

Desigo Engineering Framework – Make an impact

End-to-end engineering suite for building automation projects



Unrestricted | © Siemens 2022 | SI BP S MK | February 2022

Engineering building automation systems can be tedious

A building automation system with fitting hardware but **inefficient engineering** tools can end up in:

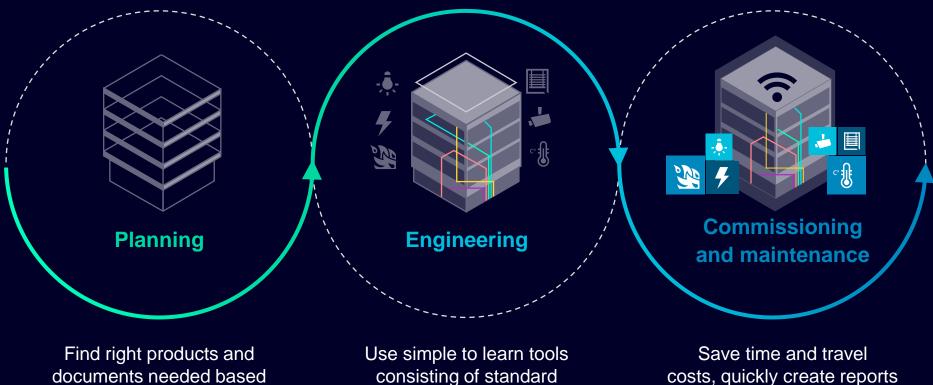
- More time consumption
- Higher project costs
- Greater complexity in the execution of tasks



The choice of **the right suite** is therefore crucial to ensure the smooth running of the project through the different stages.



Success factors in the lifecycle of a building project



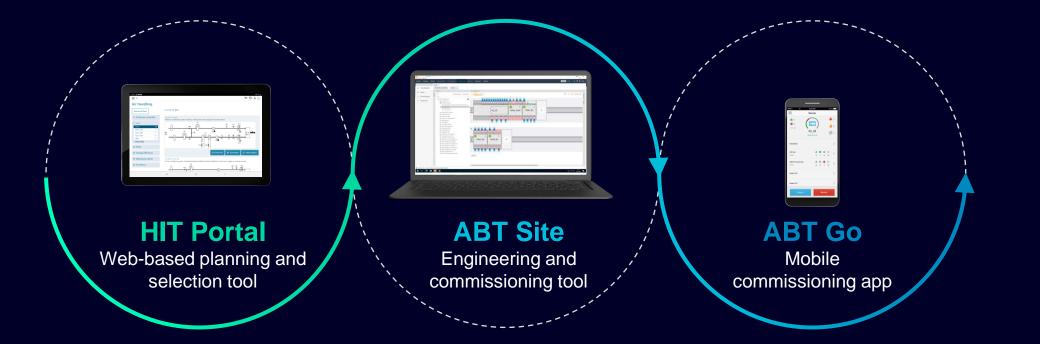
applications with help and

support functions

and use locator services for diagnostics

on project's requirements

Seamless workflows along the entire lifecycle

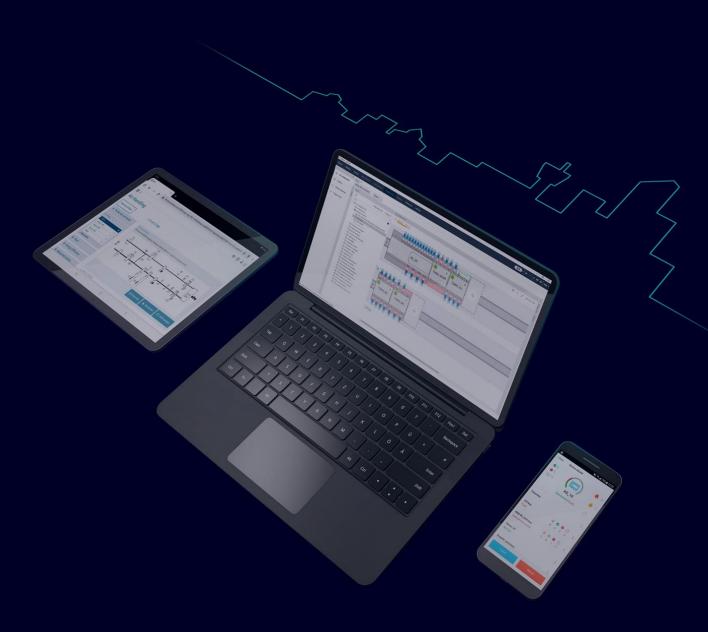


License free!



Comprehensive solution

A license-free framework that ensures seamless workflows during the entire life cycle









Stakeholders involved in a Building Automation project

John

Planner

Motivation

Keep sales estimates within acceptable margins

Tasks

- Analyze project specifications
- Provide pre-sales project design documentation

Needs

Common and easy-to-learn tools with in-built calculation support and detailed documentation

Pain-points

Determine project requirements with the optimum cost-effective solution within tendering deadlines

Jane

Engineer

Motivation

Enable the customer to get the right plant configuration and relevant benefits

Tasks

Get a project done with field devices engineered, program logic running, and easy modifications

Needs

Re-use elements as much as possible and fast testing to minimize the engineering time

Pain-points

Programming from scratch and inconsistent engineering workflows are time consuming and cumbersome

Joanna Commissioning expert

Motivation

Efficient commissioning with minimum errors to exceed customer KPIs

Tasks

Data point testing including device assignment and configuration

Needs

Work with a portable device with efficient tool

Pain-points

Challenging diagnostics and project data collection on portable devices with visual reporting

SIEMENS



the engineer **Dints** ming from scr nsistent engin

Use case 1 Plan your project with HIT Portal



Situation

I received a specification for a tailored solution from a customer and they would like to see a proposal documentation and bill of material. How can I do that?

Desigo Select

• • • • • • •	0	al formation of some			(∆) (A)
SIEMENS Approxistentia			HIT	9 maran 🛓	user [0] shopping cen
Applications Products Cathlog	Replacement Guilde	SNX Condquistor — My Projec	N Marketing Informatio	PDF Citalog	Design Select
А мунороз - согразовалиемно	R0104 (2021-01-200				
n 🛄 See Aue 101 (302140-20)	1714	int room			1
	5.e		An installand Unit - AMAL		
A 🛅 istileer					
A COLUMN	- 604	avant.			
III An want rained ANELTS					
		Mitional requirements DarSonerAnaber, scholen			
		When increasely eventile increases a monotonical state indication of states a			
	De	fine required tras			
	100	re are kOs			
		V Jacoglopus			
	-	C LWYRNY ()			10
	40	 Arrawas Image: Image: Ima			· · · ·
		· Faryadani (B)			
	- U 1	 identificacións per les 			- 4

Documentation

	10			09.0	c Copy	0.00
	-	0402.0001-014	Contract non-values delays SAC as W. 2517. But housing, 10, 200, 1 May, 140, 4 May	1		
	81	GM03.294	Been nuclear with 0.5 with temperature censor, see no feel habits that ap load keys, while	1		
	10	VMP45.32-0.62	3-port search in with System esternal thread, 56/10, 54/10, 44(3),00	1.1	1	
		19881.1	Beccorrectle actuator: 200 H, 5 S nm, 4524 K, 1,5 m, 3K auxiliary switch	1		
1	D.	A2801	The electric encoder (product	1		
4		07258012	Presence devecer with brightness senser	1.1		
4		0472100	Condenanden monten	1		
4		<u>GKA2100</u>	Line remain ensemble	1		
1	102	VMP45.40-1	Separational value with bypase, court relitioned, 19/16, 20/16, kop 1	1	1	
		53581	Recompanie actuance (200 H, 5 S num, 4024 H, 1 S H, 3P	1		

Solution

By using **Desigo select in HIT portal** I can easily plan my project and provide the final documentation to the customer.

Moreover, this project can be used by Jane as a reference to start the engineering in ABT Site.

Unrestricted | © Siemens 2022 | SI BP S MK | February 2022

Use case 2 Engineer your project with ABT Site



77

Situation

My customer would like to use a generic AHU but with a specific fan configuration. I would like to do these changes and test them but I don't have a real controller. How can I do that?

Solution

ABT Site consists of the library with multiple AHU plant samples. The application concept in programming editor allows me to modify plants with simple drag and drop* feature.

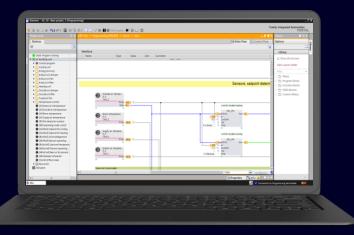
And the program simulation helps me to check the changes without having a real device. This way I can also work from my home office.

1 This feature is available with ABT V5.0

Drag and drop

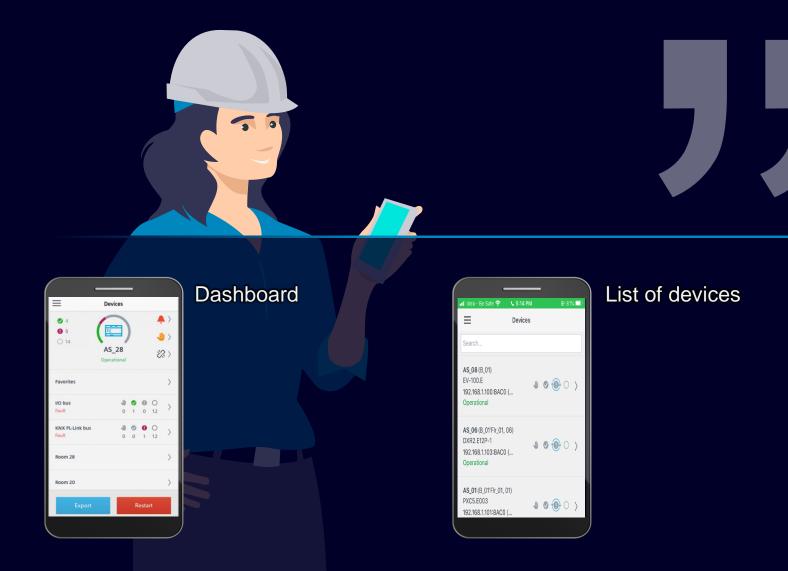
Fright free E. F.			- 6 8 5	They	10.000	
Orshan				Options	1	
11	Danies or carbon			1	01	
International and a second secon	hat a to	Market Constraints		Development Developme		
	Lossette .		-	 [COD1] (Child opper (i)) [COD2] Child opper (i), [COD2] Child opper (i), [COD2] (Dengar, reading (i),<td>Isenguă Assensitigu- Iong Functuli 2 bi h ating summol & par- losa Eventione & Mil roper, temperature coper, lengu-commi ger, Temp-commi</td>	Isenguă Assensitigu- Iong Functuli 2 bi h ating summol & par- losa Eventione & Mil roper, temperature coper, lengu-commi ger, Temp-commi	
d + 10	0		n bito	[ATLCT+] AMU, Serry LAND, Bernol, Chr. LA	toptions -	
				8		

Simulation





Use case 3 Commission your project with ABT Go



Situation

The project I need to commission is a huge building and was extended by over 500 DALI lights and I would like to save my commissioning effort and time. How can I do that?

Solution

ABT Go has an intuitive dashboard for the overview of the project including history data. It also has the binary search function for identifying and assigning DALI lights. This makes the identification of the lights quite easy and efficient, it even allows me to address all lights at once without having to be an expert. Moreover, I can send the commissioning reports with on-site pictures to Jane directly from the ABT Go app.



Productivity booster

Increased efficiency with an extensive library and consistent engineering

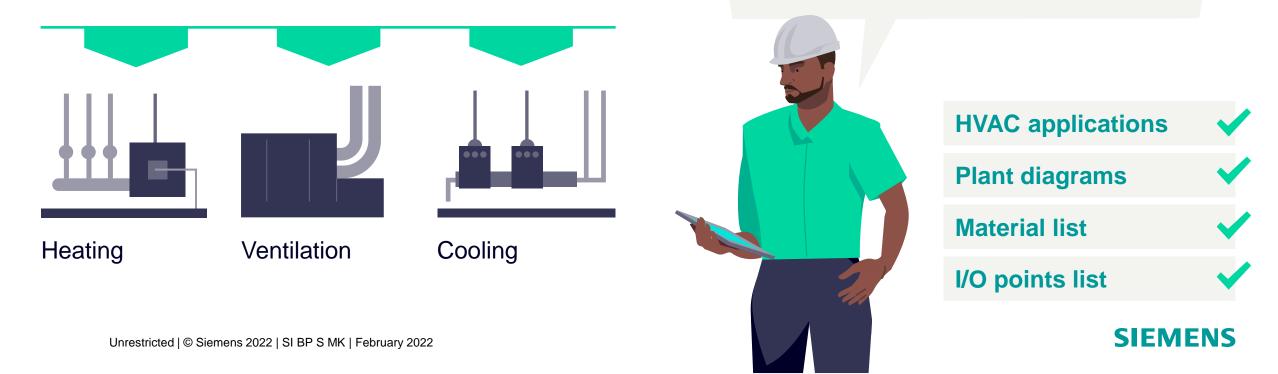




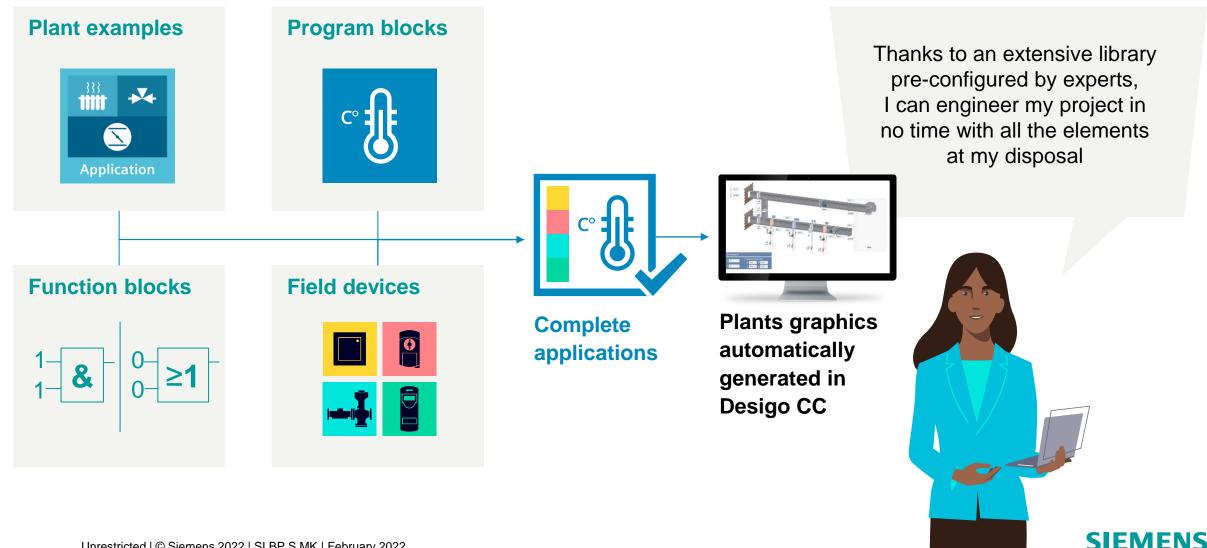
Pre-engineered applications and selection tool



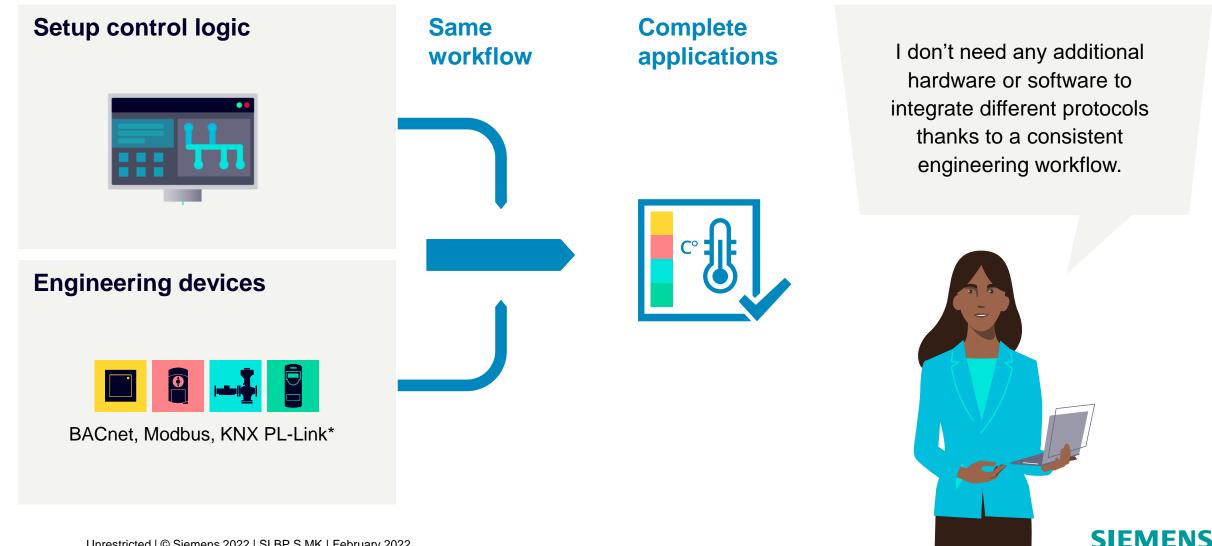
According to the specific requirements of my project, I am guided to create the complete technical documentation and am ready to share the project configuration in no time.



An extensive library to save your time



A seamless engineering across protocols integration



A mobile app to enhance your productivity on-site

Thanks to intuitiveness of the mobile app, I save time and costs in the commissioning

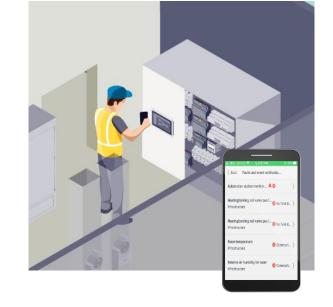


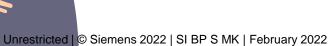
Overview of the devices' commissioning status and point testing

Field device identification and parameters modification

 $\square \mathcal{P}$

Commissioning reports creation and sharing

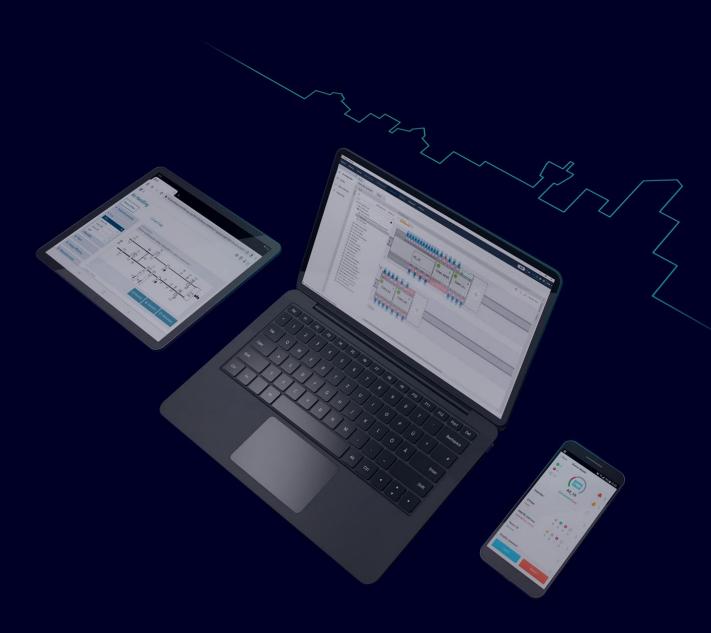






Highly intuitive

Optimized features and satisfying user-experience to make work more enjoyable





Desigo System functionalities to make your work enjoyable

BACnet SC engineering and certificate management support
Share parts of a project, specific functions and entire projects with colleagues
Drag and drop of block elements and view of function details

Visual guidance to address correct signal types







Sub-system functionalities to make your work enjoyable

Primary automation features – with Desigo



Cloud connectivity to access your controllers remotely



Full test of applications with program simulation without real devices

Play and pause for quick changes and delta download



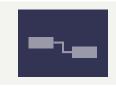
0

Engineering of **Modbus** gateways

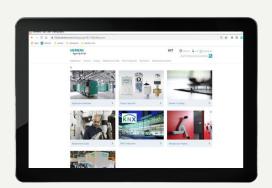


DALI commissioning

Simple room programming



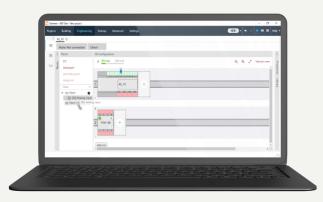
Get started in minutes



HIT Portal

No training requirements

Browse online



ABT Site Download the tool

Download

Training modules

E-Learning YouTube



ABT Go No training requirements

Google play

Apple store

Make an impact Desigo Engineering Framework

Siemens Switzerland Ltd Smart Infrastructure Global Headquarters Theilerstrasse 1a 6300 Zug Switzerland siemens.com/desigo-engineering-framework



Unrestricted | © Siemens 2022 | SI BP S MK | February 2022

