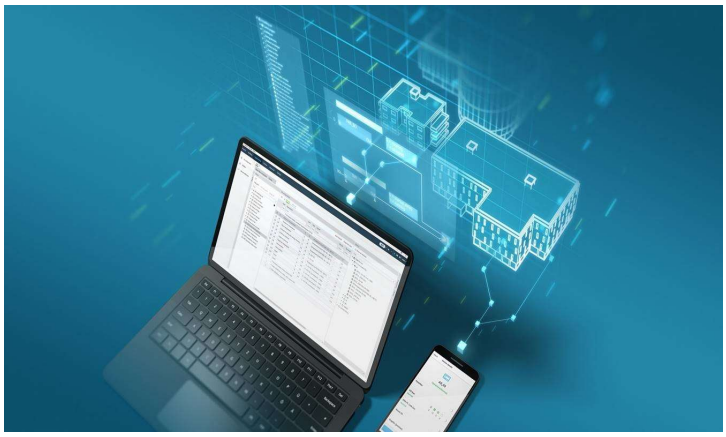
SIEMENS

Desigo/ Apogee

ABT Site V4.3



Engineering and commissioning tool for PXC4/5.. for primary plants and DXR1/2.., PXC3.. for room automation as well as Acvatix Intelligent Valves (EVG.., EVF..) with tested applications; and plant graphics engineering for Desigo Control Point.

- Create and manage projects
- Define building structure and groupings
- Add network configurations, including devices
- Freely program primary plants for PXC4/5.. for HVAC and building services
- Configure standard applications for DXR1/2.. room automation stations including related field devices and Intelligent Valves (EVG../EVF..), based on comprehensive library with application types and templates
- Commissioning and report functions
- Commissioning of programmed applications for DXR2.. and PXC3.. room automation stations
- Edit and create plant graphics for Desigo Control Point devices
- Flexibly and efficiently create customized user interfaces for Desigo Control Point
- Graphics library with a large selection of symbols and templates for Desigo Control Point
- Certificate management to activate https connections in embedded web servers

Use

This data sheet provides information on products or usage that may not be available in some countries.

Desigo PXC4/5.. for primary plants

As of ABT Site V4.0 programming of primary plants for PXC4/5.. automation stations with BACnet communication and Modbus devices/gateways integration is supported. The tool is used for engineering and commissioning using freely programmable graphical function charts (close resemblance to CEN standard 11312). It presents the user an intuitive and efficient engineering experience. A collection of over 250 function blocks, from basic logic elements to complex HVAC functions, ensure fast and efficient block programming. All function blocks can be graphically connected. These function blocks paired with a selection of sample programs ensure a fast start to any project requirement. Additionally, fast changes and updates can be made on the fly without causing major interruptions to daily operations.

Tool connection

ABT Site supports several methods to communicate with automation stations. The following connection types are possible for PXC4/5..

- Via on-board WLAN hot spot of the PXC4/5..
- Via BACnet network connection, either over IP or MS/TP depending on the automation station type
- Via cloud connection with a valid Remote Access subscription (subject to regional availability) https://assets.bpcloudapps.siemens.com/
  See section **Product documentation** for more information.

Desigo room automation

ABT Site is used to configure tested, standardized applications for the DXR1/2.. room automation stations. The tool is highly flexible, configuring inputs and outputs of the DXR1/2.. in addition to functions.

The DXR1/2.. automation stations are supplied with preloaded applications that only need be configured.

A comprehensive library with tested, standardized applications is available that can be used instead of the preloaded applications.

ABT Site can be used together with other tools from Desigo such as Desigo Xworks Plus (XWP) or ABT Pro.

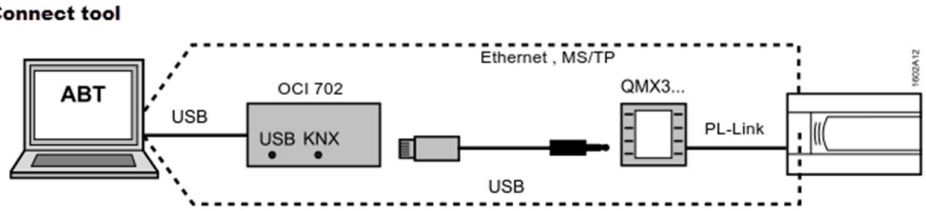
Together with ABT Pro, ABT Site specifically supports the commissioning of programmed applications for DXR2.. room automation stations, but also modular room automation stations of the PXC3 series.

Tool connection

ABT Site supports various methods to communicate with automation stations. The following connection possible for DXR1/2.. and PXC3..

- Via room operator unit
- Via USB
- Via BACnet network connection, either over IP or MS/TP, P1 depending on the automation station type

Service interface OCI702 is required to connect via room operator unit (see data sheet A6V10438951).



Desigo Control Point

The integrated graphics editor for ABT Site offers the following.

- Flexible and efficient creation of customized user interfaces: Page layouts, navigation, texts, colors, operating elements (list, buttons, hyperlinks, etc.)
- Efficient reuse of available graphics
- Simulated preview of graphics in the tool during creation

All functions to edit and create graphics are available using a standard web browser. No additional tool is required.

A comprehensive graphics library with a large selection of symbols and templates are available for Desigo Control Point

- 2D and 2D+ symbols for plant graphics
- Operating elements for end user operation
- Templates for technical primary plants and rooms, meeting and office environments, energy dashboards

Tool connection

ABT Site can communicate over BACnet/IP with touch panels or web interfaces for Desigo Control Point.

Acvatix Intelligent Valve

Acvatix Intelligent Valve is a control valve with a preinstalled, specific application. ABT Site supports, as of V3.3.1, engineering and commissioning of Acvatix Intelligent Valves together with Desigo Xworks Plus (XWP as V6.2 update) for seamless BACnet / IP communication within Desigo PX projects.

Tool connection

ABT Site can communicate with Acvatix Intelligent Valves over BACnet/IP.

Functions

The scope of functions for ABT Site as well as supported products and devices may vary by country and distribution channel. The applicable scope can be viewed in the ABT Site Help under **Info > Configuration > Device packets**. For questions, please contact your Siemens POC or consult the Siemens Industry Online Support at https://supportstage.industry.siemens.com

Desigo PXC4/5.. for primary plants

Project workflow with ABT Site

ABT Site is the only tool needed to engineer and commission a complete system of PXC4/5.. automation stations, Desigo Room Automation DXR and Desigo Control Point.

There are five major steps for engineering and commissioning a project containing PXC4/5 with ABT Site:

1. Define the project settings, add the building elements and the PXC4/5.
2. Set up the physical data points in the I/O Configuration editor and the Modbus devices / gateways including data points in the Modbus editor.

3. Program the primary functionality for the PXC4/5.
4. Add, engineer and configure any DXRs or Desigo Control Point if needed.
5. Finally, to commission the project use either ABT Site or the mobile app ABT Go or access the embedded web server using a web browser.

The flexible workflow also allows to use an existing plant or a plant sample from the library as a starting point for the PXC4/5 and freely modify it (step 3), and set up the physical and Modbus data points (step 2).

Efficiency and security

Several users can work concurrently on different devices within the same project.

The program logic for the PXC4/5 can be tested without any automation station hardware by using the built-in program simulation of ABT Site.

Data points, Modbus devices as well as plants or any parts of them can be added to a user specific custom library for future use for easy exchange with other users.

ABT Site comes with a number of predefined users, user roles, and user settings. The password policy defines the minimum requirements to attain a strong password. There are additional features like adding an expiration date for a password or using blocking mechanisms for computerized log in attempts to enhance the security aspect.

Desigo room automation

Project workflow with ABT Site

First, create the project-specific application templates in ABT Site. The templates can easily and efficiently be configured based on preloaded applications or libraries. An automation station type is assigned to each application template. Freely programmable application templates are taken over directly from ABT Pro for PXC3 series modular room automation stations, but also for the DXR2...

After determining the building structure, create the automation stations by selecting them from the existing application templates and add them to the structure.

Then, commission and load the project data and carry out point test.

Concurrent work during commissioning

Several users can work concurrently on different automation stations within the same project on the plant. To this end, the components to be loaded are checked out (Pack & Go) to allow users, e.g. installers, to configure (add/edit/delete automation stations/application templates) or load the program followed by data point testing. The test results are saved to the automation station and can be viewed any time by the commissioning engineer and read back into the engineering database.

Desigo Control Point

Project workflow with ABT Site

No engineering is required to prepare standard operating views.

The offline engineering workflow is fully integrated for Desigo devices in ABT Site:

- Building hierarchy
- Device assignment
- Create graphics

Graphics engineering in the runtime system via HTML 5.0 web browser.

Graphics library with a large number of templates and symbols.

The operating interface for technical operators and end users is created using the same engineering solution. Tool-free device commissioning. Commissioning using wizard-assisted setup is performed directly on the touch panel or using an HTML5 browser. The devices are operated using standard operating views. Graphics can be created or edited online using the integrated graphics editor.

The runtime system must always recognize and integrate standard BACnet devices.

Certificate management

ABT Site provides TLS certificate management for PXC4/5.. for primary plants, DXR2.. and PXC3.. for room automation as well as for Desigo Control Point devices. Certificate management allows for secure http (https) communication with web servers embedded in the Desigo devices. Https ensures web clients can connect to a genuine web server, while, at the same time, integrity and confidentiality of communication are protected. This feature requires firmware version Desigo V6.2 and higher on both the devices and automation stations.

Acvatix Intelligent Valve

The project workflow in ABT Site for Acvatix Intelligent Valves is the same as the workflows for DXR1/2.. provided the tool is used together with Desigo Xworks Plus.

Licensing

ABT Site does not require a license.

ABT Site can be used together with other tools from Desigo such as Desigo Xworks Plus (XWP). A Desigo Tool license is required in this case.

Ordering

The ABT Site installation routine with application library, plant graphics library, and documentation is available at no cost from your Siemens POC or can be downloaded via Siemens Industry Online Support at https://supportstage.industry.siemens.com.

Accessories

Type	Order number	Description
OCI702	S55800-Y101	Service interface to connect ABT Site to automation stations via room operator unit (Desigo room automation only).

Product documentation

Topic	Title	Document ID
User's guide	ABT Site help	A6V10431913
Desigo room automation	Data sheet for USB-KNX interface OCI702	A6V10455849
Desigo PXC4/PXC5	PXC4 & PXC5 range overview	A6V11973782
Desigo PXC4/PXC5	PXC4 & PXC5 planning overview	A6V11973797
Desigo Control Point	Desigo Control Point basic documentation (Desigo system)	A6V11170804
Desigo Control Point	Desigo Control Point basic documentation (Standard BACnet systems)	A6V11604297
Intelligent Valve	Engineering/commissioning with Desigo	A6V11572317
Remote Access Desigo	Type 1: Manually renewable subscription - data sheet	A6V12046495
Remote Access Desigo	Type 2: Automatically renewable subscription - data sheet	A6V12046497

Training courses are offered that promote the proper use of the tools. Contact your local Siemens partner for details.

You can download other relevant documents from the following Internet address.
http://siemens.com/bt/download

Specifications

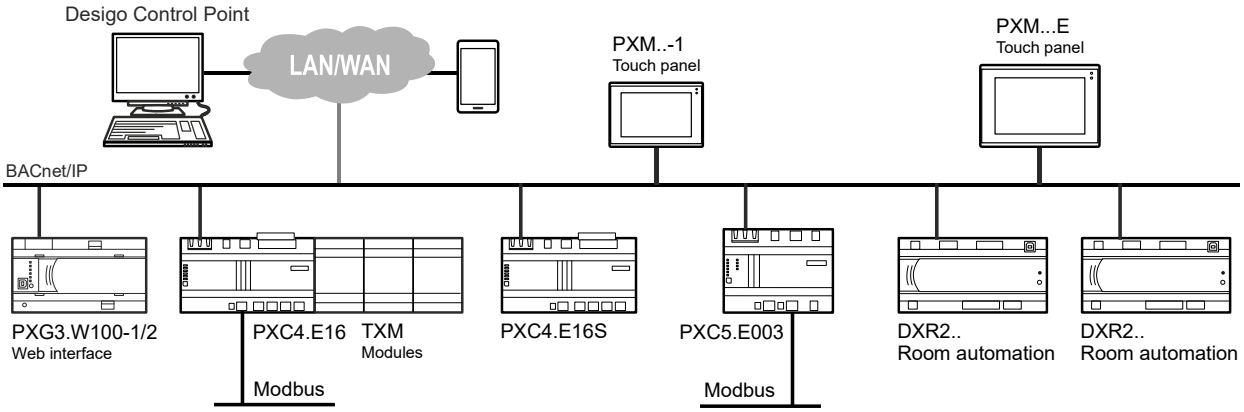
System requirements

PC hardware ABT Site stand-alone installation without other Desigo tools	
CPU	Compatible with Intel and AMD technology > 2.0 GHz (> 3.0 GHz recommended)
Memory	16 GB RAM (32 GB RAM recommended)
Hard disk	> 100 GB SSD or high performance HDD. The greater the number and size of the projects, the more additional memory is required. An ABT project size may be anywhere between 250 MB und 30 GB.
Other	Monitor: 1366x768 (1680x1050 recommended). USB port (Desigo room automation only) for SSA-DNT as an alternative to Ethernet connection

Compatibility

Windows 10 Professional, Enterprise	MS Office 2019	Microsoft Office 365
64 bit	64 bit	64 bit

Topology


Desigo Control Point
LAN/WAN
PXM..-1
Touch panel
PXM...E
Touch panel
BACnet/IP
PXG3.W100-1/2
Web interface
PXC4.E16
TXM
Modules
Modbus
PXC4.E16S
PXC5.E003
Modbus
DXR2..
Room automation
DXR2..
Room automation

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