

PDS *line*

USER MANUAL

pdslime.tekpan.com.tr/index.html

TABLE OF CONTENTS

12	1. INTRODUCTION <ul style="list-style-type: none">1.1 PURPOSE1.2 OBJECTIVES1.3 MINIMUM PRE-REQUISITES FOR THE PDS SOFTWARE
13	2. PANEL DESIGN WITH PDSline <ul style="list-style-type: none">2.1 PROCESS OVERVIEW
14	2. PANEL DESIGN WITH PDSline <ul style="list-style-type: none">2.1.1 SOFTWARE PROCESS MAP
15	2.1.2 DETAILED PROCESS STEPS <ul style="list-style-type: none">2.1.2.1 SIGN UP<ul style="list-style-type: none">2.1.2.1.1 CREATE ACCOUNT2.1.2.1.2 FILLING REGISTER FORM2.1.2.2 FORGOT THE PASSWORD<ul style="list-style-type: none">2.1.2.2.1 FORGOT YOUR PASSWORD

TABLE OF CONTENTS

16

2.1.2.2.2 IN CASE OF FORGETTING YOUR PASSWORD
2.1.2.3 LOG IN
2.1.2.4 OPEN PROJECT
2.1.2.4.1 OPEN PROJECT (FROM START PAGE)

17

2.1.2.4.2 SELECT PREPARED PROJECT
2.1.2.4.3 CONTINUE YOUR DESIGN
2.1.2.4.4 OPEN PROJECT (FROM DESIGN PAGE)

18

2.1.2.4.5 FILTERING PROJECTS
2.1.2.5 CREATING NEW PROJECT
2.1.2.5.1 CREATING NEW PROJECT
2.1.2.5.2 PROJECT DETAILS

19

2.1.2.6 PANEL DESIGN WITH CONFIGURATION WIZARD
2.1.2.6.1 CONFIGURATION TYPE
2.1.2.6.2 PROJECT SPECIFICATIONS
2.1.2.6.3 STARTING CONFIGURATION

20

2.1.2.6.4 CREATING AN ACB MODULE
2.1.2.6.5 CONFIGURING ACB CASSETTE
2.1.2.6.6 CONFIGURING BLANK CASSETTE

TABLE OF CONTENTS

21	2.1.2.6.7 COMBINING BLANK CASSETTE 2.1.2.6.8 CONFIGURING ACB MODULE 2.1.2.6.9 CHANGING MODULE NAME
22	2.1.2.6.10 CLONE COUNT 2.1.2.6.11 CLONING THE MODULE 2.1.2.6.12 DELETING MODULE
23	2.1.2.6.13 DELETING FUNCTIONAL CASSETTE 2.1.2.6.14 COUPLING MODULE 2.1.2.6.15 COUPLING MODULE SPECIFICATIONS
24	2.1.2.6.16 CONVERT MODULE 2.1.2.6.17 CREATING A FEEDER / COMBINED FEEDER MODULE 2.1.2.6.18 ADDING MCB CASSETTE
25	2.1.2.6.19 CONFIGURATING MCB CASSETTE 2.1.2.6.20 ADDING MCCB (EASY - FIX) CASSETTE 2.1.2.6.21 CONFIGURING (EASY - FIX) MODULE

TABLE OF CONTENTS

26

- 2.1.2.6.22 CONFIGURING DISTRIBUTION MODULE
- 2.1.2.6.23 CONFIGURING CABLE MODULE
- 2.1.2.6.24 CREATING A COMBINED FEEDER MODULE

27

- 2.1.2.6.25 CONFIGURING COMBINED FEEDER MODULE
- 2.1.2.6.26 CREATING A MCC MODULE
- 2.1.2.6.27 CONFIGURING WITHDRAWABLE CASSETTE
(POWER DISTRIBUTION)

28

- 2.1.2.6.28 ADDING MOTOR CONTROL CASSETTE
- 2.1.2.6.29 CONFIGURING MOTOR CONTROL CASSETTE
- 2.1.2.6.30 ADDING EMPTY MODULE

29

- 2.1.2.6.31 ADDING CORNER MODULE
- 2.1.2.6.32 ADDING BAYING KIT
- 2.1.2.6.33 ADDING BAYING MODULE

30

- 2.1.2.6.34 ADDING ADDITIONAL PARTS & ACCESSORIES
- 2.1.2.6.35 PARTS & ACCESSORIES NOTIFICATION
- 2.1.2.7 PROJECT DESIGN WITH MANUAL CONFIGURATION
 - 2.1.2.7.1 CONFIGURATION TYPE

TABLE OF CONTENTS

31	 	2.1.2.7.2 PROJECT SPECIFICATIONS 2.1.2.7.3 STARTING CONFIGURATION 2.1.2.7.4 CREATING AN ACB MODULE
32	 	2.1.2.7.5 CONFIGURATING ACB MODULE 2.1.2.7.6 ADDING COMBINATION 2.1.2.7.7 ADDING AN ACB CASSETTE
33	 	2.1.2.7.8 COUPLING MODULE 2.1.2.7.9 CONVERT MODULE 2.1.2.7.10 CONFIGURING FUNCTIONAL CASSETTES
34	 	2.1.2.7.11 ADDING BLANK CASSETTE 2.1.2.7.12 BLANK CASSETTE CONFIGURATION 2.1.2.7.13 COMBINING BLANK CASSETTES
35	 	2.1.2.7.14 CREATING A FEEDER / COMBINED FEEDER MODULE 2.1.2.7.15 ADDING DISTRIBUTION MODULE BEFORE FEEDER MODULE 2.1.2.7.16 ADDING COMBINATION (MCB - MCCB)

TABLE OF CONTENTS

36

- 2.1.2.7.17 ADDING MCB CASSETTE
- 2.1.2.7.18 CONFIGURING MCB CASSETTE
- 2.1.2.7.19 ADDING MCCB CASSETTE

37

- 2.1.2.7.20 CONFIGURING MCCB CASSETTES
- 2.1.2.7.21 BLANK CASSETTE CONFIGURATIONS
- 2.1.2.7.22 BLANK CASSETTE SPECIFICATIONS

38

- 2.1.2.7.23 COMBINING BLANK CASSETTES
- 2.1.2.7.24 ADDING CABLE MODULE AFTER FEEDER MODULE
- 2.1.2.7.25 INTERNAL POSITION

39

- 2.1.2.7.26 COMBINED MODULE
- 2.1.2.7.27 ADDING A MCC MODULE
- 2.1.2.7.28 ADDING MCC CASSETTE

40

- 2.1.2.7.29 ADDING WITHDRAWABLE CASSETTE
(POWER DISTRIBUTION)
- 2.1.2.7.30 CONFIGURING WITHDRAWABLE CASSETTE
(POWER DISTRIBUTION)
- 2.1.2.7.31 ADDING MOTOR CONTROL CASSETTE

TABLE OF CONTENTS

41	2.1.2.7.32 CONFIGURING MOTOR CONTROL CASSETTE
	2.1.2.7.33 BLANK CASSETTE CONFIGURATIONS
	2.1.2.7.34 BLANK CASSETTE SPECIFICATIONS
42	2.1.2.7.35 COMBINING BLANK CASSETTES
	2.1.2.7.36 ADDING CABLE MODULE AFTER MCC MODULE
	2.1.2.7.37 ADDING CORNER MODULE
43	2.1.2.7.38 ADDING EMPTY MODULE
	2.1.2.7.39 ADDING ADDITIONAL PARTS & ACCESSORIES
	2.1.2.8 PART LIST DETAILS
	2.1.2.8.1 ADDED MATERIALS
44	2.1.2.8.2 ELECTRICAL PARTS
	2.1.2.8.3 TEKPAN PARTS
	2.1.2.8.4 PROJECT MENU
45	2.1.2.8.5 CHANGING CUSTOMER INFO
	2.1.2.8.6 CUSTOMER INFO
	2.1.2.8.7 CHANGING PROJECT SPECIFICATIONS

TABLE OF CONTENTS

46

2.1.2.8.8 PROJECT SPECIFICATIONS
2.1.2.8.9 SAVING PROJECT
2.1.2.8.10 SAVE AS PROJECT

47

2.1.2.8.11 PLINTH SETTINGS
2.1.2.8.12 PROJECT REPORT MENU
2.1.2.8.13 CHOOSING REPORT TYPE

48

2.1.2.9 PROJECT REPORT
2.1.2.9.1 PROJECT REPORT COVER PAGE
2.1.2.9.2 PROJECT REPORT INDEX PAGE
2.1.2.9.3 PROJECT REPORT SPECIFICATIONS PAGE

49

2.1.2.9.4 PROJECT REPORT FRONT VIEW PAGE
2.1.2.9.5 PROJECT TOP VIEW PAGE
2.1.2.9.6 PROJECT REPORT SINGLE LINE DIAGRAM PAGE

50

2.1.2.9.7 PROJECT REPORT ELECTRICAL MATERIAL LIST PAGE
2.1.2.10 SHARE PROJECT
2.1.2.10.1 SHARE PROJECT
2.1.2.10.2 SHARE PROJECT

TABLE OF CONTENTS

51



2.1.2.11 ORDERING

■ 1.1 PURPOSE

The PDS Software Manual outlines the steps which any user will face during designing a PDS project. The document identifies each step one by one to the user on an example project. As the document have been prepared on an example project, the user can also see all the conditions and rules of the software.

While the purpose of the PDS Design Software is to increase efficiency of designing project, this manual provides necessary information for beginner users.

■ 1.2 OBJECTIVES

The objectives and benefits expected by the PDS Software are:

- Reduce designing and quoting time per panel by at least 80%.
- Providing a panel design program which can be used with any brand of electrical equipment.
- Standardized project report outcome.
- Reduce the time of project drawing per panel by %90.

■ 1.3 MINIMUM PRE-REQUISITES FOR THE PDS SOFTWARE

- a) Internet connection
- b) An internet browser different than windows explorer or edge such as Google Chrome, Opera, Mozilla Firefox ect.
- c) User access and user accounts creations
- d) Basic low voltage switchgear knowledge

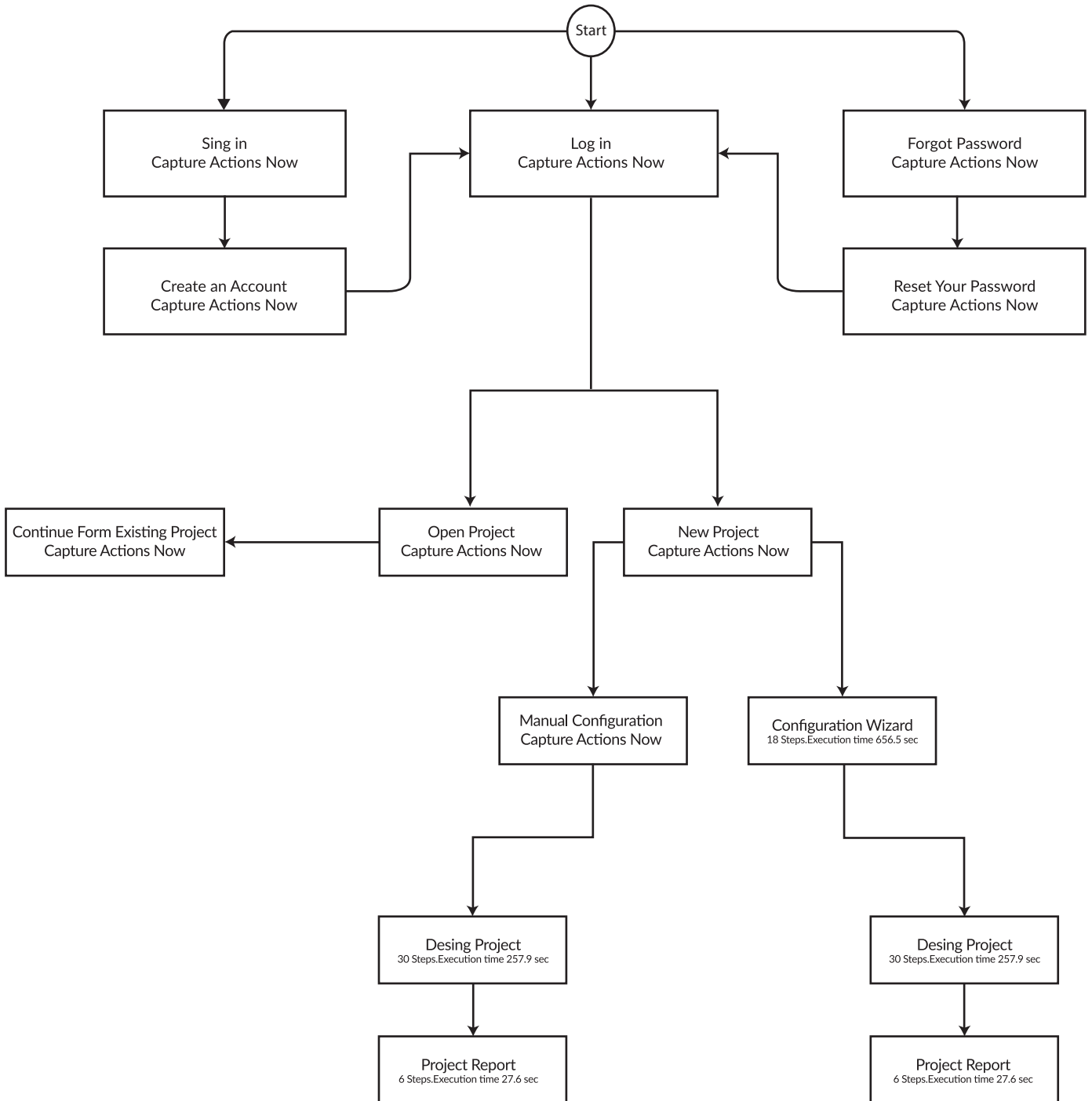
■ 2.1 PROCESS OVERVIEW

Section contains general information about the process of sample panel design.

ITEM	DESCRIPTION/ANSWER
Process Full Name	Sample Panel Design
Process Area	PDS Software
Department	Design
Process Restrictions	Before start to use software, this manual should be read and understood.

2.1.1 SOFTWARE PROCESS MAP

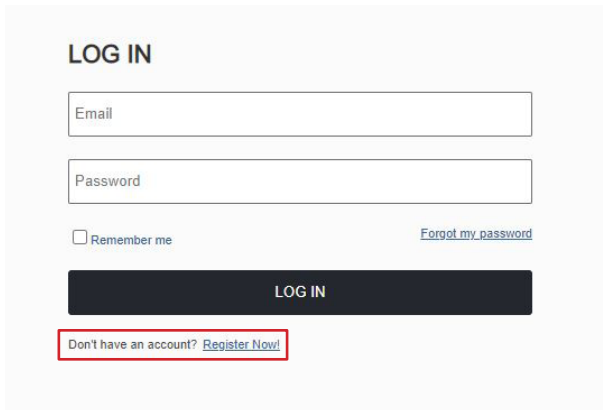
This section shows the software process map to design a project. The process can be tracked from this map step by step.



2.1.2 DETAILED PROCESS STEPS

2.1.2.1 SIGN UP

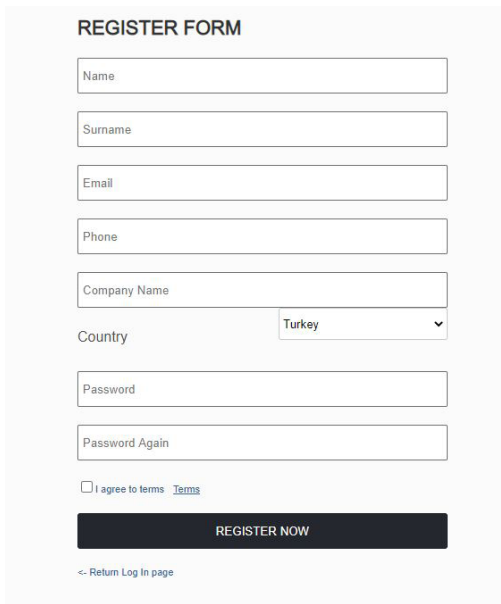
2.1.2.1.1 CREATE ACCOUNT



The screenshot shows a 'LOG IN' form with the following elements: an 'Email' input field, a 'Password' input field, a 'Remember me' checkbox, a 'Forgot my password' link, a black 'LOG IN' button, and a 'Don't have an account? Register Now!' link. The 'Register Now!' link is highlighted with a red box.

Click on REGISTER NOW to create a new account.

2.1.2.1.2 FILLING REGISTER FORM

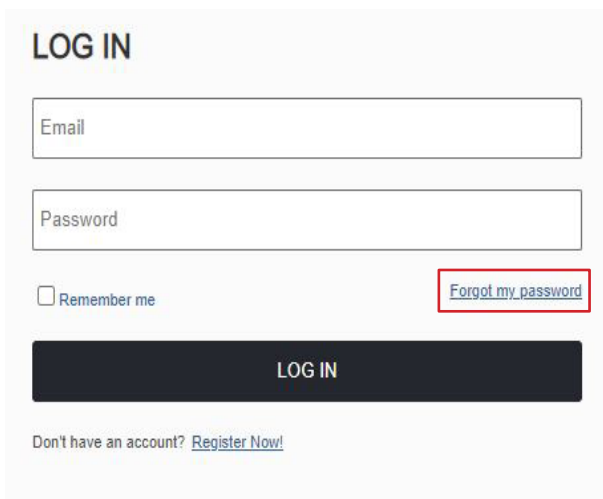


The screenshot shows a 'REGISTER FORM' with the following elements: 'Name', 'Surname', 'Email', 'Phone', 'Company Name', 'Country' (with a dropdown menu showing 'Turkey'), 'Password', 'Password Again', a 'Terms' link, a 'REGISTER NOW' button, and a '<- Return Log In page' link.

Fill up related form to create new account

2.1.2.2 FORGOT THE PASSWORD

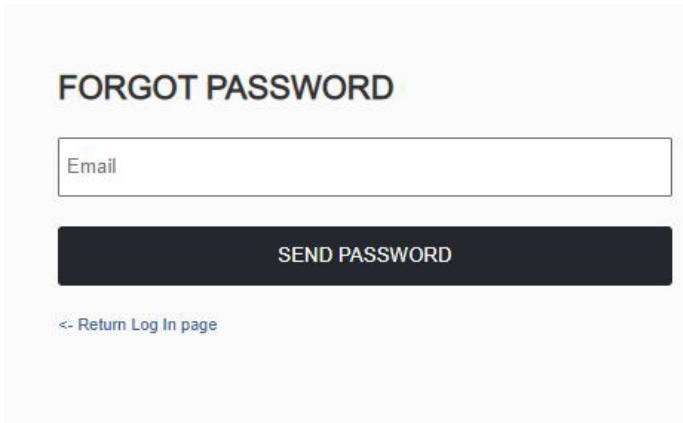
2.1.2.2.1 FORGOT YOUR PASSWORD



The screenshot shows a 'LOG IN' form with the following elements: an 'Email' input field, a 'Password' input field, a 'Remember me' checkbox, a 'Forgot my password' link, a black 'LOG IN' button, and a 'Don't have an account? Register Now!' link. The 'Forgot my password' link is highlighted with a red box.

In case of forgetting password click on the FORGOT MY PASSWORD to inform us.

■ 2.1.2.2.2 IN CASE OF FORGETTING YOUR PASSWORD



FORGOT PASSWORD

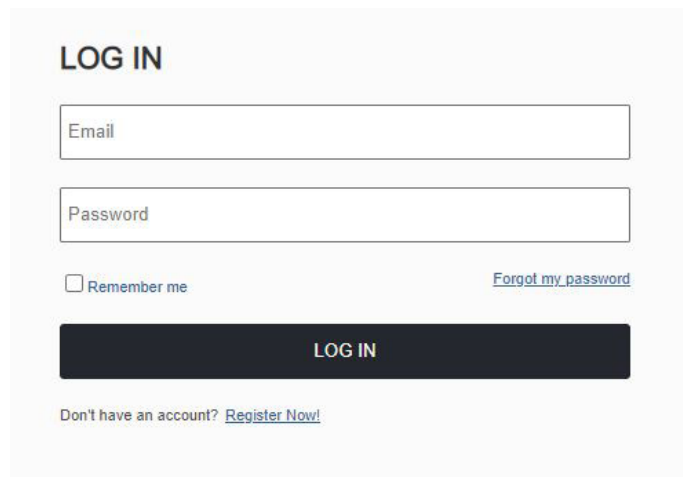
Email

SEND PASSWORD

[<- Return Log In page](#)

Valid password will be sent to the written email address.

■ 2.1.2.3 LOG IN



LOG IN

Email

Password

Remember me [Forgot my password](#)

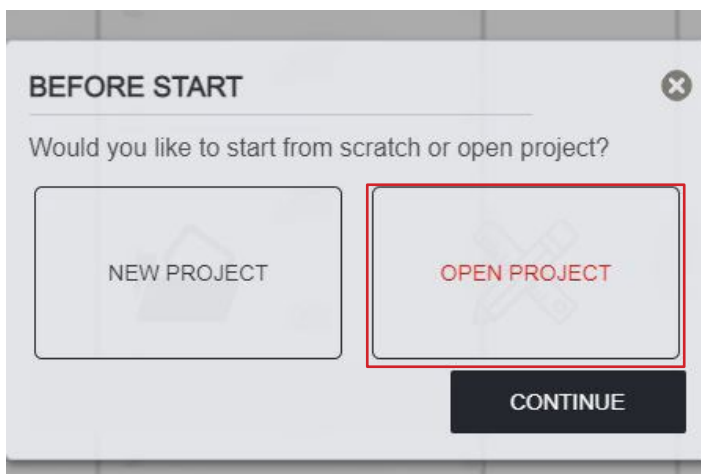
LOG IN

Don't have an account? [Register Now!](#)

Type registered e-mail address & user password and click Log In button to start to configure project.

■ 2.1.2.4 OPEN PROJECT

■ 2.1.2.4.1 OPEN PROJECT (FROM START PAGE)



BEFORE START

Would you like to start from scratch or open project?

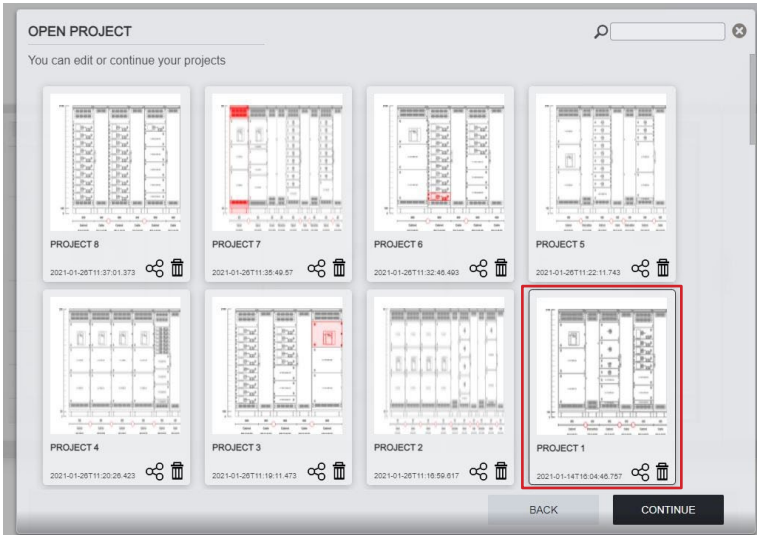
NEW PROJECT

OPEN PROJECT

CONTINUE

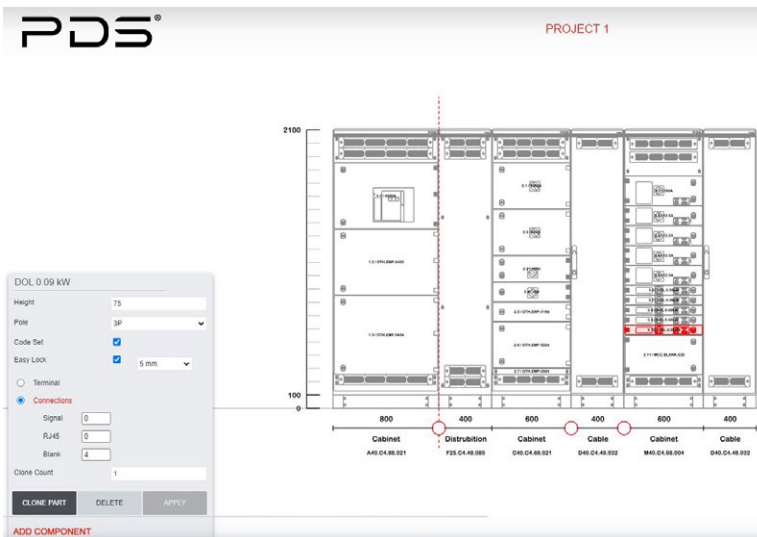
To open an existing project, after log in select the OPEN PROJECT option and click on the CONTINUE button.

2.1.2.4.2 SELECT PREPARED PROJECT



All saved projects are shown on the opening window. Please click on the project image whichever required and click on CONTINUE button.

2.1.2.4.3 CONTINUE YOUR DESIGN



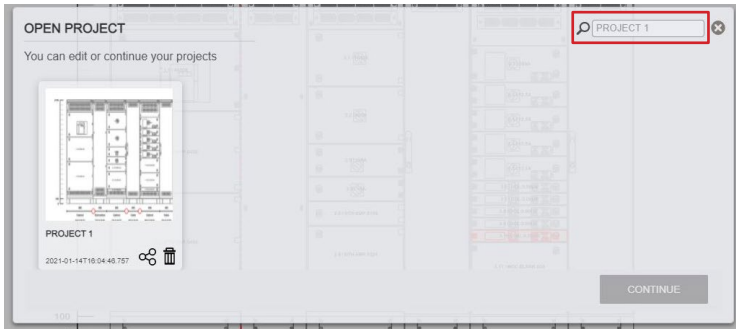
Upon selection, the project will be uploaded on screen to keep working.

2.1.2.4.4 OPEN PROJECT (FROM DESIGN PAGE)



Also, to select OPEN PROJECT tab please click on menu icon on left top on the screen. Selection is directed to the project selection page.

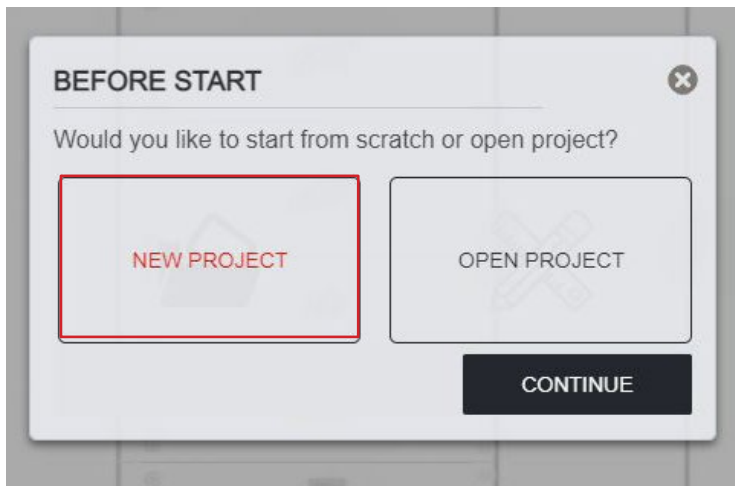
■ 2.1.2.4.5 FILTERING PROJECTS



On project selection page, project name can be searched from the search bar.

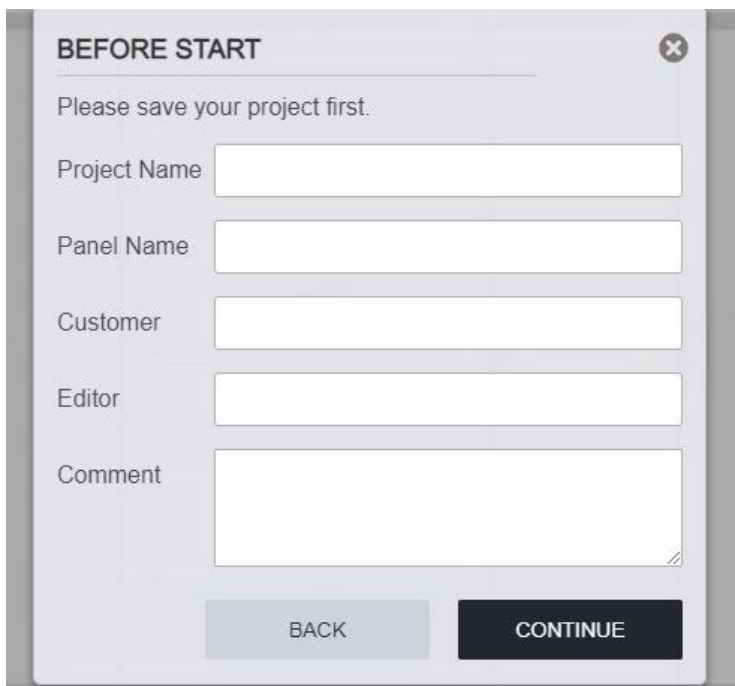
■ 2.1.2.5 CREATING NEW PROJECT

■ 2.1.2.5.1 CREATING NEW PROJECT



Upon Logging in either open an existing project or start to create a new project can be selected. To create a new project please select "NEW PROJECT" then click to CONTINUE.

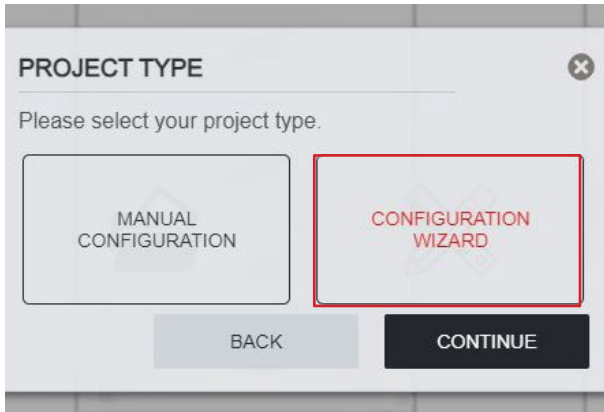
■ 2.1.2.5.2 PROJECT DETAILS



In this step project details are identified. It should not be forgotten that these identifications will be shown in project report.

2.1.2.6 PANEL DESIGN WITH CONFIGURATION WIZARD

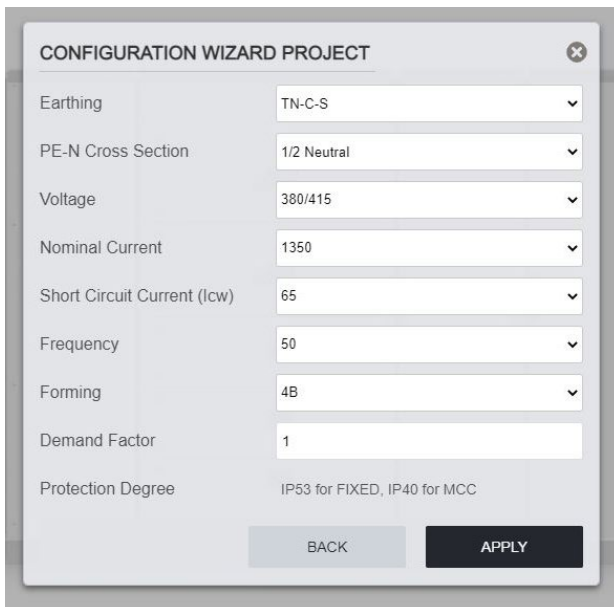
2.1.2.6.1 CONFIGURATION TYPE



Project can be created either using CONFIGURATION WIZARD or MANUAL CONFIGURATION options.

In 2.1.2.6 section; create a project with CONFIGURATION WIZARD will be explained.

2.1.2.6.2 PROJECT SPECIFICATIONS



In this step project properties are selected. Such as; earthing type, short circuit protection, segregation...etc.

According to selections, panels will be automatically affected.

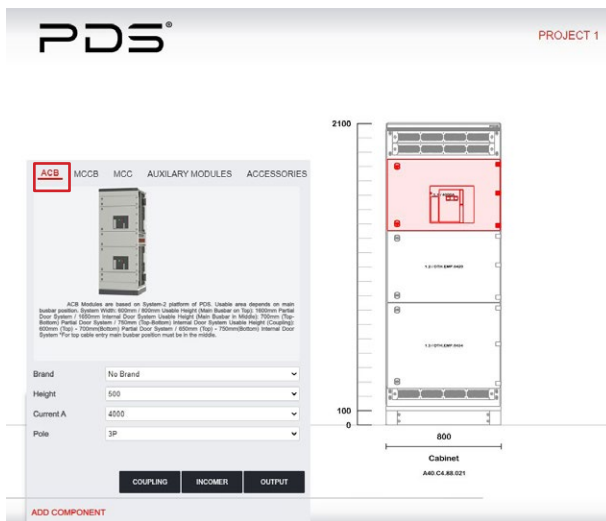
2.1.2.6.3 STARTING CONFIGURATION



To start create a project, click on START DESIGN.

Project name will be shown on top of the screen.

2.1.2.6.4 CREATING AN ACB MODULE



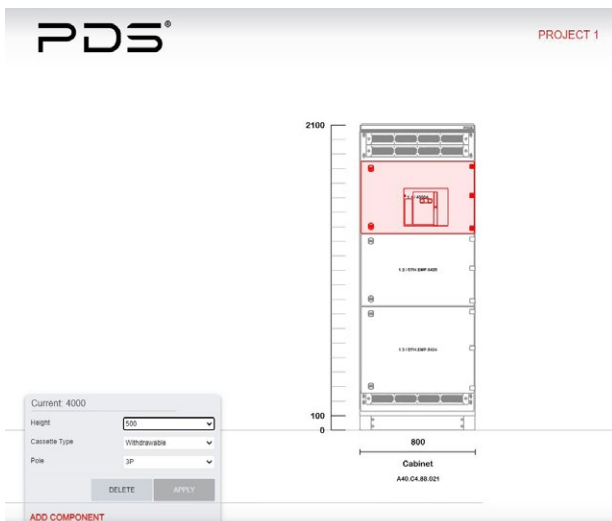
As all ACB modules have been designed for different type of breakers and tested accordingly, branded unit or no brand options can be chosen.

In branded selections, ask for a type test.

In no brand selection own air circuit breaker can be fixed in the module. In case of no brand selection even though TEKPAN could provide the module, it is not possible to provide a full type test certificate for each brand.

After Selecting ACB tab on top of the component adding area, by selecting brand, series, current and pole options an Air Circuit Braker Module is added directly. This module can be added as an incomer, outgoing or a coupling.

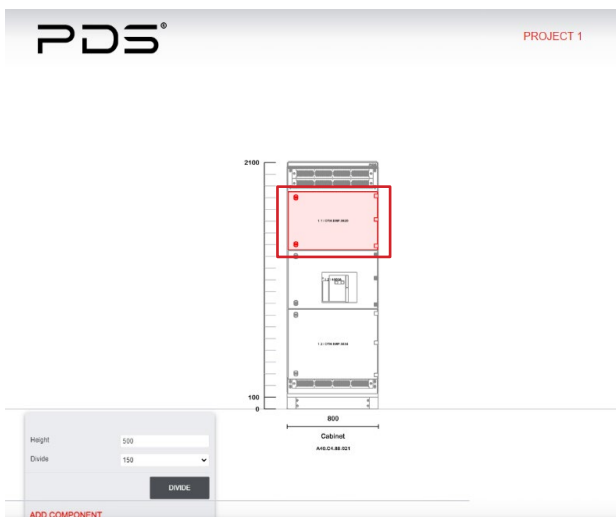
2.1.2.6.5 CONFIGURING ACB CASSETTE



Upon clicking the functional cassette which you want to configure, the configuration window will be open at the left side of the screen.

Cassette options are changed on this screen according to requirements.

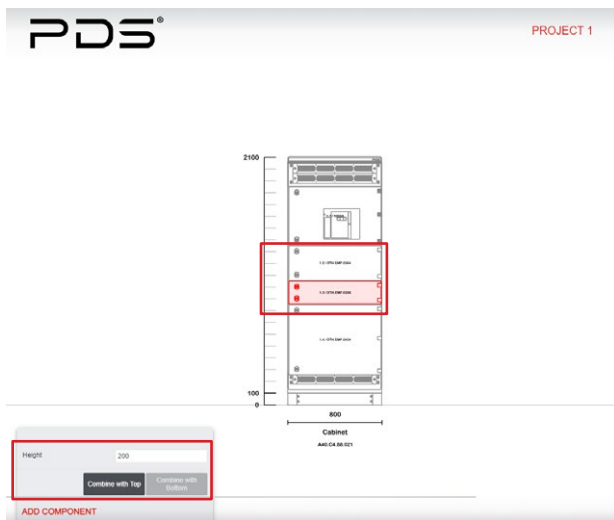
2.1.2.6.6 CONFIGURING BLANK CASSETTE



Upon selection of the functional cassette, the software is going to fill the areas that remains blank with blank cassettes. These blank cassettes programmed as to provide maximum area.

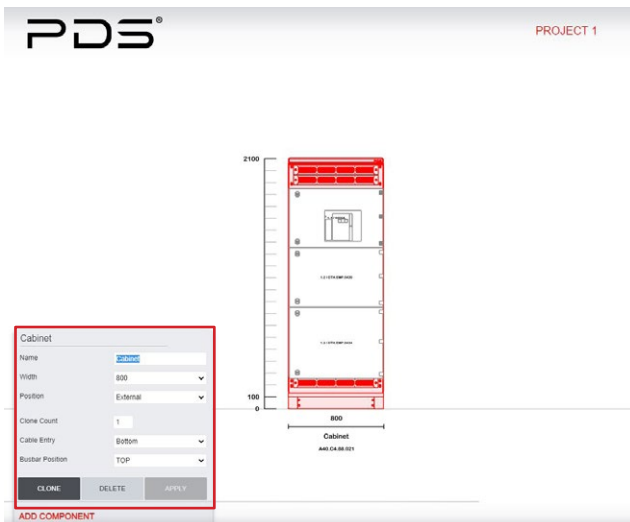
To change blank cassette's height, please left click on the unit and an options window will be opened. In this window height section shows the actual height of this cassette. Divide part shows the possible dividing dimensions. By selecting the cassette height and clicking on the divide button this cassette will be divided in two pieces. One of the pieces will be the unit that you need and the other one will be the remaining unit of the first blank that divided.

■ 2.1.2.6.7 COMBINING BLANK CASSETTE



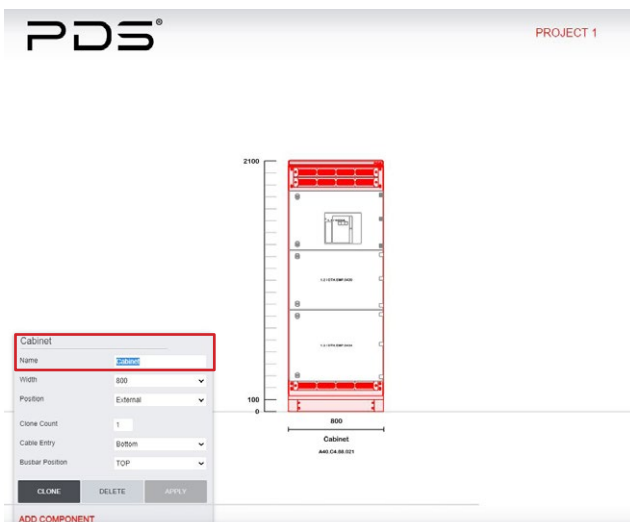
To change position of any cassette please drag it to the desired area. User can also combine the blank cassette with the other ones. After clicking the blank cassette there will be an option that allows to combine the unit with the one that is below or top of selected. While combining the blank cassette the maximum height cannot be exceeded.

■ 2.1.2.6.8 CONFIGURING ACB MODULE



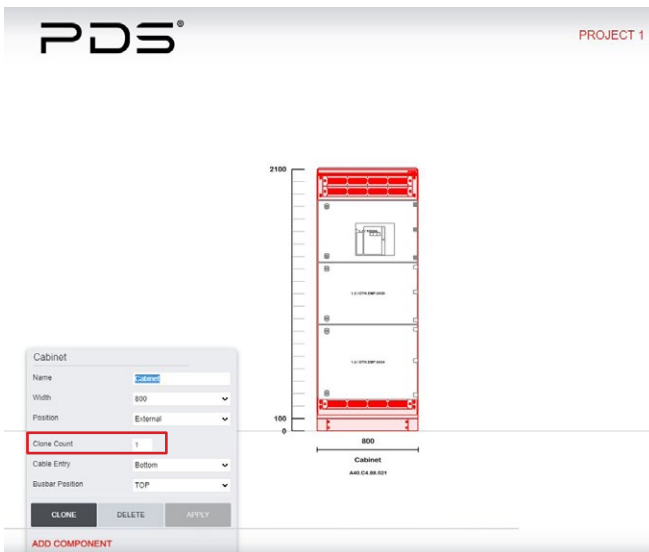
By selecting the current module, a window shows up. Module's name, width, cable entry as well as the position of main busbars are changed via this window. Also, door type is selected as partial external doors or internally separated glazed or solid doors. When all selections have been completed, please click on APPLY button to save.

■ 2.1.2.6.9 CHANGING MODULE NAME



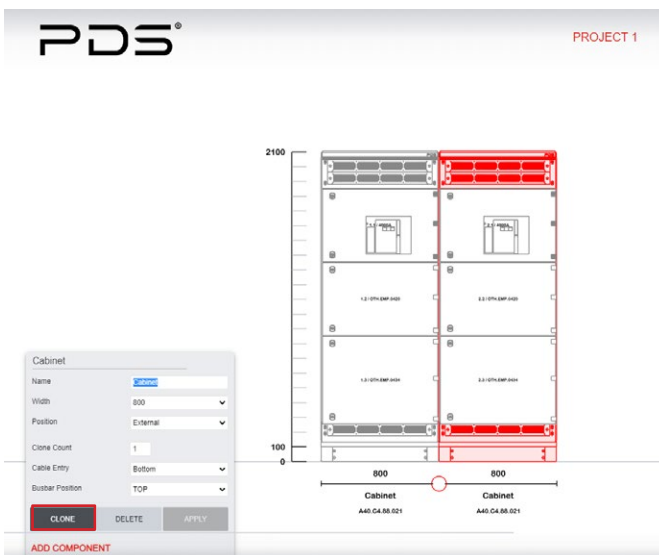
Module names are changeable and it is changed on Panel options window.

2.1.2.6.10 CLONE COUNT



After configuration, modules can be cloned same as the chosen one. To be able to do that, add clone count and click on the CLONE button.

2.1.2.6.11 CLONING THE MODULE



Upon clicking the functional module which you want to configure, the configuration window will be open at the left side of the screen.

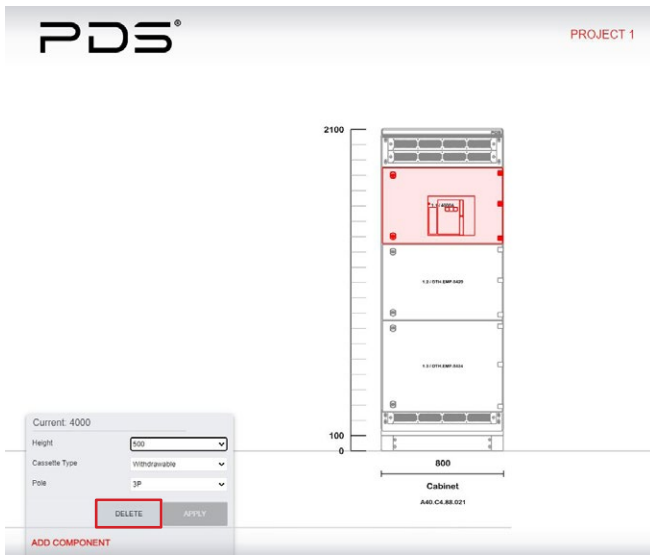
Options are changed on this screen according to requirements.

2.1.2.6.12 DELETING MODULE



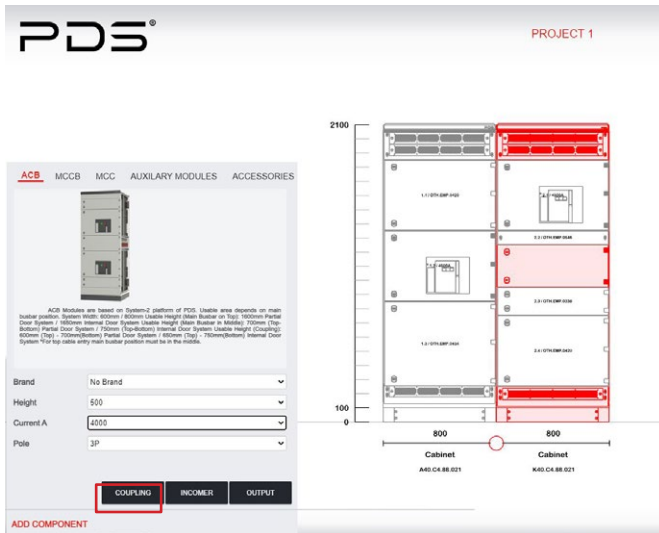
To remove a module from the project, please click on the panel that you want to remove and click on the DELETE button.

2.1.2.6.13 DELETING FUNCTIONAL CASSETTE



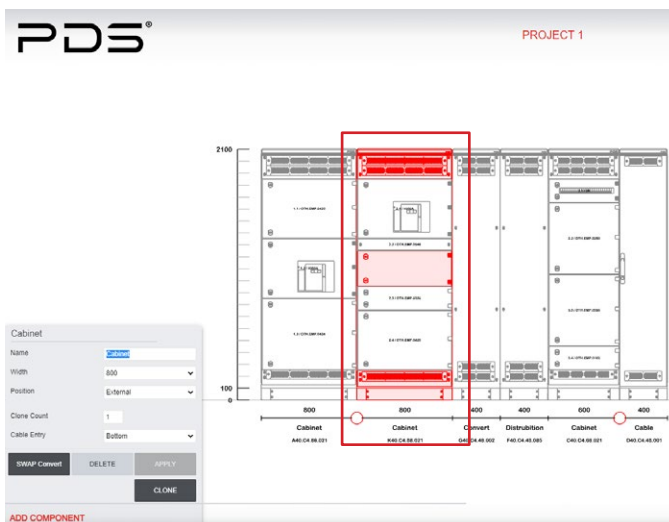
To delete any functional cassette, select it on the drawing on screen. After, options menu will be opened. By clicking on DELETE button, cassette will be removed.

2.1.2.6.14 COUPLING MODULE



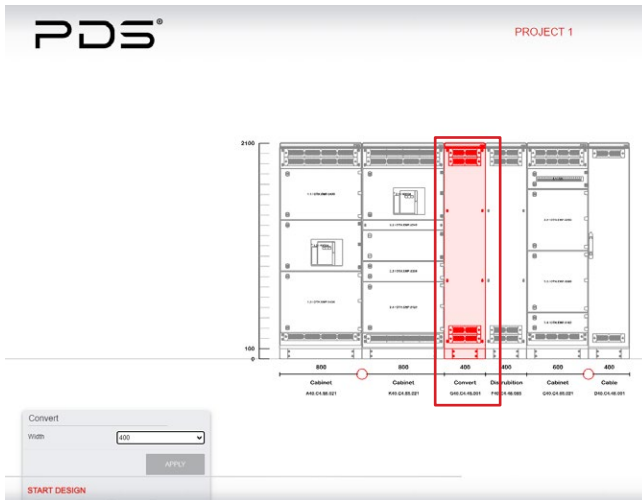
By selecting the current module, a window shows up. Module's name, width, cable entry as well as the position of main busbars are changed via this window. Also, door type is selected as partial external doors or internally separated glazed or solid doors. When all selections have been completed, please click on APPLY button to save.

2.1.2.6.15 COUPLING MODULE SPECIFICATIONS



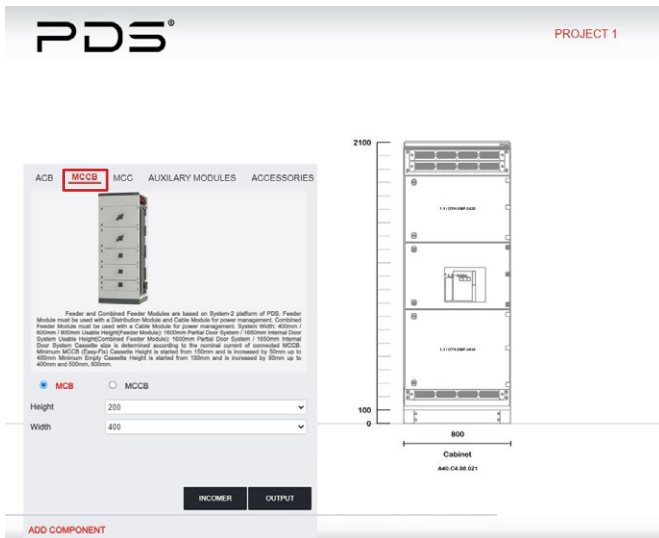
A Convert Module will be added after the Coupling Module automatically.

2.1.2.6.16 CONVERT MODULE



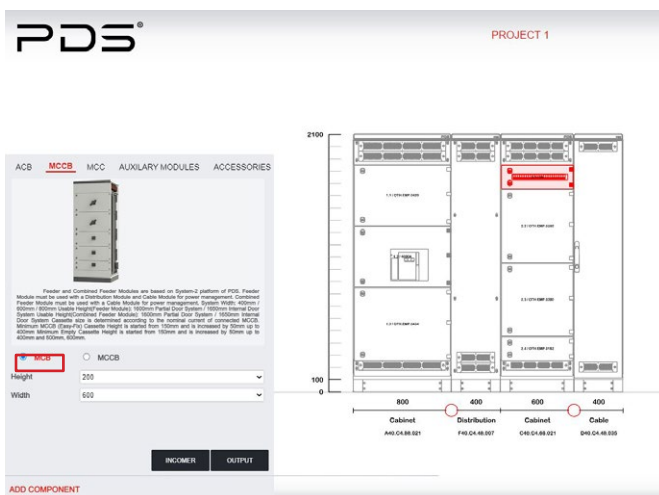
When an ACB Module is added while the main busbar position selected as middle, then you need a convert module which changes the main busbar position from middle to top or vice versa.

2.1.2.6.17 CREATING A FEEDER / COMBINED FEEDER MODULE



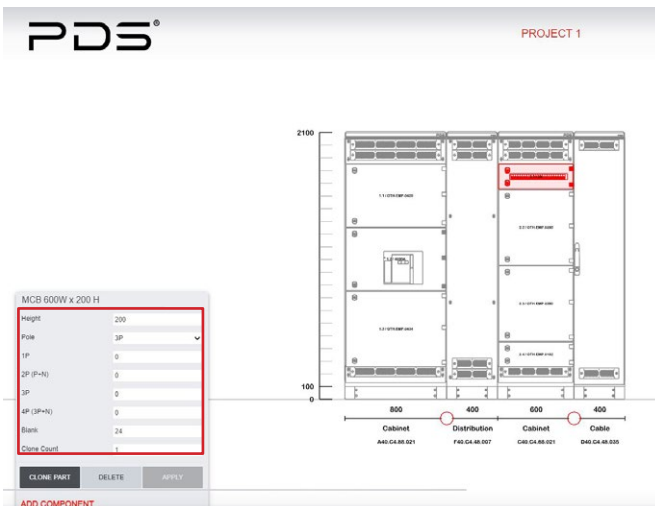
To add a Feeder Module, first of all click on ADD COMPONENT button and select the MCCB tab from the top of the opened window. MCB (Mini Circuit Braker) or MCCB (Molded Case Circuit Braker) cassettes can be added in this section.

2.1.2.6.18 ADDING MCB CASSETTE



MCB cassette is added in project as an incomer or output unit by clicking on INCOMER or OUTPUT button.

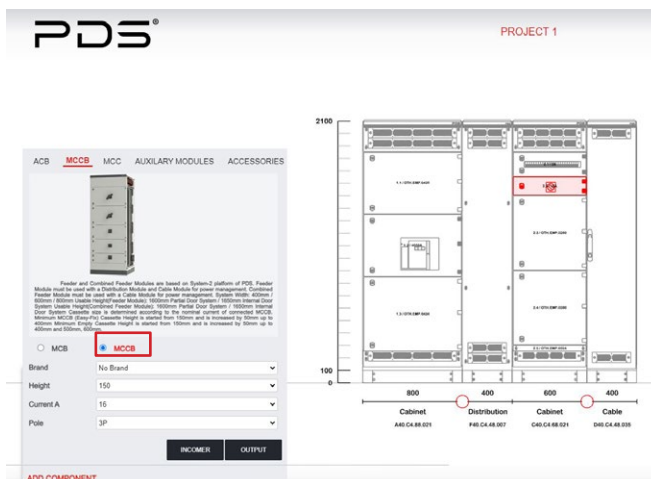
2.1.2.6.19 CONFIGURATING MCB CASSETTE



Upon clicking the functional unit which is wanted to configure, the configuration window will be open at the left side of the screen.

- 1P → 1P MCB (1 pc.)
- 2P(P+N) → 2P(P+N) MCB (2 pcs.)
- 3P → 3P MCB (3 pcs.)
- 4P(3P+N) → 4P(3P+N) MCB (4 pcs.)

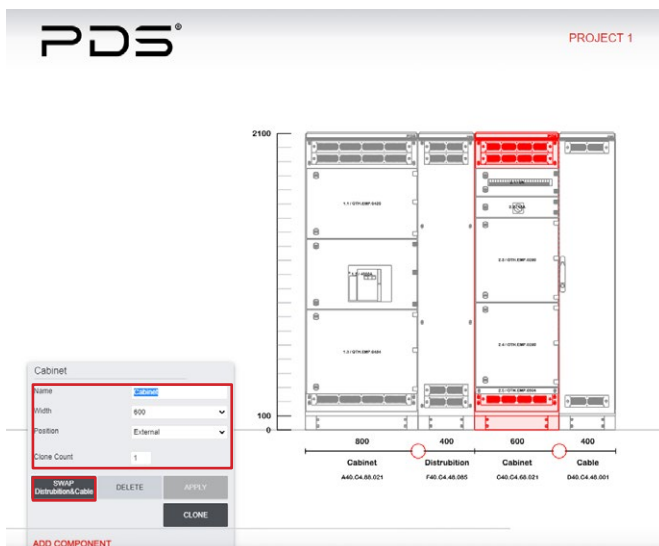
2.1.2.6.20 ADDING MCCB (EASY - FIX) CASSETTE



Brand, breaker series, current and pole of your functional cassette can be selected in the same window.

Branded cassette or no brand options can be chosen. If no brand selected, height of the cassette that you install should be selected. For branded cassettes' height selection is not a must. The height will be selected automatically. MCCB cassette is added in project as an incomer or output unit by clicking on INCOMER or OUTPUT button.

2.1.2.6.21 CONFIGURING MCCB (EASY - FIX) MODULE



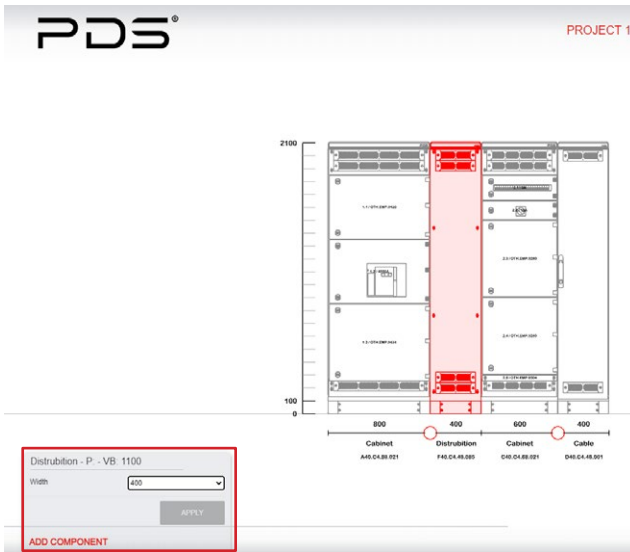
Upon clicking on Feeder Module an option window will be opened. From this window, name of the module, width and door type of module can change.

When a Feeder Module is added a Distribution Module and a Cable Module will be automatically added in the project. Those modules' positions can be swapped by clicking on SWAP Distribution & Cable button.

Click on APPLY button after finalize configuration to save.

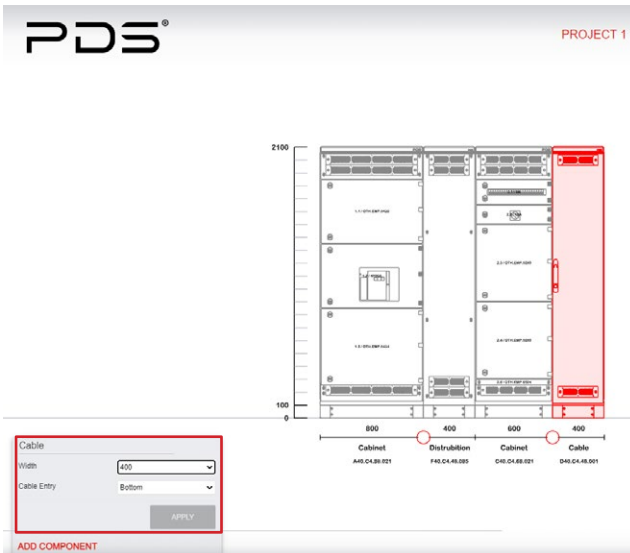
You can also clone the Feeder Module by selecting clone count and clicking on CLONE button.

2.1.2.6.22 CONFIGURING DISTRIBUTION MODULE



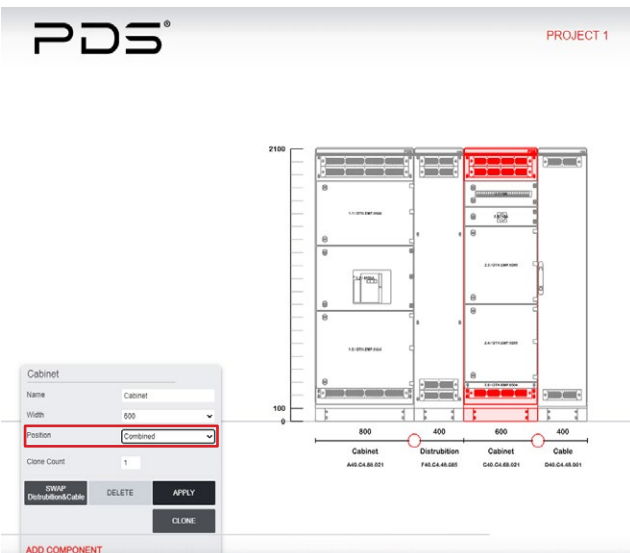
Project's Distribution Module current will be calculated according to demand factor which is selected on project specifications at the beginning of the project. Distribution Module width can be changed as 300mm or 400mm.

2.1.2.6.23 CONFIGURING CABLE MODULE



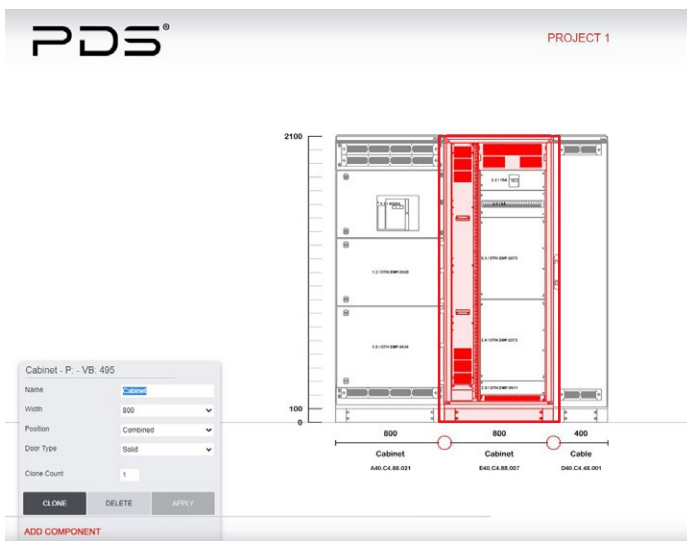
Cable Module width can be selected as 400mm or 600mm and cable entry position can be selected as bottom or rear on the options window which will be open when click on the Cable Module's panel.

2.1.2.6.24 CREATING A COMBINED FEEDER MODULE



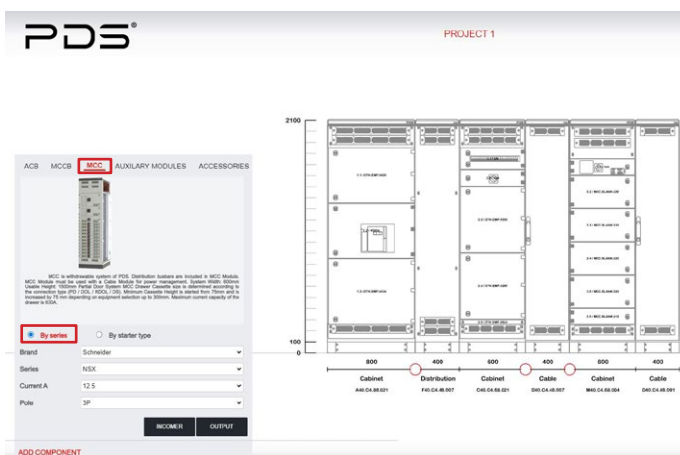
When Feeder Module selected as a Combined Module, panel turn into an internal panel. Feeder Module and Distribution Module converges in the same panel.

2.1.2.6.25 CONFIGURING COMBINED FEEDER MODULE



If Feeder Module has changed as a Combined Module, the panel automatically change to internal. Door type is changeable as solid or glazed door as it is on all internal doors.

2.1.2.6.26 CREATING A MCC MODULE

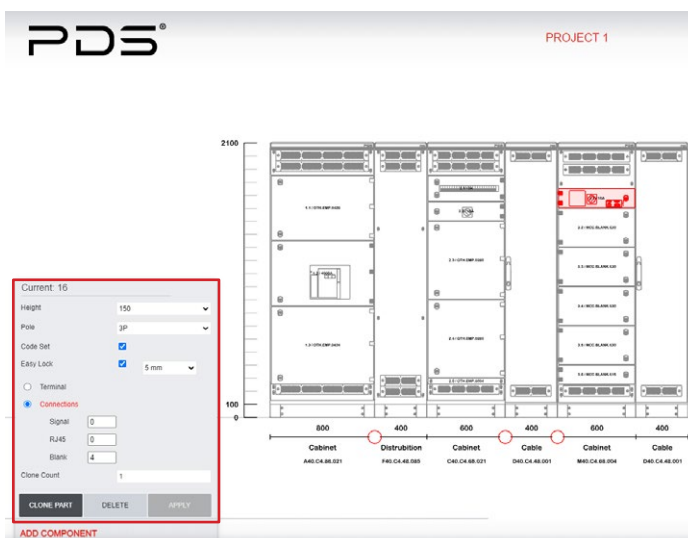


Withdrawable units can be added under the name of MCC Module. To add one please click on ADD COMPONENT button and select the MCC tap on the selection window. This section includes withdrawable breaker and withdrawable motor starter cassette.

In this option braker can be added as an incomer or output.

MCC Module will be added in project automatically as 600mm width with a Cable Module. While Cable Module's width can be configured as mentioned in previous chapters, this option is not possible for MCC Module.

2.1.2.6.27 CONFIGURING WITHDRAWABLE CASSETTE (POWER DISTRIBUTION)

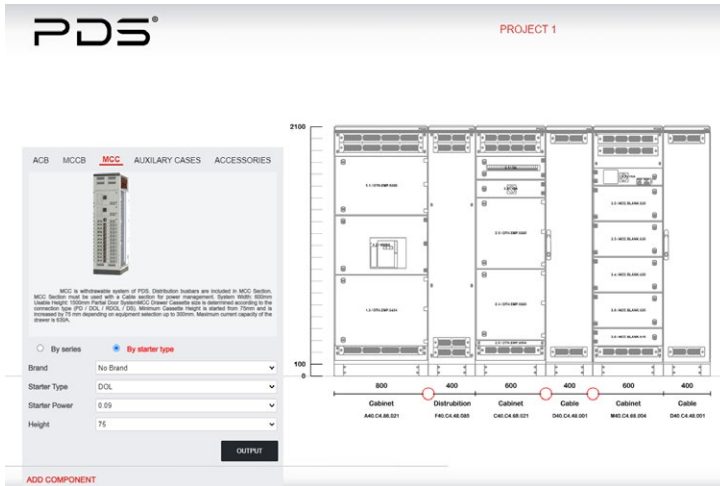


To change breaker and withdrawable unit options, select the added withdrawable power distribution cassette, a configuration window will be open.

User can add or remove code set option which allows interlocking between cabinets and easy lock which prevents operation while the energy is on - signal terminals.

After clicking on APPLY button this section can be copied via CLONE PART.

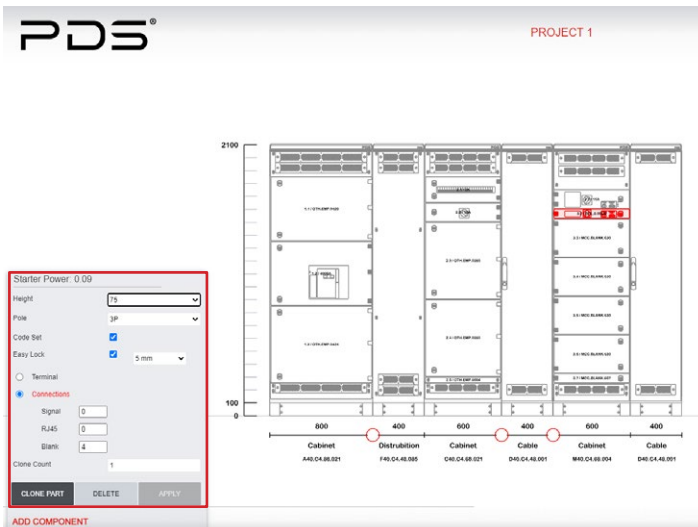
2.1.2.6.28 ADDING MOTOR CONTROL CASSETTE



After selecting the MCC tab on the add component window, to add a motor control cassette please select By Starter Type option.

Upon selection of brand, user can select starter type between Direct on Line, Reverse Direct on Line, Delta-Star Drive Starter options. Then by clicking on OUTPUT button motor control cassette will be automatically added in project.

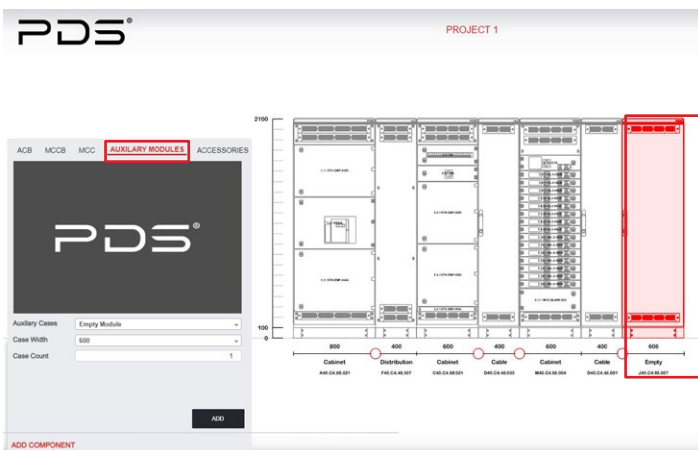
2.1.2.6.29 CONFIGURING MOTOR CONTROL CASSETTE



To change motor control cassette options, select the added unit, a configuration window will be open. User can add or remove code set option which allows interlocking between cabinets and easy lock which prevents operation while the energy is on - signal terminals.

After clicking on APPLY button this section can be copied via CLONE PART.

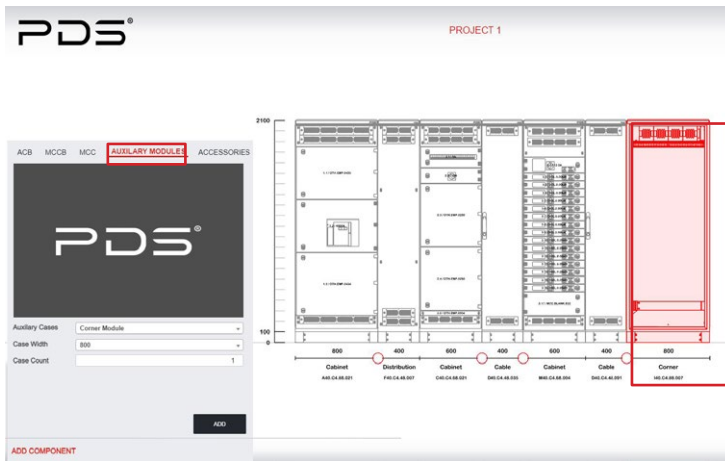
2.1.2.6.30 ADDING EMPTY MODULE



Additional Empty Module is added for project requirements. Such as; PLC section or power factor correcting section. To add panel please click on ADD COMPONENT button and AUXILIARY MODULES tab and then select Empty Module option.

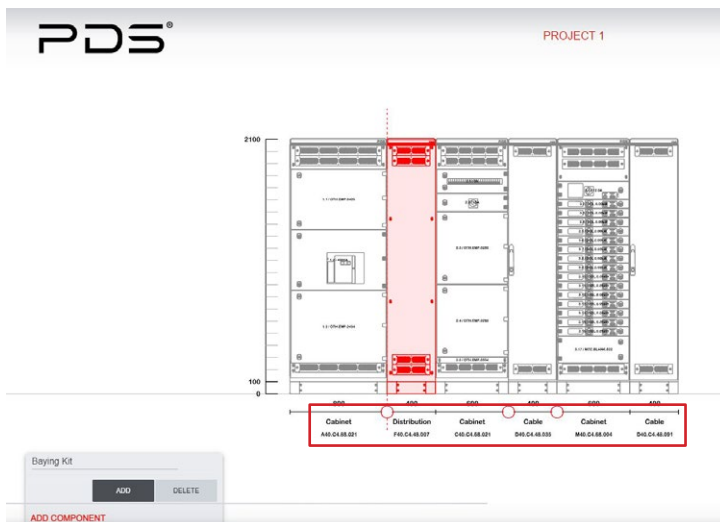
Door type is changeable as solid or glazed as it is on all internal doors.

2.1.2.6.31 ADDING CORNER MODULE



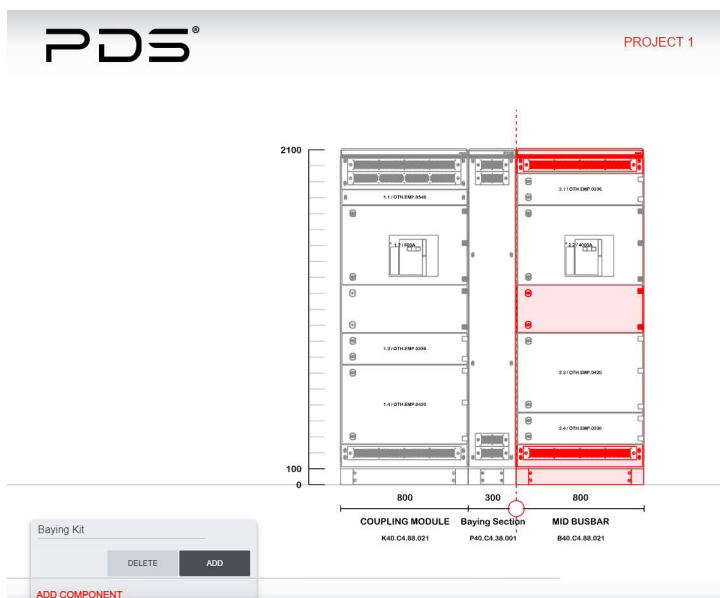
A Corner Module is added in Auxiliary Cases tab. Since, the panel width has to be same with the panel depth, this module does not have any options.

2.1.2.6.32 ADDING BAYING KIT



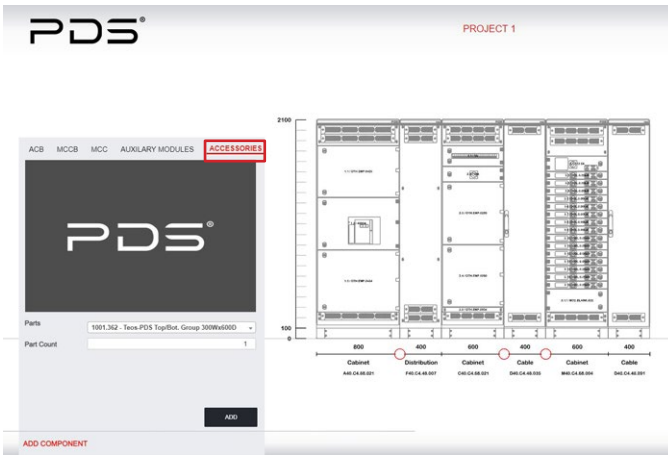
In case of user wants to ship a panel to the site by dividing it should use baying kits. To add them in the project, select the dividing point by selecting one of the red circles under the project drawing and click on the add button on the opened window. The Baying Kit window will be shown as a cut red line on your drawing. More than one baying kit can be selected by repeating the process on different points. To remove a baying kit, re-select the red circle and click on DELETE button.

2.1.2.6.33 ADDING BAYING MODULE



A Baying Module can be added in the middle of two mid busbar modules for easier assembly.

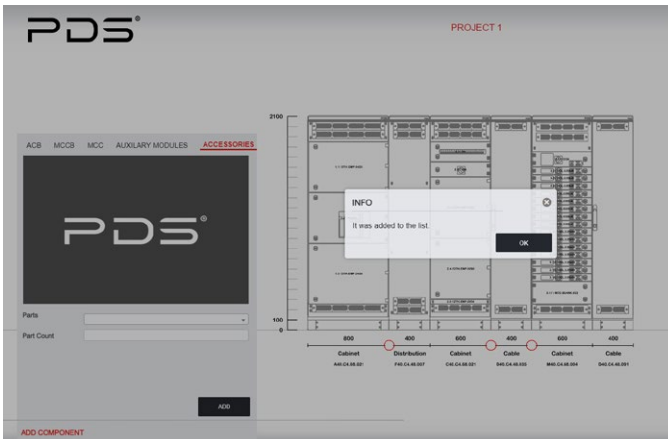
■ 2.1.2.6.34 ADDING ADDITIONAL PARTS & ACCESSORIES



If user needs additional Tekpan parts or accessories, need to click on Add Component and select the ACCESSORIES tab on top of the window that has opened.

On the parts selection tab, all materials are found. Parts can be filtered either by part code or part name. After part and quantity selection click on ADD button.

■ 2.1.2.6.35 PARTS & ACCESSORIES NOTIFICATION

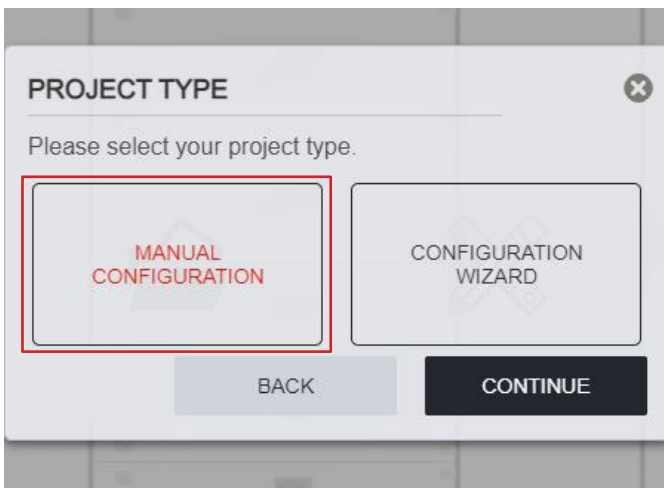


A notification will be opened in the screen which shows the task is completed.

The part that added do not shown in the project but on the list.

■ 2.1.2.7 PROJECT DESIGN WITH MANUAL CONFIGURATION

■ 2.1.2.7.1 CONFIGURATION TYPE

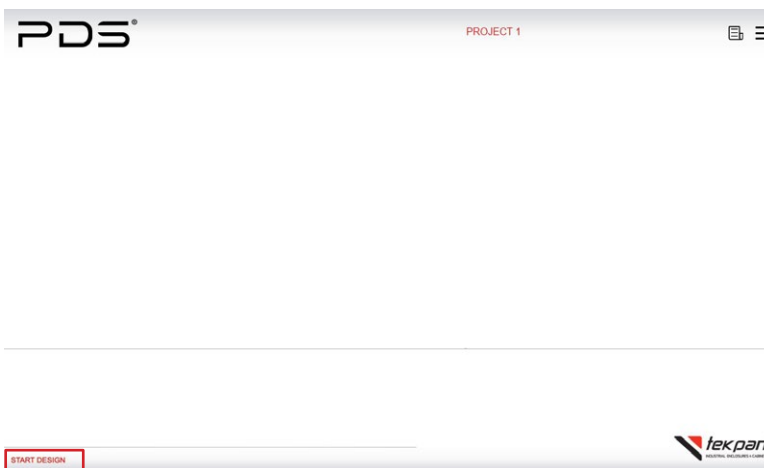


In 2.1.2.7 section; create a project with MANUAL CONFIGURATION will be explained.

2.1.2.7.2 PROJECT SPECIFICATIONS

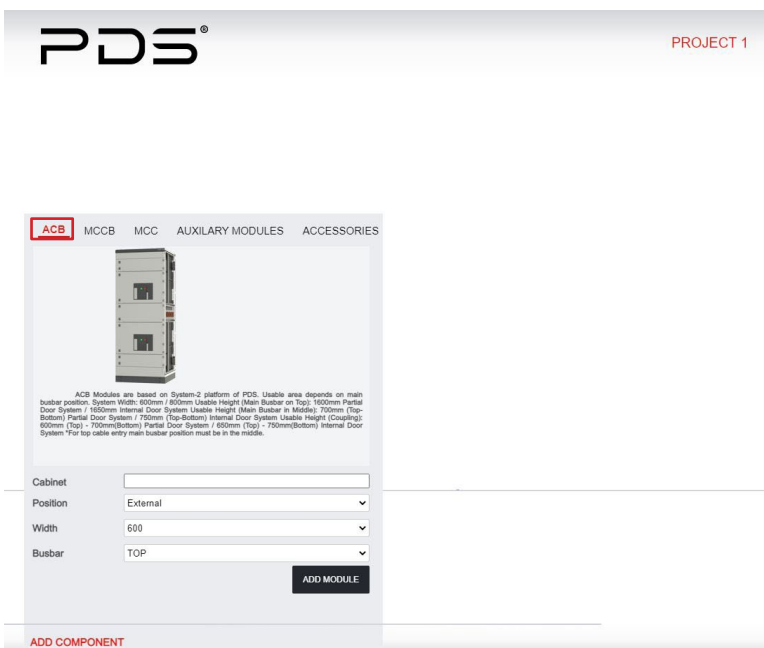
In this step project properties are selected. Such as; earthing type, short circuit protection, segregation...etc. According to selections, modules will be automatically affected.

2.1.2.7.3 STARTING CONFIGURATION



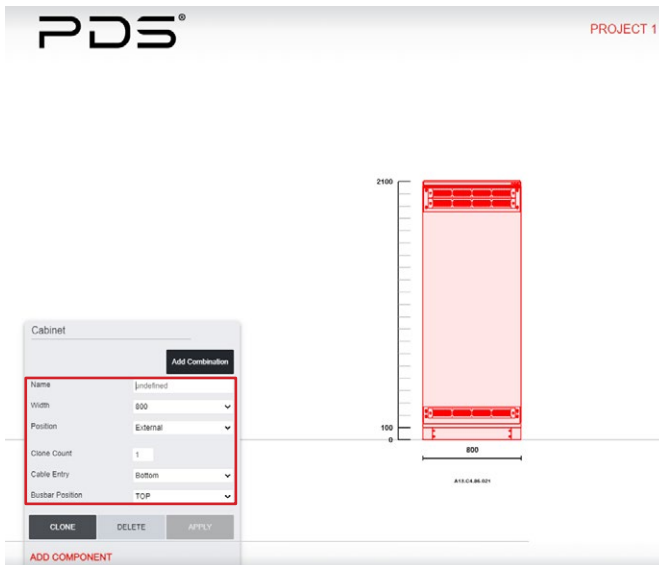
To start your project, click on START DESIGN. You should be seeing your project name on top of your screen in this point.

2.1.2.7.4 CREATING AN ACB MODULE



After Selecting ACB tab on top of the component adding area, by selecting door type, width and busbar position Air Circuit Breaker module is added.

2.1.2.7.5 CONFIGURING ACB MODULE

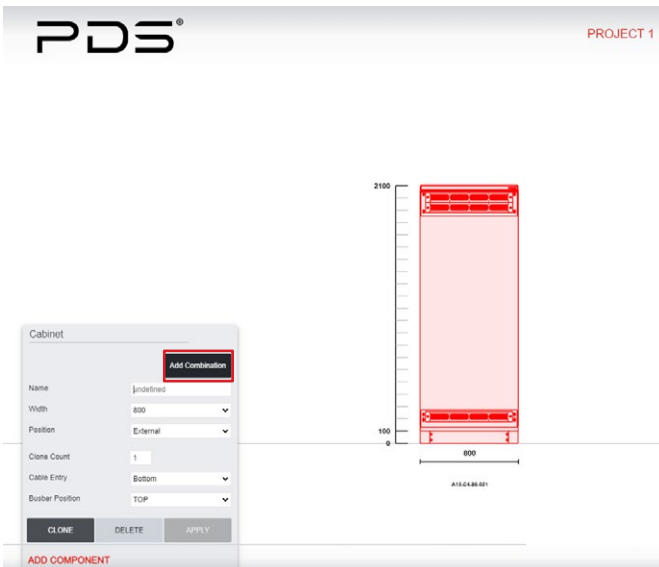


When a module added, empty panel is shown on the screen.

Module name, width, cable entry as well as the position of main busbars can be changed. Door type is changeable as partial external doors or internally separated glazed or solid doors. After configuration click on APPLY button to save.

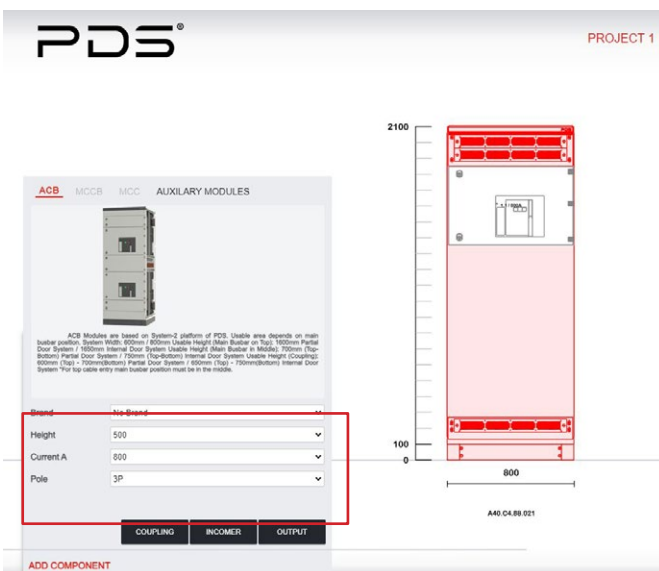
After clicking on APPLY button this section can be copied via CLONE PART.

2.1.2.7.6 ADDING COMBINATION



Please click on ADD COMBINATION button to choose breaker options.

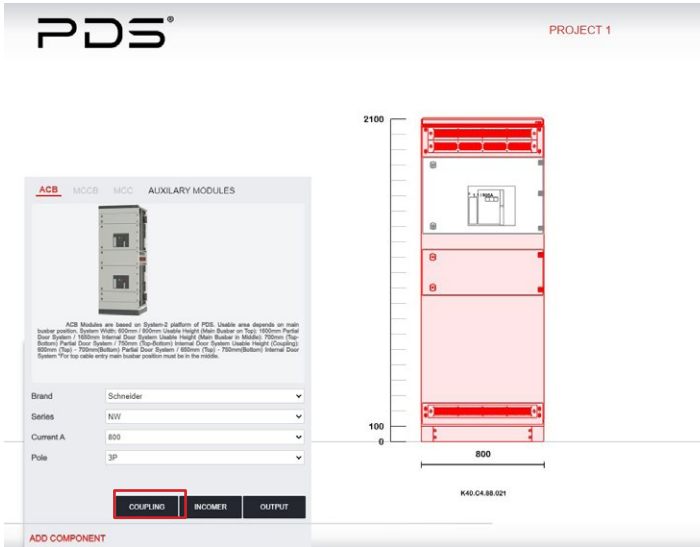
2.1.2.7.7 ADDING AN ACB CASSETTE



As all ACB modules have been designed for different type of breakers and tested accordingly, branded unit or no brand options can be chosen. In branded selections, ask for a type test. In no brand selection own air circuit breaker can be fixed in the panel. In case of no brand selection even though TEKPAN could provide the panel, it is not possible to provide a full type test certificate for each brand.

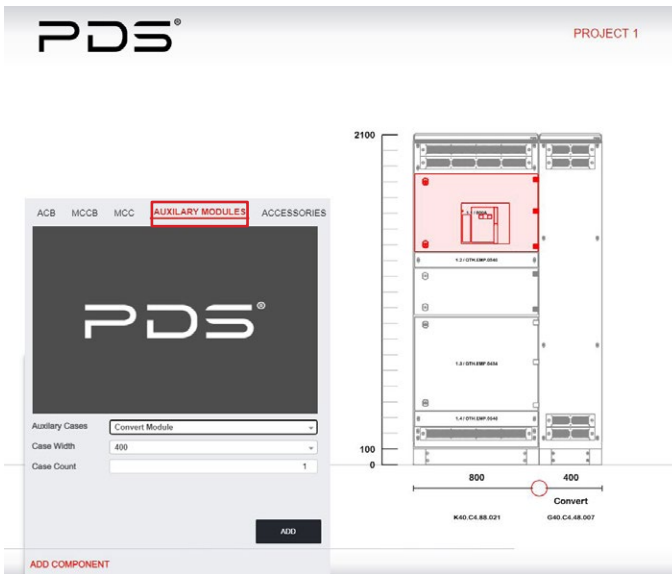
After Selecting ACB tab on top of the component adding area, by selecting brand, series, current and pole options an Air Circuit Braker cassette can be added directly. This cassette can be added as an incomer, outgoing or a coupling.

2.1.2.7.8 COUPLING MODULE



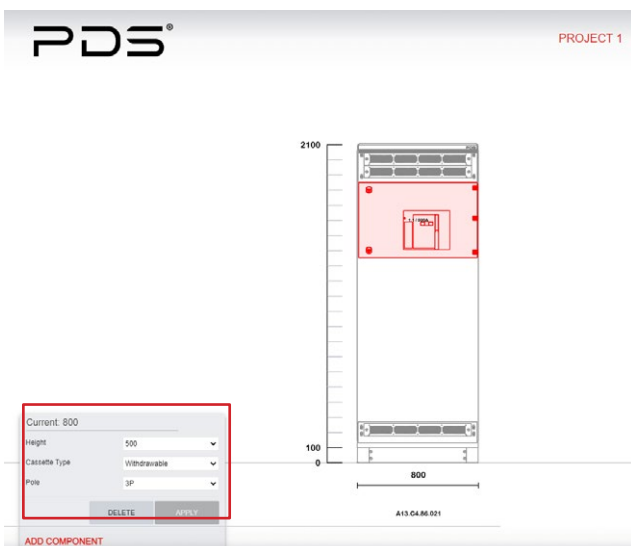
When a coupling module needed, please click on ADD COMPONENT button and select the ACB tab. Specify coupling breaker properties and click on COUPLING button to add the module. Please be aware of the busbar position. Coupling Module changes the position of main busbar. To be able to change the position back as top you need to add a Convert Module.

2.1.2.7.9 CONVERT MODULE



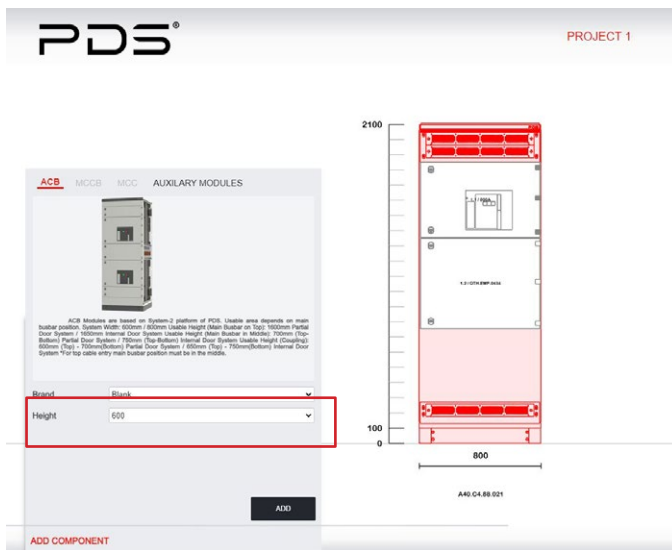
A Convert Module has to be added to change the busbar position from top to middle or vice versa.

2.1.2.7.10 CONFIGURING FUNCTIONAL CASSETTES



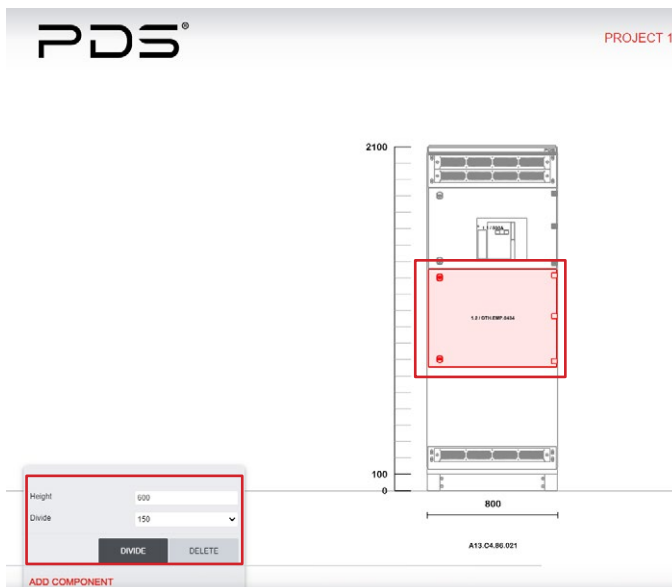
Upon clicking the functional cassette which you want to edit, the configuration window will be open at the left side of the screen.

2.1.2.7.11 ADDING BLANK CASSETTE



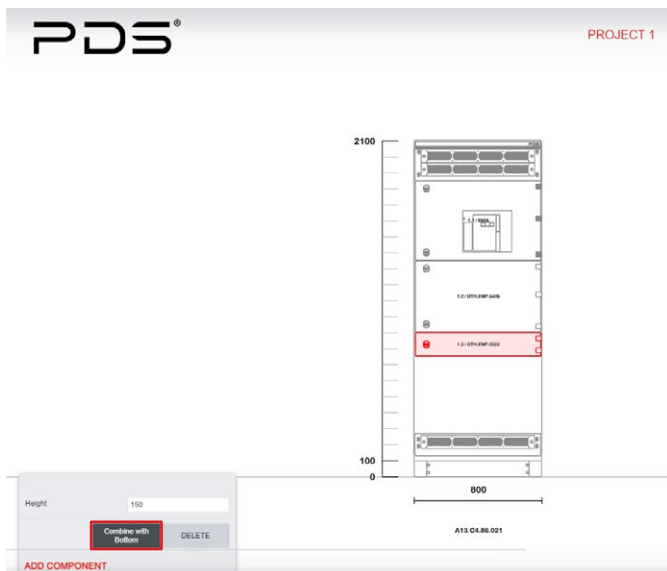
To fill remaining area with empty covers, select Blank from Brand part. Select cassette height according to the total height of the cabinet.

2.1.2.7.12 BLANK CASSETTE CONFIGURATION



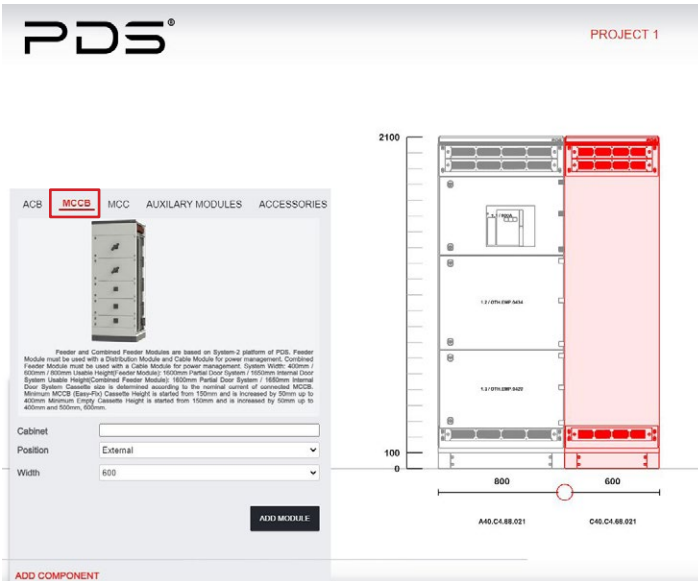
To change blank cassette's height, please left click on the unit and an options window will be opened. In this window height section shows the actual height of this unit. Divide part shows the possible dividing dimensions. By selecting the section height and clicking on the divide button this blank cassette will be divided in two pieces. One of the pieces will be the section that you need and the other one will be the remaining section of the first blank unit that divided.

2.1.2.7.13 COMBINING BLANK CASSETTES



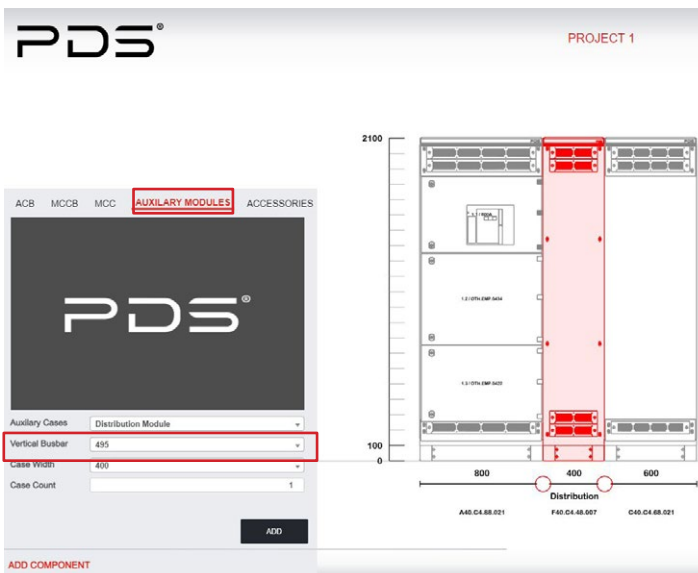
To change position of any cassette please drag it to the desired area. You can also combine the blank cassettes with the other ones. After clicking the blank cassette there will be an option that allows to combine the blank unit with the one that is below or top of selected. While combining cassettes the maximum height cannot be exceeded.

2.1.2.7.14 CREATING A FEEDER / COMBINED FEEDER MODULE



After Selecting MCCB tab on top of the component adding area, by selecting door type and width Molded Case Circuit Breaker module is added.

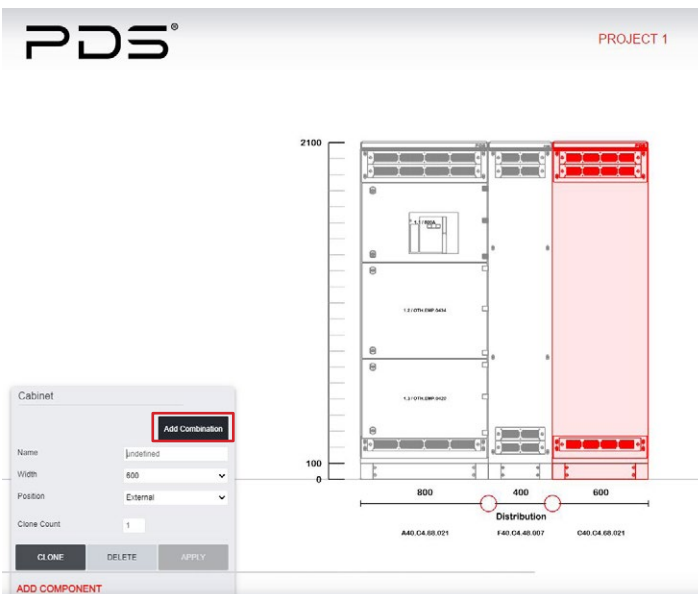
2.1.2.7.15 ADDING DISTRIBUTION MODULE BEFORE FEEDER MODULE



A Distribution Module should be added in front of a Feeder Module to be able to connect cassettes to main busbar.

Distribution bar power connected with Distribution Module's width. 400mm width allowed all size distribution bars which 495A up to 4000A, but 300mm width cannot be chosen for 2300A and 4000A distribution bars.

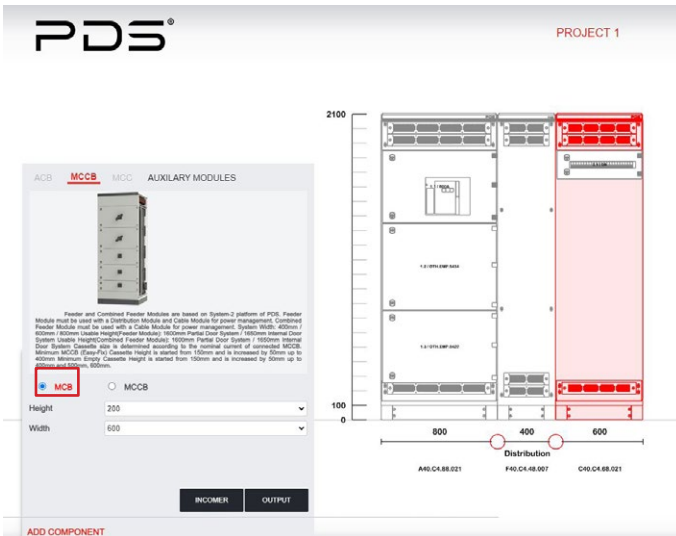
2.1.2.7.16 ADDING COMBINATION (MCB - MCCB)



After configuring module, click on ADD COMBINATION button to choose breaker options.

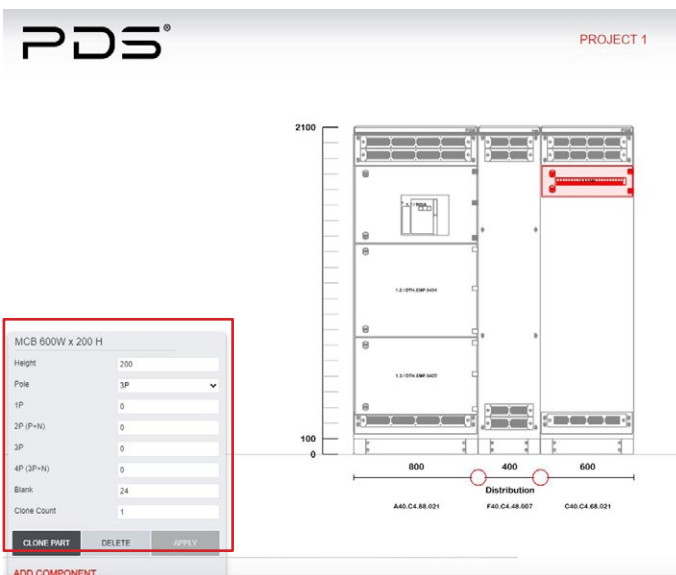
Also, width and position of the case can be changed with APPLY button.

2.1.2.7.17 ADDING MCB CASSETTE



MCB cassette is added in project as an incomer or output unit by clicking on INCOMER or OUTPUT button.

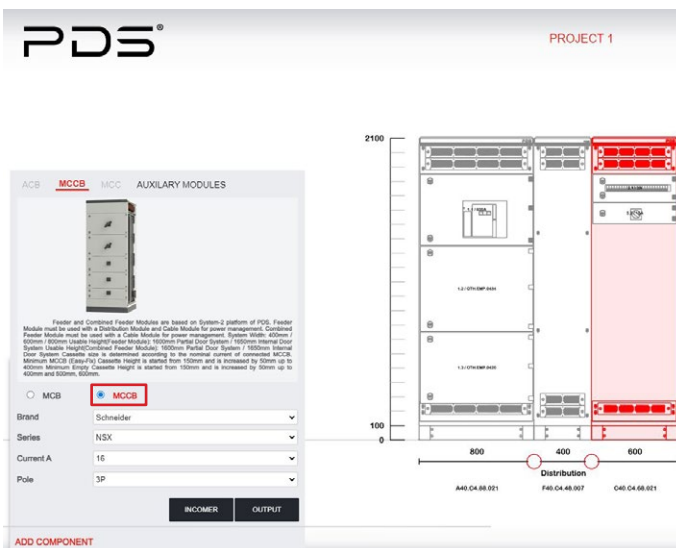
2.1.2.7.18 CONFIGURING MCB CASSETTE



Upon clicking the functional cassette which is wanted to configure, user can edit via window will be open at the left side of the screen.

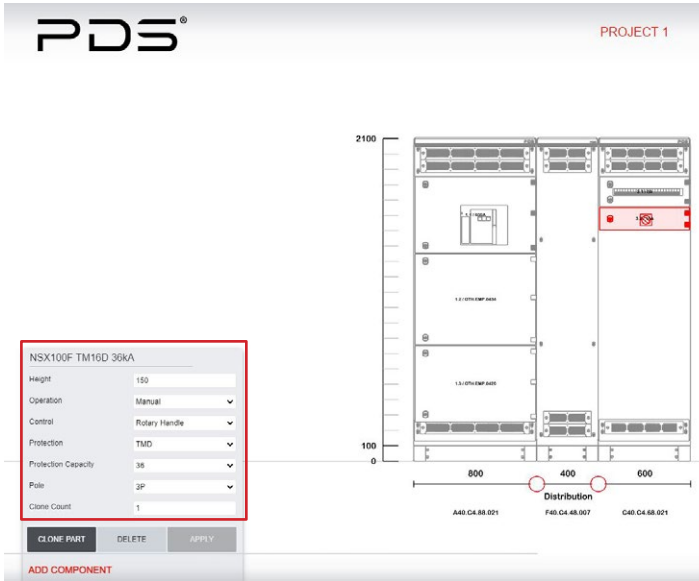
- 1P → 1P MCB (1 pc.)
- 2P(P+N) → 2P MCB (2 pcs.)
- 3P → 3P MCB (3 pcs.)
- 4P(3P+N) → 4P MCB (4 pcs.)

2.1.2.7.19 ADDING MCCB CASSETTE



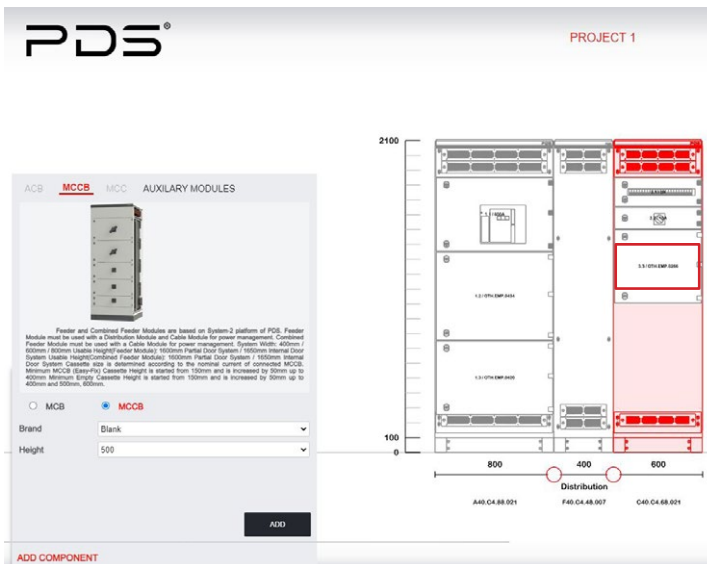
Brand, breaker series, current and pole of your functional unit can be selected in the same window. Branded cassette or no brand options can be chosen. If no brand cassette selected, height selection must be done. For branded units' height selection is not a must. MCCB cassette is added in project as an incomer or output unit by clicking on INCOMER or OUTPUT button.

2.1.2.7.20 CONFIGURING MCCB CASSETTES



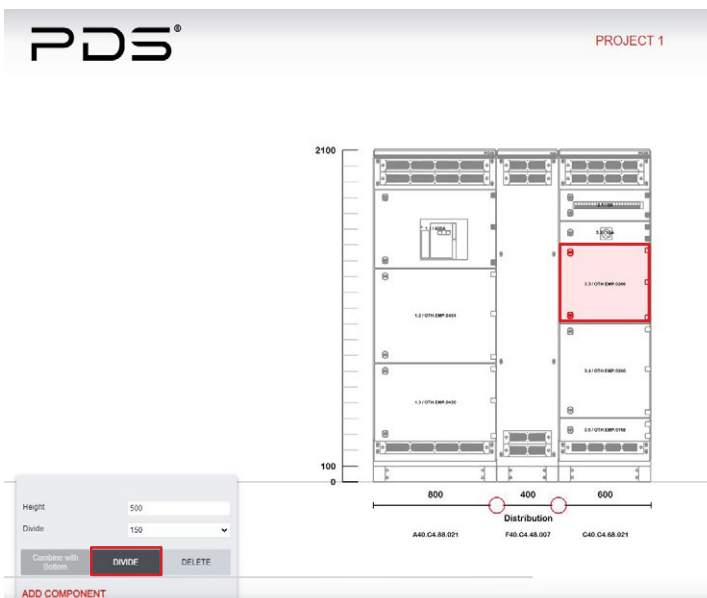
Upon clicking on MCCB cassette an option window will be opened. From this window, you can change the name of the panel, adjust width and change the door type.

2.1.2.7.21 BLANK CASSETTE CONFIGURATIONS



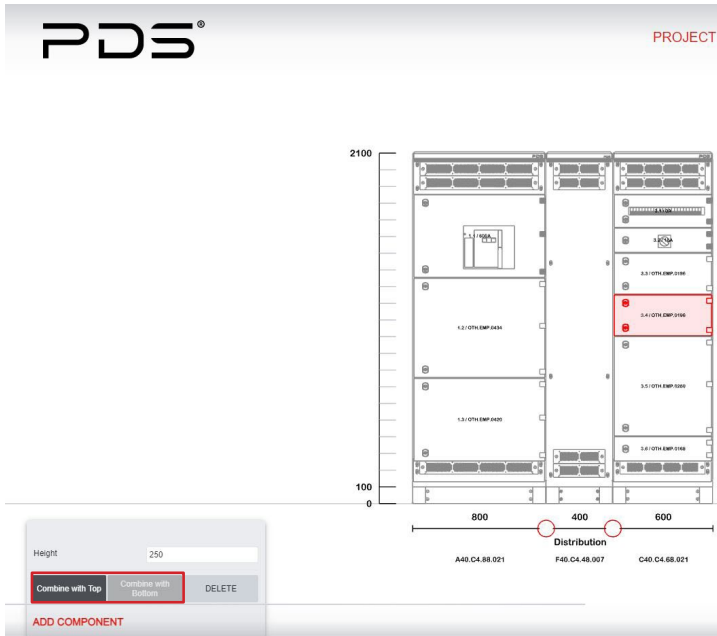
To fill remaining area with empty cassette, select Blank Section from Brand part. Selected cassette height according to the total height of the panel.

2.1.2.7.22 BLANK CASSETTE SPECIFICATIONS



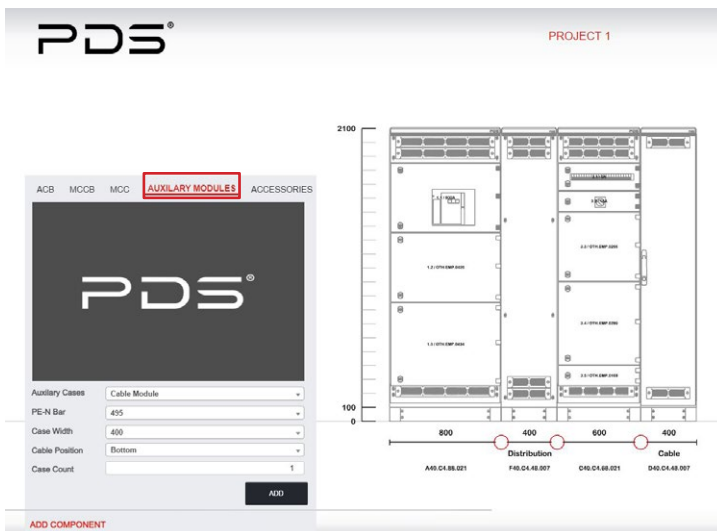
To change blank cassette's height, please left click on the cassette and an options window will be opened. In this window height section shows the actual height of this cassette. Divide part shows the possible dividing dimensions. By selecting the height and clicking on the divide button this blank cassette will be divided in two pieces. One of the pieces will be the cassette that you need and the other one will be the remaining of the first blank that divided.

2.1.2.7.23 COMBINING BLANK CASSETTES



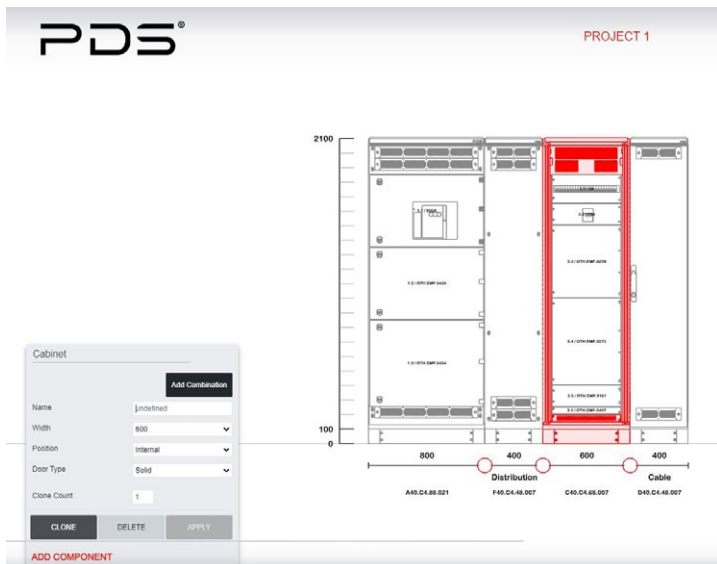
To change position of any cassettes please drag it to the desired area. You can also combine the blank cassettes with the other ones. After clicking the blank cassette there will be an option that allows to combine the blank with the one that is below or top of selected. While combining the blank cassettes the maximum height cannot be exceeded.

2.1.2.7.24 ADDING CABLE MODULE AFTER FEEDER MODULE



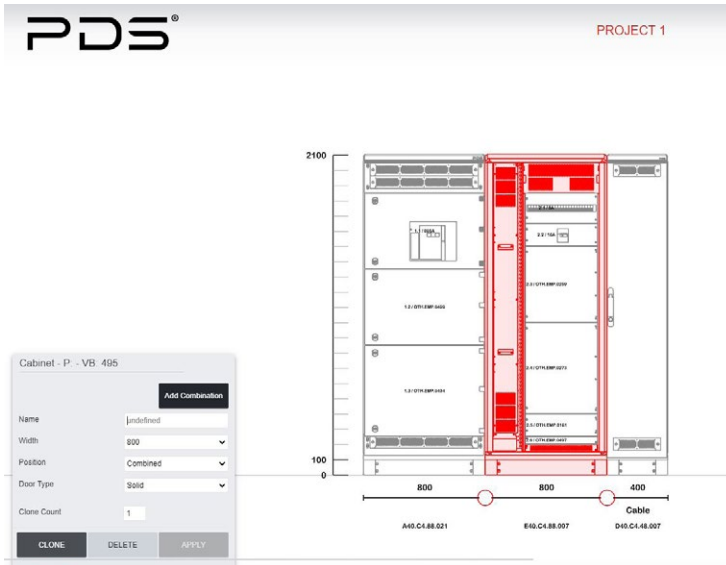
Cable Module width can be selected as 400mm or 600mm and cable entry position can be selected as bottom or rear on the options window which will be open when click on the panel. A Cable Module must be added after Feeder Modules.

2.1.2.7.25 INTERNAL POSITION



External doors can be changed as Internal. Door type is changeable as solid or glazed. External and internal module's available heights are different. After arrangement, please add suitable blank cassette.

2.1.2.7.26 COMBINED MODULE

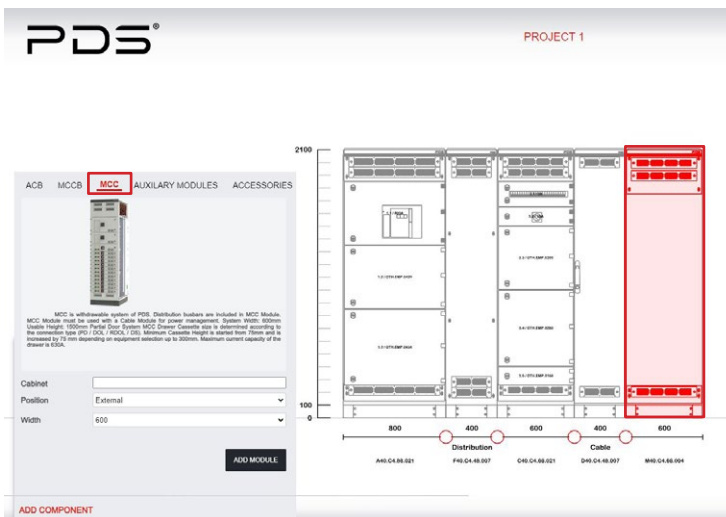


When Feeder Module is changed as a Combined Module, panel turn into an internal panel.

Distribution Module is added to the system automatically. If there is an added Distribution Panel before Feeder Module, it should be deleted after Combined transformation.

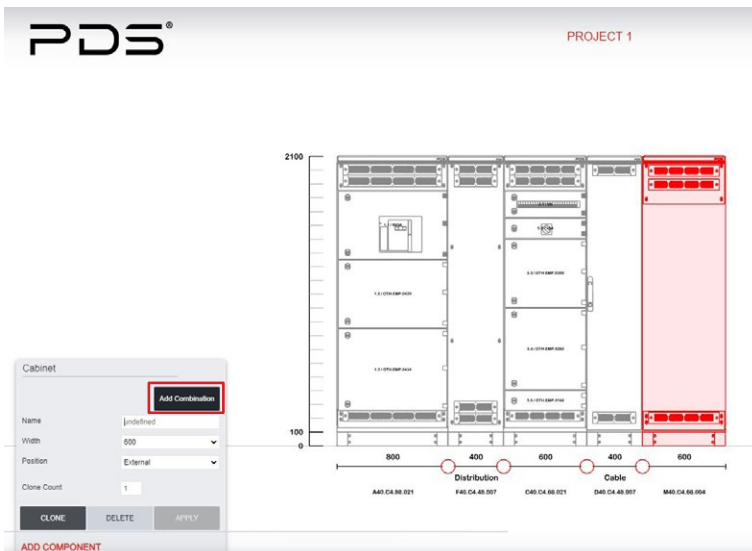
Door type is changeable as solid or glazed as it is on all internal doors. External and internal module's available heights are different. After arrangement, please add suitable blank cassette.

2.1.2.7.27 ADDING A MCC MODULE



After Selecting MCC tab on top of the component adding area, by selecting door type and width Motor Control Center module is added.

2.1.2.7.28 ADDING MCC CASSETTE



MCC cassette is added in project as an incomer or output unit by clicking on INCOMER or OUTPUT button.

2.1.2.7.29 ADDING WITHDRAWABLE CASSETTE (POWER DISTRIBUTION)

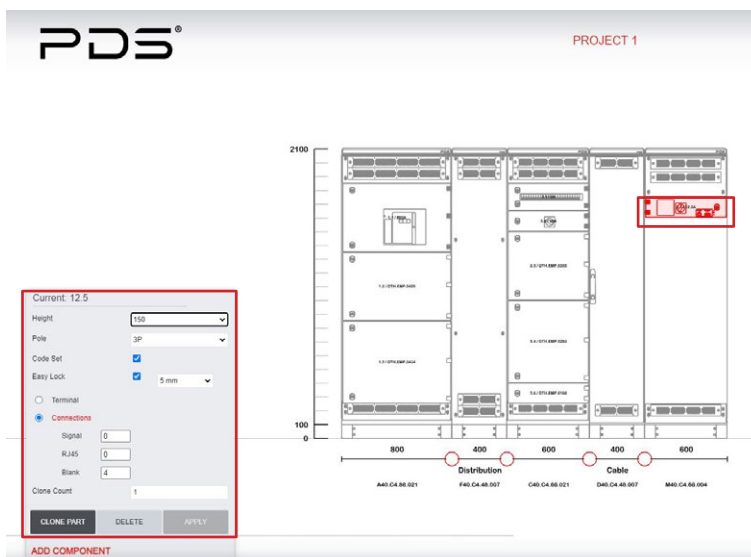


Withdrawable cassettes can be added under the name of MCC Module. To add cassette please click on ADD COMPONENT button and select the MCC tap on the selection window.

This section includes withdrawable breaker and withdrawable motor starter cassette. In this option braker can be added as an incomer or output.

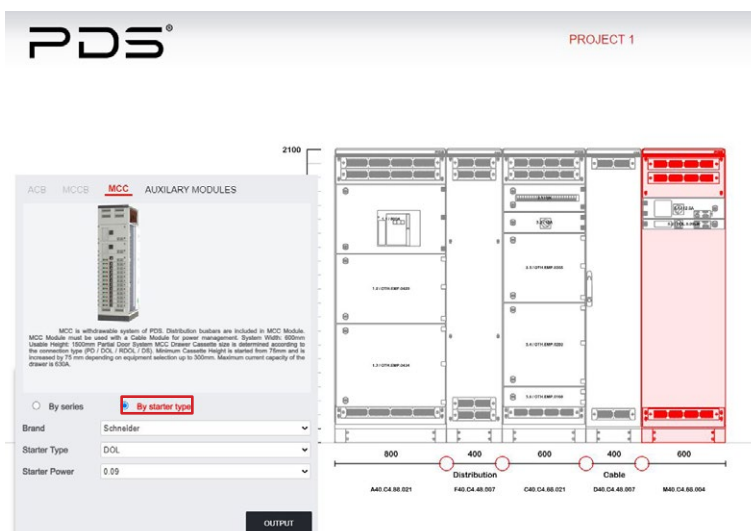
MCC module will be added in project automatically as a 600mm width with a Cable Module. While Cable Module's width can be configured as mentioned in previous chapters, this option is not possible for MCC Module.

2.1.2.7.30 CONFIGURING WITHDRAWABLE CASSETTE (POWER DISTRIBUTION)



To change breaker and withdrawable cassette options, select the added withdrawable power distribution module, a configuration window will be open. User can add or remove code set option which allows interlocking between cabinets and easy lock which prevents operation while the energy is on - signal terminals. After clicking on APPLY button this section can be copied via CLONE PART.

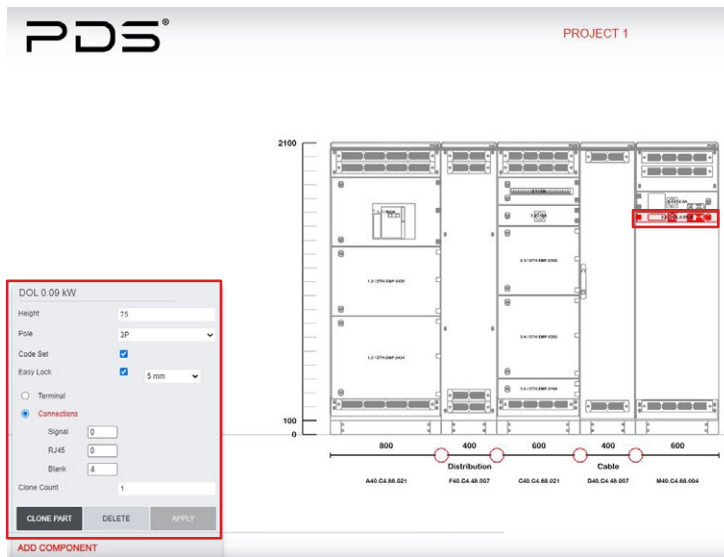
2.1.2.7.31 ADDING MOTOR CONTROL CASSETTE



After selecting the MCC tab on the add component window, to add a motor control cassette should select By Starter Type option.

Upon selection of brand, user can select starter type between Direct on Line, Reverse Direct on Line, Delta-Star Drive Starter options. Then by clicking on OUTPUT button motor control cassette will be automatically added in project.

2.1.2.7.32 CONFIGURING MOTOR CONTROL CASSETTE

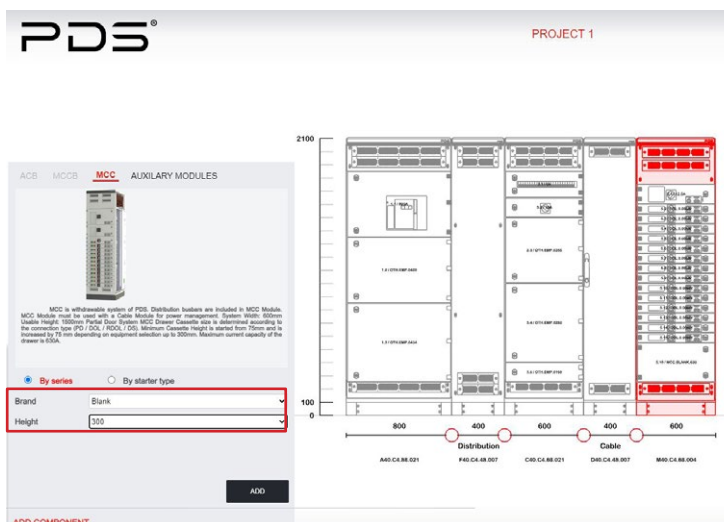


To change motor control cassette options, select the added one and a configuration window will be open.

User can add or remove code set option which allows interlocking between cabinets and easy lock which prevents operation while the energy is on - signal terminals.

After clicking on APPLY button this section can be copied via CLONE PART.

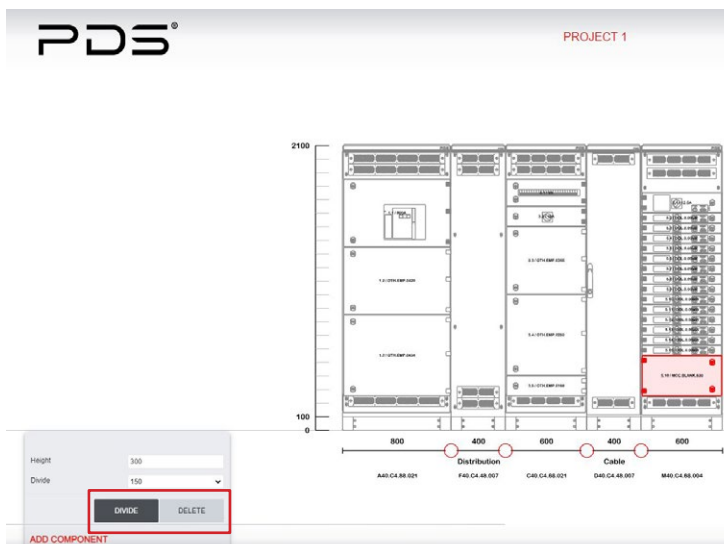
2.1.2.7.33 BLANK CASSETTE CONFIGURATIONS



To fill remaining area with empty cassettes, select Blank from Brand part.

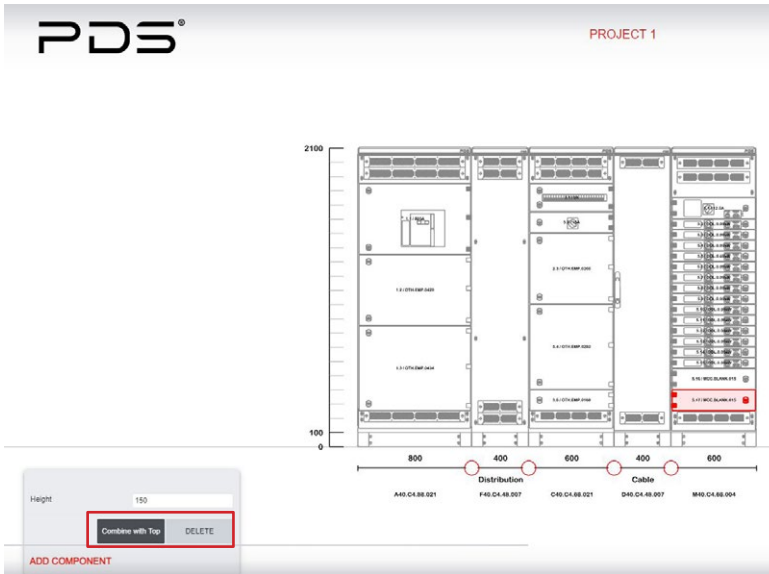
Selected cassette height according to the total height of the panel.

2.1.2.7.34 BLANK CASSETTE SPECIFICATIONS



To change height, please left click on the cassette and an options window will be opened. In this window height section shows the actual height of this cassette. Divide part shows the possible dividing dimensions. By selecting the section height and clicking on the divide button this blank cassette will be divided in two pieces. One of the pieces will be the section that you need and the other one will be the remaining section of the first blank that divided.

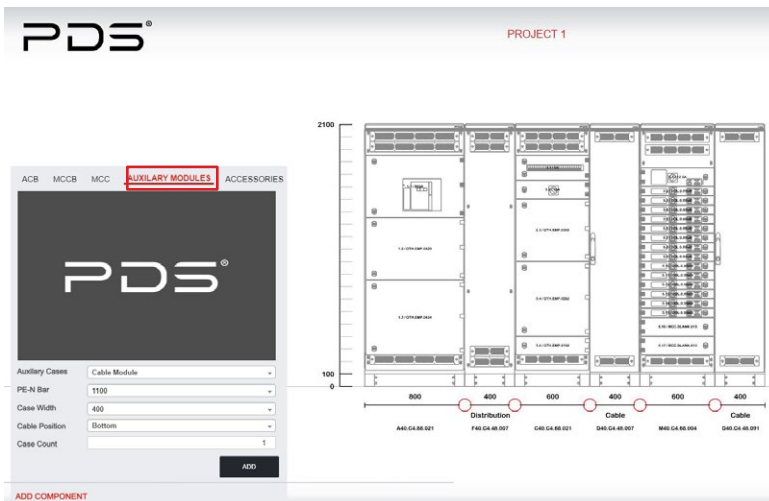
2.1.2.7.35 COMBINING BLANK CASSETTES



To change position of any cassettes, please drag it to the desired area. You can also combine the blank cassettes with the other ones. After clicking the blank cassette there will be an option that allows to combine the unit with the one that is below or top of selected.

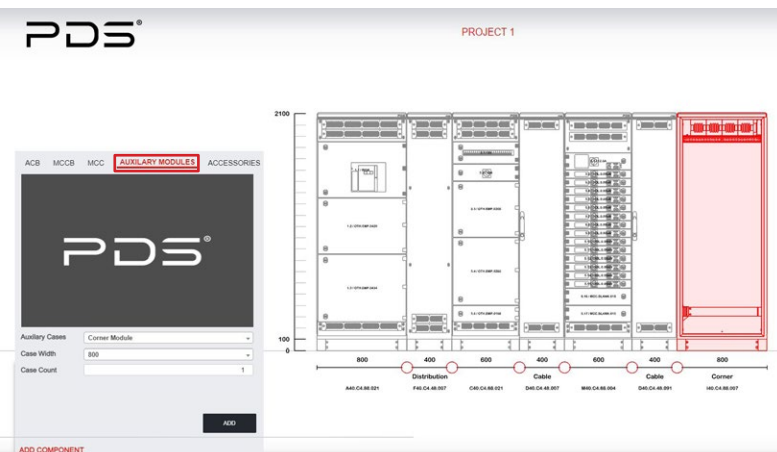
While combining the blank cassettes the maximum height cannot be exceeded.

2.1.2.7.36 ADDING CABLE MODULE AFTER MCC MODULE



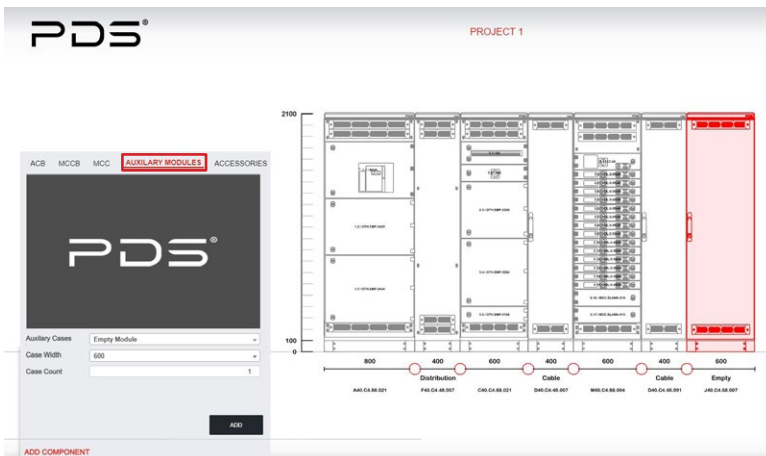
Cable Module width can be selected as 400mm or 600mm and cable entry position can be selected as bottom or rear on the options window which will be open when click on the Cable Section's panel. A Cable Section must be added after MCC section. PE-N Bar value standard as 1100A.

2.1.2.7.37 ADDING CORNER MODULE



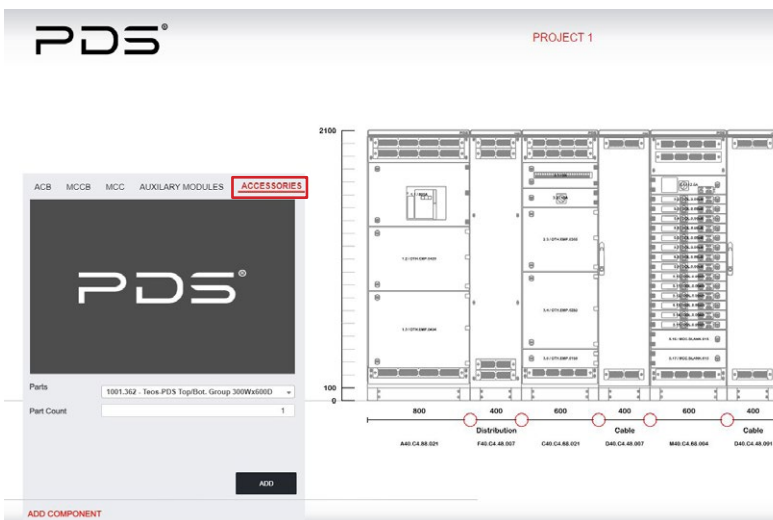
A Corner Module is added from Auxiliary Modules tab. Since, the panel width has to be same with the depth, this module does not have any options.

2.1.2.7.38 ADDING EMPTY MODULE



Additional Empty Module is added for project requirements. Such as; PLC section or power factor correcting section. To add panel please click on ADD COMPONENT button and AUXILIARY CASES tab and then select Empty Modules option. Door type is changeable as solid or glazed as it is on all internal doors.

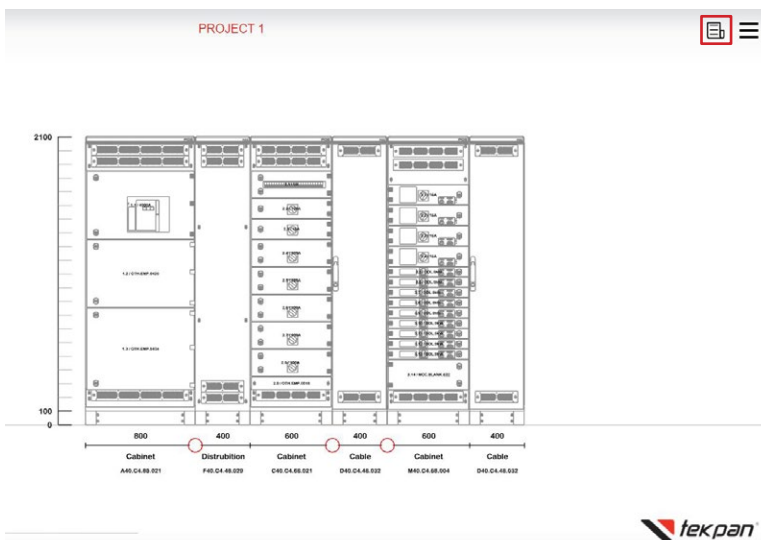
2.1.2.7.39 ADDING ADDITIONAL PARTS & ACCESSORIES



If user needs additional Tekpan parts or accessories, need to click on Add Component and select the ACCESSORIES tab on top of the window that has opened. On the parts selection tab, all materials are found. Parts can be filtered either by part code or part name. After part and quantity selection click on ADD button.

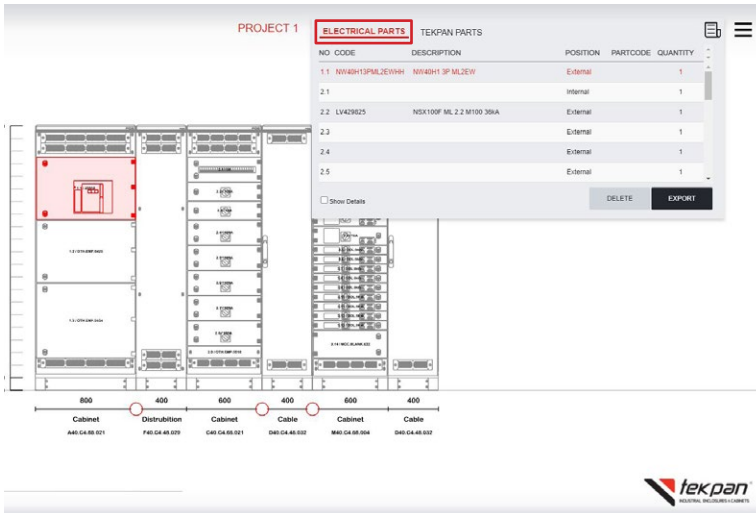
2.1.2.8 PART LIST DETAILS

2.1.2.8.1 ADDED MATERIALS



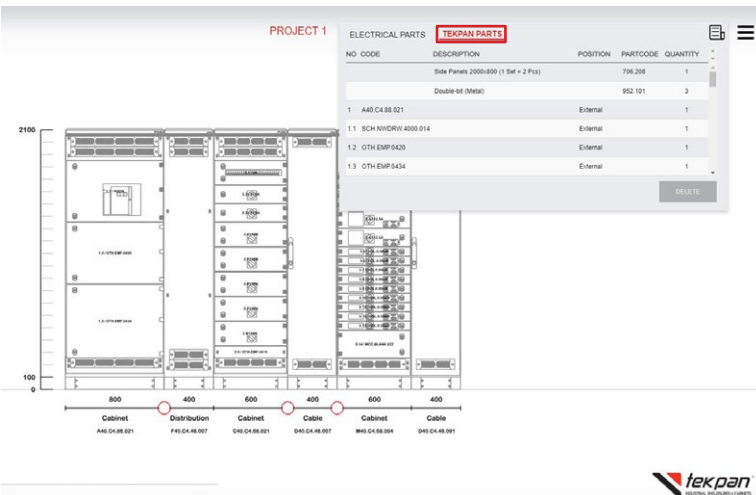
During configuring a module, there are both Tekpan Parts and Electrical Parts in the project. To check and see parts and quantities please click on the paper figure which placed right top of the screen.

2.1.2.8.2 ELECTRICAL PARTS



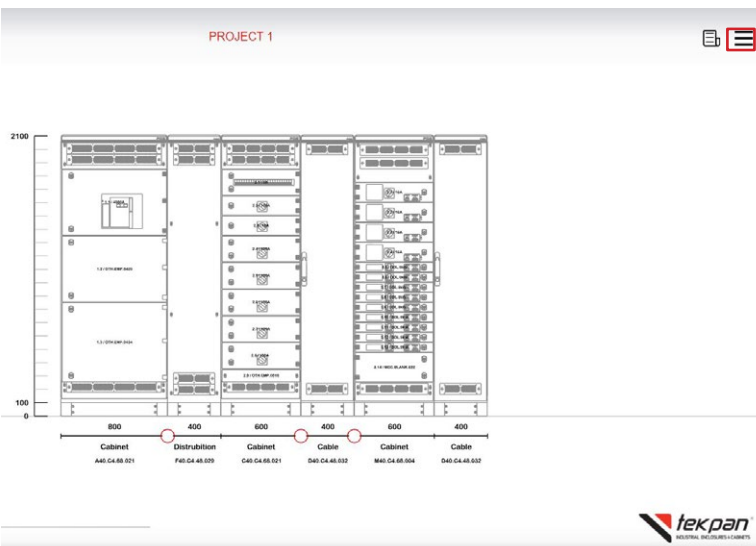
When clicking on the paper figure added functional units is shown as a list. On this list user can also select the functional cassette and see them where they have been placed. Also, the number column on the list shows the position of the cassette. While the first number shows the module number from the right, second number shows the place of cassette from the top of the panel.

2.1.2.8.3 TEKPAN PARTS



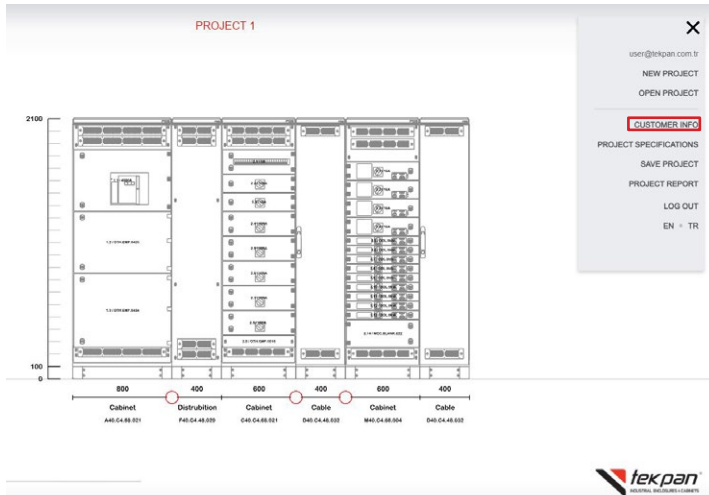
In Tekpan Parts section there are necessary parts that allows to build modules.

2.1.2.8.4 PROJECT MENU



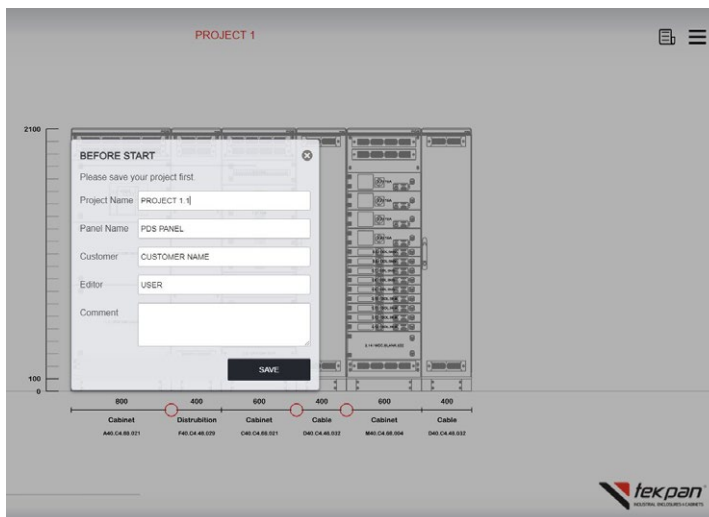
In Menu from the left top side of the screen, there are options to be used according to need.

2.1.2.8.5 CHANGING CUSTOMER INFO



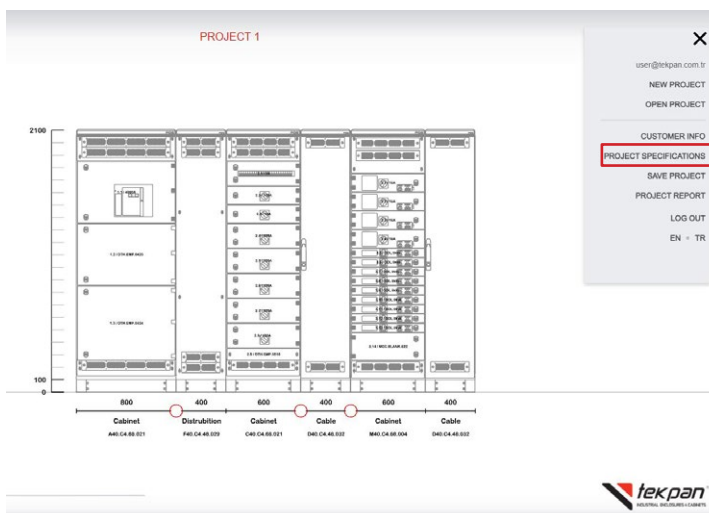
To change the customer details on project, please select the CUSTOMER INFO tab on the menu.

2.1.2.8.6 CUSTOMER INFO



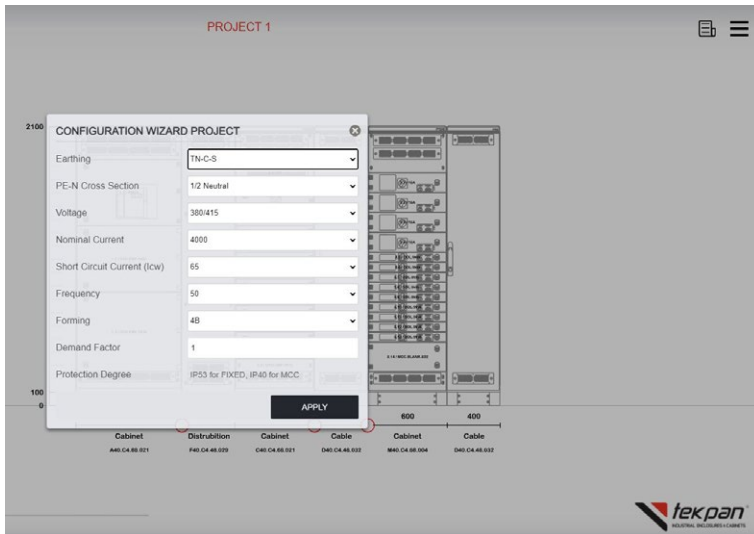
Customer information can be changed at any point of project after selecting the customer info tab.

2.1.2.8.7 CHANGING PROJECT SPECIFICATIONS



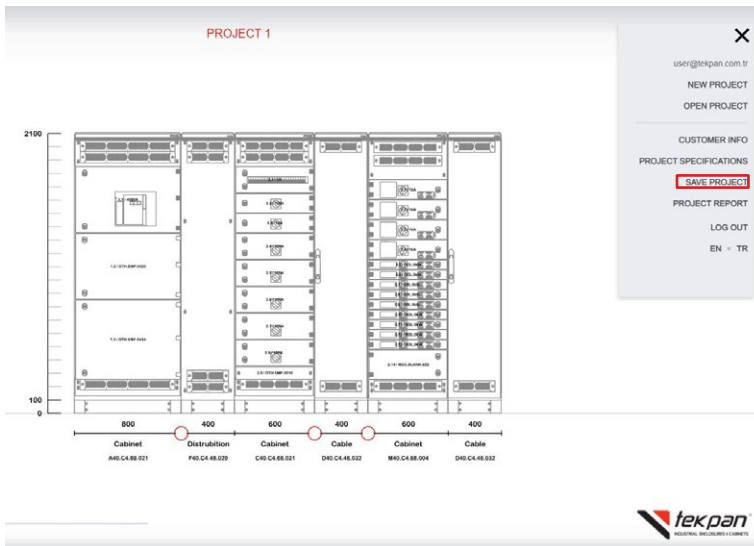
In PROJECT SPECIFICATIONS tab on the menu, user can change project options which has selected while creating a new project.

2.1.2.8.8 PROJECT SPECIFICATIONS



Modules' properties will be adjusted according to selections.

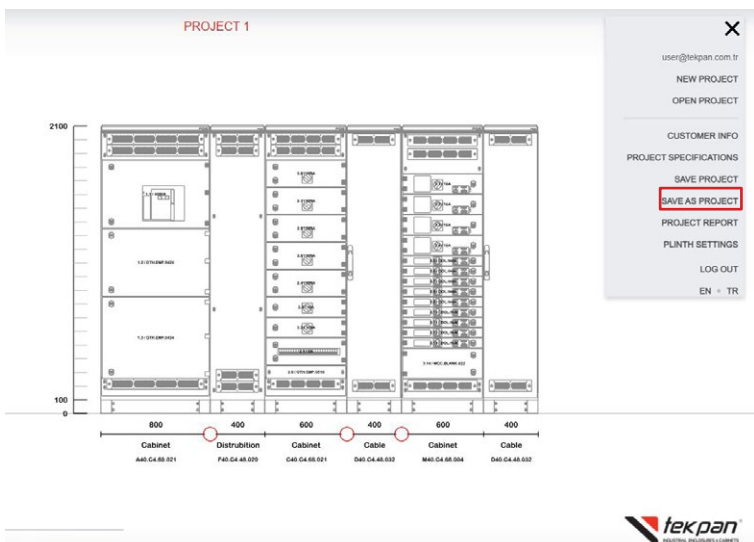
2.1.2.8.9 SAVING PROJECT



When clicking on SAVE PROJECT tab, plinth type alternatives will be optioned as modular type 100mm or 200mm plinths as well as 100mm extendable plinth.

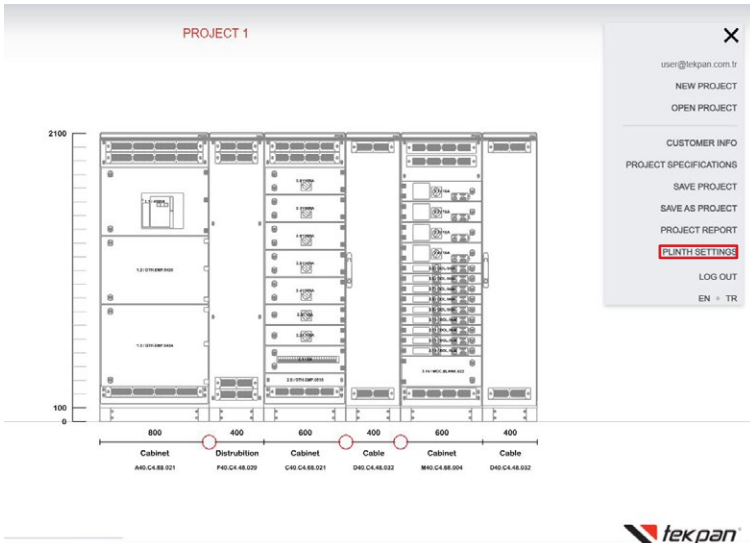
The project will be saved in the system. Project list can be checked and rearranged from OPEN PROJECT tab.

2.1.2.8.10 SAVE AS PROJECT



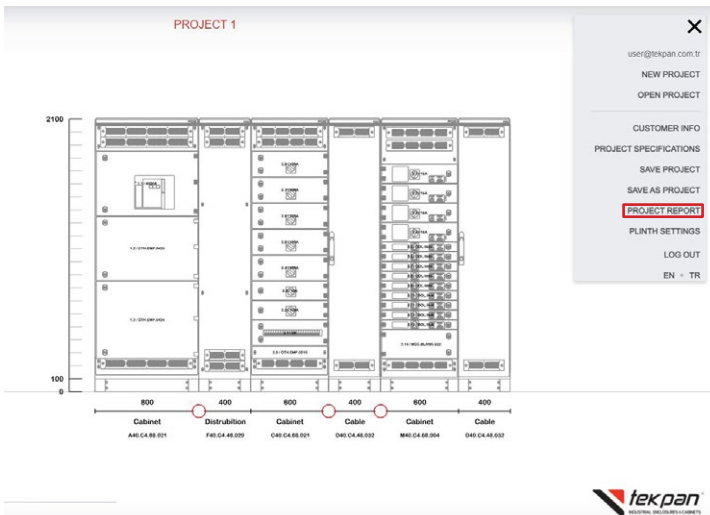
After saving project, Save as Project option opens to copy the present project and change features as different.

2.1.2.8.11 PLINTH SETTINGS



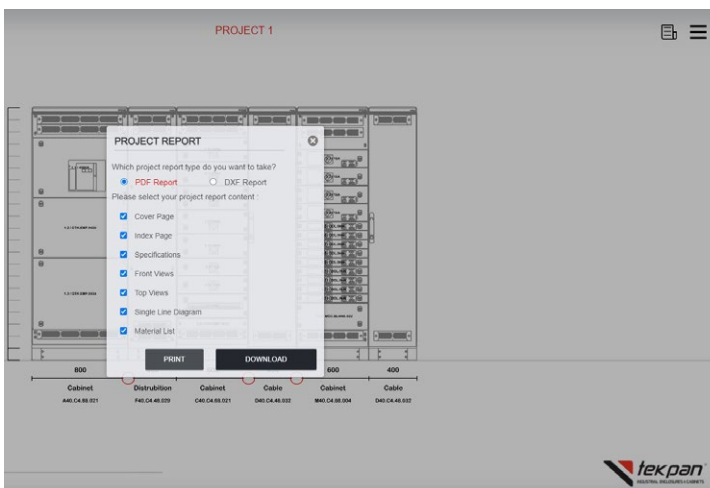
When clicking on PLINTH SETTINGS plinth type alternatives will be optioned as modular type 100mm or 200mm plinths as well as 100mm extendable plinth.

2.1.2.8.12 PROJECT REPORT MENU



This section allows you to check completed project, drawings, Single Line Diagram etc.

2.1.2.8.13 CHOOSING REPORT TYPE



In this step user is going to see Project Report window which allows to choose project type between .pdf and .dxf options. Also, Content of the file is selectable.

If user click on print button on this window, project report will be opened in a new tab of browser in .pdf format. The pop-up restrictions on browser have to be removed to be able to open the project in the new tab.

The project can be downloaded.

2.1.2.9 PROJECT REPORT

2.1.2.9.1 PROJECT REPORT COVER PAGE

Customer: Project Name: PROJECT 1						
Panel Name:						
PDS®						
Address:						
				PDS®	4-2-2021 Page 1 Total 7	
Rev.	Description	Designer	Control	Approval		

Project Cover Page includes customer name, project name, panel name and other basic features that you filled in Customer Info Part.

2.1.2.9.2 PROJECT REPORT INDEX PAGE

<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Page</th><th>Contents</th></tr></thead><tbody><tr><td>1</td><td>Cover Page</td></tr><tr><td>2</td><td>Index Page</td></tr><tr><td>3</td><td>Specifications</td></tr><tr><td>4</td><td>Materials</td></tr><tr><td>5</td><td>Wiring</td></tr><tr><td>6</td><td>Panel and Equipment</td></tr><tr><td>7</td><td>Material</td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></tbody></table>	Page	Contents	1	Cover Page	2	Index Page	3	Specifications	4	Materials	5	Wiring	6	Panel and Equipment	7	Material																							<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Page</th><th>Contents</th></tr></thead><tbody><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></tbody></table>	Page	Contents																																						
Page	Contents																																																																														
1	Cover Page																																																																														
2	Index Page																																																																														
3	Specifications																																																																														
4	Materials																																																																														
5	Wiring																																																																														
6	Panel and Equipment																																																																														
7	Material																																																																														
Page	Contents																																																																														
Rev.	Client Project PROJECT 1	PDS®	Contents	PDS®	4-2-2021 Page 2 Total 7																																																																										

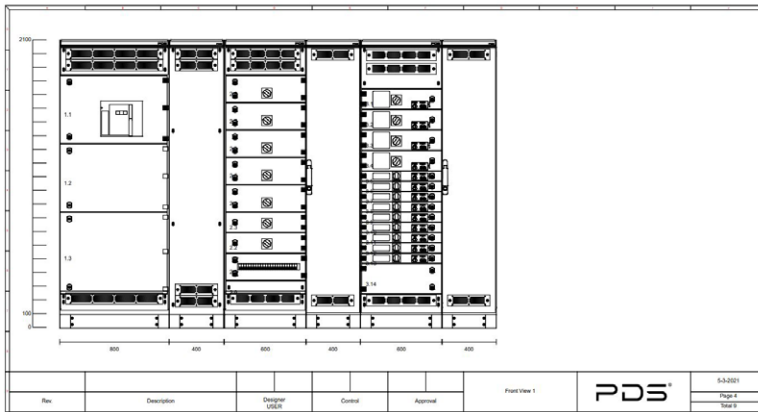
Project report's index page.

2.1.2.9.3 PROJECT REPORT SPECIFICATIONS PAGE

Nominal Current(In)	4000						
Nominal Voltage(1e)	380/415						
Frequency (f)	50						
Ingress Protection (IP)	IP40						
Short Circuit (Icw)	65						
Earthing System	TN-C-S						
Segregation							
Rev.	Description	Designer	Control	Approval	Specifications	PDS®	4-2-2021 Page 3 Total 7

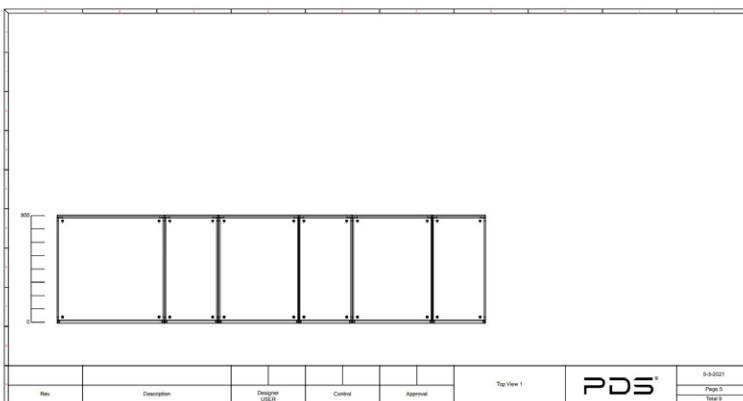
This section includes Project Specifications features.

2.1.2.9.4 PROJECT REPORT FRONT VIEW PAGE



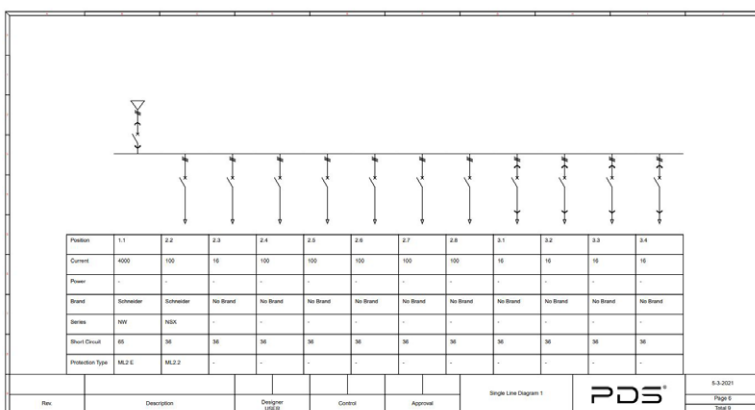
Project Cover Page includes customer name, project name, panel name and other basic features that you filled in Customer Info Part.

2.1.2.9.5 PROJECT TOP VIEW PAGE



Project's top view. If project includes a Corner Module, view continues on next page.
If the cable is positioned from the back in ACB Module or Cable Module, rear module will be seen.

2.1.2.9.6 PROJECT REPORT SINGLE LINE DIAGRAM PAGE



In this section, Single Line Diagram is shown according to the project.

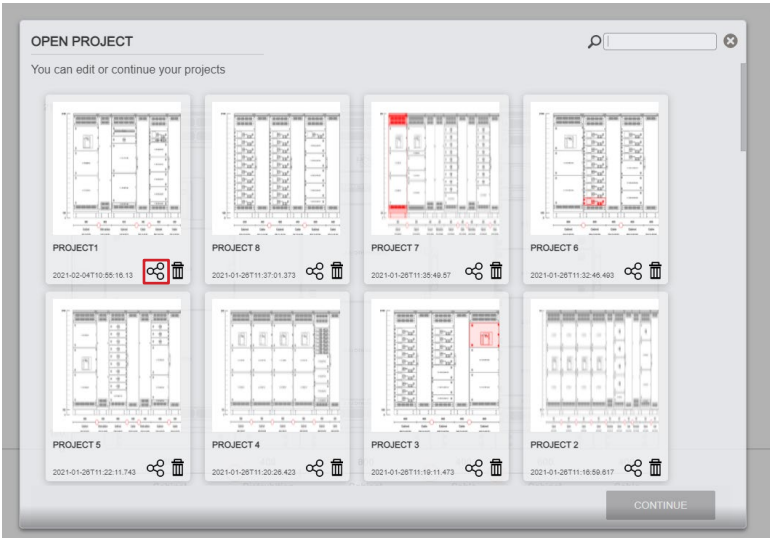
2.1.2.9.7 PROJECT REPORT ELECTRICAL MATERIAL LIST PAGE

Equipment No	Page	Description	Qty	Equipment No	Page	Description	Qty	Equipment No	Page	Description	Qty
AB000001	1	RESISTOR 100K 1/2W	1	AB000002	1	20K 1/2W	1	AB000003	1	20K 1/2W	1
AB000004	1	RESISTOR 100K 1/2W	1	AB000005	1	20K 1/2W	1	AB000006	1	20K 1/2W	1
AB000007	1	RESISTOR 100K 1/2W	1	AB000008	1	20K 1/2W	1	AB000009	1	20K 1/2W	1
AB000010	1	RESISTOR 100K 1/2W	1	AB000011	1	20K 1/2W	1	AB000012	1	20K 1/2W	1
AB000013	1	RESISTOR 100K 1/2W	1	AB000014	1	20K 1/2W	1	AB000015	1	20K 1/2W	1
AB000016	1	RESISTOR 100K 1/2W	1	AB000017	1	20K 1/2W	1	AB000018	1	20K 1/2W	1
AB000019	1	RESISTOR 100K 1/2W	1	AB000020	1	20K 1/2W	1	AB000021	1	20K 1/2W	1
AB000022	1	RESISTOR 100K 1/2W	1	AB000023	1	20K 1/2W	1	AB000024	1	20K 1/2W	1
AB000025	1	RESISTOR 100K 1/2W	1	AB000026	1	20K 1/2W	1	AB000027	1	20K 1/2W	1
AB000028	1	RESISTOR 100K 1/2W	1	AB000029	1	20K 1/2W	1	AB000030	1	20K 1/2W	1
AB000031	1	RESISTOR 100K 1/2W	1	AB000032	1	20K 1/2W	1	AB000033	1	20K 1/2W	1
AB000034	1	RESISTOR 100K 1/2W	1	AB000035	1	20K 1/2W	1	AB000036	1	20K 1/2W	1
AB000037	1	RESISTOR 100K 1/2W	1	AB000038	1	20K 1/2W	1	AB000039	1	20K 1/2W	1
AB000040	1	RESISTOR 100K 1/2W	1	AB000041	1	20K 1/2W	1	AB000042	1	20K 1/2W	1
AB000043	1	RESISTOR 100K 1/2W	1	AB000044	1	20K 1/2W	1	AB000045	1	20K 1/2W	1
AB000046	1	RESISTOR 100K 1/2W	1	AB000047	1	20K 1/2W	1	AB000048	1	20K 1/2W	1
AB000049	1	RESISTOR 100K 1/2W	1	AB000050	1	20K 1/2W	1	AB000051	1	20K 1/2W	1
AB000052	1	RESISTOR 100K 1/2W	1	AB000053	1	20K 1/2W	1	AB000054	1	20K 1/2W	1
AB000055	1	RESISTOR 100K 1/2W	1	AB000056	1	20K 1/2W	1	AB000057	1	20K 1/2W	1
AB000058	1	RESISTOR 100K 1/2W	1	AB000059	1	20K 1/2W	1	AB000060	1	20K 1/2W	1
AB000061	1	RESISTOR 100K 1/2W	1	AB000062	1	20K 1/2W	1	AB000063	1	20K 1/2W	1
AB000064	1	RESISTOR 100K 1/2W	1	AB000065	1	20K 1/2W	1	AB000066	1	20K 1/2W	1
AB000067	1	RESISTOR 100K 1/2W	1	AB000068	1	20K 1/2W	1	AB000069	1	20K 1/2W	1
AB000070	1	RESISTOR 100K 1/2W	1	AB000071	1	20K 1/2W	1	AB000072	1	20K 1/2W	1
AB000073	1	RESISTOR 100K 1/2W	1	AB000074	1	20K 1/2W	1	AB000075	1	20K 1/2W	1
AB000076	1	RESISTOR 100K 1/2W	1	AB000077	1	20K 1/2W	1	AB000078	1	20K 1/2W	1
AB000079	1	RESISTOR 100K 1/2W	1	AB000080	1	20K 1/2W	1	AB000081	1	20K 1/2W	1
AB000082	1	RESISTOR 100K 1/2W	1	AB000083	1	20K 1/2W	1	AB000084	1	20K 1/2W	1
AB000085	1	RESISTOR 100K 1/2W	1	AB000086	1	20K 1/2W	1	AB000087	1	20K 1/2W	1
AB000088	1	RESISTOR 100K 1/2W	1	AB000089	1	20K 1/2W	1	AB000090	1	20K 1/2W	1
AB000091	1	RESISTOR 100K 1/2W	1	AB000092	1	20K 1/2W	1	AB000093	1	20K 1/2W	1
AB000094	1	RESISTOR 100K 1/2W	1	AB000095	1	20K 1/2W	1	AB000096	1	20K 1/2W	1
AB000097	1	RESISTOR 100K 1/2W	1	AB000098	1	20K 1/2W	1	AB000099	1	20K 1/2W	1
AB000100	1	RESISTOR 100K 1/2W	1	AB000101	1	20K 1/2W	1	AB000102	1	20K 1/2W	1

Electrical materials are shown in this page.

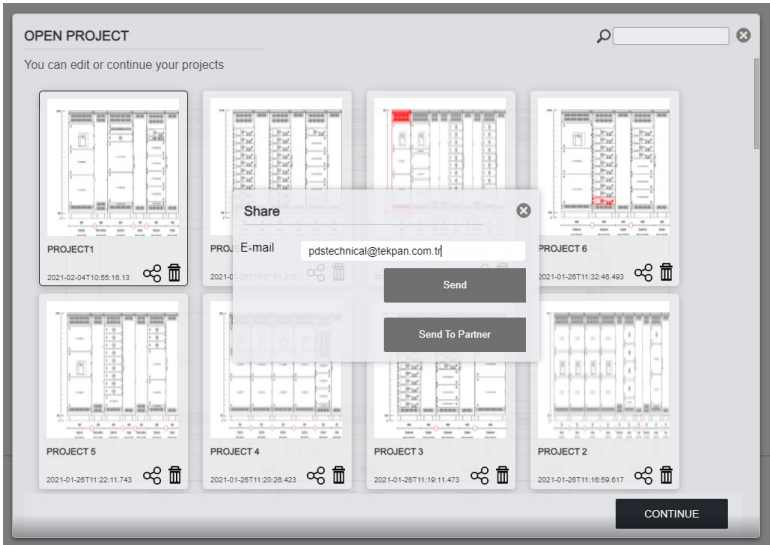
2.1.2.10 SHARE PROJECT

2.1.2.10.1 SHARE PROJECT



User can share project to have an order as well. Just click on Open Project page and share icon that is under the desired project.

2.1.2.10.2 SHARE PROJECT



To send the project, type the e-mail address of the user who you want to share the project with and click on send button.

■ 2.1.2.11 ORDERING

Order List can be sent as Excel file which mention in section 2.1.2.8.7 (Export Waybill File) or 2.1.2.8.8 (Export File) to the relevant sales representative.



PDS *line*

www.tekpan.com.tr