

SIEMENS

SIMATIC

Process Control System PCS 7

Industry Library Readme (V8.0 SP1)

Readme

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1 Security information

Siemens offers IT security mechanisms for its automation and drive product portfolio in order to support the safe operation of the plant/machine. Our products are also continuously developed further with regard to IT security.

We therefore recommend that you keep yourself informed about updates and upgrades for our products and always use the latest version of each product. You can find information on this at:

<http://support.automation.siemens.com>.

You can register for a product-specific newsletter here.

For the safe operation of a plant/machine, however, it is also necessary to integrate the automation components into an overall IT security concept for the entire plant/machine, which corresponds to the state-of-the-art IT technology. You can find information on this at:

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

Products used from other manufacturers should also be taken into account here.

2 Overview

Note

Notes on Installation and Usage

This information has priority over statements made in other documentation. Please read these notes carefully as they contain important information about the installation and use of the V8.0 SP1 blocks.

3 Scope of delivery

You have obtained the following components with this product package:

- **PCS 7 Industry Library V8.0 SP1**

The software contains the required function blocks as well as user defined objects, faceplates and functions.

The SETUP installs the function blocks, user defined objects for operator control and monitoring (block icons, group display).

Update the faceplates of the project with the OS project editor, "Basic Data" tab.

4 Hardware requirements

The conditions of SIMATIC PCS 7 V8.0 SP1 are valid for the installation.

The Industry Library for PCS 7 require at least:

- The conditions of SIMATIC PCS 7 V8.0 SP1 are valid

The Industry Library for S7 require at least:

- Recommendation for use of the library from S7-315 PN/DP and from Firmware V3.1

The Industry Library flexible require at least:

- Recommendation for use of the library from IPC 277D (12")

5 Software requirements

The blocks of the library Industry Library for PCS 7 require at least:

- SIMATIC PCS 7 V8.0 SP1

The blocks of the library Industry Library for S7 require at least:

- SIMATIC PCS 7 V8.0 SP1

or

- STEP 7 V5.5, SIMATIC S7 CFC and SIMATIC WinCC V7.2

The panel blocks of the library Industry Library require at least:

- SIMATIC WinCC flexible 2008 SP3 Standard or Advanced

6 Installation

6.1 Installing

ATTENTION: before you start the setup, older versions of the Industry Library must be de-installed (s. 6.2.)

Close all applications before starting the Setup program.

Insert the CD in the drive and start the "SETUP" program. The blocks are then copied to the PC / PG and entries are made in the registry. Important operating information is displayed while SETUP is being performed.

The library is copied to the same drive on which the PCS 7 basic software is installed. You require approximately 400 MB of space on your hard disk.

Following the installation, you can find the blocks under "Industry Lib PCS 7 V80" respectively "Industry Lib S7 V80".

To apply the changes to the blocks in your AS project, you have to execute a block type import.

The following components are installed by the SETUP:

- library Industry Lib for PCS 7 in directory ...\\SIEMENS\\Step7\\s7libs\\IL_PCS_7
- library Industry Lib for S7 in directory ...\\SIEMENS\\Step7\\s7libs\\IL_S7
- WinCC faceplates (block symbols, group displays, loop displays) in directory ...\\SIEMENS\\WINCC\\options\\pdl\\IL_PCS7 respectively ...\\IL_S7
- WinCC project functions in directory ...\\SIEMENS\\WINCC\\aplib
- WinCC flexible faceplates (IL_PCS7_Flex_V80.wlf und IL_S7_Flex_V80.wlf) in directory ...\\SIEMENS\\Step7\\s7libs
- Onlinehelp in directory ...\\SIEMENS\\Step7\\S7LIBS\\IL_PCS7 respectively ...\\IL_S7_V80
- user documentation in directory ...\\SIEMENS\\Step7\\S7MANUAL\\IL_PCS7 respectively ...\\IL_S7

6.2 De-installing

The software has to be de-installed in conformance with MS Windows. For this purpose remove the software via the MS Windows application "Add or Remove Programs".

7 New features and changes as compared to previous versions

7.1 Version V8.0 SP1

7.1.1 What's new in V8.0 SP1?

- Only IL for PCS 7: The inhibit on the "Message class" and "With confirmation" cells was removed in all blocks with indicator configuration to allow setting of the user-configured message classes.
- Only IL for PCS 7: Changes to the objects for limiting values and messages in the user-configured message classes.
- New block **S7PIDCon** in IL for S7 library as controller block for S7-300.
- New block **S7PPID** in IL for S7 library and the according icon and faceplate in the IL flexible library as panelconnection for the S7PIDCon block
- New blocks **APC_MpList**, **APC_MV**, **APC_OpSP** and **APC_Supervisor** in IL for PCS 7 to connect external, higher-level controllers to a PCS 7 process control system.

7.1.2 Changes in V8.0 SP1

- Change of the block number of S7SelR from FC260 to FC262.
- Changes in the block symbols @PCS7TypicalsIL_PCS_7.Pdl \\ @TemplateIL.Pdl:

Type	Change
All types capable of messages	Changes to the objects for limit-value display (Alarm, Warning or Tolerance limit symbol) and group display to the new user-configured message classes

7.1.3 Update information in V8.0 SP1

The following applies to the software update from V8.0 to version 8.0 SP1:

1.	Compile AS:	Complete compilation
2.	Download AS program:	Downloading changes
3.	AS stop necessary:	No
4.	Compile OS:	Complete compilation

List of blocks IL for PCS 7:

Name	Number	Block version	Interface change (AS stop necessary)	Code change
AccuS	FB1111	1.0	No	No
Aggr08	FB1114	1.1	No	Yes
Aggr16	FB1113	1.1	No	Yes
APC_MpList	FB1184	1.0	No	No
APC_MV	FB1182	1.1	No	No
APC_OpSP	FB1181	1.1	No	No
APC_Supervisor	FB1180	1.1	No	No
ASRcvH	FB1117	1.1	No	Yes
ASSendH	FB1116	1.1	No	Yes
CalcWatP	FB1144	1.1	No	Yes
HxFct	FB1147	1.1	No	Yes
IL_BR	FB1152	1.0	No	No
IL_BS	FB1151	1.0	No	No
MonAn08	FB1102	1.1	No	Yes
MonAnDi	FB1104	1.1	No	Yes
PCalcWatP	FB1146	1.1	No	Yes
PHxFct	FB1149	1.1	No	Yes
PMonAn08	FB1118	1.1	No	Yes
PMonAnDi	FB1119	1.1	No	Yes
PMonAnL	FB1120	1.1	No	Yes
PMonDi08	FB1122	1.1	No	Yes
PMonDiL	FB1121	1.1	No	Yes
PMotL	FB1107	1.1	No	Yes
PMotRevL	FB1108	1.1	No	Yes
PMotSpdCL	FB1110	1.1	No	Yes
PMotSpdL	FB1109	1.1	No	Yes
PolygonExt	FB1155	1.1	No	Yes
POpAnL	FB1123	1.1	No	Yes
POpD	FB1131	1.1	No	Yes
PPIDL	FB1138	1.1	No	Yes
PVlvL	FB1136	1.1	No	Yes
PVlvMotL	FB1143	1.1	No	Yes
SelFp	FB1154	1.0	No	No
SelStr	FB1106	1.0	No	No
SimAn	FB1100	1.0	No	No
SimDi	FB1101	1.0	No	Yes
SPCurve	FB1141	1.3	No	Yes
TimeSwitch	FB1142	1.2	No	Yes
UsrM	FB1112	1.1	No	Yes
VlvDsL	FB1103	1.1	No	Yes
ASTimeBCD	FC611	1.0	No	No
ConvAbRe	FC610	1.0	No	No
ConvCF	FC609	1.0	No	No
SelB	FC602	1.0	No	No
SelByt	FC604	1.0	No	No
SelC	FC608	1.0	No	No
SelDI	FC607	1.0	No	No
SelDW	FC606	1.0	No	No
SelI	FC603	1.0	No	No
SelR	FC601	1.0	No	No
SelW	FC605	1.0	No	No

List of blocks IL for S7:

Name	Number	Block version	Interface change (AS stop necessary)	Code change
S7AccuS	FB269	1.0	No	No
S7Aggr08	FB277	1.0	No	No
S7Average	FB270	1.0	No	No
S7CalcWatP	FB264	1.0	No	No
S7Get	FB1198	1.0	No	No
S7HxFct	FB267	1.0	No	No
S7MonAn	FB271	1.1	No	Yes
S7MonAn08	FB272	1.0	No	No
S7MonAnDi	FB273	1.0	No	No
S7MonAnGrad	FB274	1.0	No	No
S7MonDi	FB275	1.0	No	No
S7MonDi08	FB276	1.0	No	No
S7Mot	FB258	1.1	No	Yes
S7MotRev	FB259	1.1	No	Yes
S7MotSpd	FB260	1.1	No	Yes
S7MotSpdC	FB261	1.1	No	Yes
S7MV3P	FB262	1.0	No	No
S7MVLd	FB302	1.0	No	No
S7OpA	FB278	1.0	No	No
S7OpD	FB279	1.0	No	No
S7PCalcWatP	FB282	1.0	No	No
S7PHxFct	FB285	1.0	No	No
S7PIDCon	FB265	1.1	No	No
S7PMonAn	FB286	1.0	No	No
S7PMonAn08	FB287	1.0	No	No
S7PMonAnDi	FB288	1.0	No	No
S7PMonAnGrad	FB289	1.0	No	No
S7PMonDi	FB290	1.0	No	No
S7PMonDi08	FB291	1.0	No	No
S7PMot	FB292	1.0	No	No
S7PMotRev	FB293	1.0	No	No
S7PMotSpd	FB294	1.0	No	No
S7PMotSpdC	FB295	1.0	No	No
S7PMV3P	FB296	1.0	No	No
S7POpA	FB297	1.0	No	No
S7POpD	FB298	1.0	No	No
S7PPID	FB283	1.0	No	No
S7Put	FB1199	1.0	No	No
S7PVlv	FB301	1.0	No	No
S7SplitRange	FB303	1.0	No	No
S7UsrM	FB280	1.0	No	No
S7Vlv	FB263	1.1	No	Yes
S7ASTimeBCD	FC261	1.0	No	No
S7ConvAbRe	FC256	1.0	No	No
S7ConvCF	FC257	1.0	No	No
S7SelB	FC258	1.0	No	Yes
S7SelI	FC259	1.0	No	Yes
S7SelR	FC262	1.0	No	Yes
ASRcvH	FB1117	1.1	No	Yes
ASSendH	FB1116	1.1	No	Yes

8 Information on Configuration and Operation

Industry Lib for PCS 7

- The Industry Library for PCS 7 is an enhancement to the PCS 7 Advanced Process Library (APL). The delivered blocks are designed to be used in combination with the blocks of the APL.

Industry Lib for S7

- The default areas of the DB- and FC- number band need to be adapted via the menu „Customize for Compile/ Download“ in the CFC.

WinCC flexible

- For using global libraries (IL_PCS7_Flex_V80.wlf and IL_S7_Flex_V80.wlf) see User's Manual
SIMATIC HMI
WinCC flexible 2008
Compact / Standard / Advanced

Web Client

- To use the WebClient functionality all functions (*.fct - Files) from the directory WinCC-Installationpath\aplib\IL_PCS7 respectively ... \IL_S7 have to be moved to the directory Projectpath\winccproj\OS-Name\Library\WebClient (WebClient folder has to be created manually) of the WebServer-project. Afterwards the header has to be regenerated (function in Global C - Script editor).

9 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. User-configured message classes are supported only by the block symbols of V8 and later.

10 Support

Support Request:

<https://www.siemens.com/supportrequest>