SIEMENS

Desigo CC

Life Science Library

Laboratory solutions & Monitoring Desigo PX

Laboratory solutions & monitoring functions, static and dynamic symbols

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1. About this document

1.1. Purpose

This document describes the content of the Life Science Laboratory Solutions and Monitoring Desigo PX Library delivery for the Management Station. It helps Project Engineers and Graphics Engineers to get a quick overview of the available basic graphic elements, such as static- and dynamic graphic symbols, functions, icons and sample pages. It provides information about the available shapes and data point substitutions for dynamic symbols and templates.

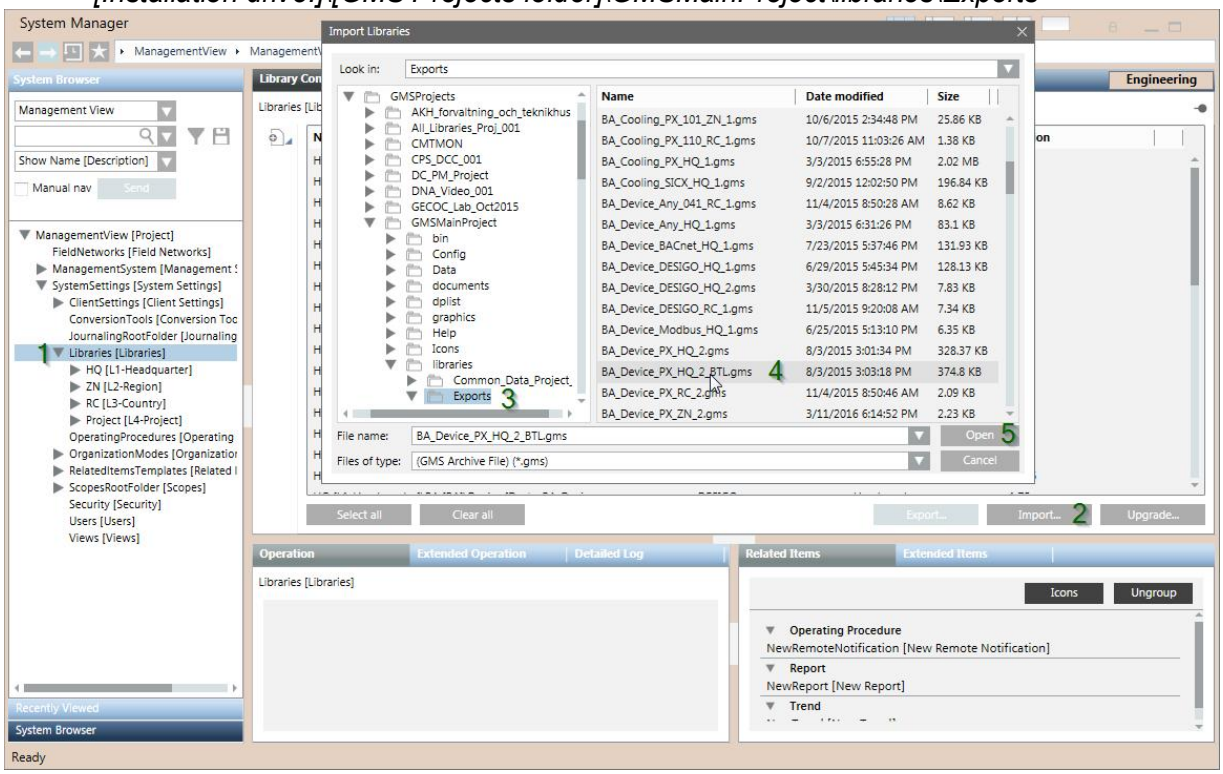
1.2. Scope

This document applies to the Desigo CC MP3.0 and Extension module “Laboratory Solutions And Monitoring Desigo PX”

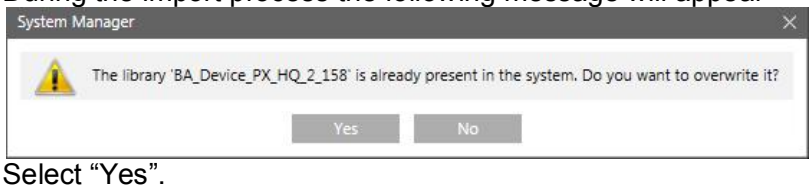
2. Installation

The current installation provides fully functional Laboratory Solution library and reduced functionality for the Monitoring library (CMT solution). To enable the full functionality of the Monitoring library (CMT solution) the following steps have to be carried out before importing data points:

1) Import the Desigo PX BTL library (BA_Device_PX_HQ_2_BTL.gms).
The BA_Device_PX_HQ_2_BTL.gms library can be found in the following folder in your system:
[Installation drive:]\[GMS Projects folder]\GMSMainProject\libraries\Exports



During the import process the following message will appear



Select “Yes”.

2) Repeat the previous step, this time for BA_Device_PX_ZN_2.gms library.
3) Do the same for BA_Device_PX_RC_2.gms if needed for the project.

IMPORTANT: Using the Desigo PX BTL library will reduce the number of points that the system can handle.

3. Libraries version

Description	Name	Version
Life Science Laboratory solutions library	BA_Room_Laboratory_PX_101_HQ_1	1.4
Life Science Monitoring library	BA_Room_Laboratory_Monitoring_PX_101_HQ_1	1.7

4. Life Science Laboratory solutions library (BA_Room_Laboratory_PX_101_HQ_1)

This library depends on the Life Science Common library (BA_Room_Laboratory_101_HQ_1)

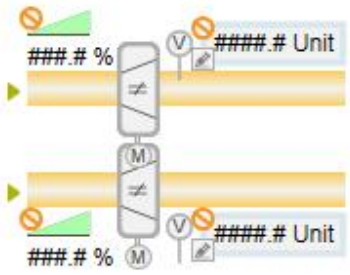
4.1. Symbols

4.1.1. DYN_2D_Damper_Laboratory_DmpLabEx_101_Horizontal_001_101

Symbol Name			
DYN_2D_Damper_Laboratory_DmpLabEx_101_Horizontal_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Extract damper	DmpLabEx_101	Horizontal	
Symbol			
			

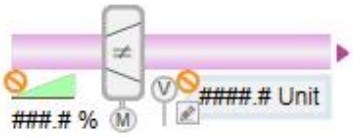
Substitutions	Set of Values
*	Dynamic symbol for laboratory air extraction damper. To be used with AflCtrM1_101 & AflCtrS1_101 functions. (AflCtrM1 & AflCtrS1 compounds of the CET library)

4.1.2. DYN_2D_Damper_Laboratory_DmpLabEx_101_Horizontal_002_101

Symbol Name			
DYN_2D_Damper_Laboratory_DmpLabEx_101_Horizontal_002_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Twin extract damper	DmpLabEx_101	Horizontal	
Symbol			
			

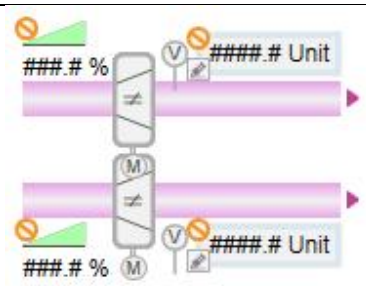
Substitutions	Set of Values
*	Dynamic symbol for twin laboratory air extraction damper. To be used with AflCtrM3_101 & AflCtrS3_101 functions. (AflCtrM3 & AflCtrS3 compounds of the CET library)

4.1.3. DYN_2D_Damper_Laboratory_DmpLabSu_101_Horizontal_001_101

Symbol Name			
DYN_2D_Damper_Laboratory_DmpLabSu_101_Horizontal_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Supply damper	DmpLabSu_101	Horizontal	
Symbol			
			

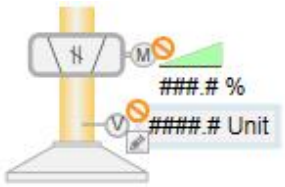
Substitutions	Set of Values
*	Dynamic symbol for laboratory air supply damper. To be used with AflCtrM1_101 & AflCtrS1_101 functions. (AflCtrM1 & AflCtrS1 compounds of the CET library)

4.1.4. DYN_2D_Damper_Laboratory_DmpLabSu_101_Horizontal_002_101

Symbol Name			
DYN_2D_Damper_Laboratory_DmpLabSu_101_Horizontal_002_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Twin supply damper	DmpLabEx_101	Horizontal	
Symbol			
			

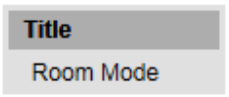
Substitutions	Set of Values
*	Dynamic symbol for twin laboratory air supply damper. To be used with AflCtrM2_101 & AflCtrS2_101 functions. (AflCtrM2 & AflCtrS2 compounds of the CET library)

4.1.5. DYN_2D_Lab_Canopy_DmpLabEx_101_Central_001_101

Symbol Name			
DYN_2D_Lab_Canopy_DmpLabEx_101_Central_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Canopy with damper	DmpLabEx_101	Central	
Symbol			
			

Substitutions	Set of Values
*CanopyDmp	Dynamic symbol for canopy with damper. To be used with DmpLabEx_101 function. (DmpEx1, DmpEx2, DmpEx3 & DmpEx4 compounds of the CET library)
Color	User can set the canopy color. Default value: #FFF2F2F2

4.1.6. DYN_2D_LAB_CET Laboratoty_Panel_Central_001_101

Symbol Name			
DYN_2D_LAB_CET Laboratoty_Panel_Central_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
CET Laboratory	Panel	Central	
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol presenting a Laboratory room state. To be used on a floor plan graphic pages for nodes with LabR_101 function. (R compound of the CET library)
Title	User can set a specific title. If the field is left empty the system will display the node's Short Reference (Default value = *empty*)

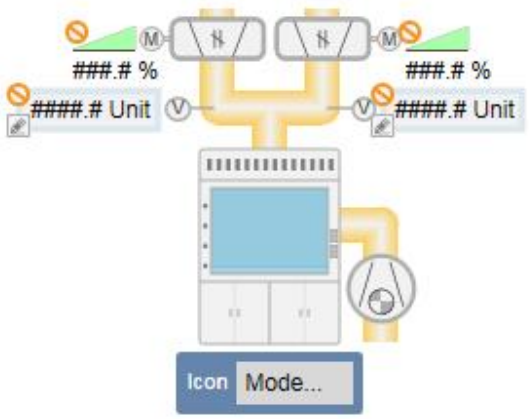
4.1.7. DYN_2D_LAB_CET Zone_Panel_Central_001_101

Symbol Name			
DYN_2D_LAB_CET Zone_Panel_Central_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
CET Zone	Panel	Central	
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol presenting a Laboratory zone constant volume flow. To be used on a floor plan graphic pages for nodes with AflCtl1_101 function. (AflCtl1 compound of the CET library)
Title	User can set a specific title. If the field is left empty the system will display the node's Short Reference (Default value = *empty*)

4.1.8. TEM_2D_Lab_Fume Hood_FhCtr_101_Central_001_101

Symbol Name			
TEM_2D_Lab_Fume Hood_FhCtr_101_Central_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Fume hood	FhCtr_101	Central	
Symbol			



Substitutions	Set of Values
FumeHood	Dynamic symbol for fume hood with one or two extract dampers To be used only in Graphic templates for nodes with FhCtr1_101 function. (FhCtr1 compound of the CET library)
Color	User can set the fume hood color. Default value: #FFF2F2F2
Grill Visibility	0 = Grill is not visible 1 = Grill is visible (Default value)
ODP Position	0 = Left 1 = Right (Default value)

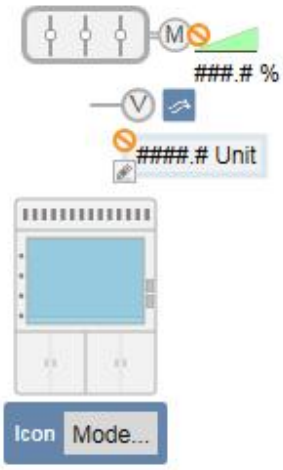
4.1.9. TEM_2D_Lab_Zone Status_None_Central_001_101

Symbol Name			
TEM_2D_Lab_Zone Status_None_Central_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Zone status	AflCtl1_101	Central	
Symbol			
			

Substitutions	Set of Values
Zone	Dynamic symbol for Laboratory zone status. To be used only in Graphic templates for nodes with AflCtl1_101 function. (AflCtl1 compound of the CET library)

4.1.10. DYN_2D_Lab_Fume Hood_FmHd_101_Central_001_101

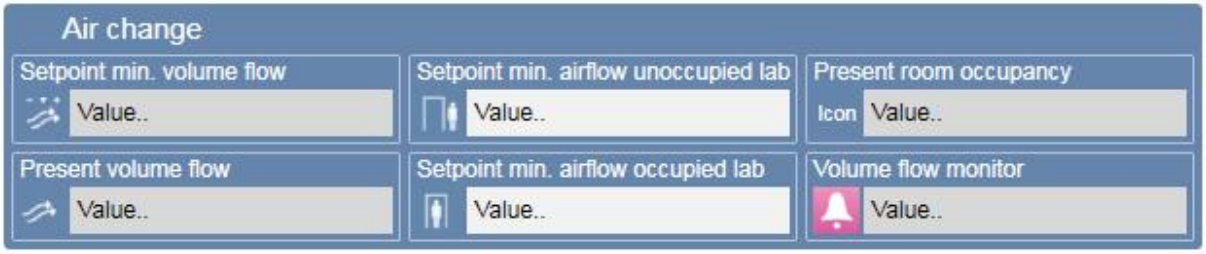
Symbol Name			
DYN_2D_Lab_Fume Hood_FmHd_101_Central_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Fume hood	FmHd_101	Central	
Symbol			



Substitutions	Set of Values
*	Dynamic symbol for fume hood for FmHd_101 function. [See 4.3.4]
Color	User can set the fume hood color. Default value: #FFF2F2F2
Grill Visibility	0 = Grill is not visible 1 = Grill is visible (Default value)
ODP Position	0 = Left 1 = Right (Default value)

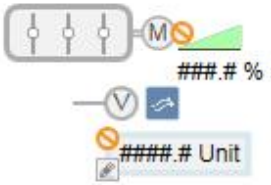
4.1.11. DYN_All_Status_AirChg_101_None_Central_001_101

Symbol Name			
DYN_All_Status_AirChg_101_None_Central_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Status	Air Change	AirChg_101	Central
Symbol			



Substitutions	Set of Values
*	Dynamic symbol for Air change status for AirChg_101 function [See 4.3.1]
FontSize	User can set the title font size (Default value = 15)

4.1.12. DYN_2D_Damper_Laboratory_DmpLab_101_Vertical_001_101

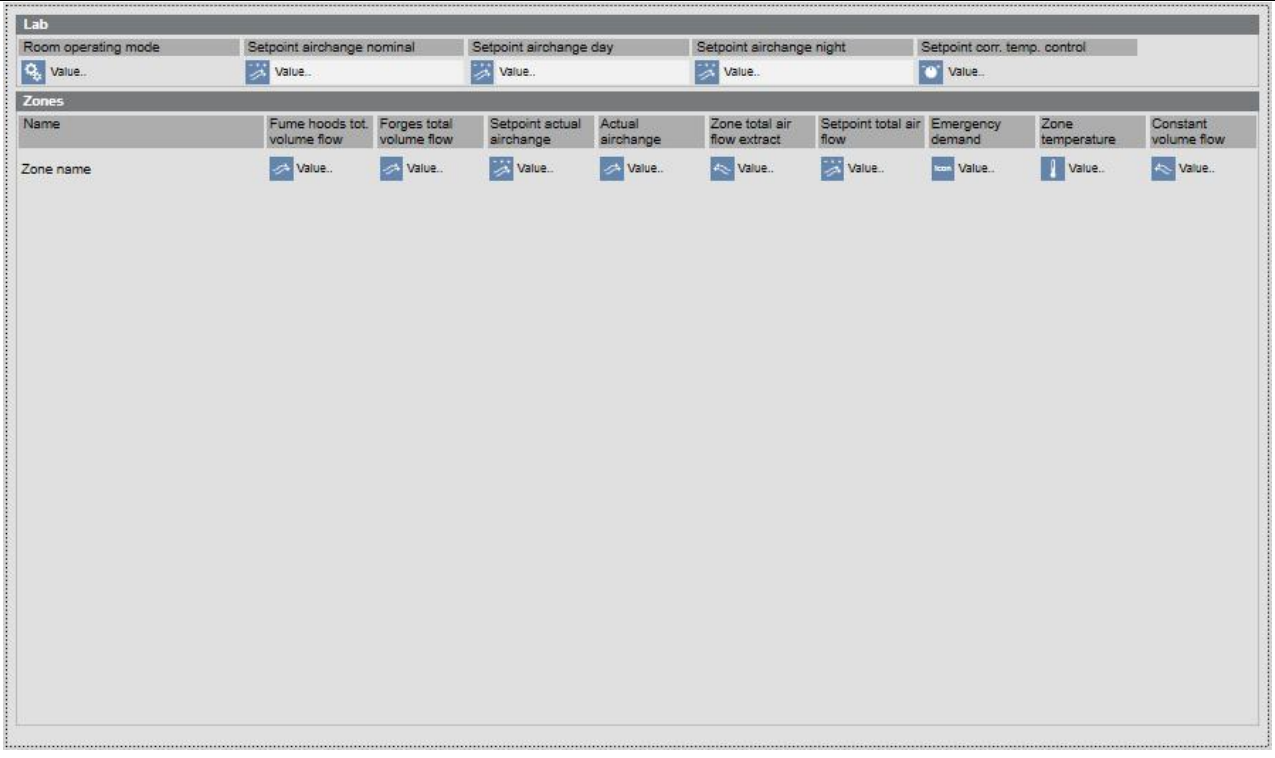
Symbol Name			
DYN_2D_Damper_Laboratory_DmpLab_101_Vertical_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
Damper	Laboratory	DmpLab_101	Vertical
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol for laboratory damper for DmpLab_101 function [See 4.3.3]

4.2. Graphic Templates

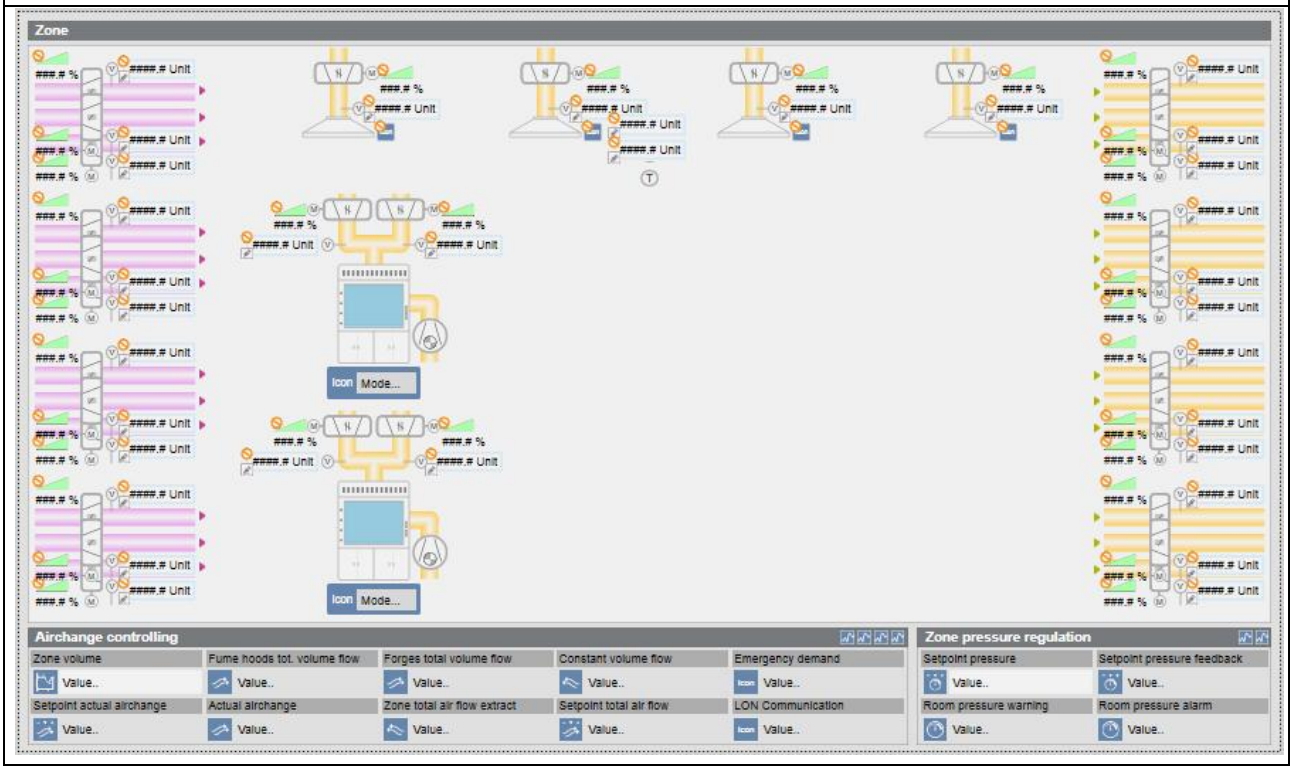
4.2.1. CET_APP_LAB_Laboratory_LabR_101_001_101

Symbol Name			
CET_APP_LAB_Laboratory_LabR_101_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
CET	Laboratory	LabR_101	Template
Template			



4.2.2. CET_APP_LAB_Zone_AflCtl1_101_001_101

Symbol Name			
CET_APP_LAB_Zone_AflCtl1_101_001_101			
Library			
BA_Room_Laboratory_PX_101_HQ_1			
Description			
CET	Zone	AflCtl1_101	Template
Template			



4.3. Functions

4.3.1. CET functions

Functions will be automatically assigned to the corresponding structure nodes/aggregators. The only exception is for LabR_101. This function has to be assigned manually to the “Room” node by the engineer after the data points import.

- **AflCtl1_101** – Laboratory zone
- **AflCtrM1_101** – Master air flow control with one supply and one extract damper
- **AflCtrM2_101 –** Master air flow control with two supply dampers
- **AflCtrM3_101 –** Master air flow control with two extract dampers
- **AflCtrS1_101 –** Slave air flow control with one supply and one extract damper
- **AflCtrS2_101 –** Slave air flow control with two supply dampers
- **AflCtrS3_101 –** Slave air flow control with two extract dampers
- **DmpLabEx_101 –** Laboratory extract damper
- **DmpLabSu_101 –** Laboratory supply damper
- **FhCtr1_101 –** Fume hood with one or two extract dampers and optional supply fan
- **HcCtr1_101 –** Laboratory canopy control for up to 4 canopies
- **LabR_101 –** Laboratory room
- **PR_101 –** Room pressure regulation

4.3.2. AirChg_101 - Airchange

AirChg_101 is function responsible for displaying the following properties:

- minimum setpoint occupied
- minimum setpoint unoccupied
- actual setpoint
- present airchange volume flow
- status occupancy
- alarm

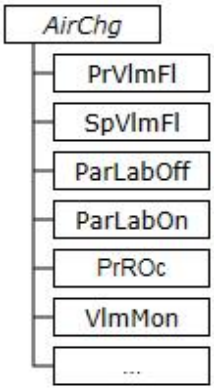
The graphic symbol for this function is:

DYN_All_Status_AirChg_101_None_Central_001_101

During the project data import the function is automatically assigned to every Block with Short Name: *AirChg_101*.

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:



4.3.3. DmpLab_101 – Laboratory VAV-damper

DmpLab_101 is function responsible for displaying the following properties:

- present volume flow
- setpoint volume flow
- damper position
- airflow alarm

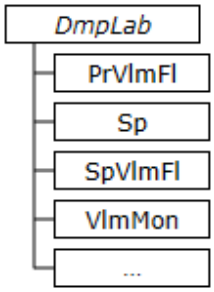
The graphic symbol for this function is:

DYN_2D_Damper_Laboratory_DmpLab_101_Vertical_001_101

During the project data import the function is automatically assigned to every Block with Short Name: *DmpEx, DmpEx1, DmpEx2, DmpEx3, DmpEx4, DmpEx5, DmpSu, DmpSu1, DmpSu2, DmpSu3, DmpSu4, DmpSu5*

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:



4.3.4. FmHd_101 – Fume hood

DmpLab_101 is function responsible for displaying the following properties:

- present volume flow
- setpoint volume flow
- damper position
- airflow alarm
- sash position
- active operating mode

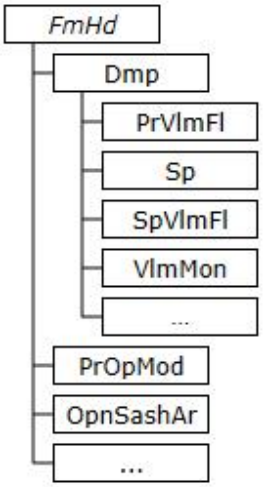
The graphic symbol for this function is:

DYN_2D_Lab_Fume Hood_FmHd_101_Central_001_101

During the project data import the function is automatically assigned to every Block with Short Name: *Fh, Fh1, Fh2, Fh3, Fh4, Fh5, Fh6, Fh7, Fh8*

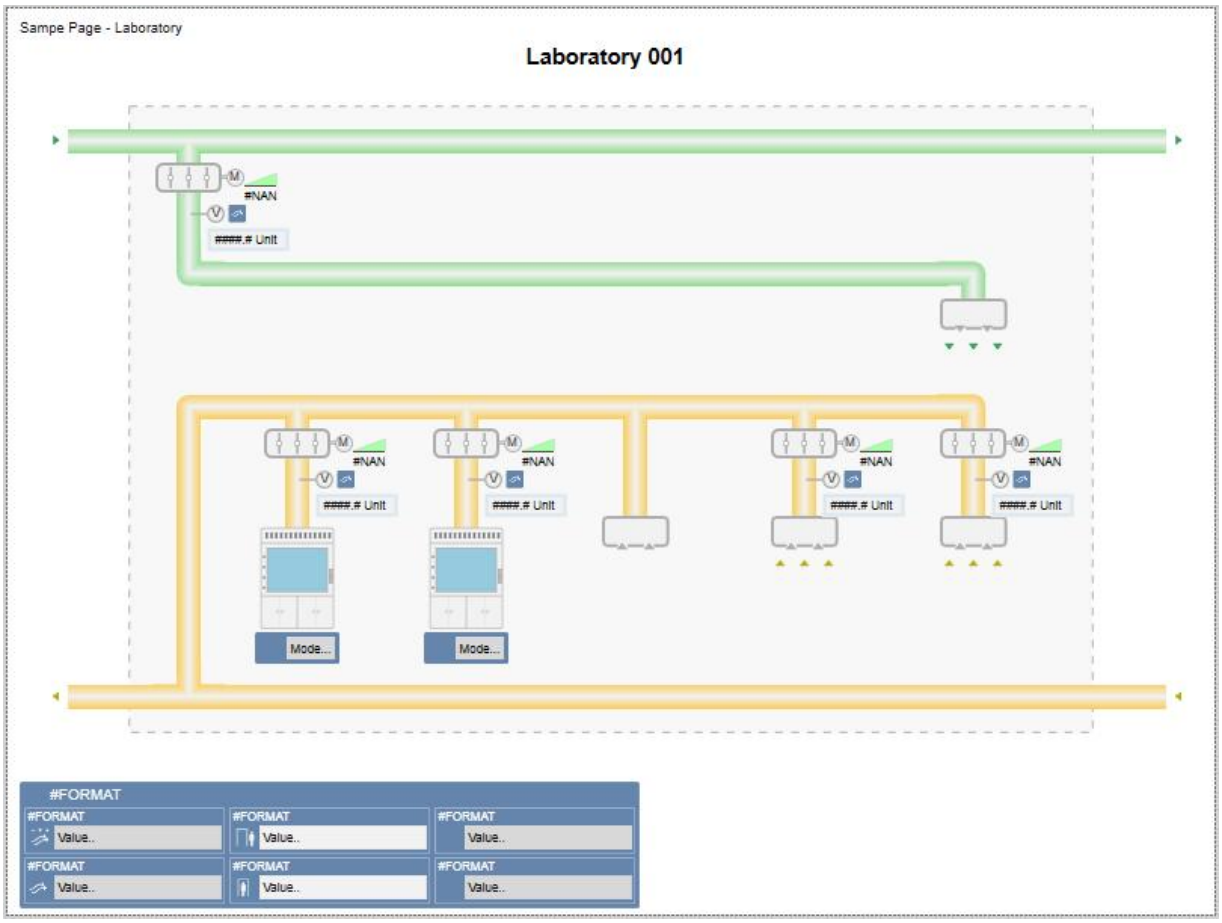
If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:

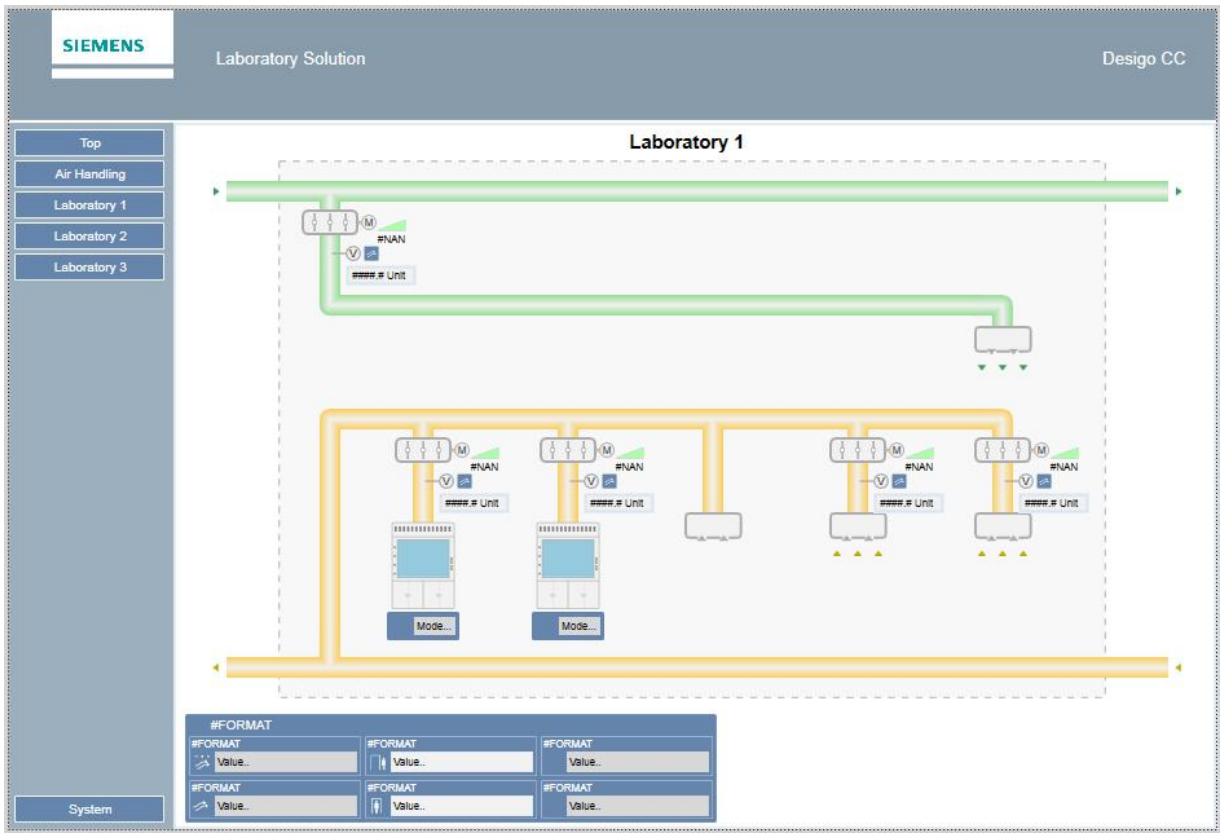


4.4. Sample graphics

4.4.1. SampleGraphic_Lab_001_101



4.4.2. SampleGraphic_Lab_002_101



5. Life Science Monitoring solutions (CMT) library (BA_Room_Laboratory_Monitoring_PX_101_HQ_1)

This library depends on the Life Science Common library (BA_Room_Laboratory_101_HQ_1)

5.1. Symbols

5.1.1. DYN_2D_Panel Door_None_None_None_001_101

Symbol Name			
DYN_2D_Panel Door_None_None_None_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Panel door	Size 1		
Symbol			
			

Substitutions	Set of Values
* PanelDoor	Dynamic symbol for panel door for binary DP. Inidicates the door state – closed/open

5.1.2. DYN_2D_Panel Door_None_None_None_002_101

Symbol Name			
DYN_2D_Panel Door_None_None_None_002_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Panel door	Size 2		
Symbol			
			

Substitutions	Set of Values
* PanelDoor	Dynamic symbol for panel door for binary DP. Indicates the door state – closed/open

5.1.3. DYN_2D_Room Sensor_Humidity_HuMon_101_All_001_101

Symbol Name			
DYN_2D_Room Sensor_Humidity_HuMon_101_All_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Room sensor	Humidity	HuMon_101	All directions
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol for room humidity sensor for HuMon_101 function. [See 5.2.1]
BoxWidth	Width of sensor value frame (Default value = 76)
Direction	0, 1 = Input value down 2 = Input value left 3 = Input value up (Default value) 4 = Input value right
DisplayBox	0 = Hides DP value frame 1 = Displays DP value frame (Default value)
Precision	0 = No digits after decimal point 1 = One digit after decimal point 2 to 5 = Two to five digits after decimal point NOTE: The value can also be 6 or 7; however, there is no place for Unit substitution (Default value = *empty*; Read from the DP instance)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendH01 to TrendH10) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name.

	(Default value = *empty*)
Units	Enter the engineering units for the value (Default value = *empty*; Read from the DP instance)

5.1.4. DYN_2D_Room Sensor_Particles 05microns_PartcMon_All_001_101

Symbol Name			
DYN_2D_Room Sensor_Particles 05microns_PartcMon_All_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Room sensor	Particles size 0.5µm	PartcMonQM_101/CFM	All directions
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol for room particles size 0.5µm sensor for PartcMonQM_101 & PartcMonCFM_101 functions. [See 5.2.3 and 5.2.4]
BoxWidth	Width of sensor value frame (Default value = 76)
Direction	0, 1 = Input value down 2 = Input value left 3 = Input value up (Default value) 4 = Input value right
DisplayBox	0 = Hides DP value frame 1 = Displays DP value frame (Default value)
Precision	0 = No digits after decimal point 1 = One digit after decimal point 2 to 5 = Two to five digits after decimal point NOTE: The value can also be 6 or 7; however, there is no place for Unit substitution (Default value = *empty*; Read from the DP instance)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendCh1) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name.

	(Default value = *empty*)
Units	Enter the engineering units for the value (Default value = *empty*; Read from the DP instance)

5.1.5. DYN_2D_Room Sensor_Particles 5microns_PartcMon_All_001_101

Symbol Name			
DYN_2D_Room Sensor_Particles 5microns_PartcMon_All_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Room sensor	Particles size 5µm	PartcMonQM_101/CFM	All directions
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol for room particles size 5µm sensor for PartcMonQM_101 & PartcMonCFM_101 functions. [See 5.2.3 and 5.2.4]
BoxWidth	Width of sensor value frame (Default value = 76)
Direction	0, 1 = Input value down 2 = Input value left 3 = Input value up (Default value) 4 = Input value right
DisplayBox	0 = Hides DP value frame 1 = Displays DP value frame (Default value)
Precision	0 = No digits after decimal point 1 = One digit after decimal point 2 to 5 = Two to five digits after decimal point NOTE: The value can also be 6 or 7; however, there is no place for Unit substitution (Default value = *empty*; Read from the DP instance)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendCh2) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name.

	(Default value = *empty*)
Units	Enter the engineering units for the value (Default value = *empty*; Read from the DP instance)

5.1.6. DYN_2D_Room Sensor_Pressure_PMon_101_All_001_101

Symbol Name			
DYN_2D_Room Sensor_Pressure_PMon_101_All_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Room sensor	Pressure	PMon_101	All directions
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol for room pressure sensor for PMon_101 function. [See 5.2.5]
BoxWidth	Width of sensor value frame (Default value = 76)
Direction	0, 1 = Input value down 2 = Input value left 3 = Input value up (Default value) 4 = Input value right
DisplayBox	0 = Hides DP value frame 1 = Displays DP value frame (Default value)
Precision	0 = No digits after decimal point 1 = One digit after decimal point 2 to 5 = Two to five digits after decimal point NOTE: The value can also be 6 or 7; however, there is no place for Unit substitution (Default value = *empty*; Read from the DP instance)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendP01 to TrendP10) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name.

	(Default value = *empty*)
Units	Enter the engineering units for the value (Default value = *empty*; Read from the DP instance)

5.1.7. DYN_2D_Room Sensor_Temperature_TMon_101_All_001_101

Symbol Name			
DYN_2D_Room Sensor_Temperature_TMon_101_All_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Room sensor	Temperature	TMon_101	All directions
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol for room temperature sensor for TMon_101 function. [See 5.2.7]
BoxWidth	Width of sensor value frame (Default value = 76)
Direction	0, 1 = Input value down 2 = Input value left 3 = Input value up (Default value) 4 = Input value right
DisplayBox	0 = Hides DP value frame 1 = Displays DP value frame (Default value)
Precision	0 = No digits after decimal point 1 = One digit after decimal point 2 to 5 = Two to five digits after decimal point NOTE: The value can also be 6 or 7; however, there is no place for Unit substitution (Default value = *empty*; Read from the DP instance)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendT01 to TrendT10 or TrendT99) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name.

	(Default value = *empty*)
Units	Enter the engineering units for the value (Default value = *empty*; Read from the DP instance)

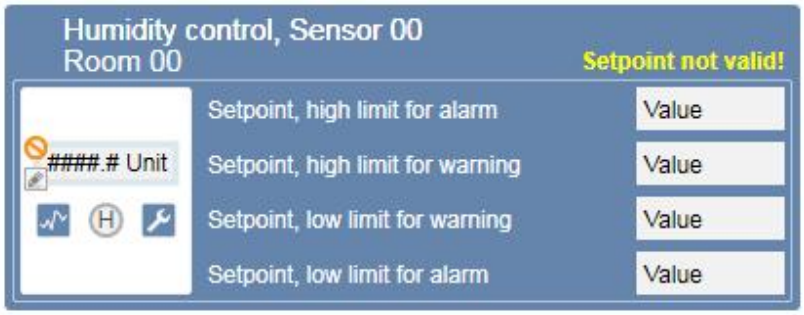
5.1.8. DYN_All_Status_ClbSen_All_001_101

Symbol Name			
DYN_All_Status_ClbSen_All_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Status	Sensor calibration	ClbSen	All
Symbol			
			

Substitutions	Set of Values
*	Dynamic symbol for sensor calibration for ClbSen function [See 5.2.6]

5.1.9. DYN_All_Status_Humidity monitor_HuMon_101_Central_001_101

Symbol Name			
DYN_All_Status_Humidity monitor_HuMon_101_Central_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Status	Humidity monitor	HuMon_101	Central
Symbol			



Substitutions	Set of Values
*	Dynamic symbol for humidity sensor monitor and control for HuMon_101 function [See 5.2.1]
Title1	First row title of the symbol **NOTE**: Displays the DP's Short Reference If no text entered (Default value = *empty*)
Title2	Second row title of the symbol (Default value = Room 00)
TitleFontSize	Title1 and Title2 font size (Default value =15)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendH01 to TrendH10) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name. (Default value = *empty*)

5.1.10. DYN_All_Status_Particle monitor_PartcMon_Central_001_101

Symbol Name			
DYN_All_Status_Particle monitor_PartcMon_Central_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Status	Particle monitor	HartcMonHQ/CFM	Central
Symbol			

Substitutions	Set of Values
*	Dynamic symbol for particle sensor monitor and control for PartcMonQM_101 & PartcMonCFM_101 functions. [See 5.2.3 and 5.2.4]
Title	Title of the symbol **NOTE**: Displays the DP's Short Reference If no text entered (Default value = *empty*)
TitleFontSize	Title font size (Default value =15)
Trend 0.5 µm	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendCh1) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name. (Default value = *empty*)
Trend 5 µm	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendCh2) if

	such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name. (Default value = *empty*)

5.1.11. DYN_All_Status_Pressure monitor_PMon_101_Central_001_101

Symbol Name			
DYN_All_Status_Pressure monitor_PMon_101_Central_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Status	Pressure monitor	PMon_101	Central
Symbol			

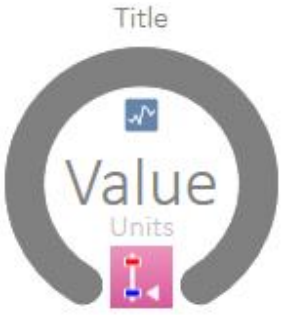
Substitutions	Set of Values
*	Dynamic symbol for pressure sensor monitor and control for PMon_101 function [See 5.2.5]
Title1	First row title of the symbol **NOTE**: Displays the DP's Short Reference If no text entered (Default value = *empty*)
Title2	Second row title of the symbol (Default value = Room 00)
TitleFontSize	Title1 and Title2 font size (Default value =15)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendP01 to TrendP10) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name. (Default value = *empty*)

5.1.12. DYN_All_Status_Temperature monitor_TMon_101_Central_001_101

Symbol Name			
DYN_All_Status_Temperature monitor_TMon_101_Central_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Status	Temperature monitor	TMon_101	Central
Symbol			

Substitutions	Set of Values
*	Dynamic symbol for temperature sensor monitor and control for PMon_101 function [See 5.2.7]
Title1	First row title of the symbol **NOTE**: Displays the DP's Short Reference If no text entered (Default value = *empty*)
Title2	Second row title of the symbol (Default value = Room 00)
TitleFontSize	Title1 and Title2 font size (Default value =15)
Trend	If the field is empty, the symbol displays a reference for a trend with a standard short name (TrendT01 to TrendT10 or TrendT99) if such exists. Otherwise the engineer could drag-n-drop a trend reference with different short name. (Default value = *empty*)

5.1.13. DYN_2D_Gauge_Angular_Sensor_Generic_Central_001_101

Symbol Name			
DYN_2D_Gauge_Angular_Sensor_Generic_Central_001_101			
Library			
BA_Room_Laboratory_Monitoring_PX_101_HQ_1			
Description			
Gauge	Angular Sensor	Generic	Central
Symbol			
			

Substitutions	Set of Values
*Datapoint:	Dynamic symbol (dashboard) for room temperature sensor, room pressure sensor and room humidity sensor for respectively TMon_101, PMon_101 and HuMon_101 function. [See 5.2.7]
Eng Units:	Enter the engineering units for the value. (Default value = *Units*)
Eng Units Font Size:	The font size of the engineering units' text can be changed. (Default value = *16*)
Gauge Title:	The gauge title can be set. (Default value = *Title*)
Gauge Title Color:	The gauge title color can be set. (Default value = *#FF808080*)
Gauge Title Font Size:	The font size of gauge title can be set. (Default value = *16*)

Range 1 Color good:	The color for the gauge value between the setpoint for low level warning and the high level warning can be set. (Default value = *#FF00FF00*)
Range 2 Color Lo Alarm:	The color for the gauge value below the setpoint for low level alarm can be set. (Default value = *#FF0000FF*)
Range 3 Color Lo Warn:	The color for the gauge value between the setpoint low level alarm and the low level warning can be set. (Default value = *#FF00FFFF*)
Range 4 Color Hi Warn:	The color for the gauge value between the setpoint high level warning and the high level alarm can be set. (Default value = *#FFFFFF00*)
Range 5 Color Hi Alarm:	The color for the gauge value above the setpoint for high level alarm can be set. (Default value = *#FFFF0000*)
Range Maximum:	The maximum value of the gauge range can be set (Default value = *100*)
Range Minimum:	The minimum value of the gauge range can be set (Default value = *0*)
Trend:	The trend reference could be drag-n-dropped into this substitution. (Default value = *empty*)
Value Font Size:	The font size of the value shown on the gauge can be set. (Default value = *36*)
Value Precision:	The value for the digits after the decimal point can be set. 0 = No digits after decimal point 1 = One digit after decimal point etc. (Default value = *0*)

5.2. Functions

5.2.1. HuMon_101 – Humidity monitoring

HuMon_101 is function responsible for displaying the following properties:

- humidity value
- high and low limits warnings and alarms
- setpoints for high/low warnings and alarms
- time delays for warnings and alarm limits
- sensor calibration parameters

The graphic symbols for this function are:

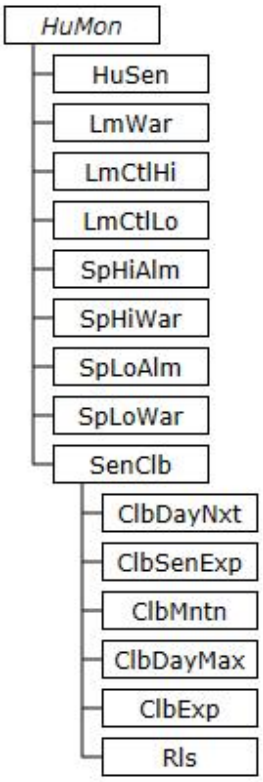
DYN_2D_Room Sensor_Humidity_HuMon_101_All_001_101

DYN_All_Status_Humidity monitor_HuMon_101_Central_001_101

During the project data import, the function is automatically assigned to every Block with Short Name: *HuMon01, HuMon02, HuMon03 … HuMon10*.

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:



5.2.2. MesPcAW_101 – Particles counters, alarms and warnings.

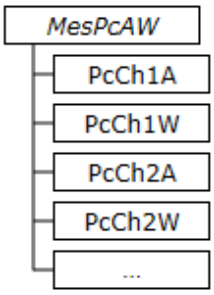
MesPcAW_101 is function responsible for displaying the following properties:

- values for particle with 0,5 µm and 5 µm size
- high limits warnings and alarms
- setpoints for warnings and alarms high limits
- time delays for warnings and alarm limits

During the project data import, the function is automatically assigned to every Block with Short Name: *MesQM* and *MesCFM*.

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:



5.2.3. PartcMonCFM_101 – Particle monitoring CFM

PartcMonCFM_101 is function responsible for displaying the following properties:

- humidity value
- high and low limits warnings and alarms
- setpoints for high/low warnings and alarms
- time delays for warnings and alarm limits
- sensor calibration parameters

The graphic symbols for this function are:

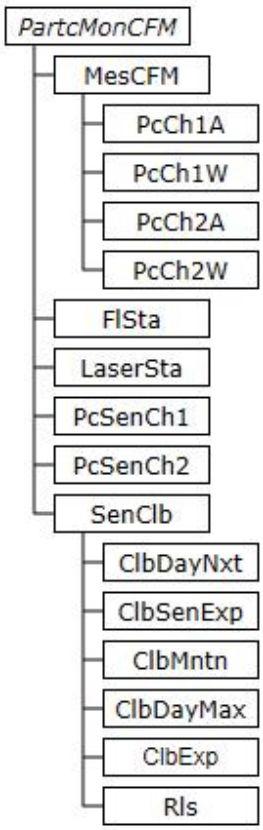
DYN_2D_Room Sensor_Particles 05microns_PartcMon_All_001_101

DYN_2D_Room Sensor_Particles 5microns_PartcMon_All_001_101

DYN_All_Status_Particle monitor_PartcMon_Central_001_101

During the project data import, this function is not assigned automatically to any blocks. This has to be done manually by the engineer.

The expected Block structure is:



5.2.4. PartcMonQM_101 – Particle monitoring QM

PartcMonQM_101 is function responsible for displaying the following properties:

- humidity value
- high and low limits warnings and alarms
- setpoints for high/low warnings and alarms
- time delays for warnings and alarm limits
- sensor calibration parameters

The graphic symbols for this function are:

DYN_2D_Room Sensor_Particles 05microns_PartcMon_All_001_101

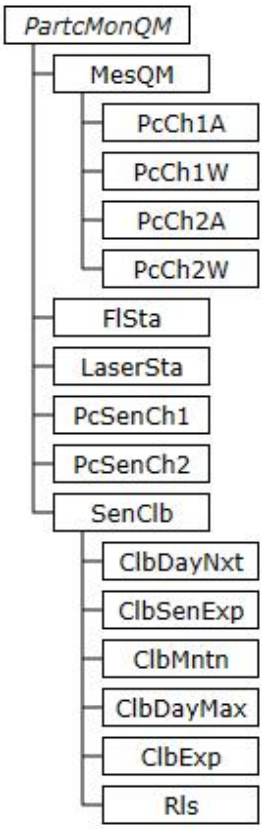
DYN_2D_Room Sensor_Particles 5microns_PartcMon_All_001_101

DYN_All_Status_Particle monitor_PartcMon_Central_001_101

During the project data import, the function is automatically assigned to every Block with Short Name: *PcMon01, PcMon02, PcMon03, … PcMon10*.

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:



5.2.5. PMon_101 – Pressure monitoring

PMon_101 is function responsible for displaying the following properties:

- pressure value
- high and low limits warnings and alarms
- setpoints for high/low warnings and alarms limits
- time delays for warnings and alarm limits
- sensor calibration parameters

The graphic symbols for this function are:

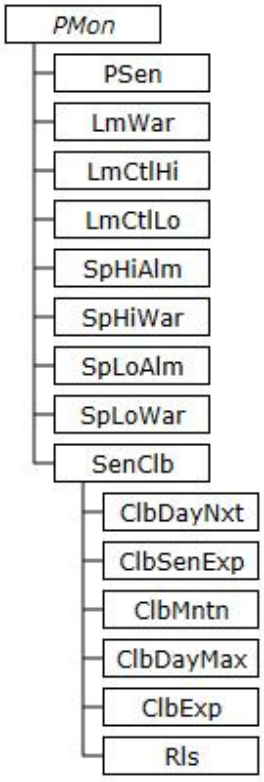
DYN_2D_Room Sensor_Pressure_PMon_101_All_001_101

DYN_All_Status_Pressure monitor_PMon_101_Central_001_101

During the project data import, the function is automatically assigned to every Block with Short Name: *PMon01, PMon02, PMon03 … PMon10*.

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:



5.2.6. SenClb_101 – Sensor calibration

SenClb_101 is function responsible for displaying the following properties:

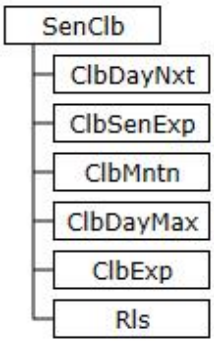
sensor calibration parameters

The graphic symbols for this function is DYN_All_Status_ClbSen_All_001_101

During the project data import, the function is automatically assigned to every Block with Short Name: *SenClb*.

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is:



5.2.7. TMon_101 – Temperature monitoring

TMon_101 is function responsible for displaying the following properties:

- temperature value
- high and low limits warnings and alarms
- setpoints for high/low warnings and alarms limits
- time delays for warnings and alarm limits
- sensor calibration parameters

The graphic symbols for this function are:

DYN_2D_Room Sensor_Temperature_TMon_101_All_001_101

DYN_All_Status_Temperature monitor_TMon_101_Central_001_101

During the project data import, the function is automatically assigned to every Block with Short Name: *TMon01, TMon02, TMon03 … TMon10*.

If the function has to be assigned to a block with different Short Name, or for some reason is not assigned to a block with the above mentioned Short Names, an engineer can manually assign the function to the right block.

The expected Block structure is: