

# SIEMENS

## SIMATIC

### Process Control System PCS 7 PCS 7 Advanced Process Faceplates Readme V9.0 SP3 Update 3 (online)

Readme


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Version: 2020-09-18 (Online)


## 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.

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 <b>WARNING</b>
indicates that death or severe personal injury <b>may</b> result if proper precautions are not taken.

 <b>CAUTION</b>
indicates that minor personal injury can result if proper precautions are not taken.

<b>NOTICE</b>
indicates that property damage can result if proper precautions are not taken.


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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

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

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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.**

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## Notes on installation

### 3.1 Scope of delivery

You have received the following software package with this delivery:

- PCS 7 Advanced Process Faceplates V9.0 SP3

It contains the block icons and faceplates.

### 3.2 Hardware requirements

The installation is subject to the conditions of SIMATIC PCS 7 V9.0 SP3.

### 3.3 Software requirements

- with at least **SIMATIC PCS 7 V9.0 SP3 with at least PCS 7 Advanced Process Library V9.0.3.4.**

### 3.4 Installation of PCS 7 Advanced Process Faceplates

Exit all applications before you start setup.

Install the PCS 7 Advanced Process Faceplates via the PCS 7 master setup or start the `Setup.exe` program 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 1 GB of free space 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.

Uninstallation is not recommended and is only possible via the Windows settings.

*3.4 Installation of PCS 7 Advanced Process Faceplates*

# New features and changes as compared to previous versions

# 4

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## Note

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

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## 4.1 Version 9.0

### 4.1.1 What's New in Version 9.0?

- The rapid stop is now also displayed at the block icon for the motors **MotL**, **MotRevL**, **MotSpdCL**, **MotSpdL**, **VlvPosL** and **VlvPosL**.
- The prediction horizon is displayed in the preview for the model-based predictive control, **ModPreCon**.
- For the model-based predictive control, **MPC10x10**, the target values of the operating point optimization are displayed in the standard view.
- Faceplates and block icons have been integrated for the new **KalFilt** block.
- For the expansion of the bypass function, the parameter view and preview, the area in the faceplate for "Display and operator control interface" as well as the block icons of the following blocks were adapted: **MonAnL**, **MonDiL**, **PIDConL**, **PIDConR**, **PIDStepL** and **TotalL**. The standard view of the interlock blocks was also adapted: **Intlk02**, **Intlk04**, **Intlk08**, **Intlk16**.
- The AOTC function was expanded by the input of digital values. This affects the following blocks: **MotL**, **MotS**, **MotRevL**, **MotSpdCL**, **MotSpdL**, **VlvL**, **VlvS**, **Vlv2WayL**, **VlvAnL**, **VlvMotL**, **VlvMPosL**, **OpDi01**, **OpDi03**, **OpTrig**, **MonDiL**, **MonDiS**, **MonDi08**
- A help button was added to the picture window of the AOTC function.
- Online help can now be called from within the APL faceplates. A help button was added for this in the "Display and operator control interface" area of the faceplate.
- The call button for the batch view is locked in the "Display and operator control interface" area depending on whether a block is used by Batch (BatchID <>0) This affects all blocks with batch capability.
- In the standard views of the **MonDi08** and **MonDiL** blocks, more than 16 characters can be input for the FlutxTmIn parameters through automatic adaptation of the character set.
- The size of the faceplates can be adjusted from 50% to 200% with the scaling factor **@APLFaceplateScaleFactor**.

4.1 Version 9.0

The following points are already included in APL 8.2 SP2:

- The **SFC Bausteinsymbol** was moved from the Basic Library to the Advanced Process Library and adapted.
- The ramp view of the blocks **PIDConL**, **PIDConR**, **PIDStepL**, **MotSpdCL**, **VlvAnL** and **OpAnL** was adapted because the gradient limit was expanded to the default through the ramp time. The time until the target setpoint is reached is displayed in the preview. Active ramp operation is now displayed in the block icons and in the display area for block states in the standard view.
- The first analog input can be operated in the standard view of the **SelA16In** block.
- The standard view of **MotSpdCL** was adapted for the new inverter enable function.

4.1.2 Changes in version 9.0

- The display of the signal status in the "Display and operator control interface" area of the faceplates was adapted in the event all inputs at the interlock blocks **Intlk02**, **Intlk04**, **Intlk08**, **Intlk16** are not interconnected (16#FF).
- Changes in the block icons @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
@MotL @MotRevL @MotSpdCL @MotSpdL @VlvMotL @VlvPosL	2016121302	Rapid stop added
@KalFil1	2016121302	Block icon for new block
@MonAnL @MonDiL @PIDConL @PIDConR @PIDStepL @TotalL	2016121302	Expansion of the bypass functionality
@SFC_TYPE	2016121302	The SFC block icons were moved from the Basic Library to the Advanced Process Library and adapted.
@PIDConL @PIDConR @PIDStepL @MotSpdCL @VlvAnL @OpAnL	2016121302	Active ramp operation is displayed in the block icon

@MotL @MotS @MotRevL @MotSpdCL @MotSpdL @VlvL @VlvS @Vlv2WayL @VlvAnL @VlvMotL @VlvMPosL @OpDi01 @OpDi03 @OpTrig @MonDiL @MonDiS @MonDi08	2016121302	AOTC function: Expanded by digital values
@MonDiL @MonDi08 @VlvPosL	2016121302	Color indices were adapted in the block icons
@SelA16In	2016121302	The use of custom emf files was added in the block icons.
@Intlk02 @Intlk04 @Intlk08 @Intlk16	2016121302	The display of the signal status in the block icons was adapted in the event that all inputs are not interconnected (16#FF).

**Note**

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

### 4.1.3 Update information for version 9.0

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

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 SP1

### 4.2.1 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.

### 4.2.2 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 **AnalogValueFormat4** in 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.

### 4.2.3 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.

## 4.3 Version 9.0 SP2

### 4.3.1 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**) .

### 4.3 Version 9.0 SP2

- 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.

#### 4.3.2 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 <b>memo view</b>	2018061902	The block icons have been enhanced for the use of the new function " <b>Memo view</b> 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/1/3	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.

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#### Note

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

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### 4.3.3 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.

## 4.4 Version 9.0 SP3

### 4.4.1 What's New in Version 9.0 SP3?

- The "Permission", "Protection" and "Interlock" button texts can be adapted on all faceplates with interlock in the CFC using the Text1 properties of the interlock inputs (Permit, Intlock, Protect etc.) . The **standard view** and the **preview** of the following blocks have been modified for this: **DoseL, MotL, MotRevL, MotS, MotSpdCL, MotSpdL, Vlv2WayL, VlvAnL, VlvL, VlvMotL, VlvPosL, VlvS, OpDi01, OpDi03, PIDConL, PIDConR**
- Filters for disabled and suppressed messages can be applied in the **PCS 7 process tag browser**.
- For the **trend views**, the number of decimal places of the Y-values on the block icons can be specified using AnalogValueFormat1..4. The global scripts `APL_SetTrendParameter.fct`, `APL_SetTrendParameter2.fct`, and `APL_SetTrendProperty.fct` have been modified or added for this.

### 4.4.2 Changes in Version 9.0 SP3

- Script errors are now no longer displayed when opening the **limit views**. The global script `APL_SetTrendParameter2.fct` has been adapted for this.
- In the **limit views**, the operator control permissions are also updated for input "Suppress messages".
- In the **notes view**, the list entries and the Open button are now also displayed again after "Recall screen composition". The global scripts `APL_ConfigureFaceplate.fct` and `APL_UpdateScreenCompositionInfo.fct` have been modified for this.
- In the preview for **SelA16In** and **SelAn16L**, the user-specific texts for the inputs are now also displayed. The files `@PG_SelA16In_Preview.PDL` and `@PG_SelAn16L_Preview.PDL` have been modified for this.
- After direct operator input of an analog value, it is now also possible to change the value with the slider. The `@PG_APL_OA_Analogithlimits100.PDL` file has been modified for this.
- The content of the **notes view** is now also visible in the Web server. The `@PG_APL_NoteView.PDL` file has been modified for this.
- When a second view is opened by right-clicking the operator control element of the faceplate, this element is now also selected.
- When a faceplate is opened on the WebClient via the **PCS 7 process tag browser**, the pin button is now correctly set.
- Faceplates connected using `SelFp1` and `SelFp2` are now also correctly displayed on the OS. `APL_OpenNewView.fct` has been modified for this.
- In the second **standard view** of the **Intlk16** block, the navigation button text is now also correctly displayed.
- In the **limit view** for the readback value of **MotSpdCL**, the message delays of the ER alarms are correctly displayed.

- In the **standard view** of the **VlvPosL** block, the limits for the "Open" and "Close" positions are correctly displayed on the bar graph for the position feedback as a function of MV\_OpScale.
- In the **message view**, the display options dialog button can now also be seen in the WebClient. @PG\_APL\_Message.pdl and @PG\_APL\_Message\_AOTC.pdl have been modified for this.
- The **group display** of **CntOhSc** shows the **maintenance request and release for maintenance**. @PG\_CntOhSc\_Overview.pdl has been modified for this.
- The 2-step and 3-step operation of the **PIDonR** block has been improved. @PG\_PIDConR.pdl has been modified for this.
- In the **parameter view** of **ModPreCon**, the text specification for the disturbance variable has been improved. @PG\_ModPreCon\_Parameter.pdl has been modified for this.
- Changes in the block icons @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
@@SFC_TYPE/2 @@SFC_TYPE/3	2019013102	New allocation states have been integrated into the block icons.

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#### Note

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

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### 4.4.3 Update Information for Version 9.0 SP3

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.

## 4.5 Version 9.0 SP3 Update 1

### 4.5.1 Changes in Version 9.0 SP3 Update 1

- In the **preview** for **VlvPosL** and **VlvMotL**, the motor feedback FbkOpngOut, FbkClsgOut are now also displayed.
- When an **analog value is changed**, the display of the slider has been improved after the operating window is opened. The @PG\_APL\_OA\_Analogwithlimits100.PDL file has been modified for this.

- If you **select a faceplate** not via the block icon, but with a jump to picture from a standard view, the format of the limits is displayed correctly. The following files have been modified for this: @PG\_APL\_OA\_Analog101.PDL, @PG\_APL\_OA\_Analogwithlimits100.PDL and @PG\_APL\_OA\_FastAction.PDL.
- **Direct control** can now always be exited using the **Cancel** key. The file @PG\_APL\_AnalogPercent.PDL has been modified for this.
- **Opening the parameter view** of **VlvPosL** via the right mouse button has been improved. The following files have been modified for this: APL\_OpenNewView.fct, @PG\_VlvPosL\_Parameter.PDL, @PG\_VlvPosL\_Parameter2.PDL, @PG\_VlvPosL\_ViewToolbar.PDL
- In the **standard view** of **PIDStepL**, a **non-defined character** was displayed depending on certain block states. This character has been removed. The @PG\_PIDStepL\_Standrad.PDL has been modified for this.
- For the blocks **MotSpdCL**, **OpAnL**, **PIDConL**, **PIDConR**, **PIDStepL**, and **VlvAnL**, the **remaining ramp run time**, depending on the time factor `TimeFactor`, is shown in the **preview** in seconds, minutes, and hours at the outputs `SP_RemRT` and `MV_RemRT`. The following previews have been adapted for this: @PG\_VlvAnL\_Preview.PDL @PG\_MotSpdCL\_Preview.PDL @PG\_OpAnL\_Preview.PDL @PG\_PIDConL\_Preview.PDL @PG\_PIDConR\_Preview.PDL @PG\_PIDStepL\_Preview.PDL
- After **upgrading the PCS 7 Advanced Process Faceplate (APG)**, APG had to be reinstalled when using **PCS 7 Advanced Process Graphics**. This is no longer necessary as of this version. After upgrading, the APG functionality is retained.
- The **display of the decimal places in the trend view** depends on the configuration on the block icon. The following file has been modified: APL\_SetTrendProperty.fct
- The button "**Back to process picture**" did not work reliably for pinned faceplates. Changed file: APL\_OpenNewView.fct
- Improved support of the PCS 7 OS function "**Screen composition**" on an OS server. Changed file: APL\_LoadFaceplateProperties.fct
- In the **memo view**, the button "**Open**" is only available for configured documents. Changed file: @PG\_APL\_Memo.PDL
- **Compatibility WinCC >V7.4.1 Update 11**  
As of WinCC V7.4.1 Update 12 a new target setpoint could not be entered with **activated gradient limits**; this is now possible again. Changed files: @PG\_MotSpdCL\_Standard.PDL, @PG\_PIDConL\_Standard.PDL, @PG\_PIDConR\_Standard.PDL, @PG\_PIDStepL\_Standard.PDL, @PG\_FmTemp\_Standard.PDL, @PG\_FmCont\_Standard.PDL, @PG\_OpAnL\_Standard.PDL, @PCS7ElementsAPL.PDL, @PG\_APL\_OA\_Analogwithlimits100.PDL
- **Changes in the block icons** @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
@Vlv2WayL/1	2018061902	is no longer displayed as interrupted for a short time when a picture is selected.

**Note**

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

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## 4.5.2 Update Information for Version 9.0 SP3 Update 1

The following applies to the software update to version 9.0 SP3 Update1:

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.

## 4.6 Version 9.0 SP3 Update 2

### 4.6.1 Changes in version 9.0 SP3 Update 2

- In the **Japanese language version**, the new texts are translated in the default view of the **TimeTrig** block.
- In the **limit value view** of the **MotSpdCL** block, the display of the unit of the setpoint difference has been improved. Changed file: @PG\_MotSpdCL\_LimitRbk.PDL.
- Access to **online values** for **AOTC** on the **Web client** has been improved. For access to archive values, refer to the information in the APL manual in section "APL Operator Trend Control". Changed files: APL\_OpenCurveControl.fct, APL\_TrendPropChange\_AOTC.fct.
- **Selecting the Memo view** no longer generates unnecessary **script diagnostics**. Changed files: APL\_VBScripts.bmo, @PG\_APL\_NoteView.pdl.
- **Setpoint input with active ramp** improved. The setpoint in the operating area of the faceplate is no longer overwritten. Changed files: @PG\_MotSpdcl\_Standard.PDL, @PG\_PIDConL\_Standard.PDL, @PG\_PIDConR\_Standard.PDL, @PG\_PIDStepL\_Standard.PDL, @PG\_FmTemp\_Standard.PDL, @PG\_FmCont\_Standard.PDL, @PG\_APL\_OA\_Analogwithlimits100.PDL.
- With **negative GAIN values**, the sign in the parameter view of the **PIDConL**, **PIDConR** and **PIDStepL** blocks were not always displayed. Changed files: @PG\_PIDConL\_Parameter.PDL, : @PG\_PIDConR\_Parameter.PDL, : @PG\_PIDStepL\_Parameter.PDL
- **Changes in the block icons** @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

4.7 Version 9.0 SP3 Update 3

Type	VersionID	Change
@MonAnL/4 @MonAnS/4	2020022502	The <b>color change for the measured value</b> is performed similar to types 1-3 depending on the acknowledgment status and the limit violation.
@OpDi03/1/2	2020022502	The block icons of the <b>OpDi03</b> block were extended by the <b>"Active memo"</b> display.
@VlvPosL/1/2/3/4	2020022502	<b>Tracking of the manipulated variable</b> is indicated in the block icon.

**Note**

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

**4.6.2 Update information for version 9.0 SP3 Update 2**

The following applies to the software update to version 9.0 SP3 Update 2:

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.

**4.7 Version 9.0 SP3 Update 3**

**4.7.1 Changes in version 9.0 SP3 Update 3**

- Adding values to the **"APL Operator Trend Control"** (AOTC) from a picture window using CTRL + left mouse click has been improved.  
Changed file(s): APL\_OpenCurveControl.fct.
- In the **trend view** of the controller blocks **PIDconL** and **PIDConR**, the display range for MV is no longer fixed at 0..125. The display range now depends on the values configured at MV\_OpScale. At **PIDStepL**, the display range is determined automatically with the AutoScale function depending on RbkOut.  
Changed file: @PG\_APL\_TrendPID.PDL, @PG\_APL\_TrendPID\_Statistic.PDL
- **Calling documents in the Memo view** no longer generates unnecessary **script diagnostics**.  
Changed file(s): @PG\_APL\_NoteView.pdl.
- After **opening the operating area**, the focus is automatically set to the setpoint input field  
Changed file(s): @PG\_APL\_OA\_Analogwithlimits100.PDL

- The "PCS 7 - Process Tags Overview" has been functionally extended. It can now also be filtered for suppressed messages.  
Changed files: PCS7\_TagStates\_APL.xml.
- **Changes in the block icons** @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
@MonDiL/1 @MonDiS/1	2020080702	Operation via the block icon is now also possible with In = 0.

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**Note**

The @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL files contain block icons with the **VersionsID 20191118x**. These block icons were prepared for a future functional extension. Functionally, these icons correspond to version V9.0.3 Update 1.

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

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## 4.7.2 Update Information for Version 9.0 SP3 Update 3

The following applies to the software update to version 9.0 SP3 Update 3:

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

- The faceplates are designed as multilingual:
  - **Interface texts** are configured in WinCC.
  - **Message texts** are configured in the 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.

- **Function jump from "Faceplate to faceplate"**  
This function is language-dependent. 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, 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 define 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.

- There is the following functional limitation for the "**Display documents**" function when using WinCC V7.1.4.7:  
Execution of the "Create/update block icons" function deletes the file names configured at the block icons at "NoteView1..3".  
The file names are no longer deleted starting from WinCC V7.4.1.8.
- A standard server (SSM) must be configured for the "**Display documents**" function and the documents (MHT files) must be stored there.
- **Format specification for analog value display**  
The analog value format must be configured so that it takes into account the smallest change caused by the operating range and direct operation. This ensures a correct function and does not interfere with direct operation.  
First example:  
Working range: 0 .. 1  
Value adjustment by direct operation: 0,5%  
The **smallest possible change** is 0,005. Therefore, AnalogValueFormat should have at least **3 decimal places** - ##0.000  
Second example:  
Operating range: 0 .. 100  
Value adjustment by direct operation: 0,5%  
The **smallest possible change** is 0,5. Therefore, AnalogValueFormat should have at least **1 decimal place** - ##0.0  
The configuration of the operating value for direct operation and the analog value format is made at the block icon.  
Operating value for direct operation:  
Blocksymbol>Properties>Configuration>DirectOperationValue  
analog value formats:  
Blocksymbol>Properties>Configuration>AnalogValueFormat1..4

## Notes on the documentation

- 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 alarm classes are only supported by block icons from the template pictures "@PCS7TypicalsAPLV8.PDL" or template "@TemplateAPLV8.PDL".
- In the section "**Setpoint view Flow DoseL**" below the first figure in the note there is the sentence  
"2.) Displays (3), (4), (5), (6) and (8) are hidden in scale mode with `Feature.Bit7 = 1`."  
This does not correspond to the current block functionality. Correct is:  
"2.) Displays (3), (4), (5), and (6) are hidden in scale mode with `Feature.Bit7 = 1`."  
This means that, in **scale mode with flow calculation**, the bar graph display for the setpoint is also displayed with `Feature.Bit7 = 1`.



# Change history of PCS 7 Advanced Process Faceplates

# 7

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

Version	Edition	Change
2019 FEB 02 (ONLINE)	02/2019	Delivery status PCS 7 Advanced Process Faceplates V9.0 SP3
2020 JAN 13 (ONLINE)	01/2020	Delivery status PCS 7 Advanced Process Faceplates V9.0 SP3 Update 1
2020-04-24 (ONLINE)	04/2020	Delivery status PCS 7 Advanced Process Faceplates V9.0 SP3 Update 2
2020-07-09 (ONLINE)	07/2020	Delivery status PCS 7 Advanced Process Faceplates V9.0 SP3 Update 2 (Update)
2020-09-18 (ONLINE)	09/2020	Delivery status PCS 7 Advanced Process Faceplates V9.0 SP3 Update 3

