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PCS 7 Process Control System PCS 7 Advanced Process Faceplates Readme V9.0 SP2 (Online)

Readme

Version: 2018-06-02 (online)

V9.0 SP2
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Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Security information

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Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines, and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

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To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under
https://www.siemens.com/industrialsecurity.

Overview

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Note

Read these notes carefully; they contain important information and additions regarding PCS 7 Advanced Process Faceplates.

The information given in this Readme file takes precedence over all PCS 7 manuals.

Notes on installation 3

3.1 Scope of delivery

You have received the following software package with this delivery:

- PCS 7 Advanced Process Faceplates V9.0 SP1

It contains the block icons and faceplates.

3.2 Hardware requirements

The installation is subject to the conditions of SIMATIC PCS 7 V9.0 SP1.

3.3 Software requirements

- At least SIMATIC PCS 7 V9.0 SP1.

3.4 Installation of PCS 7 Advanced Process Faceplates

Exit all applications before you start setup.

You install the PCS 7 Advanced Process Faceplates via the PCS 7 general setup or start the program setup.exe of the PCS 7 Advanced process Faceplates.

You will receive additional information during the installation process.

The files are copied to the drive on which the WinCC software is installed.

Installation requires about 450 MB of free memory on the hard disk.

To transfer the faceplates and block icons to your OS project, you need to run the OS Project Editor in the WinCC Explorer.

New features and changes as compared to previous versions

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Note

For possible behavior changes in earlier versions, please refer to the readme file of these versions.

4.1 Version 9.0 SP1

4.1.1 What's new in Version 9.0 SP1?

- In the **parameter view** of **PIDConR**, the controller parameters `TI` and `TD` can now also be specified in minutes and seconds depending on the input values `TI_Unit` and `TD_Unit`.
- The following blocks have been given a **batch view**: **CntOhSc**, **Intlk02**, **Intlk04**, **Intlk08**, **Intlk16**, **OpStations**, **OpDi01**, **OpDi03**, **OpTrig**, **Ratio** and **SelA16In**. For this, the Toolbar, Overview of the individual blocks and the shared batch view have been adapted.
- The **standard** and **preview view** of the blocks have been adapted for direction-dependent interlock with the **VlvMotL** and **VlvPosL**.
- The **standard view** for **TimeTrig** has now been given a "display area for block states". Invalid signals and concurrent setting and resetting of a periodical or individual trigger are displayed here.
- Additional values can be selected for the **AOTC**. @TRG_APL_TRENDCURVE.PDL was changed and@PG_APL_DIALOG.PDL created again.
- With **AOTC**, curve groups can now be saved with the option private or public.
- The 4-quadrant view @TRG_APL_TrendCurve_FullScreen.PDL has been added for the **AOTC** .
- The **KalFilt** block now features local operator authorization. The **preview** of **KalFilt** has been adapted for this.

4.1.2 Changes to Version 9.0 SP1

- When an analog value is changed in the block icons, the display of the slider is improved after opening of the operating window.
- In the standard view 2 of ModPreCon, the manipulated variable scaling range has been improved.
- In the trend view of ModPreCon, the online variables are shown again.

- In the standard view of the MPC10x10 block, the preview bar graph display has been improved.
- In the standard view of ModPreCon and MPC10x10, the limited setpoint SP_Out is displayed.
- The number formats of the auxiliary values UserAna1, UserAna2 are uniformly set to AnalogValueFormat3 und AnalogValueFormat4in the standard view of DoseL, MonAnL, Vlv2WayL, VlvAnL, VlvMotL, VlvPosL, MotL, MotRevL, MotSpdL.
- The number format of the additional value AV and the associated limit values is uniformly set to AnalogValueFormat5 in the limit view of VlvMotL, VlvPosL, MotL, MotRevL, MotSpdL.
- Changes in the block icons @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
@Intlk02, @Intlk04, @Intlk08, @Intlk016	2017091902	Adaptations due to newly added batch view
@MotL, @MotRevL, @MotSpL, @VlvMotL, @VlvPosL	2017091902	AnalogValueFormat5 added as the number format of AV should be uniform with AnalogValueFormat5.

Note

No changes in @PCS7TypicalsAPLV7.PDL\@TemplateAPLV7.PDL.

4.1.3 Update Information for Version 9.0 SP1

The following applies to the software update from version 8.2 SP2 / 9.0 to version 9.0 SP1:

1. Update faceplates and block icons of the project; see the "Process Control System PCS 7 Operator Station" manual.
2. After installation, the Web View Publisher must be run on the Web server. The plug-in for the PCS 7 Advanced Faceplates must be updated on the Web clients.

4.2 Version 9.0 SP2

4.2.1 What's new in Version 9.0 SP2?

- The **MonDiL** block has a new block icon MonDiL/6 that can display customer-specific symbols.
- The block **SelA16L** with the corresponding faceplates has been added to select one of 16 analog values with extended functionality.

- The **memo view** has been extended by the "**Display documents**" function. Up to 3 customer-specific files (mht format) can be selected and displayed.
- Buttons for changing the zoom factor have been added in the files for the **@PCS7TypicalsAPLV8.PDL**, **@TemplateAPLV8.PDL** block icons.
- When the limiting is disabled (e.g. PV_AH_En = 0), Feature Bit of the limit value is shown grayed-out in the **limit view** at the following blocks:
  MotSpdCL, VlvAnL, DoseL,
  PidConL, PIDConS, PIDConR, PIDStepL, ModPreCon, MPC10x10,
  MonAnL, MonAnS, OpAnL
- The **standard view** and **preview view** of the blocks were adapted for position-dependent interlock in **VlvAnL** and speed-dependent interlock in **MotSpdL**.
- The "Invalid signal" state is now also shown in the display area for states with the **standard view** for the controllers (**PIDConL, PIDConR, PIDStepL, PIDConS, FmCont, FmTemp, ModPreCon, MPC10x10**) and the faceplates (**OpAnL**,**OpAnS**) .
- For the PIDConL, PIDConR, PIDStepL closed-loop controllers, the special operation input **@PG_APL_OA_FastAction.PDL** has been created for optimization of the operation steps.
- The APL Operator Guide is now available in all languages.

4.2.2 Changes in Version 9.0 SP2

- The text for the PropFacSP parameter was adapted for the PIDConL, PIDConR and PIDStepL controllers in the **parameter views** @PG_PIDConL_Parameter.PDL, @PG_PIDConR_Parameter.PDL, @PG_PIDStepL_Parameter.PDL. It now describes the status for PropFacSP =1.0: Proportional action in the forward branch.
- In the **standard view** of ModPreCon and MPC10x10, you can set the text for the process value for each instance at the CFC in the object properties (I/Os PV_OUT > Identifier) of the block. The text is also displayed in the **preview** for ModPreCon.
  In the **parameter view** of ModPreCon and MPC10x10, you can specify the text for the disturbance variable for each instance at the CFC.
- In the **standard view** of ModPreCon and MPC10x10, the prediction of free movement is now also displayed in automatic mode when tracking mode is switched on.
- In the **standard view**, **parameter view** and **preview** of KalFilt, the sample displays and laboratory results are no longer displayed if no equations are present in the Kalman Configurator. In this case, the SampleEn =0 input at the block is reset.
- In the **preview** of PIDConL, PIDConR, PIDConS and VlvAnL, the display of the manipulated variable of the output channel has been switched to visible for **out of service**.
- In the **standard view** of PIDConS, the status of the position feedback Rbk.ST is no longer displayed if the block is **out of service**.
- In the **standard view** of OpAnL, OpAnS, the status of the process value PV_In.ST is no longer displayed when the block is **out of service**.
- In the **limit view** @PG_VlvPosL_LimitRbk.PDL of VlvPosL, the message suppression/delay for the manipulated variable difference and readback value limits is now also displayed.

- The export button in the **trend view** of KalFilt is now also only visible and operable with "**Higher process controlling**" operator authorization. **@PG_APL_TrendKF_L.PDL** has been modified for this.
- The permission in client mode for buttons of the "APL_OP_BUTTON" type has been improved for **all faceplates**.
- In the **standard view** of SelA16In an unconnected In1 input is also not displayed if Feature Bit5 =1 and Feature Bit7 =0 are configured.
- The operator control enable of the In01 input has been added to the **preview** of SelA16In.
- "**Maintenance demanded and release for maintenance**" is now also displayed for the **faceplate overview "Display and operator controls"** of CntOhSc.
- The function of the "**Back to block icon**" operator control has been improved in the **faceplates**. The APL_LoadFaceplateProperties.fct and APL_OpenNewView_AOTC.fct functions have been modified for this.
- The addition of extra values for AOTC has been extended with important parameters.
- The opening of AOTC has been improved. @TRG_APL_TrendCurve.PDL and all @TRG_APL_TrendCurve_FullScreen.PDL have been modified for this.
- The opening of the message window has been improved in AOTC. @TRG_APL_TrendCurve.PDL has been modified for this.
- The printing function has been improved when using AOTC within the "**Call/assemble trend groups**" function.
- The WinCC window "**PCS 7 Process Tags Overview**" has been expanded with internal and external setpoint switching of SelA16In and SelAn16L.

- Changes in the block icons @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
All block icons with **memo view**	2018061902	The block icons have been enhanced for the use of the new function "**Memo view** with call of customer-specific HTML files".
@MonDiL/6	2018061902	The block icon has been enhanced to display customer-specific icons.
@MonDiL/4 @MonDiS/4	2018061902	The correct color is now always displayed in the icon when opening the picture. The default of attribute status 3 has been set to zero.
@VlvPosL/1 @VlvMotL/1	2018061902	Customer-specific icons can now also be used on the block icons via the "Directory for pictures" property.
@KalFil/1 @MPC10x10/1 @MPC10x10/3 @SelA16In/?	2018061902	The units with an integer value of 0 are now also displayed on the block icons and can be set on the CFC via the Unit (S7_Unit) property parameter.
@@SFC_TYPE/2 @@SFC_TYPE/3 @@SFC_RTS/2 @@SFC_RTS/3	2016121302	New allocation states have been integrated into the block icons.

Note

No changes in @PCS7TypicalsAPLV7.PDL\@TemplateAPLV7.PDL.

4.2.3 Update Information for Version 9.0 SP2

The following applies to the software update from version 8.2 SP2 / 9.0 to version 9.0 SP1:

1. Update faceplates and block icons of the project; see the "Process Control System PCS 7 Operator Station" manual.
2. After installation, the Web View Publisher must be run on the Web server. The plug-in for the PCS 7 Advanced Faceplates must be updated on the Web clients.

Information on configuration and operation 5

- The faceplates are designed as multilingual:
  - Interface texts are configured in WinCC,
  - message texts are configured in ES.

  The display texts of the block (s7_shortcut / s7_string_0/1) are delivered only in English and can be changed to the language of the country in ES. You can change these texts in STEP 7 on the block or in the CFC chart of the corresponding block instance.
- Tag names that refer to AS blocks with messages may not contain special characters (spaces % . ' \ ? * :).
- Configuration at the block icon
  It is recommended not to make any instance-specific parameter changes at the block icon, for example, for the following settings:
  - Color settings for the trend display
  - Changes to operator permissions

  If you nevertheless make instance-specific parameter changes, they do not have an effect if the faceplate is opened with the "Picture selection via measuring point" or "Jump from faceplate to faceplate" function and not directly with the block icon. In this case, the system-specific settings are in effect and not the instance-specific settings.
- Jumping from "Faceplate to Faceplate"
  This function is language-based. To use this function in a foreign language, the language needs to be configured in your project. In the SIMATIC Manager (menu command Options > Language for Display Devices…), check if there is a foreign language used in the project. If necessary, provide this foreign language as described in the "PCS 7 – Configuration Manual Operator Station" and compile the OS.
  This function is not available in the OS simulation, the keys for jumps do not operate in the OS simulation.
- Changes in faceplate
  If you make changes in faceplates, then you will have to document them in the project. In case of an upgrade, you will also have to make these changes in the newly supplied APL Faceplates.
- You can specify your own units in the XML file APLCustomerUnits.xml.
- If you want to adjust the scaling of the APL faceplates during process control, you can make the `@APLFaceplateScaleFactor` tag operable in a process picture. To achieve this, copy the new button objects from `@PCS7TypicalsAPLV8.pdl` into a process picture.
- The "**Display documents**" function in the memo view on an OS client requires the configuration of a standard server for the Split Screen Manager (SMM). See "PCS 7 – Operator Station Configuration Manual > Determining the default servers for OS client"
- The "**Display documents**" function is not supported on a Web server.

- The following functional limitation occurs for the "**Display documents**" function when using WinCC V7.1.4.7:
  Execution of the function "Create/update block symbols" deletes the file names configured at the block symbols at "`NoteView1..3`".
  The file names are no longer deleted as of WinCC V7.4.1.8 and higher.

Notes on the documentation

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The terms or message classes Alarm, Warning, Tolerance or the corresponding acronyms in icons and colors used in the documentation are not valid when using user-configured message classes.

These terms and colors depend on the project-specific setting.

The user-configured message classes are only supported by block icons from the template pictures "@PCS7TypicalsAPLV8.PDL" or template "@TemplateAPLV8.PDL".

Change history of PCS 7 Advanced Process Faceplates

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Changes since delivery release of PCS 7 Advanced Process Faceplates Readme (online)

Version	Edition	Change
2017-12-02 (ONLINE)	12/2017	Delivery status PCS 7 Advanced Process Faceplates V9.0 SP1