2019
AI	<ul style="list-style-type: none"> ▪ Small text correction on Installation Guide 	1.3.0.7	06/12/2018
AH	<ul style="list-style-type: none"> ▪ Enhancements of diagnostics detection of analog inputs. 	1.3.0.7	15/02/2018

	<ul style="list-style-type: none"> ▪ Enhancements in detection of loss of bus master. ▪ Inclusion of the Installation Guide in the product BOM. ▪ Updated the product label for compliance of the UL certification, File Number E496087. 		
AG	▪ This new product revision is related to modifications for including other module in test system.	1.3.0.3	15/09/2017
AF	▪ Enhancements on immunity against electromagnetic interference.	1.3.0.3	10/08/2016
AE	▪ Changed the product label to comply with the new revision of CE directive.	1.3.0.1	31/05/2016
AD	▪ Enhancement in factory process.	1.3.0.1	13/05/2016
AC	▪ Homologation of alternative part numbers for components used on this product.	1.3.0.1	11/05/2016
AB	▪ Hardware enhancements.	1.3.0.1	16/11/2015
AA	▪ Initial revision.	1.3.0.1	24/09/2015

2.49 BCS-NJ6001 – 6 AI V/I MODULE NEXTO JET 12 BITS – BJ

REV	Description	Version	Date
AG	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.1.0.1	22/03/2022
AF	▪ Enhancement in factory process.	1.1.0.1	15/05/2020
AE	▪ Included support for 4-20 scale and for the new parameter “Open Circuit Value”.	1.1.0.1	03/09/2019
AB-AD	▪ These revisions were skipped due to integration of internal documentation.	-	-
AA	▪ Initial revision.	1.0.0.14	08/05/2018

2.50 BCS-NJ6005 – 6 AI/4 AO V/I MIXED MODULE NEXTO JET – BJ

REV	Description	Version	Date
AM	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.1.0.1	22/03/2022
AL	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.1.0.1	30/07/2021
AK	▪ Enhancement in factory process.	1.1.0.1	15/05/2020
AJ	▪ Included support for 4-20 scale and for the new parameter “Open Circuit Value”.	1.1.0.1	03/09/2019
AB-AI	▪ These revisions were skipped due to integration of internal documentation.	-	-
AA	▪ Initial revision.	1.0.0.14	08/05/2018

2.51 BCS-NJ6010 – 8 AI THERMOCOUPLE MODULE NEXTO JET – BJ

REV	Description	Version	Date
AM	▪ Enhancements on immunity against electromagnetic interference.	1.0.0.16	26/10/2022
AL	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.0.0.14	22/03/2022
AK	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.0.0.14	30/07/2021
AJ	▪ Enhancement in factory process.	1.0.0.14	15/05/2020
AI	▪ Change in the firmware source code to add a new module (BCS-NJ6011) on compilation scope.	1.0.0.14	17/05/2018

	<ul style="list-style-type: none"> ▪ Inclusion of the Installation Guide in the product BOM. ▪ Updated the product label for compliance of the UL certification, File Number E496087 		
AH	<ul style="list-style-type: none"> ▪ This new product revision is related to modifications for including other module in test system. 	1.0.0.13	15/09/2017
AG	<ul style="list-style-type: none"> ▪ Additional enhancements on immunity against electromagnetic interference. 	1.0.0.11	10/08/2016
AF	<ul style="list-style-type: none"> ▪ Enhancements on immunity against electromagnetic interference. 	1.0.0.9	08/07/2016
AE	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.0.0.6	20/05/2016
AD	<ul style="list-style-type: none"> ▪ Enhancement in factory process. 	1.0.0.6	13/05/2016
AC	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.0.0.6	11/05/2016
AB	<ul style="list-style-type: none"> ▪ Hardware enhancements. 	1.0.0.6	30/11/2015
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.0.0.6	25/09/2015

2.52 BCS–NJ6011 – MIXED ANALOG MODULE NEXTO JET – BJ

REV	Description	Version	Date
AF	<ul style="list-style-type: none"> ▪ Enhancements on immunity against electromagnetic interference. 	1.0.0.16	26/10/2022
AE	<ul style="list-style-type: none"> ▪ Minor improvement in the external mechanics of the product, without significant impact. 	1.0.0.14	22/03/2022
AD	<ul style="list-style-type: none"> ▪ Enhancement in factory process. 	1.0.0.14	15/05/2020
AB-AC	<ul style="list-style-type: none"> ▪ These revisions were skipped due to integration of internal documentation. 	-	-
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.0.0.14	08/05/2018

2.53 BCS–NJ6020 – 8 AI RTD MODULE NEXTO JET – BJ

REV	Description	Version	Date
AL	<ul style="list-style-type: none"> ▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision. 	1.1.0.8	29/07/2021
AK	<ul style="list-style-type: none"> ▪ Support for the new hardware revision which introduces additional improvements to immunity against electromagnetic interferences. 	1.1.0.8	29/09/2020
AJ	<ul style="list-style-type: none"> ▪ Integration of internal documentation. 	1.1.0.3	24/06/2020
AI	<ul style="list-style-type: none"> ▪ Small text correction on Installation Guide ▪ Updated the product label for compliance of the UL certification, File Number E496087. 	1.1.0.3	06/12/2018
AH	<ul style="list-style-type: none"> ▪ This revision was skipped due to integration of internal documentation. 	-	-
AG	<ul style="list-style-type: none"> ▪ Inclusion of the Installation Guide in the product BOM. 	1.1.0.3	17/05/2018
AF	<ul style="list-style-type: none"> ▪ Changes in the test system for including new product. ▪ Changes the time of Burn In. 	1.1.0.3	15/09/2017
AE	<ul style="list-style-type: none"> ▪ Improved immunity against electromagnetic interferences. 	1.1.0.3	13/01/2017
AD	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	1.1.0.1	11/07/2016
AC	<ul style="list-style-type: none"> ▪ Homologation of alternative part numbers for components used on this product. 	1.1.0.1	18/05/2016
AB	<ul style="list-style-type: none"> ▪ Hardware enhancements. 	1.1.0.1	29/01/2016
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.1.0.1	31/07/2015

2.54 BCS–NJ6100 – 4 AO VOLTAGE/CURRENT MODULE NEXTO JET – BJ

REV	Description	Version	Date
AM	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.2.0.9	22/03/2022
AL	▪ Updated UL Mark adding cUL (Canada). Due to the process of introduction on production line, this update may be present in some units before this revision.	1.2.0.9	26/07/2021
AK	▪ Enhancement in factory process.	1.2.0.9	15/05/2020
AJ	▪ Small text correction on Installation Guide	1.2.0.9	10/12/2018
AI	▪ Inclusion of the Installation Guide in the product BOM. ▪ Updated the product label for compliance of the UL certification, File Number E496087.	1.2.0.9	17/05/2018
AH	▪ Changes in the test system for including new product. ▪ Changes the time of Burn In.	1.2.0.9	15/09/2017
AG	▪ This new product revision is related the inclusion in news part numbers for internal codes with same electrical characteristics and with RoHS compliance.	1.2.0.9	05/10/2016
AF	▪ Changed the product label to comply with the new revision of CE directive.	1.2.0.9	22/07/2016
AE	▪ Enhancement in factory process.	1.2.0.9	13/05/2016
AD	▪ Homologation of alternative part numbers for components used on this product.	1.2.0.9	11/05/2016
AC	▪ Internal firmware modifications, with no impact on product functionalities.	1.2.0.9	27/01/2016
AB	▪ Hardware enhancements.	1.2.0.7	20/11/2015
AA	▪ Initial revision.	1.2.0.7	13/07/2015

2.55 BCS–NJ6101 – 4 AO V/I MODULE NEXTO JET 12 BITS – BJ

REV	Description	Version	Date
AH	▪ Minor improvement in the external mechanics of the product, without significant impact.	1.1.0.1	22/03/2022
AG	▪ Enhancement in factory process.	1.1.0.1	15/05/2020
AF	▪ Included support for 4-20 scale.	1.1.0.1	03/09/2019
AB-AE	▪ These revisions were skipped due to integration of internal documentation.	-	-
AA	▪ Initial revision.	1.0.0.14	08/05//2018

2.56 GSD Files - PROFIBUS DP HEAD NX OEM

REV	Description	Scope	Version	Date
AB	▪ Included new scales for NX6000 and NX6020 modules. ▪ Included the file ALNJ0EDD.GSD, with support for the I/O Modules of Nexto Jet solution.	GSD	1.0.1.4	08/12/2015
AA	▪ Initial revision.	GSD	1.0.0.0	10/09/2015

3. BCS Tools Series**3.1 BCS-MT8500/ADV – BCS-MT8500/LITE – BCS-MT8500/PRO – BCS-MT8500/BASIC – BCS-MT8500/BIG**

REV	Description	Version	Date
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<p>AY</p>	<ul style="list-style-type: none"> ▪ Added Distributed IO Configurator. ▪ Added BSD/BFI Configurator. ▪ Added Documents feature. ▪ Added Restore Points feature. ▪ Added export tags for iX Developer feature. ▪ Added ModBus TCP Master and Modbus RTU compatibility with Nexto Xpress series and NX3008. ▪ Added support for XP350 PLC with SoftMotion. ▪ Added support to run Python scripts. ▪ Included a new command to remove the current license (returning to Lite). ▪ Updated GN-948x devices. ▪ Fixed MODBUS RTU Master request diagnostic not working with more than 128 requests. ▪ Fixed I/O mapping update for EtherCAT devices. ▪ Fixed ‘Scan for devices’ command doesn’t work with X2 and PIO controllers. ▪ Fixed general screen size and translation problems. ▪ Fixed the “Invalid result package” error message when trying to login to the CPU with incompatible firmware. ▪ Added, by default, VAR and END_VAR in PLC_PRG. 	<p>3.50</p>	<p>19/01/2023</p>
<p>AX</p>	<ul style="list-style-type: none"> ▪ Added support to new CPU NX3008. ▪ Added verification to check for the presence of non-related variables inside redundant areas. ▪ Added Reset Origin Device Command. ▪ Added support to EtherCAT Master for all Nexto Xpress. ▪ Added LibIntegratedIoExt which allows to use additional analog inputs on Nexto Xpress. ▪ Added a compilation error message when user uses REFERENCE TO in persistent vars. ▪ Fixed Online Change performance, which was degraded since version 3.31. ▪ Fixed login performance when several CFC POU windows were opened. ▪ Fixed an issue where mappings of MODBUS Symbol Client and Master could stop to work (frozen values) after an online change. ▪ Fixed an issue where graphical elements could show a red “X” ending on a crash due to GDI handle leak. ▪ Fixed an issue where deleting unused symbols on Symbol Configuration could lead to exception on OPC UA Server. ▪ Fixed an issue where changing the execution order of CFC POU with online change could lead to a PLC exception. ▪ Fixed BCS Tools crash error after closing ModBus Server window when opening a project without updating it. ▪ Fixed an issue where changing focus in and out on NET fields results on project change. ▪ Fixed BCS Tools crash error when changing Watchdog of MainTask on Xpress controller. ▪ Fixed an issue where Project Compare could show differences for identical CFC POU. ▪ Fixed declaring the libraries dependencies as placeholders. ▪ Increased the maximum size of Program Memory from 2MB to 3MB on XP300/XP315/XP325. ▪ Increased the maximum size of Program Memory from 6MB to 8MB on XP340 and NX3005. ▪ Removed limit of 500 assemblies on EtherNetIP Scanner. ▪ Updated version of EtherCAT Master driver. ▪ Updated LibNextoPID library containing new standard and advanced control functions. ▪ General improvements on Portuguese and English texts. ▪ Changed the minimum required firmware for PIOs Targets. 	<p>3.40</p>	<p>08/12/2022</p>

AW	<ul style="list-style-type: none"> ▪ Added minimum required firmware check routine in the X2/BoX2/PIO targets. ▪ Added new message box to notify user if a new version is available for download. ▪ Added rules to allow adding only PLC compatible devices. ▪ Added new command Create POU's from Template. ▪ Added new PIO targets: <ul style="list-style-type: none"> ▪ PIO GL-9973. ▪ PIO GL-9974. ▪ PIO GL-9975. ▪ Added new wizard features: <ul style="list-style-type: none"> ▪ Combo box to categorize devices during project creation. ▪ Fieldbus wizard configuration (protocol + slave + amount of slaves). ▪ Added start and stop system events in project template. ▪ MODBUS Symbol: <ul style="list-style-type: none"> ▪ Fixed MODBUS Client/Server does not support ambiguous variables. ▪ Fixed bug that IntegratedIO Tags don't work with Modbus. ▪ Fixed exception in the PLC when changing the size of the array mapped in MODBUS. ▪ Project Update: <ul style="list-style-type: none"> ▪ New User Interface. ▪ Correct version displaying. ▪ Removed Project Environment window. ▪ Added LAN port name update for Ethernet and EtherCAT devices when upgrading projects created in previous versions to HMI X2. ▪ Fixed behavior that caused the project to break when updating without saving first. ▪ Fixed invalid version format error when updating X2 devices with Ethercat Slaves. ▪ Reduced CPU consumption when logged in. ▪ Fixed window behavior not closing during code generation. ▪ Fixed wizard behavior not correctly displaying ethernet interface choices. ▪ Fixed Modbus TCP Slave configuration tabs that were not displayed. ▪ Fixed exception when loss connection to the PLC. ▪ Fixed compilation error when using J1939 ECU device in projects with X2 modules. ▪ Fixed Gateway conflict message with other Gateways already installed. ▪ Fixed incorrect channel and description texts in Integrated I/O page. ▪ Fixed keyboard shortcuts S and N for Write and Force dialogs in Portuguese language. ▪ Fixed improper add of GVLs IoQualities and Modules_Diagnostic when opening project created on previous versions. ▪ Fixed issue that allows Maintask interval greater than 100 ms in projects with Machine Profile. ▪ Fixed missing .DLL that causes problemas in Trace object of previous versions. ▪ Removed the 'Enable retain and persistent variables in function blocks' checkbox from CPU parameters page. ▪ Removed 'Scan for Devices' command for PROFIBUS devices. ▪ Removed software license update window during startup. ▪ Removed access to startup application settings. 	3.34	16/02/2022
AV	<ul style="list-style-type: none"> ▪ Added new target PIO GL-9972. ▪ Added new Ethernet/IP adapter GN-9089. ▪ Added new PROFINET Device GL-9087. ▪ Added new PROFINET Device GN-9287. ▪ Added CSV import and export tab of I/O mappings. ▪ Fixed issue in MODBUS Symbol RTU Master that makes mappings stop to work after an online change. 	3.33	24/09/2021

	<ul style="list-style-type: none"> ▪ Fixed issue in MODBUS Symbol RTU Slave that makes mappings stop to work after an online change. ▪ Fixed crash after closing the Clock Settings dialog. ▪ Fixed application startup exception when declaring arrays of function blocks in retain or persistent areas. ▪ Fixed system out of memory error caused by changes in Redundancy configuration. ▪ Fixed J1939 device issue regarding stack version. ▪ Fixed issue that made impossible to delete the copies of UserPrg POU. ▪ Fixed the startup with invalid international settings. ▪ Fixed issue in PID Control editor that causes malfunction after performing a ‘clean all’ command. ▪ Created “OPC UA” device category ▪ Unchecked, by default, the ‘Recipe management in the PLC’ option in the ‘Recipe Manager’ object. ▪ Renamed bit bReserved05 to bHardwareFailure for Ponto series module PO1213. ▪ Updated BFI inverters devices. ▪ Updated Ethernet/IP GN-9289 device. ▪ Updated G-Series Modules and PIO targets. ▪ Improved the project template for PIO Beijer devices. ▪ Improved the project template for X2/BoX2 Beijer devices. ▪ Improvements in NX5000 redundancy performance. ▪ Improvements in Portuguese translation. 		
AU	<ul style="list-style-type: none"> ▪ Fixed improper online change request due to IoDrvNexttoRedundancy library. ▪ Fixed improper online change request due to LibDatabaseManager library. ▪ Fixed the overlap of I/O addresses for PROFINET devices. ▪ Improvements in PROFIBUS diagnostics for Ponto Series slaves. 	3.32	11/06/2021
AT	<ul style="list-style-type: none"> ▪ Added new target GL-9971 (PIO). ▪ Added OPC UA for GN-937x (PIO). ▪ Added ‘Declarations > Add all instance paths’ command for PersistentVars. ▪ Added confirmation dialog for force variables command (F7). ▪ Added confirmation dialog for write variables command (Ctrl + F7). ▪ Added ‘Connected Clients’ counter in the status bar (requires compatible firmware). ▪ Added support to System Events. ▪ Added support to reStructuredText documentation for libraries. ▪ Added Application tab on target device. ▪ Added ‘Scan for Devices’ feature for all Beijer devices. ▪ Added ‘Disable Device’ command present in the Devices tab. ▪ Added the default configuration ‘Auto-reconnect’ on the Modbus TCP Master device for GN-9372 and GL-9971. ▪ Fixed compatibility with projects created between versions 3.15 and 3.23. ▪ Fixed issue in MODBUS Symbol Server that makes mappings stop to work after an online change. ▪ Fixed issue in MODBUS Symbol Client that makes mappings stop to work after an online change. ▪ Fixed issue that makes ‘subsequent’ attribute don’t be applied on online change. ▪ Fixed issue that makes new objects marked in Redundancy Configuration don’t be applied on online change. ▪ Fixed Ethernet/IP Scanner to proper work with I/O bit mapping from existing symbolic variables. ▪ Fixed ‘Scan for Devices’ command of EtherCAT Master on online mode. ▪ Fixed compile error for GVLs with attribute ‘qualified_only’ in Redundancy Configuration. 	3.31	16/04/2021

	<ul style="list-style-type: none"> ▪ Fixed improper download request for Nexto projects with EtherCAT Master. ▪ Fixed improper online change request for projects with CFC's POUs. ▪ Fixed behavior of pulse variables (Special_Variables GVL) for projects with "Basic" profile. ▪ Fixed issue that put project with Symbol Configuration in dirty state after opening. ▪ Fixed the installation conflict with Codesys 3.5 SP15 Patch 5. ▪ Enabled 'Download Application Info' option for all targets. ▪ Removed command "Tools > Import and Export Options". ▪ Improvements in Portuguese translation. ▪ Improvements in online help (Nexto Xpress resolution of PT100 and PT1000). ▪ Improvements in CSV import and export commands. ▪ Improvements in installer. ▪ Improvements in PID Control editor. ▪ Fixed auto-declare of variables for X2/BoX2 targets. ▪ Changed the default values of the MODBUS TCP Master settings. ▪ Changed the default values of the Ethernet Adapter settings. ▪ Changed the default values of EtherCAT Master settings. ▪ Updated the GN-9386 and GL-9086 EtherCAT slaves. ▪ Improvements in PIO available application objects. ▪ Improved the performance to save project changing the project compress level from maximum compress to minimum compress. ▪ Fixed the issue of the Gateway not starting. ▪ Updated CANopen inverter devices. ▪ Changed "Set all outputs to default" as standard on the "PLC Settings" tab for GL-9971 and GN-9372. ▪ Changed the default configuration 'Enabled 1 (use bus cycle task if not used in any task)' on rack devices for GN-9372 and GL-9971. ▪ Fixed the Special Variables program calls location in redundant applications. 		
AS	<ul style="list-style-type: none"> ▪ Added new targets X2, BoX2 and PIO; ▪ Added command "License Manager" in "Tools" menu; ▪ Added command "License Repository" in "Tools" menu; ▪ Added command "Bookmarks" in "View" menu; ▪ Added commands "Find in Project" and "Replace in Project" to standard toolbar; ▪ Added new default options for "SmartCoding" and "FBD, LD and IL editor"; ▪ Increased the RAM usage limit of the programming system for x64 architecture; ▪ Increased maximum number of tasks of Nexto Xpress PLCs from 5 to 16; ▪ Integrated I/O points are considered by Wizard when creating a project with I/O modules; ▪ Enabled on Menu "Declarations" the submenu "Reorder List and Clear Gaps". ▪ Included new default options for "SmartCoding" and "FBD, LD and IL editor". ▪ Improved mappings limit routines; ▪ Improved project treeview display; ▪ Improved robustness of Login command; ▪ Improvements in "Update Software License" Window; ▪ Improvements in device treeview to show access modifiers; ▪ Improvements in message texts about memory range field exceeding PLC memory limit; ▪ Improvements in portuguese message texts; ▪ Improvements in project update (modify device) for products with Integrated I/O; ▪ Improvements in simulation mode; 	3.30	07/10/2020

	<ul style="list-style-type: none"> ▪ Improvements in Wizard usability; ▪ Improvements of color schemes in Text Editor options; ▪ Improvements of the intelligent input assistance: <ul style="list-style-type: none"> ▪ Categories: Open with ‘Ctrl + Space’, switch pages with arrows left/right; ▪ Filters: When typing elements from DUTs or FBs, naming filter now is independent of character position and characteres are highlighted; ▪ Improvements on CFC ToolBox and Editor: <ul style="list-style-type: none"> ▪ Accelerated multiple insertion of an element from the ToolBox in the CFC editor, by selecting the element on ToolBox view, pressing Ctrl and left clicking in the editor to insert at each new click; ▪ Auto Dataflow Mode as new default setting; ▪ Display Execution Order shows the execution order of the blocks as overlay; ▪ Execution order is setting is adaptable in POU properties; ▪ Explicit start point for feedback loops; ▪ Drag and drop of variables; ▪ Improvements on ST Editor: <ul style="list-style-type: none"> ▪ When the cursor is on a symbol name, all occurrence locations of the symbol within the editor are highlighted; ▪ Incremental search for strings with ‘Ctrl + Shift + i’; ▪ Navigation through searched string with ‘Alt + Page Up/Page Down’; ▪ Comment and uncomment multiple lines at once via context menu or ‘Ctrl + o’ and ‘Ctrl + i’ shortcuts; ▪ Editing columns via keyboard operation ‘Shift + Alt + Arrow Keys’; ▪ Auto declare via “Smart Tags” with suggestion popup. Keyboard shortcut is ‘Ctrl + .’; ▪ Improvements on Watch: <ul style="list-style-type: none"> ▪ Type cast for pointer inside Watch; ▪ Monitoring of instance via interface, also in case of dynamically created objects; ▪ Monitoring of the instance when reference is made via pointer; ▪ Removed IL language from Wizard; ▪ Removed Spanish option from installer; ▪ Removed the confirmation dialog before execute the commands Delete and Cut; ▪ Removed unsupported objects from X2 PLCs; ▪ Signing of compiled libraries supported, and new icons. See more info in ‘Library Manager > Icon legend’; ▪ Updates the fieldbus devices; ▪ Fixed CANOpen CiA 405 Library Help navigation; ▪ Fixed error on printing the project through the command “Document...” in “Project” menu; ▪ Fixed Ethernet/IP Scanner’s configuration issues regarding import of third-party EDS files; ▪ Fixed improper online change request after close and reopen a project; ▪ Fixed improper online change request due to Symbol Configuration automatic cleanup routine; ▪ Fixed improper online change request on projects with not installed third-party devices; ▪ Fixed improper variable uncheck after project update due to Symbol Configuration automatic cleanup routine; ▪ Fixed installer issue that applied wrong file permissions during reinstalling; ▪ Fixed issue that hides product library when the project is opened/created; ▪ Fixed Wizard calculation of number of Thermocouple modules. 		
-	<ul style="list-style-type: none"> ▪ Added support to IEC 60870-5-104 Server protocol on XP340. ▪ Added support to Client Certificate on MQTT Protocol. 	3.23	01/06/2020

	<ul style="list-style-type: none"> ▪ Added diagnostics to new USB devices (Wifi and 3G/4G modem) on Nexto Xpress. ▪ Increased limit of OPC UA variables from 5000 to 20000. ▪ Increased limit of Export Online Variables from 30000 to 60000. ▪ Performance optimization of Export Online Variables routines. ▪ Fixed bit forcing issues for direct mapped variables. ▪ Fixed compilation error in Simulation Mode when using some CPU and rack combinations. ▪ Fixed compilation error caused by LibDatalogger dependencies. 		
-	<ul style="list-style-type: none"> ▪ New limit of 16000 Ethernet/IP Device assemblies for the whole project. ▪ Added support to Update Device context menu for EtherCAT Slaves. ▪ Increased limit of assemblies per Ethernet/IP Device to 500. ▪ Fixed an issue where a password-protected project would failed to open. ▪ Fixed an issue where PIDControl object would not always save the generated code correctly. ▪ Fixed some issues with Export Online Variables. ▪ Improved Project Update for update of children devices. ▪ Improved support for multiple versions to be installed in parallel. ▪ Improvements in texts for Portuguese and English Cultures. ▪ Included MODBUS Symbol Client device version 1.0.0.25 for support of old versions. 	3.22	30/03/2020
-	<ul style="list-style-type: none"> ▪ Added a new type of license: BIG Program Professional. ▪ Increased limit of assemblies per Ethernet/IP Device from 50 to 60. ▪ Fixed a crash in Ethernet/IP interface when configuring “AXL E EIP DI 16 M12 6P” device. ▪ Improvements in Project Wizard. ▪ Improvements in texts for Portuguese and English Cultures. 	3.21	12/02/2020
-	<ul style="list-style-type: none"> ▪ Added a new command called “Start PACTware” in “Tools” menu to call an Asset Management Tool. ▪ Fixed exception in Redundant NX3030 after project synchronization process; ▪ Fixed issue causing “Online Change” when opening project with WebVisualization object. 	3.20	27/12/2019
-	<ul style="list-style-type: none"> ▪ Added option Refactoring in the menu Tools/Options; ▪ Added new Module Options on EtherNet/IP Module of EtherNet/IP Adapter: SInt Input Module x 124, SInt Output Module x 125, Int Input Module x 124, Int Output Module x 125, DInt Input Module x 124, DInt Output Module x 125, Real Input Module x 124 and Real Output Module x 125; ▪ Added support for MQTT_CLIENT Function Block (provided by LibMQTT), which allows the controller to publish/subscribe MQTT messages; ▪ Added support for MSSQL_CLIENT Function Block (provided by LibSQLClient), which allows the controller to connect to a Microsoft SQL Server database; ▪ Added support to CAN termination parameter on the CPU device for XP300, XP315, XP325 and XP340; ▪ Added network configuration rules in XP300, XP315, XP325 and XP340 to prevent downloads with invalid configuration. ▪ Improvements in Project Update; ▪ Improvements in Project Wizard; ▪ Improvements in the project file creation; ▪ Improvements in NX3003 Integrated/IO Mapping; ▪ Improvements in texts for Portuguese Culture; ▪ Disabled Expansion Ethernet Interfaces and Redundancy network for Basic License; ▪ Fixed a problem was removing the Redundancy Configuration object while updating the project; ▪ Fixed a problem generating code without errors with NX4000 modules disconnected; 	3.19	20/12/2019

	<ul style="list-style-type: none"> ▪ Fixed problem creating unnecessary NX4000 modules; ▪ Fixed a crash in BCS Tools while updating some kind of redundant projects; ▪ Fixed a problem prevented project creation when BCS Tools International Settings was marked “Same as Microsoft Windows”; ▪ Fixed issue that caused “Online Change” when opening project in specific situation; ▪ Fixed a crash in Ethernet/IP interface when configuring “AXL E EIP DI 16 M12 6P” device. 		
-	<ul style="list-style-type: none"> ▪ Added support to XP340 PLC; ▪ Added option on the device IEC 60870-5-104 Server to receive a command in local time; ▪ Added option to the device IEC 60870-5-104 Server to send timestamps in local time; ▪ Added the command Refactoring in the menu Edit; ▪ Added new options of Baudrates for Nexto Xpress Serial (COM1): 2400 bps and 4800 bps; ▪ Added new elements for Visualization feature; ▪ Added a new object called Alarm Manager; ▪ Added a new object called Trend Recording Manager; ▪ Added a new object called Interface; ▪ Added CANopen Manager for XP300 and XP315; ▪ Added J1939 Manager and ECU for XP300, XP315, XP325 and XP340. ▪ Improvements in Help Files; ▪ Improvements in Import/Export CSV; ▪ Improvements in International Settings; ▪ Improvements in Project Update; ▪ Improvements in Project Wizard; ▪ Improvements in the project file creation; ▪ Improvements in MODBUS Server Mapping Screen; ▪ Improvements in Comparing Projects with PIDControl object; ▪ Improvements in texts for Portuguese Culture; ▪ Improvements in Fast Input configuration consistency; ▪ Improvements in PLCOpenXML Import command; ▪ Fixed SNTP period parameter in compiler warning to resolve “Implicit conversion from unsigned Type ‘USINT’ to signed Type ‘SINT’” error; ▪ Fixed problems to configure MODBUS in COM interfaces after selecting Normal Mode; ▪ Fixed a problem to send the project archive to PLC; ▪ Fixed a problem to show Security Screen in the previous versions; ▪ Fixed NX9020 description; ▪ Fixed an error when saving Recipes using REAL variables; ▪ Fixed call location at MainPrg of redundant applications; ▪ Fixed login with online change in Redundant Project; ▪ Fixed copy/paste for CANopen Remote Device; ▪ Changed the MainTask Interval to be triggered as a warning, no longer as an error for Xpress CPUs; ▪ Changed field name of the serial advanced parameter to “RS-485 Termination”; ▪ Changed download archive size from 16 MB to 26 MB for XP300, XP315 and XP325; ▪ Added support in MODBUS Symbol drivers and IEC 60870-5-104 Server driver to variables from Function Blocks with EXTENDS directive; ▪ Added consistency when try to using a NX5100 with NX9020; ▪ Disabled clock settings in simulation mode. 	3.18	29/10/2019
-	<ul style="list-style-type: none"> ▪ Included XP3xx in CANopen Slave Devices library (to be used with CANopen Manager). ▪ Improvements in Project Update; ▪ Improvements in the project file creation; ▪ Improvements in Help Files; 	3.17	04/09/2019

	<ul style="list-style-type: none"> ▪ Fixes in copy and paste commands in I/O Mapping; ▪ Fixes in Special Variables GVL. 		
-	<ul style="list-style-type: none"> ▪ Added Integrated I/O Mapping for NX3003 and XP3xx; ▪ Enabled Protocol EtherNet/IP Scanner and Adapter for all CPUs; ▪ Included Datalogger functionality (added LibDataLogger library); ▪ Added a new system GVL called Special Variables including Pulsating Bits, Clock variables and Constants; ▪ Added new "Open Circuit Value" parameter for XP3xx Analog Inputs; ▪ Added information about modules installation in Help files; ▪ Added a tooltip that shows up in the configuration screen when passing the mouse cursor above the modules; ▪ Improvements in NX5101 Modbus Mappings to align data according to the physical order; ▪ Improvements in Analog Output Configuration Page XP315 and XP325; ▪ Fixed error message in New Project Screen when trying to add I/O modules; ▪ Improvements in the English culture help files; ▪ Fixed I/O Simulation tool was not working for Integrated I/O in NX3003, XP300, XP315 and XP325; ▪ Limited the use of reserved words ("DigitalInputs", "DigitalOutputs", "FastInputs" and "FastOutputs") in code generation for CPU NX3003, XP300, XP315 and XP325; ▪ Fixed the incompatibility with NJ6001 and NJ6005 (introduced in recent versions 3.14 and 3.15) when module have firmware version lower than 1.1.0.1. 	3.16	14/08/2019
-	<ul style="list-style-type: none"> ▪ Updated the compiler to fix a potential occurrence of exception when using Ethernet IP protocol. 	3.15	01/07/2019
-	<ul style="list-style-type: none"> ▪ Included option "disabled" for open circuit value on 4-20mA inputs of NX6000 and NJ6000 modules, allowing reading of signals below 4mA (0 to 4mA). ▪ Included 4-20mA scale on modules NJ6001, NJ6005 and NJ6101, adding also an option to set the behavior of analog inputs on open circuit condition. ▪ Added "Login" Button to Easy Connection. ▪ Including a confirmation message before removing objects from the project. ▪ Added Right Click to open the product information web page in Configuration (Bus). ▪ Use Internet Explorer 11 to show the start web page (requires Internet Explorer 11 to be installed). ▪ Improvement to copy and paste on Modbus Symbol Server. ▪ Improved algorithm of the LibNextoPID with anti-reset windup and the automatic error recovery (ex: Gp < 0). ▪ Fixed the translation of the "Paste Contacts" submenu in the "FBD / LD / IL" menu. ▪ Fixed to always create a project with newest version of PLC. ▪ Fixed possible error "Object reference not set to an instance of an object" after request export to CSV. ▪ Fixed the culture selection after open the "Clock Settings" dialog. ▪ Fixed the "Export Online Variables" command. ▪ Fixed error introduced on version 3.10 which may cause exception after a switchover of redundant PLC. ▪ Fixed error introduced on version 3.11 which results on exception when reading/writing to MODBUS mappings with variable size longer than 16 bits. ▪ Changed limits of Recipe Manager, keeping only the limit of 5.000 variables per Recipe Definition. ▪ Improved Help. 	3.14	26/06/2019
-	<ul style="list-style-type: none"> ▪ Changed the installer to solve some cases where the installation process 	3.13	16/04/2019

	<p>results on error when running on outdated versions of Windows 7 and 8.1.</p>		
AR	<ul style="list-style-type: none"> ▪ Added CANopen Manager support for XP325. ▪ Added Fast I/O support (counters, interrupts and PWM/PTO) for XP300, XP315 and XP325. ▪ Added Interruption option and Counter Interrupts to NX3003 in Integrated I/O window. ▪ Added support for Import and Export to NX3003, XP300, XP315 and XP325. ▪ Updated help with CANopen. ▪ Fixed the checkbox “Enable retain and persistent variables in Function Blocks”, which was not being effective when checked specifically for Nexto Xpress controllers. ▪ The declarations editors (GVL and POUS) now opens in tabular mode. ▪ Added LibMachineOEM. ▪ Automatically open the project update window for outdated projects. ▪ Fixed a problem on PLC Redundancy control algorithm, which could cause a failure on the switchover process if an specific communication problem between the CPUs has occurred previously. 	3.12	11/03/2019
AQ	<ul style="list-style-type: none"> ▪ Added I/O Simulator page ▪ Added new hot swap mode “Hot Swap Disabled Without Startup Consistency” for following devices: NX3003, NX3004, NX3005, NX3010, NX3020, NX3030 and NX5100 ▪ Updated help ▪ Added encryption to OPC UA ▪ Opens the declarations editors (GVL and POUS) in tabular mode ▪ Added a message box to warning about changing values when user leaves a page ▪ Improved the error message when use a Basic license ▪ Added support to Nexto Xpress PLCs XP300, XP315 and XP325 ▪ Added support to NX3003 PLC ▪ Added support to NX5101 MODBUS TCP Head ▪ Added support to OPC UA configuration ▪ Added EtherNet/IP Adapter ▪ Added option in the project wizard to create the directory to project’s files ▪ Added “Find in Project” command in menu “Edit” ▪ Added “Replace in Project” command in menu “Edit” ▪ Added “Browse Call Tree” command in menu “Edit > Browse” ▪ Added “BCS Tools Perspective” command in menu “View > Choose Perspective” ▪ Added “HMI Perspective” command in menu “View > Choose Perspective” ▪ Added “Visualization” command in menu “View > HMI Views” ▪ Added “HMI Features” command in menu “View > HMI Views” ▪ Added “Programmings” command in menu “View > HMI Views” ▪ Added “Datasources” command in menu “View > HMI Views” ▪ Added “Commit Accepted Changes” command in menu “Project” ▪ Added “Insert Execute Box” command in menu “FBD/LD/IL” ▪ Added “Add to Recipe Definition” command in context menu of the POU’s and GVL’s ▪ Added “Browse Call Tree” command in context menu of the POU’s ▪ Added “Export Library” command in context menu of the Library Manager ▪ Included Encryption tab in the Application object ▪ The parameter “Minimum Error Before Clock Update” accepts a new range from 1 up to 65519 ms ▪ Improvements in the performance of Import Safety Projects command ▪ Improvements in the Import Safety Projects command 	3.04 3.05 3.10 3.11	28/12/2018
AP	<ul style="list-style-type: none"> ▪ Added Help files for EtherNet/IP in Portuguese; ▪ Included the possibility of enabling hot swap on CPU configuration, 	3.03	15/01/2018

	<p>even when using Nexto Jet modules (which doesn't have support for this feature). This allows to avoid stopping the PLC when a remote bus expansion rack is disconnected.</p> <ul style="list-style-type: none"> ▪ Added Import Safety Project... and Delete Safety Objects Imported... commands in Project menu; ▪ Added message if no device was found when Easy Connection is executed; ▪ Added on the About dialog the version in wich the project was created; ▪ Added support to Alarm Manager and Alarm Configuration; ▪ Added support to NX9020 rack. ▪ Increased the limit of the EtherCAT slaves to 192. 		
<p>AO</p>	<ul style="list-style-type: none"> ▪ Added EtherNet/IP Scanner; ▪ Added the IEC 60870-5-104 Server device; ▪ Added Disable Breakpoint and Enable Breakpoint commands in Debug menu; ▪ Added Easy Connection command; ▪ Added Edit IO mappings command in context menu of Device object; ▪ Added new commands (Reorder list and clean gaps, Save current values to recipe and Restore values from recipe) in Persistent Variables object; ▪ Added NJ1005, NJ6001, NJ6011, NJ6101 and NX5100 modules support; ▪ Added options to Operating Mode command in Online menu; ▪ Added Toggle Breakpoint command to POU when CPU is connected; ▪ Added Placeholders command in context menu of Library Manager object; ▪ Added Print Preview command in File menu; ▪ Added quality variables support for IO modules; ▪ Added quality variables support for MODBUS Symbol Client driver; ▪ Added Wink command in Source upload... and Source download... commands; ▪ Changed tab design for all screens; ▪ Changed the Synchronism screen in CPU configuration. The new screen allows time zone configuration with SNTP disable; ▪ Created a new design option to Communication Settings screen; ▪ Enable or disable redundant objects causes online change download; ▪ Fixed a problem in compiler using Symbol Configuration and variables with character “_”; ▪ Fixed an issue in PersistenVars that initialized variables when a variable type was changed during an online changes process; ▪ Fixed problems with source download options; ▪ Implemented a change to decrease the project archive size when removing objects; ▪ Implemented a change to show right quantity of recent projects in the start page; ▪ Implemented a consistency to deny read, write and force invalid indexes of arrays; ▪ Implemented a process to close all windows when a logoff is done; ▪ Implemented Export/Import process for Dynamic IP address parameter in NET1; ▪ Implemented Export/Import to User and Groups of Project Settings command; ▪ Implemented new options tabs (Device description download, Library download and Proxy Settings) in Options command in Tools menu; ▪ Implemented new tab Target memory settings in Application object; ▪ Implemented new tab View in tab option CFC Editor in Options command in Tools menu; ▪ Implemented new warnings in tab Compile warnings of Project Settings command; ▪ Implemented Permission for Folders in the Permissions Window; ▪ Implemented setting 'keep running on CPU stop' to MODBUS Slave and Server 	<p>3.02</p>	<p>09/06/2017</p>

	<ul style="list-style-type: none"> ▪ Implemented the consistency of maximum number of PROFIBUS slave bytes; ▪ Improvements in Auto Declare command; ▪ Improvements in Breakpoints command; ▪ Improvements in Cross Reference List command; ▪ Improvements in EtherCAT Master Sync Window; ▪ Improvements in GVL and PersistentVars objects; ▪ Improvements in Help files; ▪ Improvements in memory usage during project update; ▪ Improvements in NX5001 tab DP-Parameters; ▪ Improvements in online changes process in certain cases ▪ Improvements in Portuguese Culture Screens; ▪ Improvements in POU for implicit checks object; ▪ Improvements in Project Information... command; ▪ Improvements in Recipe Manager; ▪ Improvements in Recipe object in Tree view; ▪ Improvements in Symbol Configuration object; ▪ Improvements in tab option Device Editor in Options command in Tools menu; ▪ Improvements in tab option SmartCoding in Options command in Tools menu; ▪ Improvements in Trace object; ▪ Improvements in Watch command; ▪ Included Internal Points configurations in Nexto CPUs; ▪ Some difference project structure for new projects: <ul style="list-style-type: none"> ▪ Changed Wizard Page to choose the language of UserPrg and StartPrg; ▪ New projects are created with four folders called SystemGVLs, SytemPOUs, UserGVLs and UserPOUs; ▪ A new POU called StartPrg is created for every new project; ▪ A new POU called UserPrg is created for non-redundant projects; ▪ Three new GVLs called IOQualities, Module_Diagnostics and System_Diagnostics are created; ▪ The Diagnostics GVL is not created for new projects; ▪ Removed a wrong icon from Add Gateway Window. 		
AN	<ul style="list-style-type: none"> ▪ Enabled Redundant PROFIBUS network for NX3020 in Wizard page; ▪ Improvements in Redundant State Machine using only Ethernet I/Os; ▪ Improvements to decrease the size of BCS Tools projects. 	2.08	26/12/2016
AM	<ul style="list-style-type: none"> ▪ Added NX3005 CPU support; ▪ Added the Visualization feature to the tool. This feature enable users to create screens loaded and stored in the CPUs memory with the logic application. Using this feature is possible access created screens trough the web browsers. This feature is enable only for NX3005 CPU: <ul style="list-style-type: none"> ▪ Added Visualization Manager object used to set general configuration of Visualization feature; ▪ Added WebVisualization object used to set the specific configuration related with web access in the created screens; ▪ Added Visualization objects that is used to create screens to access application information; ▪ Added Image Pool object to the application. This object is used to create a list of images that can be used in the Visualization; ▪ Added Network Variable List (NVL) feature to tool. The feature enable exchanging variables among controllers trough the CPU network interfaces. ▪ Added a new command called Clock Settings that is an easy way to get and set date and time in the CPUs; ▪ Added the option of Dynamic IP Address to the CPU Ethernet interface (DHCP Protocol); ▪ Added the option Edit Page Size in the CFC Menu; ▪ Fixed a problem using Export to CSV feature and the SOE enabled; ▪ Fixed a problem using Export Online Variables command; 	2.07	31/10/2016

	<ul style="list-style-type: none"> ▪ Fixed a problem related with Symbols in Treeview with Redundant PROFIBUS Networks; ▪ Improvements performance in Import from CSV command. ▪ Fixed an eventual issue with redundant system startup when using exclusively PROFIBUS slaves from Nexto Series; ▪ Changed verification rule of hot-swap mode parameter for Nexto Jet Solution to allow the system to startup even with absent modules. 		
AL	<ul style="list-style-type: none"> ▪ Changed the product label to comply with the new revision of CE directive. 	2.05	22/06/2016
AK	<ul style="list-style-type: none"> ▪ Added a new type of license: BIG PROGRAM; ▪ Included a new option that allows to use Retain and Persistent variables on Function Blocks; ▪ Changed the verification rule of NX3004 maximum current to allow the operation with up to 20W in some specific conditions; ▪ Added support for NX9010 rack with NX5110; ▪ Enhancements on Export Online Variables command; ▪ Fixed import/export for projects with PO7078 module; ▪ Compilation performance optimization in projects with MODBUS Client and MODBUS Master; ▪ Performance optimization on Open Project, Generate Code and Login commands. 	2.05	25/01/2016
AJ	<ul style="list-style-type: none"> ▪ Added support for Nexto Jet solution, with the inclusion of the following modules: NJ1001, NJ2001, NJ6000, NJ6010, NJ6020, NJ6100. ▪ Added a new PROFIBUS slave device called NX5110_NJ which allows to use Nexto Jet solution modules with the Nexto Series PROFIBUS DP head. ▪ Added Export and Import Online Variables command in the Online Menu. ▪ Added support for flexibility of Persistent and Retain memory area sizes. ▪ Implemented support to use old Nexto modules with Machine Profile. ▪ Enhancements on PIDControl when using it on redundant projects. ▪ Changed name and description of parameter Allocate Diagnostic Area According to the Device Description in NX5001 configuration. ▪ Consistency of EtherCAT parameters Sync0 and Sync1. ▪ Consistency of EtherCAT slave parameter Cycle Time. ▪ Improvements in message texts about synchronization options for EtherCAT configuration. ▪ Improvements in help files about EtherCAT. ▪ Removed the diagnostic HotStartCounter from the diagnostic structure of NX3004 CPU. ▪ Fixed errors using NX9010 in simulation mode. ▪ Changed the text of hot swap options in CPU General Configuration tab. ▪ Improvements in Portuguese Help files. ▪ Improvements in message texts about Modbus direct mapping limits. 	2.03	15/10/2015
AI	<ul style="list-style-type: none"> ▪ New Features: ▪ Added Scan Devices feature for Nexto Series PROFIBUS Master NX5001; ▪ Added NX9010 Rack support. ▪ Enhancements: ▪ Improvements in EtherCAT Master Device; ▪ Improvements in OPC Configuration Screen including new verifications for ARRAY type and a new option to use CPU embedded gateway; ▪ Improvements in OPC Server service; ▪ Improvements in Symbol Configuration object to remove automatically deleted variables; ▪ Improvements in the treatment of GSD files from third part suppliers into Device Repository; ▪ Improvements in Force Command for bit type; 	2.02	04/08/2015

	<ul style="list-style-type: none"> ▪ Improvements in Edit commands (Add/Copy/Paste/Cut/Delete) for PROFIBUS Slave Devices; ▪ Improvement in Wizard Page to treat current consumption before creating a project; ▪ Improvements in Help files. 		
AH	<ul style="list-style-type: none"> ▪ New Features: ▪ EtherCAT Master: <ol style="list-style-type: none"> 1. Added EtherCAT Master Device to be inserted as a communication driver; 2. Enabled the option Scan Devices to scan automatically the devices connected below the EtherCAT Master. ▪ Added a new Project Profile called Machine Profile execute fast applications. ▪ Added Nexto Series PROFIBUS DP slaves NX5110 and NX5210: <ol style="list-style-type: none"> 1. Added Nexto Series PROFIBUS slaves into the Configuration and Consumption; 2. Added Nexto Series PROFIBUS slaves into the Bill of Materials; 3. Added limits verifications for Nexto Series PROFIBUS Slaves. ▪ Added NX3004 CPU support. ▪ Added NX9000 Rack support. ▪ Added SNTP support in the NX3010 CPU. ▪ Added a library to read and write PROFIBUS DPV1 commands using NX5001 interface. ▪ Added a new configuration in the CPU screen called Enable I/O Update per Task used to Update I/O in task different than MainTask. ▪ Added Export and Import from PLCOpen XML in the Project Menu. ▪ Added the option called Redundancy without panel to use a redundant system without the Control Panel. ▪ Automatically vital failure treatment for Ethernet interfaces and MODBUS Client devices in Half Cluster redundancy Projects. ▪ Enhancements: ▪ Improvements in Portuguese Culture Screens; ▪ Improvements in Portuguese Help files. 	2.01	14/05/2015
AG	<ul style="list-style-type: none"> ▪ New Features: ▪ OPC Server; ▪ Added OPC Server into the installer; ▪ Added OPC Configuration menu to configure devices to connect with OPC Server; ▪ Added Symbol Configuration object to define variables available for OPC Server access; ▪ Application CRC; ▪ Added CPU Information menu to Access Project and CPU CRC; ▪ Added a new Diagnostics for Nexto CPUs to access CRC. ▪ Export to and Import from CSV Files: ▪ Added support to Export and Import Nexto CPUs parameters; ▪ Added support to Export and Import Nexto Series Modules configuration; ▪ Added support to Export and Import Ponto Series PROFIBUS Slaves; ▪ Added support to Export and Import GVLs into CSV files; ▪ Added support to Export and Import POU's in ST language; ▪ Import through selection of multiple CSV files. ▪ Recipe Manager: ▪ Added Recipe Manager object; ▪ Added Recipe Definition object; ▪ Added LibRecipeHandler to manage Recipes into the application; ▪ Added a new programming language called CFC Page-Oriented language and its editor; ▪ Added Sync and Freeze commands support for NX5001. ▪ Added two new hotswap modes for Nexto Series CPUs: ▪ Disabled; ▪ Enabled, with startup consistency. 	2.00	30/09/2014

	<ul style="list-style-type: none"> ▪ Windows 8.1 support. ▪ Enhancements: ▪ Ponto Series PROFIBUS slaves; ▪ Added Ponto Series PROFIBUS slaves into the Configuration and Consumption; ▪ Added a new screen to configure Ponto Series bases; ▪ Added a new screen to configure Ponto Series expansion; ▪ Added Ponto Series PROFIBUS slaves into the Bill of Materials; ▪ Added limits verifications for Ponto Series PROFIBUS Slaves. ▪ Project Wizard: ▪ Added option to select bus expansion with redundancy; ▪ Added option to select redundancy project with OPC communication; ▪ Added a page to create IO modules during the wizard configuration; ▪ Added Project Profile descriptions; ▪ Help files improvements and optimizations; ▪ Optimization in the Nexto Series graphical configuration; ▪ Added PID_INT and PID_REAL Function Blocks into the LibNextoPID; ▪ Improvements in PIDControl Editor to edit main variables and retain them values; ▪ Blocked Project Update from new projects to older versions; ▪ Changed contact support link URL; ▪ Improved the consistencies for 24 characters in device identifiers; ▪ Added a verification to prevent the use of "AT" in redundant objects; ▪ Changed the behavior to create and download project archive with online change; ▪ Changed the behavior to create boot application implicit on download and online changes; ▪ Changed the option Source Download to “Prompt at program Download and online Changes” by default; ▪ Changed the Option additional files to send “Download information files” by default; ▪ Improvements in the usability of FBD/IL/LD editor; ▪ Improvements in the usability of CFC editor. 		
AF	<ul style="list-style-type: none"> ▪ New Features: ▪ Implemented Edit Object (offline) command; ▪ Disabled the option “Exclude from build” for CPUs; ▪ Added a new analog I/O module: NX6020 – 8 AI RTD Module. ▪ Enhancements: ▪ Standardization in comments of modules parameters and in texts used in Modbus mappings; ▪ Improvements on saving memory card configuration; ▪ Improvements in Import/Export commands; ▪ Implemented, into the update command, the feature to update redundant projects from any version without stops the application; ▪ Removed the option to read Modbus data using broadcast slave address because it was an invalid command; ▪ Updated libraries to improve the accuracy of local bus watchdog detection; ▪ Fixed problems in Online Change using Modbus drivers; ▪ Fixed a situation where MODBUS driver could incorrectly indicate NX5000 failure; ▪ All diagnostics structure library are now visible. 	1.41	18/07/2014
AE	<ul style="list-style-type: none"> ▪ New Features: ▪ Changed the installer based in Microsoft InstallShield to installer based in Inno Setup. This change reduces the installation time; ▪ Added MODBUS devices with mappings of symbolic variables; ▪ Added Import/Export command to CSV files. This command imports or exports the project configurations; ▪ Added Import/Export support to the MODBUS Symbolic drivers; ▪ Added a new analog I/O module: NX6010 – 8 Ch. Thermocouple Input 	1.40	13/01/2014

	<ul style="list-style-type: none"> Module; ▪ Added LibLogs with new function block to manage CSV files into the memory card. ▪ Enhancements: ▪ Improvement to receive MODBUS serial frames before 3.5 characters silence. 		
AD	<ul style="list-style-type: none"> ▪ Changed the MODBUS mappings limit from 128 to 512. ▪ Changed the limit of characters of TAGs from 24 to 255. ▪ Changed the limit of characters of Descriptions from 48 to 255. ▪ Changed the limit of characters of Devices Names from 24 to 255. ▪ Updated compiler version to 3.4.4.27. ▪ Updated Libraries. 	1.33 1.34 1.35	28/10/2013
AC	<ul style="list-style-type: none"> ▪ Updated Libraries. 	1.32	01/07/2013
AB	<ul style="list-style-type: none"> ▪ Enhancements on performance. ▪ Corrections in memory overlap verification for Diagnostics Variables. ▪ Enhancements on Project Update. ▪ Enhancements on Simulation Mode. ▪ Added External Events configuration. ▪ Correction in memory allocation of retain variables for online changes. 	1.31	12/06/2013
AA	<ul style="list-style-type: none"> ▪ Initial revision. 	1.30	12/04/2013