

Digital twins of product data available for all ECAD tools with just a few clicks

2023-05-10





» Josef
Schmelter



Engelbert
Blumenthal

Digitale Zwillinge der Produktdaten für alle ECAD-Tools

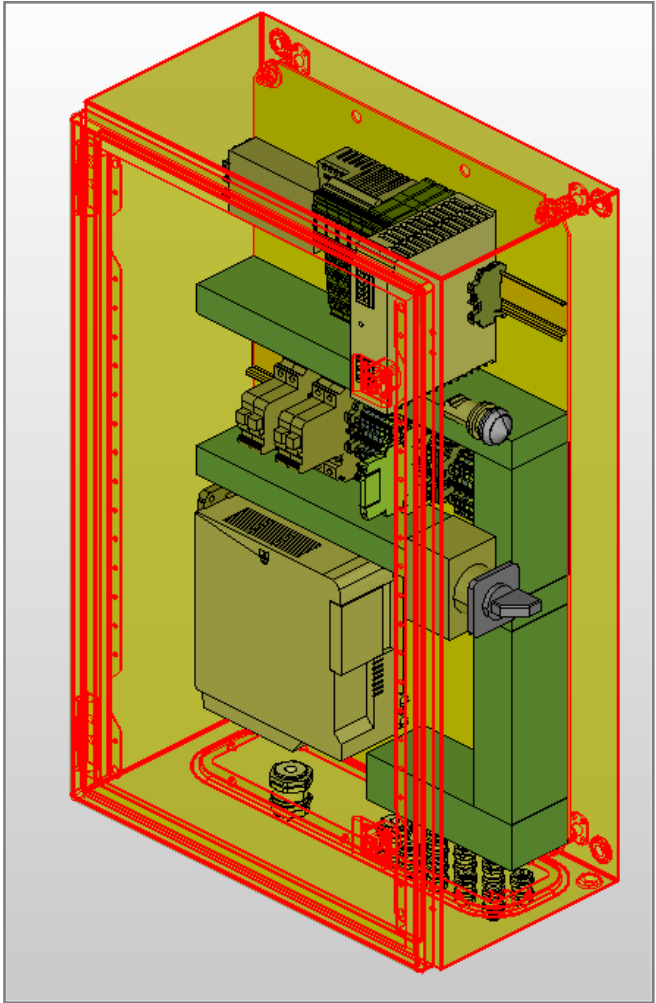
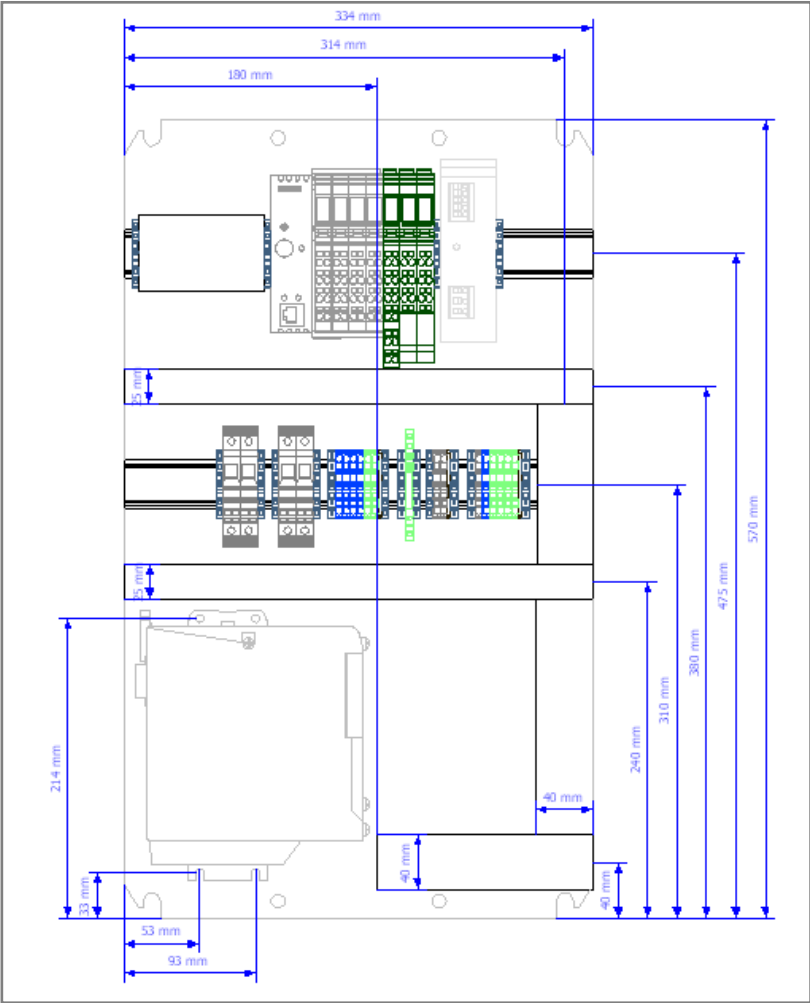
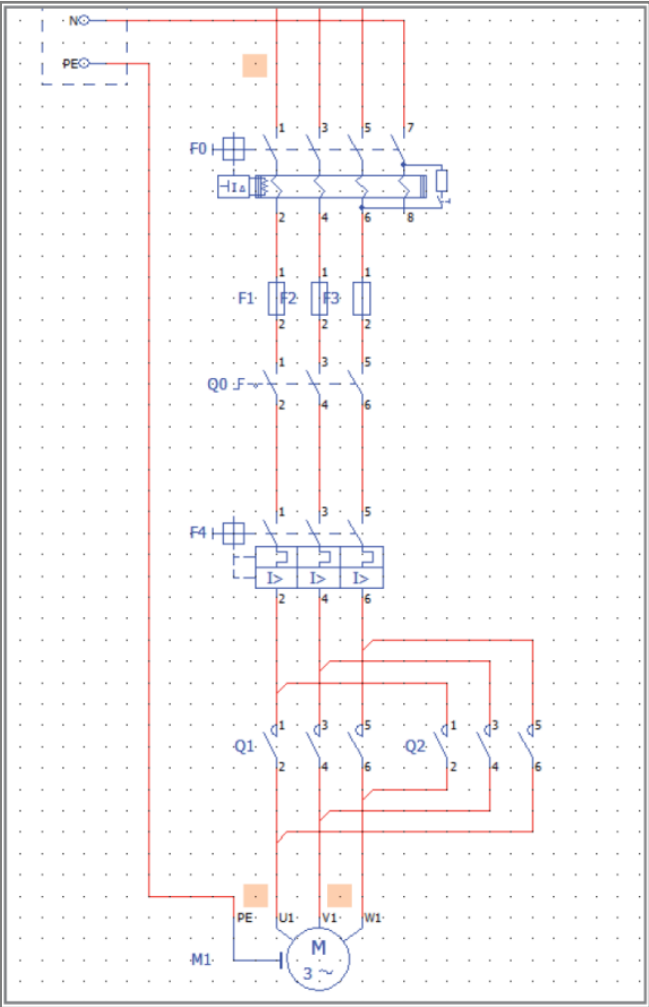
- ECLASS Advanced
Produktdaten Standard
- Integration in bestehende ECAD-Tools
- Vereinfachung der Engineering Prozesse

PHOENIX CONTACT product portfolio

Our motivation - Optimal support for our customers in their applications with product data

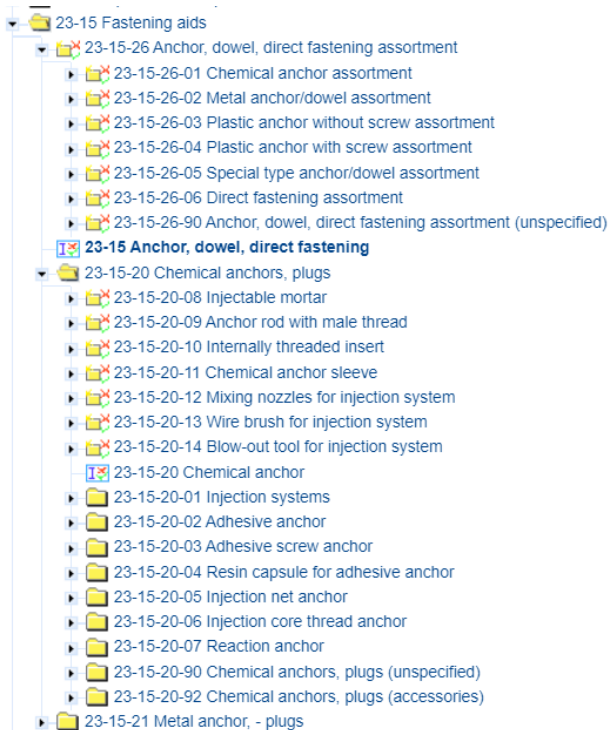


ECLASS in engineering applications

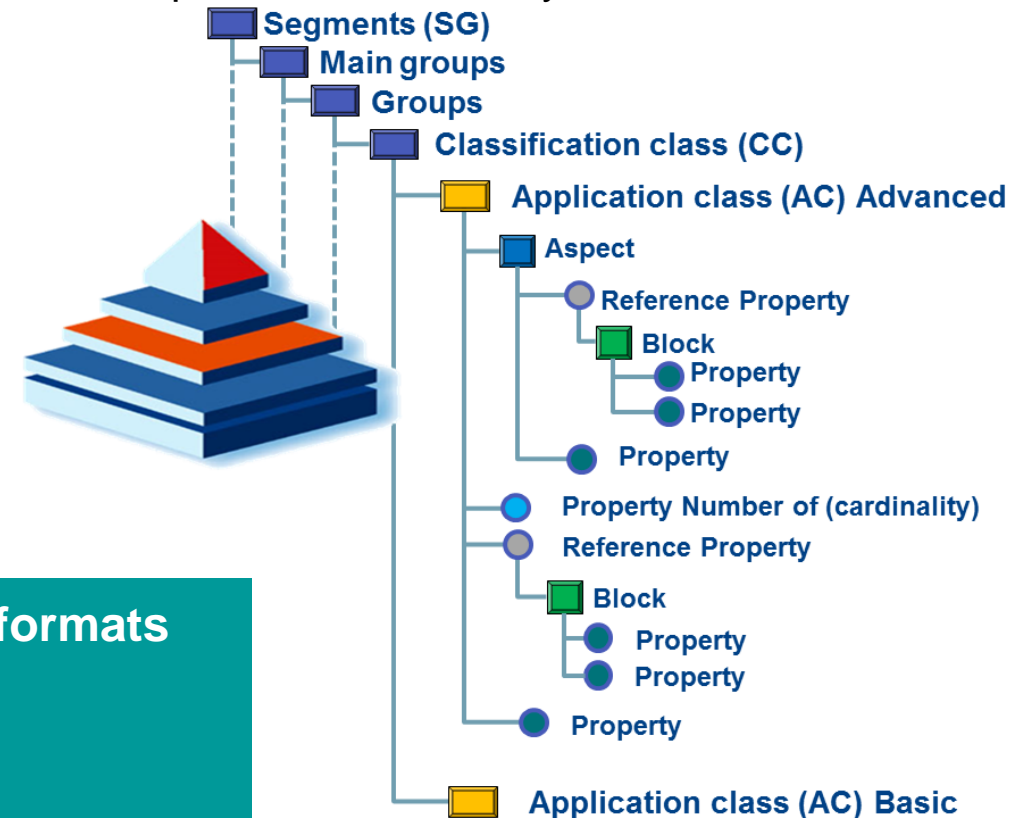


The ECLASS ADVANCED model is maintained via the ECLASS CDP

- All changes to the model are recorded via Change Request
- With each release generation, the changes to the previous version are recorded in Transaction Update Files (TUFs)
- The TUF files (xml) are machine readable and therefore data sets can be updated automatically
- The ECLASS CDP is continuously developed further



CLASS



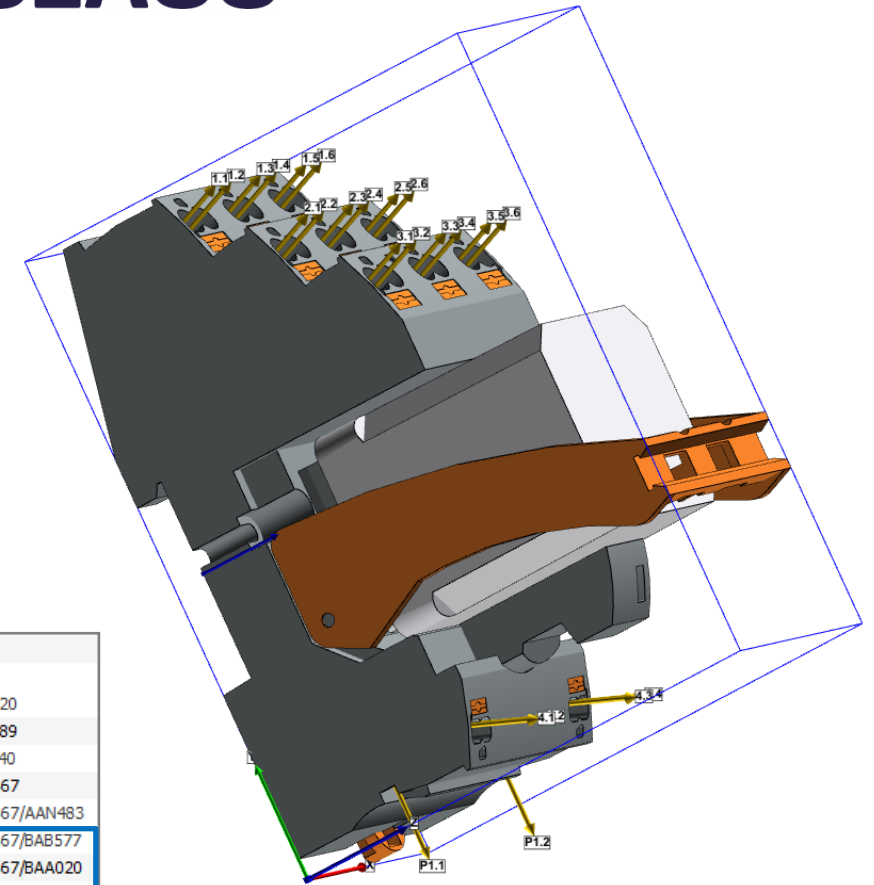
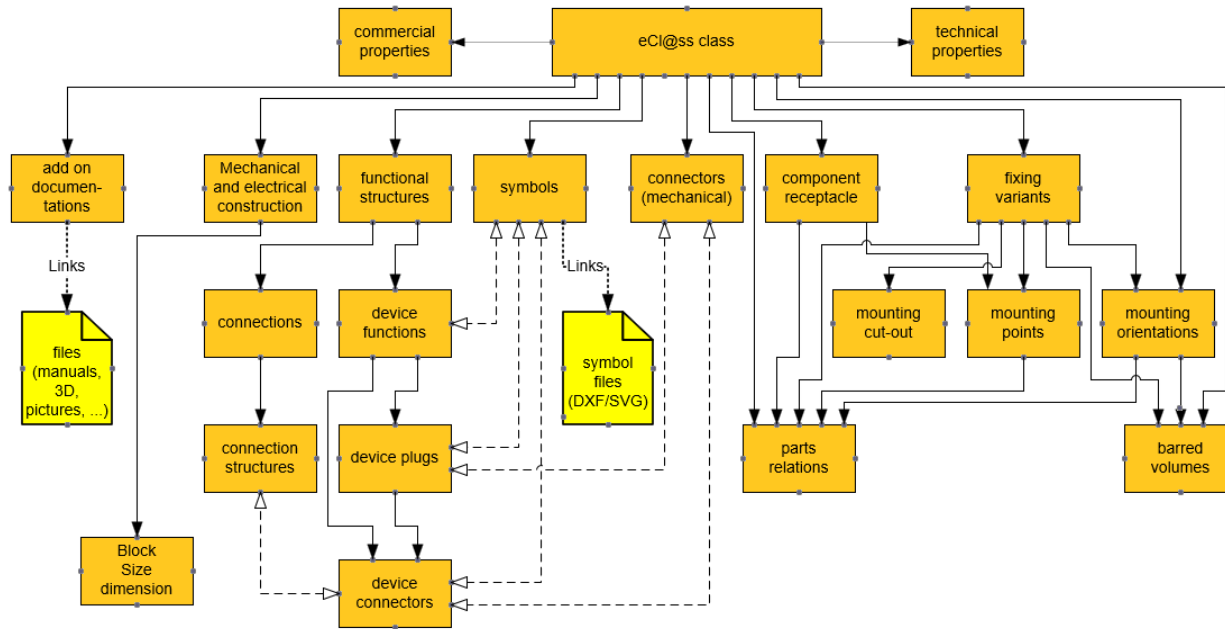
One model two export formats

BASIC

ADVANCED

ECLASS in engineering applications

ECLASS CEG CAX develops uniform vendor-independent data structures



B Mechanical and electrical construction (s)				ADO270/AAR080	
B Construction general				ADO270/AAR080/AAQ640	
C	Number of the executions of the housing parts	0		ADO270/AAR080/AAQ640/AAN520	
	Fitting form	Assembly		ADO270/AAR080/AAQ640/AAN489	
	net weight	kg	0.2116	ADO270/AAR080/AAQ640/AAF040	
B Size dimension				ADO270/AAR080/AAQ640/AAQ667	
P	enveloping body type	enveloping body cuboid		ADO270/AAR080/AAQ640/AAQ667/AAN483	
	Depth	mm	89.9	ADO270/AAR080/AAQ640/AAQ667/BAB577	
	Height	mm	111.73	ADO270/AAR080/AAQ640/AAQ667/BAA020	
	Width	mm	43.4	ADO270/AAR080/AAQ640/AAQ667/BAF016	

Application of product data - clipx ENGINEER



https://www.phoenixcontact.com/cxe/app/

Start Ansicht Schnittstellen

EINFÜGEN BEARBEITEN ZUBEHÖR MARKING ASSISTENTEN / KONFIGURATOREN

PROJEKTBAUM

- Projekt: Hybrid-Motorstarter ...
- Rail 1
- K 1
- K 2
- X 1
- X 2
- X 3
- X 4
- X 5

UNPLATZIERTE ELEMENTE

EINFÜGECENTRUM

Suchbegriff(e)

- AB-PTI
- AB-PTI 4/3
- AB-PTI/3
- AB-UTI 6/3
- AB-UTI/3
- AB-UTN 2,5/10
- AXC 1050
- AXC 1050 XC
- AXC 3050
- AXC CLOUD-PRO
- AXC F 1152
- AXC F 2152
- AXC F 3152
- AXC F XT ETH 1TX
- AXC F XT SPLC 1000
- AXL F AI2 AO2 1H
- AXL F AI2 AO2 XC 1H
- AXL F AI4 1 1H
- AVI F AI4 1 VC 1H

FREMDARTIKEL ANLEGEN

PRODUKTINFORMATIONEN

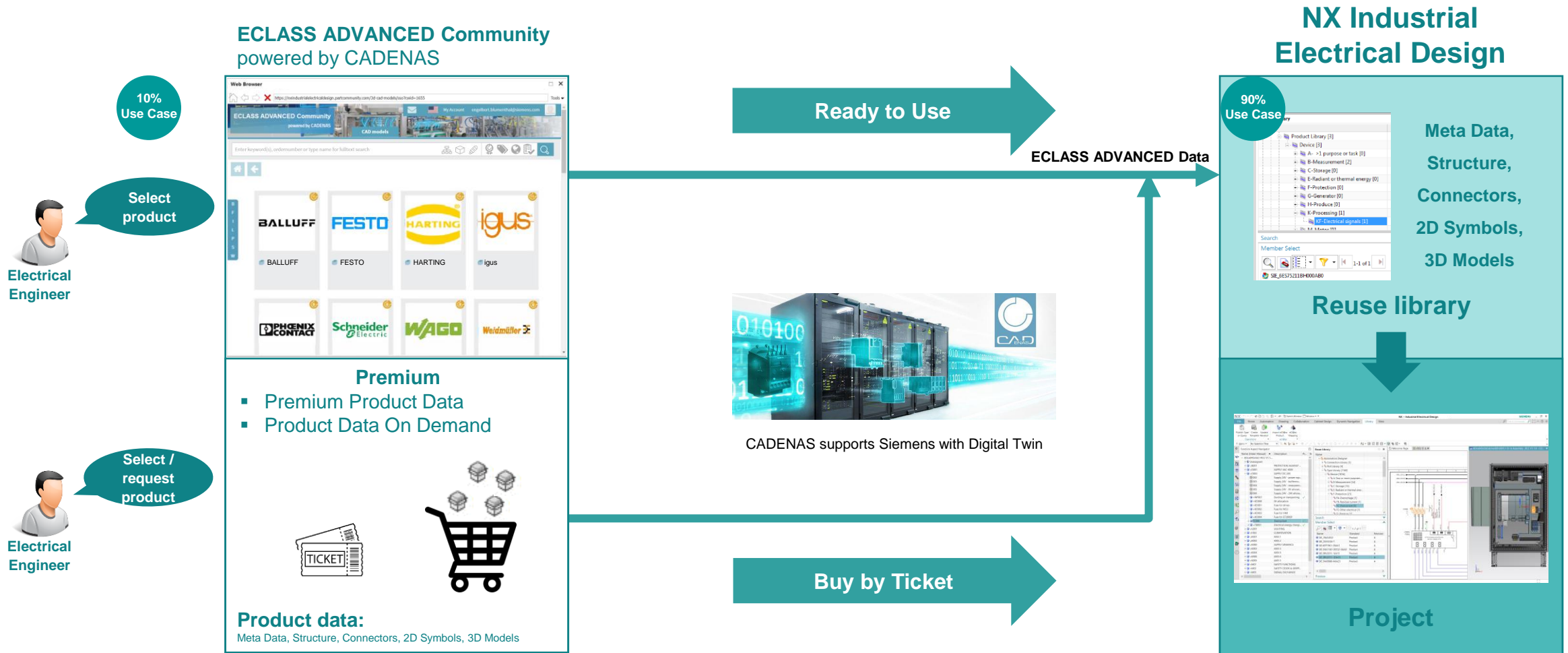
Kein Artikel ausgewählt

© 2021 PHOENIX CONTACT Impressum Datenschutz Rechtliches



ECLASS ADVANCED Community powered by CADENAS

Digital product data twins for a smooth electrical engineering process



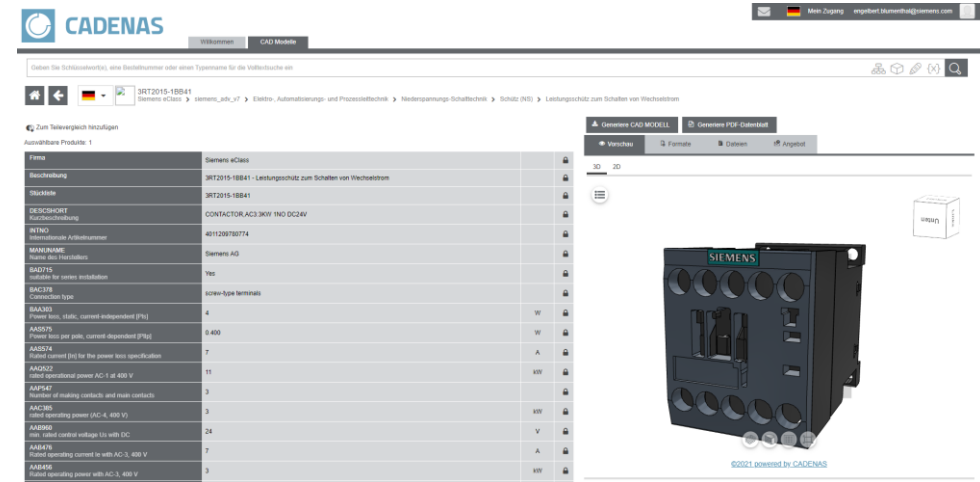
ECLASS ADVANCED Community powered by CADENAS

Siemens product data digital twins

Siemens product data digital twins are available in ECLASS ADVANCED Community.

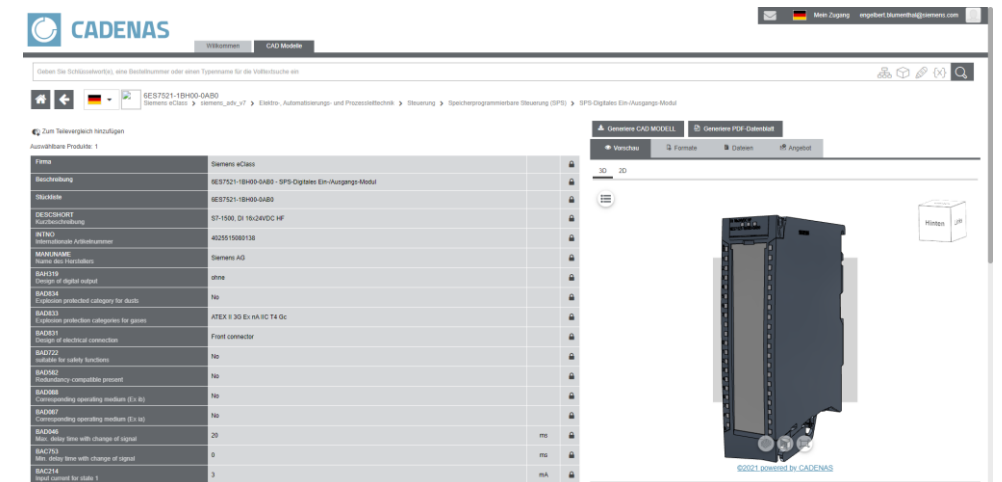
Siemens SI EP:

- **5SY** Miniature circuit breaker
- **3VA1** Circuit breaker 3VA1
- **3RV2** Circuit breaker for motor protection
- **3RT2** Power contactor



Siemens DI FA:

- **SIMATIC S7-1500**
- **SIMATIC ET 200SP**
- **SIMATIC ET 200MP**
- **SIMATIC ET 200PRO**
- **SIMATIC ET 200AL**



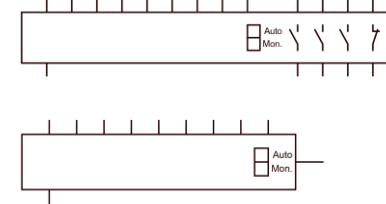
Efficient creation of product data with ECLASS ADVANCED import

Siemens product data

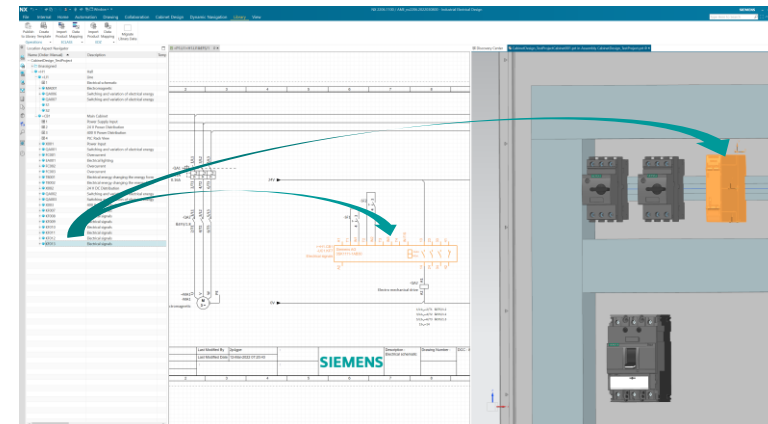
With the ECLASS ADVANCED import Siemens and 3rd party product data can be imported. The products including properties, structure, connectors, 2D symbols and 3D model will be created in the product library. The ECLASS ADVANCED import reduces the effort to create new products.

ECLASS ADVANCED import to create the product including:

- Properties
- Structure
- Connectors
- 2D symbols
- 3D model



ECLASS Import –
3D Model



Object Template Properties Expressions Product Remove Selection Product Place in Aspect Place in Automation Break Template

Insert Edit

Parts Bulk Request and Manage Project Connections Connection Implementation Value Set Template Sett...

Location Aspect Navigator

Name (Order: Manual)	Description	Temp
- CabinetDesign_TestProject		
+ Unassigned		
+ H1	Hall	
+ L11	Line	
1	Electrical schematic	
MA001	Electromagnetic	
QA006	Switching and variation of electrical energy	
QA007	Switching and variation of electrical energy	
S1		
S2		
+ CB1	Main Cabinet	
1	Power Supply Input	
2	24 V Power Distribution	
3	400 V Power Distribution	
4	PLC Rack View	
X001	Power Input	
QA001	Switching and variation of electrical energy	
FC001	Overcurrent	
EA001	Electrical lighting	
FC002	Overcurrent	
FC003	Overcurrent	
TB001	Electrical energy changing the energy form	
TB002	Electrical energy changing the energy form	
X002	24 V DC Distribution	
QA002	Switching and variation of electrical energy	
QA003	Switching and variation of electrical energy	
X003	400 V AC Distribution	
KF007	Electrical signals	
KF008	Electrical signals	
KF009	Electrical signals	
KF010	Electrical signals	
KF011	Electrical signals	
KF012	Electrical signals	

Reuse Library

Search

Folder View

Name
+ Industrial Electrical Design
+ Connection Library[4]
+ Port Library[6]
+ Settings Library[6]
+ Telegram Library[5]
+ Type Library[353]
+ Devicefunction[15]
- Device[319]
+ A-Two or more purposes or tasks[...]
+ B-Measurement[26]
+ C-Storage[11]
+ E-Radiant or thermal energy[17]
+ F-Protection[22]
+ G-Generator[12]
+ H-Produce[15]
- K-Processing[31]
KF-Electrical signals[25]
KG-Optical and acoustical signals...
KH-Fluid signal[1]
KJ-Mechanical signals[1]
KK-Variou input/output informa...
KZ-Combined tasks[1]
+ M-Motor[12]
+ P-Presenting information[7]
+ Q-Switching or varying of energy o...

Member Select - KF-Electrical signals[25]

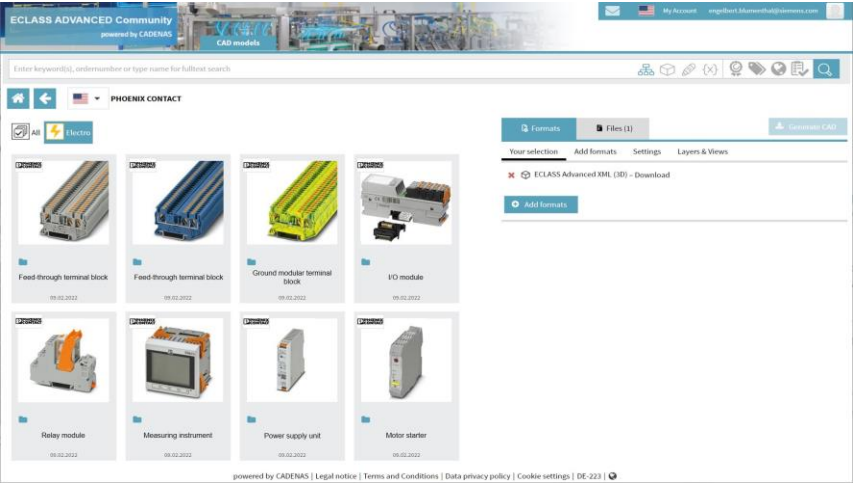
1-25 of 25

Name	Standard
1085039_1	Product
aedn_DEVICE-KF	Type
ALL_1734-IB4_1	Product
ALL_1734-IB8	Product
BEC_EL1002	Product
BEC_EL1004	Product
BEC_EL2002	Product
BEC_EL3002_1	Product
MUR_55510	Product
MUR_57280	Product
PHO_2702072	Product
PHO_2861360	Product
SIE_6ES7521-1BH10-0AA0_1	Product
WAG_750-377_2	Product
WAG_750-552	Product
WAG_750-597	Product
WAG_750-1400	Product
WAG_750-1405	Product
WAG_750-1491	Product
WAG_750-1504	Product
WAG_EP0000016974	Product
WEI_2426320000	Product
WIS_1315170000	Product
WIS_1394420000	Product
WIS_2007420000	Product

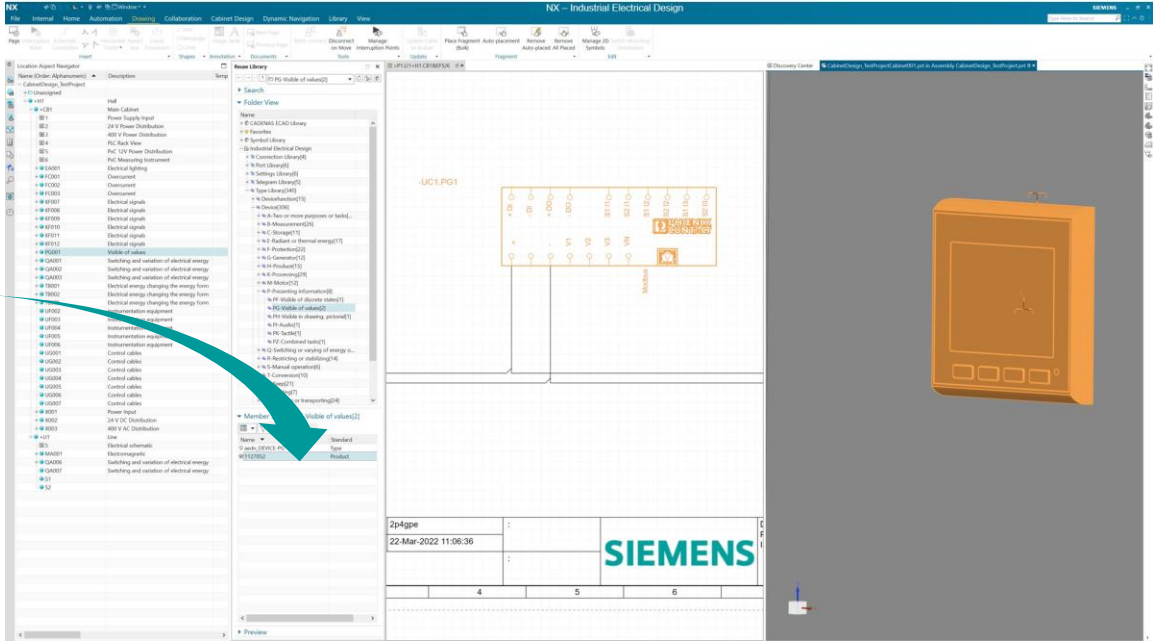
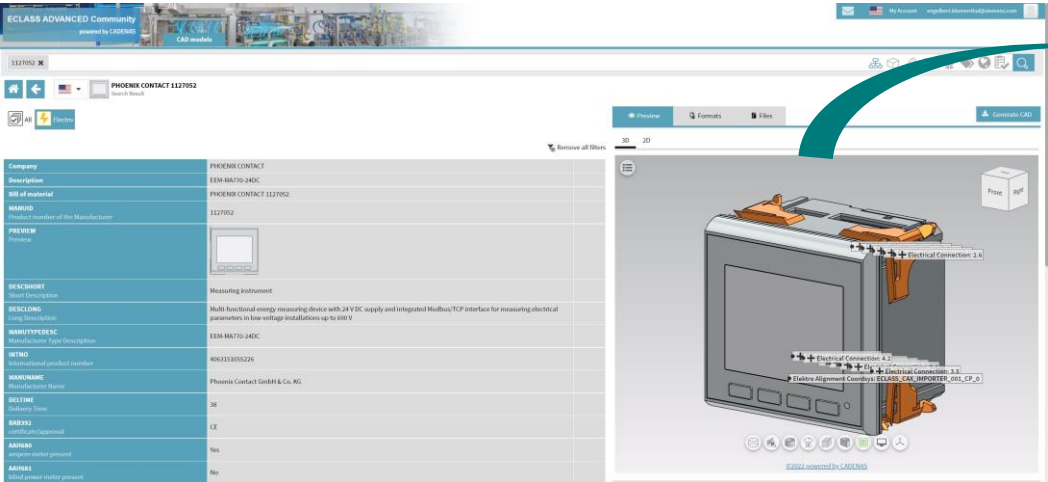
Discovery Center CabinetDesign_TestProject.prt

ECLASS ADVANCED Community powered by CADENAS

Phoenix Contact Catalogue Product Data



With the **ECLASS ADVANCED** import 3rd party product data can be imported. The products including properties, structure, connections, 2D symbols and 3D model will be created in the product library. The **ECLASS ADVANCED** import significantly reduces the effort to create new products.



Object Template Properties Expressions Product Selection Product Place in Aspect Place in Automation Break Template Ports Manager Bulk Connection Request and Implementation Manage Value Sets Project

Location Aspect Navigator

Name (Order: Alphanumeric)	Description	Temp
- CabinetDesign_TestProject		
+ Unassigned		
+ H1	Hall	
+ CB1	Main Cabinet	
1	Power Supply Input	
2	24 V Power Distribution	
3	400 V Power Distribution	
4	PLC Rack View	
5	PxC 12V Power Distribution	
6	PxC Measuring Instrument	
+ EA001	Electrical lighting	
+ FC001	Overcurrent	
+ FC002	Overcurrent	
+ FC003	Overcurrent	
+ KF007	Electrical signals	
+ KF008	Electrical signals	
+ KF009	Electrical signals	
+ KF010	Electrical signals	
+ KF011	Electrical signals	
+ KF012	Electrical signals	
+ QA001	Switching and variation of electrical energy	
+ QA002	Switching and variation of electrical energy	
+ QA003	Switching and variation of electrical energy	
+ TB001	Electrical energy changing the energy form	
+ TB002	Electrical energy changing the energy form	
+ TB005	Electrical energy changing the energy form	
+ UF002	Instrumentation equipment	
+ UF003	Instrumentation equipment	
+ UF004	Instrumentation equipment	
+ UF005	Instrumentation equipment	
+ UF006	Instrumentation equipment	
+ UG001	Control cables	
+ UG002	Control cables	
+ UG003	Control cables	
+ UG004	Control cables	
+ UG005	Control cables	
+ UG006	Control cables	
+ UG007	Control cables	
+ X001	Power Input	
+ X002	24 V DC Distribution	
+ X003	400 V AC Distribution	
+ L11	Line	
5	Electrical schematic	
+ MA001	Electromagnetic	
+ QA006	Switching and variation of electrical energy	
+ QA007	Switching and variation of electrical energy	
S1		
S2		

Reuse Library

Search

Folder View

- + CADENAS ECAD Library
- + Favorites
- + Symbol Library
- Industrial Electrical Design
 - + Connection Library[4]
 - + Port Library[6]
 - + Settings Library[6]
 - + Telegram Library[5]
 - Type Library[339]
 - + Devicefunction[15]
 - Device[305]
 - + A-Two or more purposes or taskf...
 - + B-Measurement[26]
 - + C-Storage[11]
 - + E-Radiant or thermal energy[17]
 - + F-Protection[22]
 - + G-Generator[12]
 - + H-Produce[15]
 - + K-Processing[29]
 - + M-Motor[12]
 - + P-Presenting information[7]
 - + Q-Switching or varying of energy o...
 - + R-Restricting or stabilizing[14]
 - + S-Manual operation[6]
 - + T-Conversion[10]
 - + U-Keep[21]
 - + V-Treating[7]
 - + W-Guiding or transporting[24]
 - + X-Connecting[24]
 - + EPLAN Macro[2]
 - + PLC[4]
 - + Software[12]

Member Select - Device[305]

1-19 of 19

Name	Standard
% A-Two or more purposes or taskf...	Classification Class
% B-Measurement[26]	Classification Class
% C-Storage[11]	Classification Class
% E-Radiant or thermal energy[17]	Classification Class
% F-Protection[22]	Classification Class
% G-Generator[12]	Classification Class
% H-Produce[15]	Classification Class
% K-Processing[29]	Classification Class
% M-Motor[12]	Classification Class
% P-Presenting information[7]	Classification Class
% Q-Switching or varying of energy...	Classification Class
% R-Restricting or stabilizing[14]	Classification Class
% S-Manual operation[6]	Classification Class
% T-Conversion[10]	Classification Class
% U-Keep[21]	Classification Class
% V-Treating[7]	Classification Class
% W-Guiding or transporting[24]	Classification Class
% X-Connecting[24]	Classification Class
aedn_DEVICE	Type

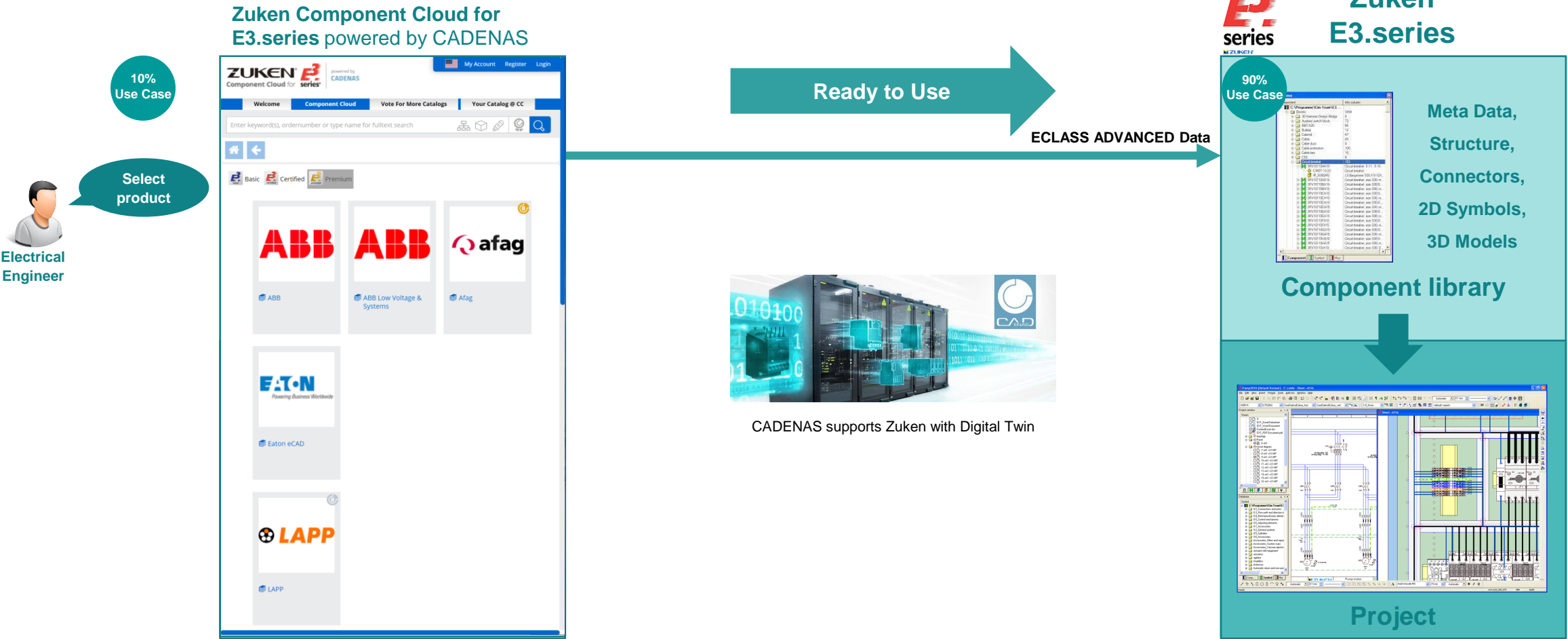
Preview



Approved by	Last Modified By	2p4gpe	:	SIEMENS	Description :	PxC Measuring Instrument	Drawing Number :	DCC : &EFS	Full Page Name :	=P1.L1+H1.CB1&EFS/6
Approval Date	Last Modified Date	22-Mar-2022 11:06:36	:		Name :		6			
Checked by	:	:	:							
Check Date										

Zuken Component Cloud for E3.series powered by CADENAS

Digital product data twins for a smooth electrical engineering process



Willkommen | Component Cloud | Vote For More Catalogs | Ihr Katalog @ CC

Geben Sie Schlüsselwort(e), eine Bestellnummer oder einen Typenname für die Volltextsuche ein

156-C3P20NCB
Rockwell Automation > Motor Control, Solid-State > Co

3D 2D

Basic Zertifiziert Premium

Company	Rockwell Automation	
Description	156-C Solid State Contactor - 156-C Solid State Contactor	
Bill of material	156-C3P20NCB	
CN	156-C3P20NCB	
Catalog Number	156-C3P20NCB	
DESCRIPTION	3 Phase SSC 20A 600VAC AC or DC control	
H	110.0	mm
L	53.8	mm
W	101.7	mm
CERTIFICATION	UL508; cUL; VDE; GL	

Generiere CAD MODELL

Sie haben noch keine CAD- oder PDF-Datei zum Download generiert.

©2023 powered by CADENAS

Component Cloud 23.0.0 for E3series - Download Information

Component name: 1489.MIC005_Rockwell_Automation

Symbolname	Symboltype
1489.MIC005_Rockwell_Automation	PreviousSymbol

The following symbols are referenced in the CLX file and mapped to E3 symbols:

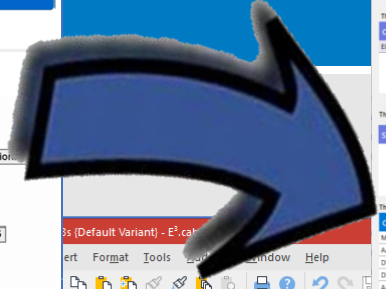
CLK Symbol	E3 Symbol
E0306	E0306

The following symbols/models will be loaded by CLX from MDS to the database:

Symbolname	Model name

The following attributes are defined for the component in the CLX file:

CLK Attribute	Language	E3 Attribute
MODEL	en-US	-root defined-
AAB485	en-US	-root defined-
DESCRIBING	en-US	-root defined-
DESCRIBEREI	en-US	-root defined-
AAD677	en-US	-root defined-
MANUFACTURERURL	en-US	-root defined-
BAH005	en-US	-root defined-
AAQ326	en-US	-root defined-
ED22	en-US	-root defined-
ED22	en-US	-root defined-



The digital twin:
from the component to
the finished control cabinet
(or wiring harness)

3D (Default Variant) - E3.cab

terminal diagram

Component name: <All>

Component list:

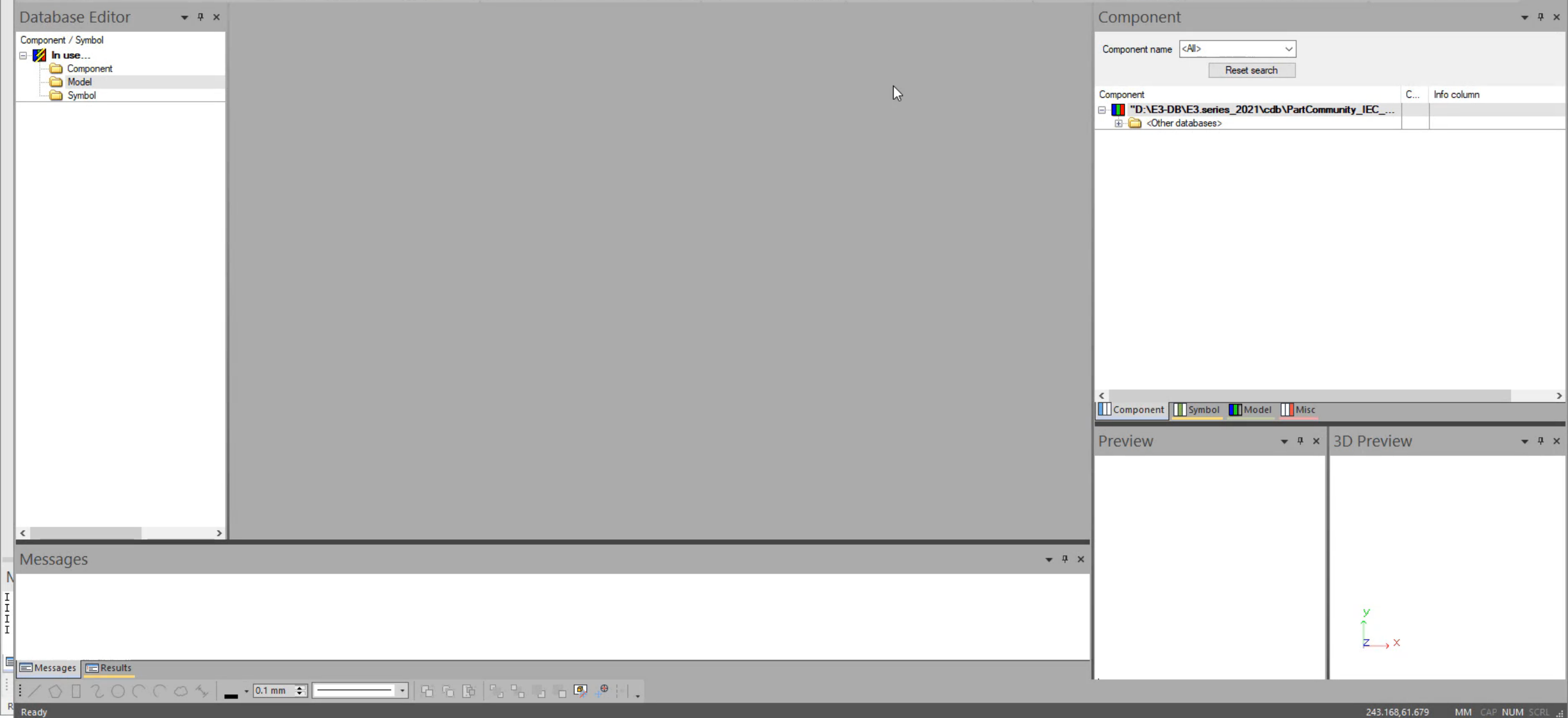
- C:\Zuken\E3.s...
- 2/2-directional ...
- 3/2-directional ...
- 3D-Harness De...
- 4/2-directional ...
- 4/3-directional ...
- 5/2-directional ...
- 5/3-directional ...
- Accessories
- ABB AC500
- Air conditioning
- Auxiliary switch ...
- Avionics
- RXR Accessory

Wiring Diagram: 2-40987000_C

Panel Layout: Sheet 2

Messages

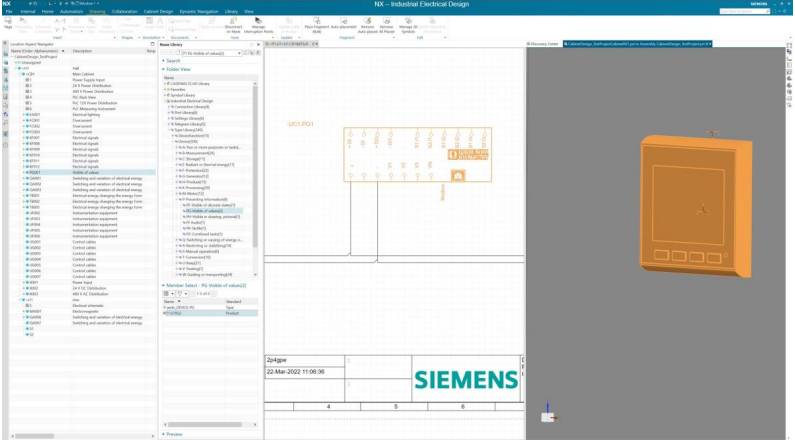
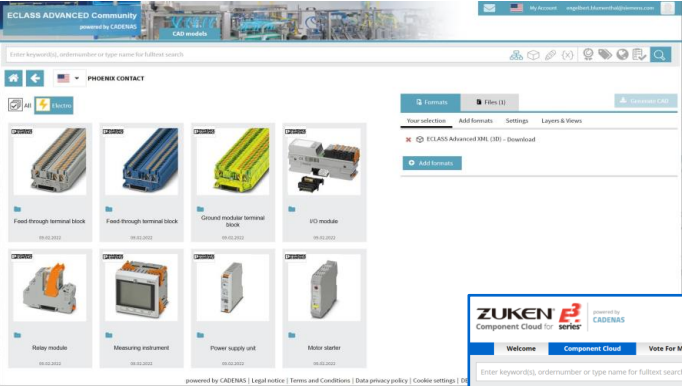
© Zuken 2023



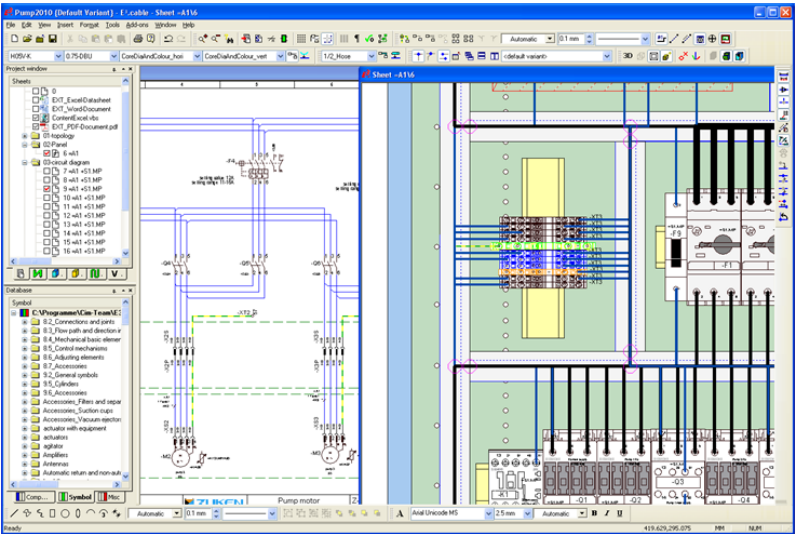
ECLASS ADVANCED Community powered by CADENAS


Digital twins of product data available for all ECAD tools with just a few clicks

ECLASS ADVANCED Community



Zuken Component Cloud for E3.series





Digital twins of product data available for all ECAD tools with just a few clicks

2023-05-10