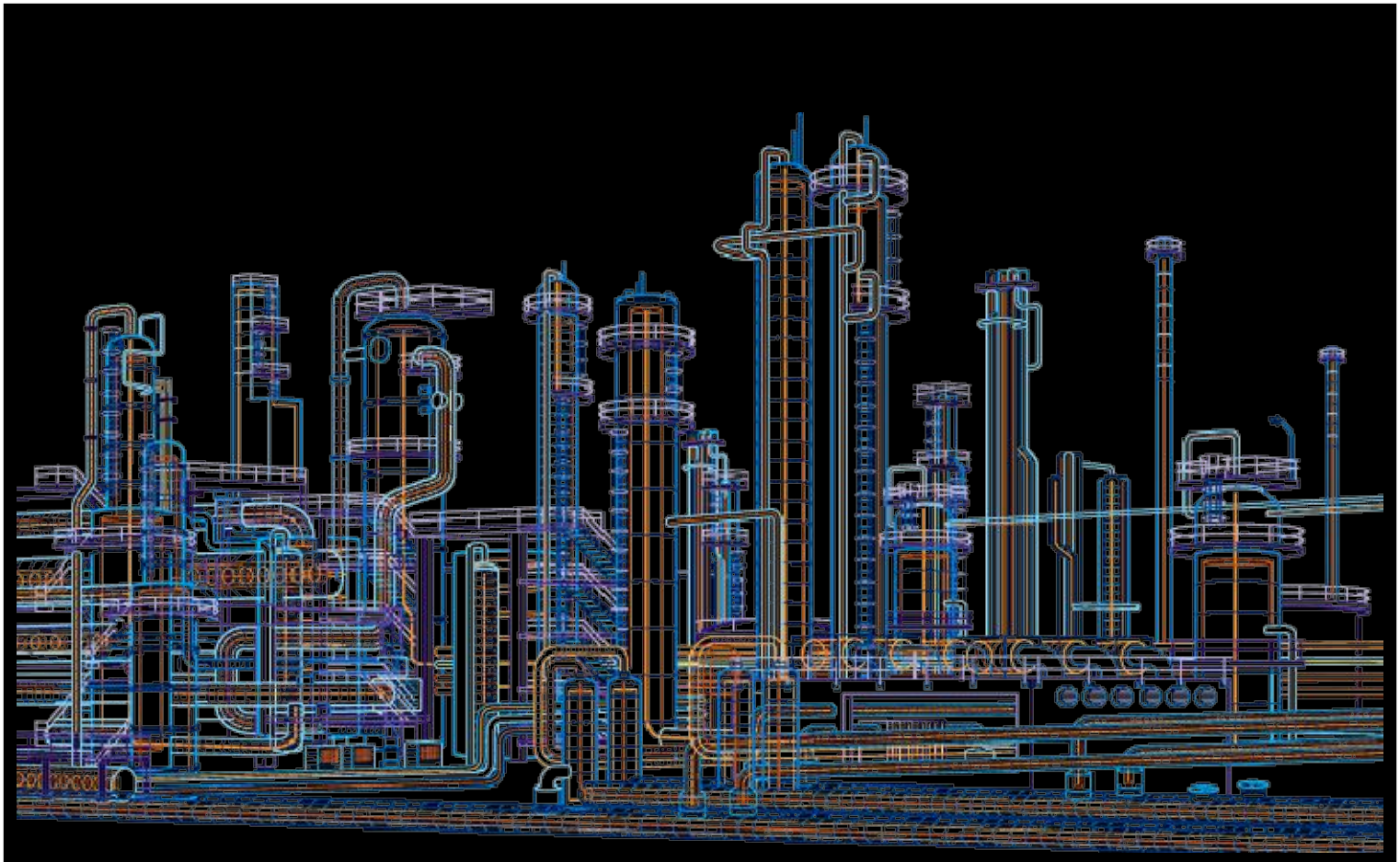

System 800xA
PC Toolkit Library for AC800M V5.1-4
Release Notes

System Version 5.1

Power and productivity
for a better world™

NOTICE

The information in this document is subject to change without notice and should not be construed as a commitment by ABB. ABB assumes no responsibility for any errors that may appear in this document.

In no event shall ABB be liable for direct, indirect, special, incidental or consequential damages of any nature or kind arising from the use of this document, nor shall ABB be liable for incidental or consequential damages arising from use of any software or hardware described in this document.

This document and parts thereof must not be reproduced or copied without written permission from ABB, and the contents thereof must not be imparted to a third party nor used for any unauthorized purpose.

The software or hardware described in this document is furnished under a license and may be used, copied, or disclosed only in accordance with the terms of such license.

TRADEMARKS

All rights to copyrights, registered trademarks, and trademarks reside with their respective owners.

Document number: 3BDA033512R5107_ReleaseNotes_PC Toolkit Library for AC800M

Table of Contents:

Inhalt

1. Introduction

This document represents the release notes for PC Toolkit Library for AC800M V5.1-4.

This document describes new or improved functionality introduced in this release. It also enumerates known problems which are not resolved. Where applicable workaround is added that help overcome the problem. This document replaces the existing release notes for the prior release.

Release Notes Safety Notices

Install the software within the design limitations as described in the installation and upgrade instructions. This software is designed to operate within the specifications of the 800xA. Do not install this software to systems that exceed these limits.

These Release Notes are written only for qualified persons and are not intended to be a substitute for adequate training and experience in the safety procedures for installation and operation of this software. Personnel working with this software must also exhibit common sense and good judgment regarding potential hazards for themselves and other personnel in the area. Should clarification or additional information be required, refer the matter to your ABB sales representative and/or local representative.

File these Release Notes with other instruction books, drawings, and descriptive data of the 800xA. Keep these release notes available for the installation, operation and maintenance of this equipment. Use of these release notes will facilitate proper operation and maintenance of the 800xA and its software and prolong its useful life. All information contained in release notes are based on the latest product information available at the time of printing. The right is reserved to make changes at any time without notice.

2. Functionality

The PC Toolkit Library for AC800M is a system extension for System 800xA. It compiles a basic set and optional software packages. PC Toolkit Library for AC800M was developed specially for use in the markets Oil, Gas & Chemicals. To a greatest possible extent, Faceplates and Graphic Elements are harmonized with the object types of Freelance and Melody/AC870P.

The PC Toolkit Library for AC800M comprises

Package	Description
Base	• Preconfigured one- and two-screen Operator Workplace • PC_Library with Control Module Types (CMT) based on the ABB Standard Library for the standard process function like motor, valve, counter, controller, etc. • Graphic Elements and Faceplates for all CMT's • PC_ExtensionLib with Profibus Modules for Simocode, UMC100, frequency converter, etc. • Interlock Viewer (replaces Interlock Display) • Free Graphic Elements showing mass data like radar diagram and profiling indication. • PC Tools facilitates interoperability configuration through the automated generation during engineering. It includes Aspect link, Link Generator and SFC Step Text Uploader.

Table 2-1 Contents of the Base software package

Following optional software packages are available

Packages	Description
HP HMI	Expands the capabilities of traditional Graphic Elements and Faceplates. It provides technologies to make operator workplace safe and efficient.
FD Typical	Set of ready-to-use Function Designer Typical including I/O assignment which meets the requirements for the market Oil, Gas & Chemicals
EPI CMT	The PC Batch Library provides an Equipment Phase Interface module (EPI), with additional CMT's and a faceplate. It provides the ability to connect 800xA Batch Management and controls SFC's in compliance with ISA88. **Note:** When using 800xA Batch Management the EPI Phase Driver is required
EPI Phase Driver	The EPI Control Module realizes the equipment module in the AC800M controller. It is the interface to connect different recipe packages 800xA Batch Management, Workflow Manager (WFM-BCM) in compliance with ISA88. It includes the Batch Equipment phase. It can also be used without recipe packages to drive SFCs, managing parameter and operator messages. **Note:** 1) Refer to Batch Report XL for a valuable optional package. 2) When using EPI Phase Driver the PC Batch Library is required.

Table 2-2 Optional software package

3. Release Notes

The PC Toolkit Library for AC800M Version 5.1-4 has been released for delivery and plant operation under System 800xA SV5.1Rev and FP versions. Refer to section 3.1 Conditions, Restrictions and Remarks.

Refer to section 3.2 Related Documents and separate Release Notes for Interlock Viewer and Effect Viewer.

PC Toolkit Library for AC800M Software Packages	Delivery
ABB PC Graphic Object Types 5.1-3 (Build: 5.1.5554.28704)	base
ABB PC Interlock Viewer 5.1-1/8 (Build: 5.1.5637.13935)	base*[1]
ABB PC Tools 5.1-1 (Build: 5.01.0100)	base
ABB PC Workplace 5.1-3 (Build: 5.1.5554.28682)	base
ABB PC Library for AC800M 2.1-3 (Build: 2.1.5620.13340)	base
ABB PC Library for AC800M 2.1-3 HP-HMI Add On (Build: 2.1.5620.13351)	base
ABB PC Library for AC800M 2.1-3 FD Add On (Build: 2.1.5597.17260)	base
ABB PC AC800M Batch Library 5.1-2/2 (Build: 5.1.5630.18024)	optional
ABB PC AC800M Batch Library 5.1-2 HP-HMI Add On (Build: 5.1.5584.22274)	optional
ABB PC AC800M Batch Library 5.1-2 FD Add On (Build: 5.1.5522.16424)	optional
ABB PC AC800M EPI Phase Driver 5.1-10 (FP4 req.) (Build: 5.1.5093.15485)	optional
ABB PC Toolkit Library for AC800M 2.1-2 Typicals (Build: 2.01.0200)	optional
ABB PC Effect Viewer 5.1-1/1 (Build: 5.1.5522.16460)	optional *[1]
ABB PC Effect Viewer PC Extensions 5.1-1/1 (Build: 5.1.5522.16479)	optional

Table 3-1 Released software packages for 800xa feature pack versions

*[1] The PC Interlock Viewer and PC Effect Viewer can be used in other libraries than PC_Lib. In this case the PC Interlock Viewer can be ordered as a separate software package. Refer to Price List Oil, Gas & Chemicals Germany 3BDA033517.

PC Toolkit Library for AC800M Software Packages	Delivery
ABB PC AC800M Batch Library 5.1-2/2 (Build: 5.1.5630.18036)	optional
ABB PC AC800M Batch Library 5.1-2 HP-HMI Add On (Build: 5.1.5584.22256)	optional
ABB PC AC800M Batch Library 5.1-2 FD Add On (Build: 5.1.5556.30051)	optional

Table 3-2 Optional software packages for 800xA revision versions

3.1 Conditions, Restrictions and Remarks

- The minimum requirement for this version is System 800xA SV5.1RevA. For details refer to 3BDA033943_Version Information PC Toolkit Library for AC800M
- PC Toolkit Library for AC800M requires the Graphic Editor PG2
- Graphic displays that were created under Visual Basic Graphic Editor are still supported but are recommended to be migrated. A migration tool is available and part of the 800xA base product.
- The Interlock Display was replaced by the Interlock Viewer. This requires that the link from the Faceplates to the Interlock window must be updated. Refer to update procedure in document 3BDA035322R5107EN_Installation & Configuration. If required both versions can exist at the same time.
- If a control module (CM) of the PC_Lib is used inside another CM's, then the name of this PC_lib CM instance must be declared (if not already done) before a new download (PC_Lib name parameters have empty initial values). This applies only when the control module type is created by means of the CBM. It does not apply for control module types created with FD.
- When using the PC AC800M Batch Library or PC EPI Phase driver, minimum 800xA system version is SV5.1FP4 is required.
- If the PC Toolkit Library is being updated from V5.1-2 or older versions, then the consistency check might generate an error "Embedded instance 'SignalInRealM' is obsolete, no longer included in object type." Use the repair option of the consistency check tool to fix.

3.2 Related Documents

The following documents describe installation, configuration and operation with PC Toolkit Library for AC800M

Category	Document	Description
Release Notes	3BDA035401R5105_	Release Notes Interlock Viewer
	3BDA035403R5103_	Release Notes Effect Viewer
Operation	3BDA035321R5108EN 3BDA033321R5108DE	Manual for Operators Handbuch für Bediener in deutsch
Installation & Configuration	3BDA035322R5108	PC Toolkit Library for AC800M

Category	Document	Description
Configuration	3BDA035330R5102_CM_… 3BDA035332R5103_CM_… 3BDA035333R5102_CM_... 3BDA035334R5102_CM_... 3BDA035342R5103_CM_... 3BDA035344R5102_CM_… 3BDA035345R5102_CM_... 3BDA035347R5101_CM_… 3BDA035350R5103_CM_… 3BDA035361R5101_CM_... 3BDA035362R5101_CM_... 3BDA035363R5101_CM_...	**Control Modules details for**: PC_Analog (PC_AI, PC_AICALC, PC_AO) PC_Dosing PC_Open_Loop_Control (Drive/Valves etc.) PC_Flags PC_Closed_ Loop_Control (PC_PID, …) PC_PulsPause PC_Binary (PC_DI) PC_Totalizer PC_Auxiliary CMT's and FB's Profibus_ACS800 Profibus_SIMO_PRO_V Profibus_UMC100
	3BDA035330R510x_HMI_... … 3BDA035354R510x_HMI_...	Faceplate and Graphic Elements of the different Object Types. Please note, that the elements for Classic and HPHMI style have been separated.
	3BDA035329R5103EN_	Free Graphic Elements
	3BDA033478R5104EN_	Graphic Property Configuration
	3BDA035401R5103EN_	Interlock Viewer
	3BDA035403R5103EN_	Effect Viewer
	3BDA035360R51xx_FD_...	**FD-Templates for:** PCAI_1_FD, PCAO_1_FD, PCBI_1_FD, PCBO_1_FD, PCBO_2_FD, PCCNT_1_FD, PCCNT_2_FD, PCCNT_3_FD, PCCTRL_1_FD, PCCTRL_2_FD, PCCTRL_3_FD, PCCTRL_4_FD, PCDOS_1_FD, PCHVFC_1_FD, PCHVFC_2_FD, PCHVFO_1_FD, PCMOT_1_FD, PCMOT_2_FD, PCMOT_3_FD, PCMOT_4_FD, PCSFC_1_FD, PCSFC_2_FD
	3BDA033920R5105_	PC_EPI Batch Connect Package
	3BDA033919R5104_	PC_EPI BM Phase Driver

Table 3-3 Related Documentation

4. Product support

4.1 Technical Support

Contact ABB technical support at tech-support-system-solution@de.abb.com or you local ABB representative for assistance in problem reporting.

4.2 How to obtain

Product Marketing/ TechSalesSupport and Order placement: DEATG/CES; mailto:tech-support-system-solution@de.abb.com , Phone +49 (0)69 7930 4410

License cost is outlined in the Price List 3BDA033517I_PriceBook_SystemSolutions

4.3 Deliverables

CD-Rom or DVD Medium with PC Toolkit Library for AC800M and product documentation in English.

4.4 New Features – Improvements

4.4.1 Documentation

- The manuals for the control modules have now been combined type specific e.g. document CM_Analog compiles the PC_AI, PC_AICALC and the new module PC_AO, the manual CM_Open_Loop_Control compiles PC_PID, PC_PIDMASTER, PC_SplitrangeCC …
- Same applies to HMI documentation. In addition the HMI documentation for Classic and HPHMI style guide has been separated.
- Statements for CPU load and Memory usage for every single CMT added

4.4.2 Interlock Viewer

Now supporting Control Diagram Editor

4.4.3 Effect Viewer

Now supporting Control Diagram Editor

4.4.4 Control Modules

- New control module for analog output PC_AO.
- PC_AO CMT allows to switch an analog input (Analogue input with binary output information).
- New control module for digital input PC_DI
- Valves, Motors: Alarm can be generated when the module is in safe position and automatic command tries to switch to other positions

- Name and Description parameters are redefined. Name parameters have now empty default value and description briefly describes control module functionality
- If a module is already in safe position (typically stopped or closed) and an interlock/operation condition/object error gets active, the output will not drive in safe position again.
- Output parameter ObjErr and InteractionPar.ObjErrPrioCmdSwitchOver indicate when the module switches to safe position because of an interlock/operation-cond/object error and when the module is in safe position because of an interlock/operation-cond/object error and an automatic command tries to start/open the module.

4.4.5 Faceplates

- All object types with faceplate have new parameter ILockOp. By setting this parameter to true, all inputs on faceplate (including buttons) become inoperable
- Object type PC_Drive: Torque and Power values are now indicated on Trend tab
- Objects type PC_PID, PC_PIDMaster: new tab for Feedforward value and Feedforward parameters is added
- The on/off indication is improved to get a clear indication.

4.4.6 Graphic elements

- For the object types PC_AI, PC_PID, motors and valves a single GE is now available which combines live value, alarm status, value status and mode
- New properties NormalMode and NormalModeExt were added to HPHMI operating mode graphic elements. This allows to hide normal operating mode state in graphic displays

4.4.7 EPI function block

- A runtime indication and optional monitoring (including alarm if maximum runtime exceeded) is added.
- EPI can be set in simulation mode. In simulation mode a simulation SFC (must be configured to enable the simulation mode) will run and the normal Run, Hold, Restart, Stop and Abort SFC's are disabled.
- An extended faceplate (in HPHMI style) is added to the EPI control module. The extended faceplate shows more information more information on the same time as the standard faceplates.
- The EPI supports new parameter types "OpMode" (for the first parameter only) and "List". This parameter types provides a list selection of the defined entries in the faceplate and parameter editor. The selected value is available as text and as numeric value (selected index, the first list item became the index = 1). An error message occurs if an OpMode or List parameter type has an undefined value (the current text value isn't included in the defined list items).
  Depending of the selected OpMode, the visibility and the enabled state of other parameters in the faceplate can be set.

- New parameter group “Engineering parameters” are included. These engineering parameter can be used to setup additional parameters of the equipment modules, which are not part of the “batch” parameters.
- The EPI Faceplate indicates the text of the current step of the active SFC and the name of the active SFC.
- New possibility to interact with the operator via operator messages in the faceplate (up to 10 different messages possible). Depending on the configuration of each message the operator must select a binary option (for example a target selection), enter a numeric or string value or acknowledge the operator message only. It is also possible to show the operator message without acknowledge possibility and the message will reset by logic (Scenario open manual value and check the feedback).
  The right to acknowledge the operator message can be set for each message independent.
- New operation Finish: Depending on the configuration the finish button in the faceplate can be enabled. On press the Finish button on the faceplate the EPI will run a finish procedure (Stopping followed by complete state).
- Parameter indication in the faceplate improved (HPHMI): Operable parameters have green text color, none operable parameters have blue text color and changed parameters (not yet applied) have a yellow background. List parameters with invalid value will indicated by red background,
- Parameter editor for the current EPI can be call up directly from the parameter, report value or engineering parameter tab of the faceplate (requires FP4).
- The Auto reset functionality has improved: Available options are now "Reset after Complete", "Reset after Aborted", "Reset after Stopped" and “Initial mode after reset”.
- New option to Restart the running SFC with the Restart command after Hold. In a new EPI Output parameter the current step number of the Run SFC is stored to branch out after restart.
- New EPI State defined: Steady State. Can be set by a new input PIN. Depends on this state, some changes can be defined, e.g. change the operation mode parameter or enabling of the finish button.
- Enable and disable parameter changes, enable finish, enable operation mode changes, enable parameter changes by selectable criteria. In general, a permission to operate the parameters in the EPI faceplate is specified in the EPI editor.
- Recipe and engineering parameters get initial values defined in the parameter editor when performing an initial download of the control builder application.
- New control module type "PC_BatchUnit" can get the equipment status from a batch equipment aspect (occupied by any batch or reserved by operator) for use inside control builder logic.
- Parameter editor supports type instantiation concept.
- Every mode status of the EPI is available as single binary value and as combined data type.
- Parameters are now written to the controller after the apply button was pressed. New Output Pin indicates new information available.

4.5 Fixed Problems in V5.1-3

Faceplate and graphics issues

Description	Remarks
HPHMI bar graphs: Limit colors for all limits are now retrieved automatically by configured priority *ID: ACM-GE-135, D: ACM-GE-067, ID: ACM-GE-238, ID: ACM-GE-239*	fixed
Alarm Indication Graphic Element: The Font size is now configurable as input property. *ID: ACM-GE-070*	fixed
Large real values and min/max indicators for bar graphs are now displayed in exponent format *ID: ACM-FP-098*	fixed
PC_FlagBool[Ext] - No force indication in FP when out is forced *ID: ACM-FP-104*	fixed
PC_FlagTime - “ms” was not shown in GE and FP but possible to define *ID: ACM-GE-106*	fixed
PC_Drive - When Ilock0 && StatDeact || Ilock1 && StatAct is true: the interlock is not indicated on FP, but indicated on GE. *ID: ACM-FP-107*	fixed
PC_Drive - When alarms were disabled, they appeared in the alarm list (even the inactive ones). This led to visibility of the status indication in FP and GE *ID: ACM-FP-108*	fixed
RatioCC - OP Note indication was not shown when OP Note had data. *ID: ACM-FP-116*	fixed
RatioCC - Unit for actual ratio and ration was not indicated *ID: ACM-FP-117*	fixed
RatioCC - Fraction was not indicated in the Faceplate *ID: ACM-FP-118*	fixed
SplitRangeCC - Disable state from the outputs was not indicated *ID: ACM-FP-120*	fixed
PC_PID – Set point ramping is now deactivated in manual mode. *ID: ACM-FP-125*	fixed
PC_Motor, PC_Valve - HPHMI: In order to show identical icons on FPs and GEs, new aspects where introduced. PC_HMI_MotorSettings allows adapting the icon type of Motors by means of integer values. Same applies to Valve with aspect PC_HMI_ValveUniSettings. *ID: ACM-FP-145*	fixed

Description	Remarks
Package installation: The installation routine is now guiding the user to load SFC Viewer package before the PC_Workplace package. *ID: ACM-WP-171*	fixed
SignalInBoolM: The GE siginbool_HPHMI_ Text ||SL_Deviation translation was not found. *ID: ACM-GE-181*	fixed
HPHMI Graphic Elements in with Interlock icon: A new icon for Interlock was introduced which replaces the old Interlock status symbol. The old indication can be disabled with property ShowInterlock. Default setting is True *ID: ACM-GE-189*	fixed
PC_PID: PV value is not indicated in the FP trend (classic only) *ID: ACM-GE-190*	fixed
PC_PID, PC_PIDMASTER: Set/reset checkboxes takes no effect in the FP trend (classic only) *ID: ACM-GE-191*	fixed
Indication on input failures between PC_AI and PC_PID/PIDMASTER harmonized (yellow background). *ID: ACM-GE-192*	fixed
The MAX / MIN indication of controller output reached (yellow symbol) did appear when limit output was deactivated. *ID: ACM-GE-193*	fixed
Level LL was not displayed in a HPHMI faceplate *ID: ACM-GE-195*	fixed
After the default installation routine the new aspect categories are not part of the Faceplate Link Creator settings. *ID: ACM-GE-196*	fixed
PC_MotorBiM, PC_MotorUniM: The expression of EnableReset cannot be modified. *ID: ACM-GE-197*	Refer to note in HMI documents
Interlock Indication: The appearance of the interlock indication harmonized between object types. Letter “R” added for ready to reset. *ID: ACM-FP-199*	fixed
PC_ValveBiM: When Locking0/1/2 was active and changes to inactive the operator cannot reset the lock. At this moment the motor was inoperable from the faceplate. *ID: ACM-FP-200*	fixed
PC_PID, PC_PIDMASTER: When TrackMan/TrackAuto/TrackOld is active the button to switch over to manual mode was not disabled. *ID: ACM-FP-201*	fixed
Trend Graphic Elements:	fixed

Description	Remarks
It is now possible to configure the limits as visible or invisible. *ID: ACM-GE-202*	
SFC Faceplate: Display of Max- and Min-Time was not adjusted to the current value (field in FP is to small). *ID: ACM-GE-203*	fixed
PC_Alarm_Event: if AEConfig was set to 4 (Level) an parameter error occured *ID: ACM-GE-206*	fixed
PC_Drive: MotorValueAlarm showed unit "%" *ID: ACM-GE-207*	fixed
PC_PIDMASTER: Edit and common tab was not always visible when user hasn't had application engineer role *ID: ACM-GE-208*	fixed
PC_FlagBool, PC_FlagBoolExt: When CM parameter UsePulse value is changed from 1 to 0 and Pulse Out in FP is set to true, puls was still active. *ID: ACM-GE-209*	fixed
PC_Totalizer: Unit string was not set on OutRealIO *ID: ACM-GE-210*	fixed
PC_Dosing: Description of InteractionPar.PredosingMode was wrong *ID: ACM-GE-211*	fixed
PC_AI, PC_PID/PIDMASTER: It was not possible to set the hysteresis for the limits less than the lower measuring range value. *ID: ACM-GE-212*	fixed
HPHMI numeric graphic elements have had an input property "alarm frame width" which had no effect. *ID: ACM-GE-213*	The property is now deleted.
CM PC_DI_Out: Inhibit did not work correctly if parameter voteout.backward.connected was not set. *ID: ACM-GE-214*	fixed
The HPHMI SignalInBoolM Graphic Element has a configurable color for bad state. It is now possible to configure and show the highest alarm state color of the tag. *ID: ACM-GE-237*	fixed
PC_Dosing: Stop CountingDelay was not changeable in the faceplate *ID: ACM-GE-241*	fixed
PC_MotorBIM: (HPHMI+Classic) It was not possible to have the FB0 trend visible after hiding it. *ID: ACM-GE-242*	fixed

Description	Remarks
PC_PID, PC_PIDMASTER: Deviation limit values are not indicated correctly in case of AEConfig = 4 (values are indicated as disabled) *ID: ACM-GE-243*	fixed
PC_Dosing: Setpoint is now changeable with the bar graph slider in automode *ID: ACM-GE-244*	fixed
PC_Dosing: When the coarse or fine valve was manually opened by using the faceplate buttons (not O/I) and the mode was switched over to automatic the valves did not close with AutoCmd0 or when the set point value was reached) *ID: ACM-GE-245*	fixed
PC_Drive: A new parameter External ModeInit is available to switch the external SP on an initial controller load. *ID: ACM-FP-246*	fixed
PC_PID, PC_PIDMASTER: With parameter AllowManModeInTrack of aspect PC_HMI_PIDSettings it is now possibility to change to manual mode if track is active *ID: ACM-FP-248*	fixed
PC_AI: INC/DEC The limit violation is now calculated based on Out.Forward.Value. The input signal error and filter handling is now included. *ID: ACM-FP-249*	fixed
PC_PID, PC_PIDMASTER: Unit and Range of the Offset is now used from the Out signal *ID: ACM-FP-250*	fixed
PC_FlagBoolExt: When track to false becomes inactive while PC_FlagBoolExt is in manual mode and the output was in state true before, the Flag went back to true state again. *ID: ACM-FP-251*	fixed
PC_FlagBoolExt: Visibility of configuration for Pulsed Output depends on UsePulse parameter. If this parameter is set before first download then Pulse Out is automatically set to true. If later the parameter is set to true then Pulse Out becomes by default off. *ID: ACM-FP-252*	fixed
PC_Totalizer: When Totalizer is configured with Periodic Reset the default period time is 0s. Once the counter is set to periodic time it is not possible to reset the counter any longer. *ID: ACM-FP-253*	fixed
PC_PID, PC_PIDMASTER: Trend tab is now indicating the Out.Forward. Value instead of IP.OutManValue) *ID: ACM-FP-254*	fixed

Description	Remarks
PC Numeric Value Type ValuePosition was limited from 30 to 85. *ID: ACM-FP-256*	fixed
PC_FlagBoolExt: When module is in Track all buttons in the Faceplate (Classic & HPHMI) are now disabled *ID: ACM-FP-257*	fixed
PC_FlagBoolExt: When module is in Track it is now possible to change the mode with inputs AutoIn and ManIn *ID: ACM-FP-258*	fixed
PC_FlagBoolExt: The icons position in the indication area is now synchronized to Motor and Valve *ID: ACM-FP-259*	fixed
All Faceplate are now prepared to be compatible with Interlock Viewer. Refer to update procedure. *ID: ACM-FP-264*	fixed
All delivered PC_Libraries were checked against consistency errors. They should not appear again. *ID: ACM-LIB-265*	fixed

Table -1 Fixed Issues on faceplate and graphic in V5.1-3

PC_Library (Control Modules and Typicals)

Description	Remarks
PC_Dosing - Status Alarm has no Message *ID: ACM-CM-103*	fixed
PC_ValveBiM - If Priority CmdMan=True and OperationCond or Locking signal becomes TRUE and Inhibit all incoming conditions is active then Valve switches to manual mode. *ID: ACM-CM-110*	fixed
PC_MotorBiM – there was no alarm for bad signal of FB2. *ID: ACM-CM-113*	fixed
PC_Totalizer, PC_Dosing - If AEConfig=0 alarm output was set *ID: ACM-CM-115*	fixed
PC_PID - Output value seemed to be frozen in case of an error *ID: ACM-CM-124*	fixed
SplitRangeCC - On bad IN signal, no alarm was generated *ID: ACM-CM-119*	fixed
PC_PID - Signal SetInternal was ignored. It was immediately set back to false. *ID: ACM-CM-126*	fixed
PC_PID – Visibility of the Output Change rate depends now on the parameters OutRampIncEn, OutRampDecEn and	fixed

Description	Remarks
EnableOutSpeedLim. *ID: ACM-CM-127*	
Parameter publishing of typicals has been corrected *ID: ACM-TYP-144*	fixed
PC_PID, PC_PIDMASTER: Setinternal was true when external SP and SP.Status was bad. *ID: ACM-CM-216*	fixed
PC_PID, PC_PIDMASTER: Tab Active was missing in HPHMI faceplate *ID: ACM-CM-217*	fixed
PC_StatusMessages: Event list ("||SL_...) showed invalid message text *ID: ACM-CM-218*	fixed
PC_AlarmEvent: On AEConfig =2; both messages were the same without any difference in indication. *ID: ACM-CM-219*	fixed
PC_PID: Output limit values are now changeable. *ID: ACM-CM-221*	fixed
PC_PID: Enabling tolerance band with parameters EnableDevPos and EnableDevNeg in FD did not work *ID: ACM-CM-224*	fixed
PC_FlagBool: Faceplate did not show the indication for Operator Notes. *ID: ACM-CM-225*	fixed
Radar Graphic Elements: If the value was less than the min range the red bar was shown outside the element. *ID: ACM-CM-228*	fixed
The HPHMI SignalInBoolM Faceplate was behaving differently to the Classic Faceplate. Bad status indication of the Classic Faceplate (no matter if the input was inverted or not) was always at the top. In HPHMI style the logical 1 was shown at the top and logical 0 at the bottom of the faceplate. *ID: ACM-CM-236*	fixed
The manuals for control modules show references to the used library. *ID: ACM-CM-272*	fixed

PC_Batch_Library (EPI)

Description	Remarks
An SFC in manual mode does not accept an operation requested from EPI. A message is not generated. *ID: EPI-CM-008*	New InteractionPar parameter AllowSFCManMode introduced. If not set the connected SFC's are forced in automatic mode.

Table 4-2 Fixed Problems on Control Modules in V5.1-3

4.6 Fixed Problems in V5.1-4

4.6.1 Faceplate and graphical issues

Description	Remarks
All Classic GE: After upgrading 800xA to 5.1 FP4 RevD (or 5.1 RevD) graphics become inoperable if in one or more GE's the property StatusIndWidth is set to 0 *ID: ACM-GE-226, ACM-FP-342*	fixed
PC_ValveBiM: When the valve is opened and gets a command to stop, it is not indicated on faceplate that the valve is stopping. *ID: ACM-FP-227*	fixed
PC_ValveUniM+BiM, Valence supervision is not documented in CMT documentation *ID: ACM-FP-270*	fixed
PC_FlagBool Classic Faceplate: indication for Operator Note is shown on wrong position *ID: ACM-FP-278*	fixed
PC_ValveBiM: feedback parameter (FBConfig = 4) brings object error when the command 1 or 2 has been activated (in manual or auto mode). *ID: ACM-FP-284*	fixed
SFC2DHeader: Indication of OperatorNote HoldsData is missing in PC Faceplate (Standard+HPHMI) *ID: ACM-FP-286*	fixed
PC_Motor…/PC_Drive: GroupStartMode is not indicated in the Faceplate when active *ID: ACM-FP-288*	fixed
PC_Dosing: If parameter SetAuto or SetMan is true, the faceplate button to switch over to manual mode is not disabled. *ID: ACM-FP-293*	fixed
PC_PID/PC_PIDMaster: Depending on the chosen type of controller P, PI, PD, PID the field "Derivation filter time" the eligibility is not displayed correctly. *ID: ACM-FP-299, 304*	fixed

Description	Remarks
Sometimes the alarm/event lists are not sorted properly. Alarm list is sorted by active time but displayed column is event time *ID: ACM-GEN-303*	fixed
PC_PIDMASTER: Some OUT graphic elements indicate PidCCPar.Faceplate.OutManValue, instead of Out.Forward.Value *ID: ACM-FP-305*	fixed
PC_Drive: In track mode the SP input is still editable, but has no influence *ID: ACM-FP-329*	fixed
PC_PID+PC_PIDMASTER, PC_Drive: Switchover to external setpoint is possible, even if SP.Forward.Status is bad and IntOnBadSP is set *ID: ACM-FP-343*	fixed
PC_Drive: 'On' button shall not be enabled in case of ObjError. *ID: ACM-FP-346*	fixed

Table 4-3 Fixed Issues on faceplate and graphic in V5.1-4

4.6.2 PC_Library (Control Modules and Typicals)

Description	Remarks
Some PC_Lib Control Modules have a Name Parameter input with 25 characters string limit and some 30. *ID: ACM-CM-273*	Name parameters have 30 characters now
Some PC_Lib Control Modules don't have a Description Parameter. *ID: ACM-CM-274, 308*	Control Modules which have name parameter have also description parameter now
PC_Dosing: Description of parameter CondNameL says "HH alarm" instead of "L alarm" *ID: ACM-CM-289*	fixed
PC_AI: Description of parameter INCAct says "INV active" Instead of "INC active" *ID: ACM-CM-290*	fixed
Data Type PC_ValveUniMPar. Description of "SetAuto" is not correct *ID: ACM-CM-291*	fixed
PC_Dosing: Description of parameters PriorityCmd0 and OperationCond0 does not describe the parameter functionality *ID: ACM-CM-292*	fixed
Motors, Valves, Drive: The behavior of feedbacks and common outputs does not work correctly in "TestMode". If TestMode is set, it should be indicated in faceplate, command outputs must not be set any longer and feedbacks should be simulated.	fixed

Description	Remarks
ID: ACM-CM-295	
Motors, Valves, Drive: behavior of parameters KeepModeAtError and KeepOutAtError do not work correctly *ID: ACM-CM-296, ACM-CM-287*	fixed
PC_Dosing: DataType PC_Dosing_Par - description of parameter ErrorMode says "Behavior of Out…" instead of "Behavior of Input…" *ID: ACM-CM-301*	fixed
PC_ExtensionLib Control Modules have still "unspecified" parameter direction and because of that cannot be used in Diagrams in combination with other modules which have a defined parameter direction. *ID: ACM-CM-302*	fixed
PC_ValveMan: AlState output has always the value -710. This error code means SourceName and Conditionname not unique. *ID: ACM-CM-307*	fixed
PC_AI: Limits generate no alarm on error when error mode is set to predetermined value. *ID: ACM-CM-309*	fixed
PC_AI: Inc/Dec limits are also active when InteractionPar.LevelINc/LevelDec = 0. This leads to an alarm (if alarm is enabled) on each input value change. *ID: ACM-CM-310*	fixed
The names of the blind objects generate errors after a cold download, needed due to hardware changes. After this, the name uploader gave errors on this with the explanation: “ignored empty name properties for....” *ID: ACM-CM-315*	fixed
PC_Totalizer: The counter is not working correctly when switching from analog input value to binary mode. On switch to binary count mode the last OutRealIO value is kept, instead of calculate on InBool value *ID: ACM-CM-316*	fixed
PC_PID/PC_PIDMASTER: Modified Controller parameter (TN, KP, TI) become active immediately at value input. *ID: ACM-CM-319*	The values become active only after an Apply.
PC_TOALIZER: Mode switch from logic is not valid configured. Currently only via InteractionPar possible, but no lock of the mode buttons if set by logic *ID: ACM-CM-320*	fixed
PC_TOALIZER: Override value in HHHwInh, HHwInh and HwInh is only set by set from faceplate, CM inputs InhGTHHHAct and so on are ignored *ID: ACM-CM-321*	fixed
PC_Drive: Alarm or Object error is missing on bad FBSpeed value	fixed

Description	Remarks
ID: ACM-CM-323	
Valve/Motor/Drive: After deleting and reloading an application, the InteractionPar.Enable ObjErr is set by GroupStart variable again *ID: ACM-CM-324*	Value is now persistent after action
PC_Drive: SPManValue (means DriveSP) is reset on delete/reload of the application *ID: ACM-CM-325*	Value is now persistent after action
PC_Drive: Output ExternalMode is not set *ID: ACM-CM-328*	fixed
PC_Drive: Switchover to external mode is possible even if the external set point is bad or unconnected *ID: ACM-CM-333*	fixed
PC_PID/PC_PIDMASTER: Switchover to external mode by SetExt is possible even if the external set point is unconnected *ID: ACM-CM-334*	fixed
PC_Drive, PC_Motor…: Operation of the module in object test mode is not possible if Failure, WindTemp or Maintenance is set. *ID: ACM-CM-335*	fixed
PC_PID/PC_PIDMASTER: Indication of controller settings (Tab Active) may be incorrect or empty after warm start or change of settings *ID: ACM-CM-339*	fixed
PC_Drive: At SP connected PC_PIDMASTER will not set to backtracking if Drive is not started *ID: ACM-CM-341*	fixed
PC_AI, PC_PID, PC_PIDMASTER: Limit alarms are created exact on limit value, but outputs are set on value < limit (for low limits) or set on value > limit (for high limits) *ID: ACM-CM-348*	fixed

4.6.3 PC_Batch_Library (EPI-CMT)

Description	Remarks
Values on EPI faceplate tab “Report values” show red question marks for some seconds. *ID: EPI-FP-016, EPI-CM-017*	fixed
Operation mode handling between EPI und SFC not working correctly. *ID: EPI-CM-008, EPI-CM-015*	fixed
"Main View" was translated to "Hauptsicht" in German Language Package FP4. This results in late bindings problems of the faceplate.	fixed

Description	Remarks
ID: EPI-CM-018	
Aspect Key information in the Control Module Type PC-EquipmPhaseIntf is lost after PC Toolkit Library update *ID: EPI-CM-019*	fixed
EPI-Faceplate: Parameter write handing not correct. *ID: EPI-CM-036*	fixed
EPI-Faceplate. The full SFC-name is not shown *ID: EPI-CM-037*	fixed

Table 4-4 Fixed Problems on Control Module EPI-CMT

4.6.4 PC_EPI-Phase Driver

Refer to Document 3BDA033923R5104EN Release Notes EPI BM Phase Driver

4.6.5 PC_Interlock Viewer

Refer to Document 3BDA035401R5107EN_Release Notes_Interlock Viewer for AC800M

4.6.6 PC_Effect Viewer

Refer to Document 3DBA035403R5102EN_Release Notes_Effect Viewer for AC800M

4.7 Known Problems

Some known issues are more important than others. Pay attention to the workarounds, clarifications and helpful hints provided, particularly for the issues that are marked Important.

Installation

Description	Remarks
During the uninstallation of a system extension (for example while executing an update) in some cases a message "**Error 1905 Module C:\...\AfwGenericExtension.dll failed to unregister**" occurs. 	

Table 4-5 Known Problems for Installation and Loading

Graphical issues and documentation

Description	Remarks
PC_PID, PC_PIDMASTER, PC_FlagBoolExt, PC_FlagRealExt). It is not possible to change the track indication to interlock indication in classic faceplates (option "ShowTrackAsIL"). *ID: ACM-FP-260*	Functionality in HPHMI faceplates is implemented.
The Status Indication in classic Faceplates is shown in HPHMI style only. *ID: ACM-FP-266*	
The Status Indication in classic Graphic Elements is shown in HPHMI style. *ID: ACM-GE-267*	
Documentation of initial settings for Control Module user rights is not correct. *ID: ACM-DOC-271*	
PC_PID and PC_PIDMASTER : When module is in track mode (TrackMan, TrackAuto, TrackOld) then output "AutoStat" is set to true and mode graphic element shows auto mode even module was in manual before. *ID: ACM-FP-282*	The indication of the faceplate is ok but GE shows always first icon automode in case of track.
Status indication in FP and GE when signal is disturbed (over-underflow, line break, substitution value, controller disturbed, etc.	

Description	Remarks
is not identical and not accordingly documented. *ID: ACM-GE-312, ACM-GEN-337*	
Common: Combo boxes will write the values directly to the desired property on change (without Apply). For example PC_Totalizer Tab Parameters1 *ID: ACM-FP-318*	
PC_MotorBIM: Faceplate buttons are disabled in case of object error -> harmonize with other modules *ID: ACM-FP-345*	

Table 4-6 Known Problems for graphical issues and documentation in V5.1-4

Control Module Types

Description	Remarks
PC_MotorUniM and PC_Drive have a parameter InteractionPar.KeepModeOnError. If this parameter is set the Drive/Motor still changes to Man mode in case of a failure. PC_ValveUni/Bi works as designed *ID: ACM-CM-138*	
PC_SplitRangeCC: In.Backward.Connected is not set any time. This leads in a superior controller module (for example PC_PIDMASTER if the EnableOutSpeedLim is set to false). *ID: ACM-CM-336*	
PC_Drive: SP.Backward.Range parameters are not properly set *ID: ACM-CM-349*	

Table 4-7 Known Problems for Control Module types

3BDA033512R5107_ReleaseNotes_PC Toolkit Library for AC800M

Germany 2015-02-25

BU Oil, Gas and Petrochemical
Frankfurt, Germany
www.abb.com/Chemicals