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SIMATIC

PCS 7 Process Control System PCS 7 Advanced Process Faceplates Readme V8.2 SP2 (Online)

Readme

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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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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.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit:

<http://www.siemens.com/industrialsecurity>.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends to apply product updates as soon as available and to always use the latest product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under

<http://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

3.1 Scope of delivery

You have received the following software package with this delivery:

- PCS 7 Advanced Process Faceplates V8.2 SP2

It contains the block icons and faceplates.

3.2 Hardware requirements

The installation is subject to the conditions of SIMATIC PCS 7 V8.2.

3.3 Software requirements

The block icons and faceplates of PCS 7 Advanced Process Faceplates require at least SIMATIC PCS 7 V8.2.

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.

3.4 Installation of PCS 7 Advanced Process Faceplates

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 8.2

4.1.1 What's new in Version 8.2?

- The settings for trend view, operator authorization, and analog formats from block icons are used in the **faceplates** even if the faceplate is not opened with the block icon (e.g. with the function "Picture selection via measuring point" or "Jump from faceplate to faceplate"). The property "Directory for pictures" is only transferred to the faceplates for the status displays Valve/Motor in the family Drives.
- **Global scripts** independently determine the nesting depth of the picture window in the faceplate of the basic picture of the faceplate.
- Overdosing can be acknowledged in the **DoseL** faceplate (new Feature bit).
- New block type **VivPosL / ShrdResL**
- **SeIA16In** dynamically adjusts to the height of the standard view.
- Depending on the Feature bit, the setpoint value can be internally/externally selected in the standard view of the faceplate **SeIA16In**.
- The tooltip text for the button to lock/unlock messages now appears dynamically in the **faceplate**, depending on whether messages can be locked or unlocked.
- Measuring points in the APL are listed in the new **PCS 7 Tag Browser**.

4.1.2 Changes in version 8.2

- Correction of the global script function in **APL_SetTrendProvider** in case the internal tag **@TagArchiveName** does not exist.
- The tooltip text for the **"Lock messages" button** now depends on the status of the lock.
- New **color index** 473-478 for the status indicator for the release for maintenance and status indicator in **ShrdResS**.

4.1 Version 8.2

- Names of EMF files now type-specific and separated according to faceplates and block icons in the **Drives** family.
- Uniform valve display for the **VivL** and **VivS** types between faceplate and block icon in the "Out of service" mode.
- Changes in the block icons @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
@MonDiL/2-@MonDiL/5 and @MonDiS/2-@MonDiS/5	2015062302	The VB scripts for the change of color in the block icons of MonDiL and MonDiS have been corrected for the parameter value "Color"=10 (16#A).
All in the Drives family (except @MotSpdCL/1-@MotSpdCL/4)	2015062302	Names of EMF files now type-specific and separated according to faceplates and block icons.
@OpDi03/3	2015062302	Display for interlocks and bypass added.
@CntOhSc/1 @CntOhSc/2 @ConPerMon/1 @ConPerMon/2 @CountOh/1 @CountScL/1 @CountScL/2 @Intlk02/1 @Intlk04/1 @Intlk08/1 @Intlk16/1 @ModPreCon/1 @ModPreCon/2 @MPC10x10/1 @MPC10x10/2 @OpDi01/1 @OpDi01/2 @OpDi03/1 @OpDi03/2 @Ratio/1 @Ratio/2 @SelA16In/1 @SelA16In/2 @ShrdResS/2 @TimeTrig/1 @TotalL/1 @TotalL/2	2015062302	Correction of Z-sequence of elements in the status bar.
Type VivAnL	2015062302	Error in auxiliary valve is now only shown in the auxiliary valve icon.
Type VivL / VivS	2015062302	Script change, valve states are evaluated also in the "Out of service" mode.

Note

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

4.1.3 Update information for version 8.2

The following applies to the software update from version 8.1.x to version 8.2:

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.

4.2 Version 8.2 SP1

4.2.1 What's new in Version 8.2 SP1?

- You can use the new **APL Operator Trend Control (AOTC)** for displaying trends.
- APL block icons support the group display of the APG (Advanced Process Graphics) library.
- The block inputs `PropFacSP` (P component in feedback) and `DiffToFbk` (D component in feedback) are shown in the parameter view of the blocks **PIDConL**, **PIDConR**, and **PIDConS**.
- The block **MonAnL** supports configuration of a low pass filter in the parameter view.
- The block **ShrdResL** has been expanded from 4 to 8.
- Standard view of the block **SelA16In** supports internal / external switchover.
- As an alternative to the "IDs" of the block interface `AVxx`, the display "OS Additional text" of the I/O `INxx`, also supports the labeling of the analog values in the standard view of the **Intlkxx**.
- The font size for labelling the analog values in the standard view of the **Intlkxx** block is reduced according to the text length.

4.2.2 Changes in version 8.2 SP1

- The AnalogValueFormat5 now has an additional attribute for the analog value format assignment in the block icon for type **MotSpdCL**. The analog value formats 1 to 5 are now based on the following analog values:
 - Analog value format 1: Process read back value `Rbk`
 - Analog value format 2: Setpoint `SP, ER`
 - Analog value format 3: Associated value 1 `UserAna1`
 - Analog value format 4: Associated value 2 `UserAna2`
 - Analog value format 5: Additional analog value `AV`
- The flashing characteristics in the standard view and in the block icons for an unreached valve position and switched off motor have been improved for the motor valves **VlvMotL** and **VlvPosL**.
- Changes in the block icons `@PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL`:

Type	VersionID	Change
@CntOhSc/1	2016040502	The C script for the attribute "UnitNumericValue3" has been modified to prevent a script error during runtime.
@PIDConL/2	2016040502	C-scripts on the object events of "Value2" and "Value3" have been adapted.
@ShrdResL	2016040502	Assignment and active area configured for channels 5 to 8 have been adapted.
@VlvL @VlvS @Vlv2WayL @VlvMotL @MotS @MotL @ShrdResS @ShrdResL @MotSpdL @MotRevL @Intlk02/04/08/16 @MonDiL @MonDiS @MonDi08 @OpDi01 @OpTrig @OpDi03 @OpStations	2016040502	Scripts inserted for mouse operation. The use of the group display in the APG (Advanced Process Graphics) is thus possible.

@VlvMotL	2016040502	<ul style="list-style-type: none"> • Scripts inserted for mouse operation. The use of the group display in the APG (Advanced Process Graphics) is thus possible. • Flashing behavior of the block symbol changed when the motor is stopped and the valve position has not yet been reached.
@VlvAnL @MotSpdCL @MonAnL @MonAnS @OpAnL @OpAnS @PIDConL @PIDConR @PIDConS @PIDStepL @FmCont @FmTemp @ModPreCon @ConPerMon @Ratio @MPC10x10 @CountScL @CntOhSc @CountOh @TotalL @DoseL @SelA16In @TimeTrig	2016040502	Added AOTC (APL Operator Trend Control) for values in the block icon.
@VlvPosL	2016040502	<ul style="list-style-type: none"> • Scripts inserted for mouse operation. The use of the group display in the APG (Advanced Process Graphics) is thus possible. • Added AOTC (APL Operator Trend Control) for values in the block icon. • Flashing behavior of the block symbol changed when the motor is stopped and the valve position has not yet been reached.
@OpDi01_3 @OpDi03_3	2016040502	Status "Bypass protection" has been removed from the block icons.
@SelA16In1 @SelA16In2 @SelA16In3	2016040502	Added display of the selection Internal/External in the block icon.

4.3 Version 8.2 SP1 Update 1

@MotL4	2016040502	Scripts inserted for mouse operation. The use of the group display in the APG (Advanced Process Graphics) is thus possible.
@MonDiS4 @MonDiS5	2016040502	Internal variable MFPIC adapted in the scripts of the object events.

Note

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

4.2.3 Update information for version 8.2 SP1

The following applies to the software update from V8.2x to version 8.2 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 8.2 SP1 Update 1

4.3.1 Changes in version 8.2 SP1 Update 1

- In the limit view for motors, the check marks for "Suppress messages" are now also available during OS client operation and are not grayed out. The function APL_SetLinkAVMessageEnable.fct has been modified for this.
- The status display of the motor valve in @PG_VlvMotL_Standard.PDL has been changed so that irrelevant objects are also not visible in the customized status displays.
- The format at the block icon is set without decimal places, only integers are permitted when changing the value for "Direct control". @PG_APL_OA_Analogwithlimits100.PDL has been modified to this purpose.
- Changes in the block icons @PCS7TypicalsAPLV8.PDL \ @TemplateAPLV8.PDL:

Type	VersionID	Change
@VlvAnL	2016040502	Added or corrected values in the block icon AOTC (APL Operator Trend Control).
@VlvMotL @VlvPosL /1/2	2016101102	The status indicator for open valve and close valve have been modified.

Note

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

4.3.2 Update information for version 8.2 SP1 Update 1

The following applies to the software update from V8.2.1 to version 8.2.1 Update 1:

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 8.2 SP2

4.4.1 Changes to Version 8.2 SP2

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

Type	VersionID	Change
@PIDConL @PIDConR @PIDStepL @MotSpdCL @VlvAnL @OpAnL	2017022402	Active ramp operation is displayed
@SFC_TYPE	2017022402	The SFC block icons in APL style have been moved from the Basis Library to the Advanced Process Library and modified.

Note

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

4.4.2 Update Information for Version 8.2 SP2

The following applies to the software update from V8.2.x to version 8.2 SP2:

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.

4.4.3 What's new in Version 8.2 SP2?

- The **SFC block icon** 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 by means of the ramp time. The time until the target setpoint is reached is displayed in the preview. Active ramp mode is now displayed in the block icons and in the display area for block states in the default view.
- The first analog input can be operated in the default view of the **SelA16In** block.
- When inverter enable is activated, the text "Device infeed" is replaced by "Inverter enable" in the default view of the **MotSpdCL** block.

Information on configuration and operation

- 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.

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 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
2016-06-02 (ONLINE)	06/2016	Delivery state of PCS 7 Advanced Process Faceplates V8.2 SP1
2016-10-07 (ONLINE)	06/2016	Delivery state of PCS 7 Advanced Process Faceplates V8.2 SP1 Update 1
2017-03-07 (ONLINE)	03/2017	Delivery Status of PCS 7 Advanced Process Faceplates V8.2 SP2

