



ID-Spec

*A Schneider Electric Software for Pre-Design
of Industrial and Tertiary Building Electrical
Distribution*

Schneider
Electric



ID-Spec helps you to satisfy your customer in installation design

ID-Spec

- **Increases the closeness with your customer**

by helping you to select the relevant electrical distribution principles and to present it to your customer

- **Improves your speed in call for tender specification production**

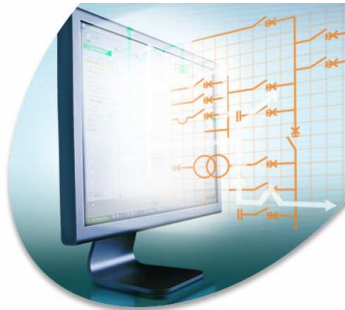
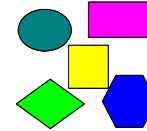
by producing automatically a report including the equipment technical sheets for the call for tender specification

Installation design with ID-Spec



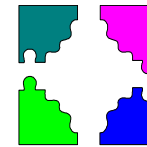
1. Collect the customer needs

(rough information available at Pre-design stage)



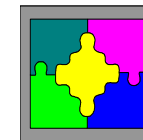
2. Define Electrical Distribution principles with ID-Spec and share it with your customer

- Describe the need by answering general questions
- Choose the electrical distribution architecture and the equipment, among those ID-Spec has selected on the basis of your need description
- Present your choices to your customer thanks to the report automatically produced by ID-Spec



3. Complete manually the report automatically produced by ID-Spec to obtain the call for tender specification

- Draw the single line diagram and size the equipment, manually
- Add to the report automatically produced by ID-Spec the single line diagram and equipment sizing in order to obtain the call for tender specification



ID-Spec allows you to define electrical distribution principles in 4 steps and to present it to your customer in a substantiated report



1. Define the project characteristics

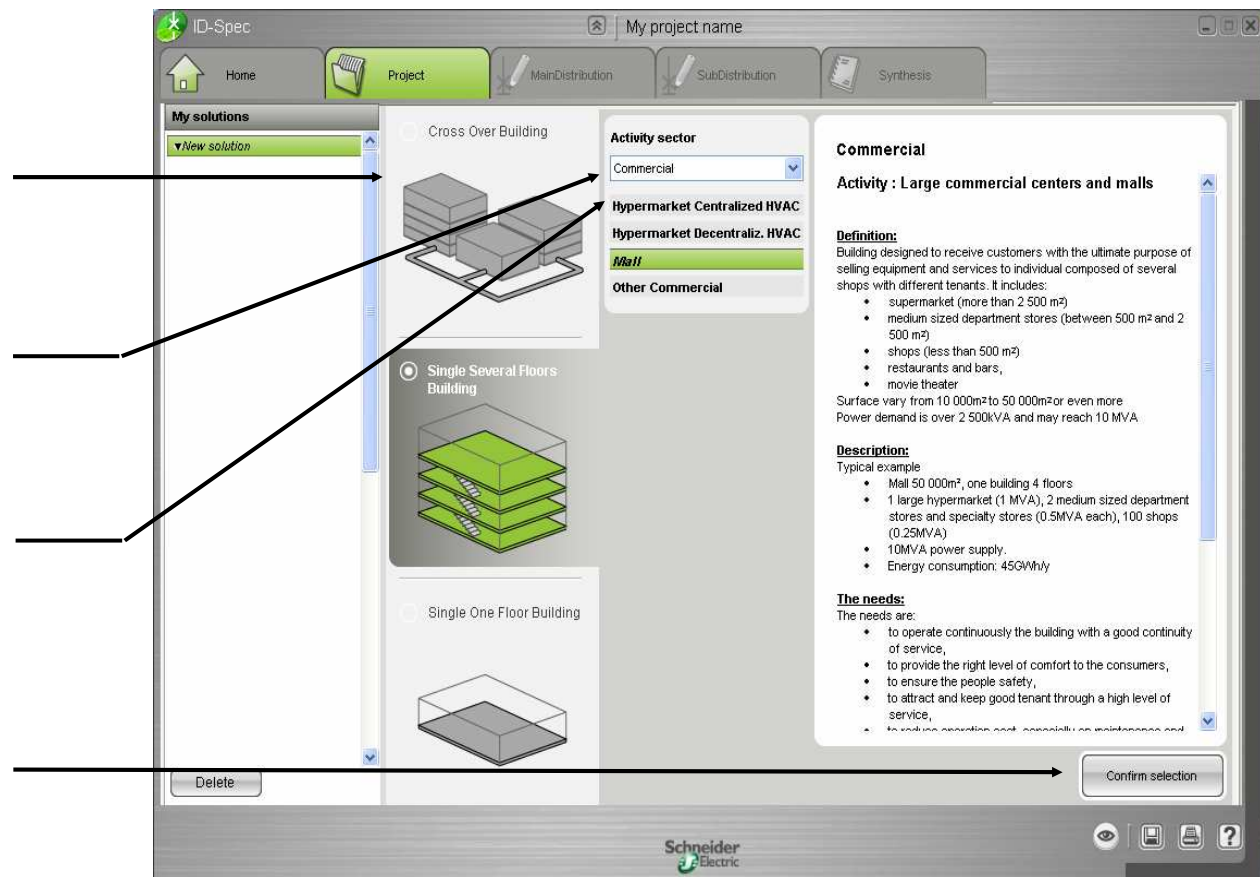
2. Select the Main Distribution architecture

3. Select the Sub Distribution architecture and equipment

4. Select the Main Distribution equipment, Generate the technical chapter of the call for tender specification without equipment sizing (including substantiated chapter about electrical distribution principles selected)

Step 1 : Define the project characteristics

1. Select the kind of site associated to the Electrical Distribution under design
2. Select the activity sector
3. Select the activity
The activity description is then displayed on the right part of the screen
4. Confirm the selections
The selected characteristics are then listed in the tree view on the left part of the screen and the next thumb is displayed



Step 2: Select the Main Distribution architecture

1. Define the Upstream connection parameters

2. Define the Site parameters

The relevant main distribution architecture are then displayed below the green arrow

3. View the proposed architecture and select one of them

By selecting one of the proposed architectures, display associated description and recommendations on the right part of the screen. After viewing all, select the most relevant, from your point of view.

4. Confirm the selections

The screenshot shows the ID-Spec software interface. The top navigation bar includes 'Home', 'Project', 'MainDistribution', 'SubDistribution', and 'Synthesis'. The 'MainDistribution' tab is active. The 'My solutions' panel on the left shows a 'New solution' for 'Single Several Floors Building Mall'. The 'Upstream connection' section has dropdowns for 'Connected to' (Utility), 'Connection scheme' (Single Line), and 'Service reliability' (Standard). The 'Site parameters' section has dropdowns for 'Power demand' (1250 kVA < ≤ 2500 kVA) and 'Floor Number' (≤ 5). A green arrow points to the 'Upstream connection' section. Below the 'Site parameters' is a green arrow pointing down to a list of three options: '1 Subst- N TransfoNO- Central.' (selected), '1 Subst- N TransfoNC- Central.', and '1 Subst- 1 Transfo- Centr Dist'. A green arrow points to the '1 Subst- N TransfoNO- Central.' option. To the right, the 'Single-line diagram pattern' shows a schematic of a substation with two transformers and a busbar. The '1 Subst- N TransfoNO- Central.' section displays 'Usual characteristics' with two bar charts: 'Synthesis' (Inst. power field (kVA) vs Project floor N°) and 'Reliability' (High, Medium, Basic) vs 'Technicity'. A green arrow points to the 'Synthesis' chart. Below the charts is the 'Installed power' section, which states: 'The installed power is usually greater than 1250 kVA. But this solution can be used for smaller installed power in case of:'. A green arrow points to the 'Confirm selection' button at the bottom right.

Step 3a: Select the Sub Distribution architecture

ID-Spec proposes:

- a pre defined list of circuits,
- pre defined settings for the characteristics of these circuits according to the activity selected

1. If necessary, modify the circuit list by (bottom buttons)
 - selecting the circuit and deleting or renaming it
 - adding new circuit

2. For each circuit:

2a. Click on the circuit thumb

2b. Check and if necessary modify circuit characteristics

relevant architecture proposals are then listed below green arrow

2c. View the proposals for the circuit architecture

2d. Move to circuit technology selection

The screenshot shows the ID-Spec software interface for configuring a sub-distribution system. The main window is titled 'My project name' and has tabs for 'Home', 'Project', 'MainDistribution', 'SubDistribution', and 'Synthesis'. The 'SubDistribution' tab is active.

On the left, the 'My solutions' panel lists various circuit types. The 'Mall' category is expanded, and 'Large shops' is selected. Below this, a list of circuit characteristics is shown, with 'Centralized' highlighted in green. A green arrow points to this list.

The 'Circuit characteristics' panel on the right contains several settings: Flexibility (No), Load distribution (Localized), Interruption sensitivity (Short Failure Acceptable), Disturbance sensitivity (Medium), and Double connection required (False). Below these are 'Default values' and a 'Technology>>' button.

On the right side, there is a 'Centralized' layout diagram showing a star connection. Below the diagram is a 'Description' section and a 'Recommendations' section. The 'Recommendations' section states: 'Centralized Layout is recommended when: Installation flexibility is low, Load distribution is localized: high unit power loads, non-uniform.' It also notes: 'Power supply by cables gives greater independence of circuits, reducing the consequences of a fault from the point of view of power availability.'

At the bottom of the interface, there are buttons for 'Delete', 'Add...', and 'Rename'. A 'Confirm selection' button is located at the bottom right.

Step 3b: Select the Sub Distribution equipment

2. For each circuit (continuation):

2e. Check and if necessary modify additional circuit characteristics

The relevant requirements on equipment are then displayed below the green arrow

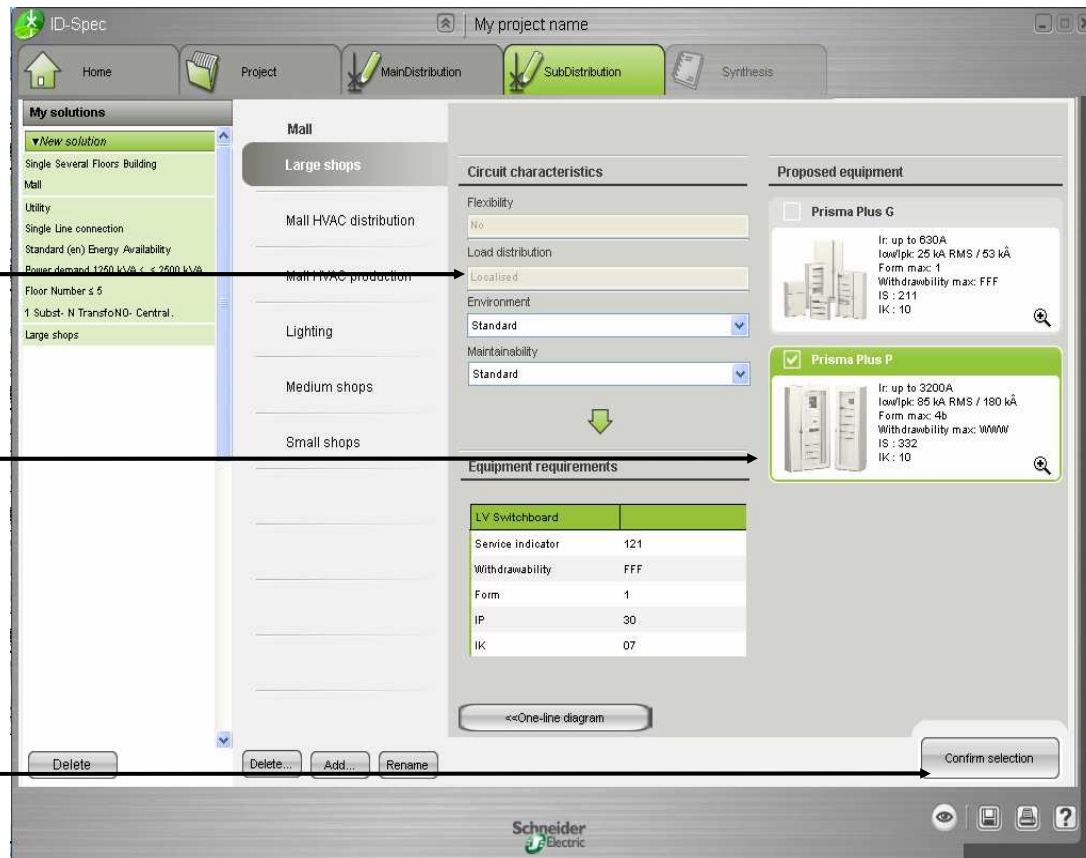
2f. Select the offer you want to specify for this circuit

It is possible to select several offers.

It is possible to have more information about one offer, by clicking on the zoom in the right bottom corner of the offer label

Then click on the next circuit thumb.
(It resumes the 2a step for this next circuit)

3. Confirm the selections done for all the circuits



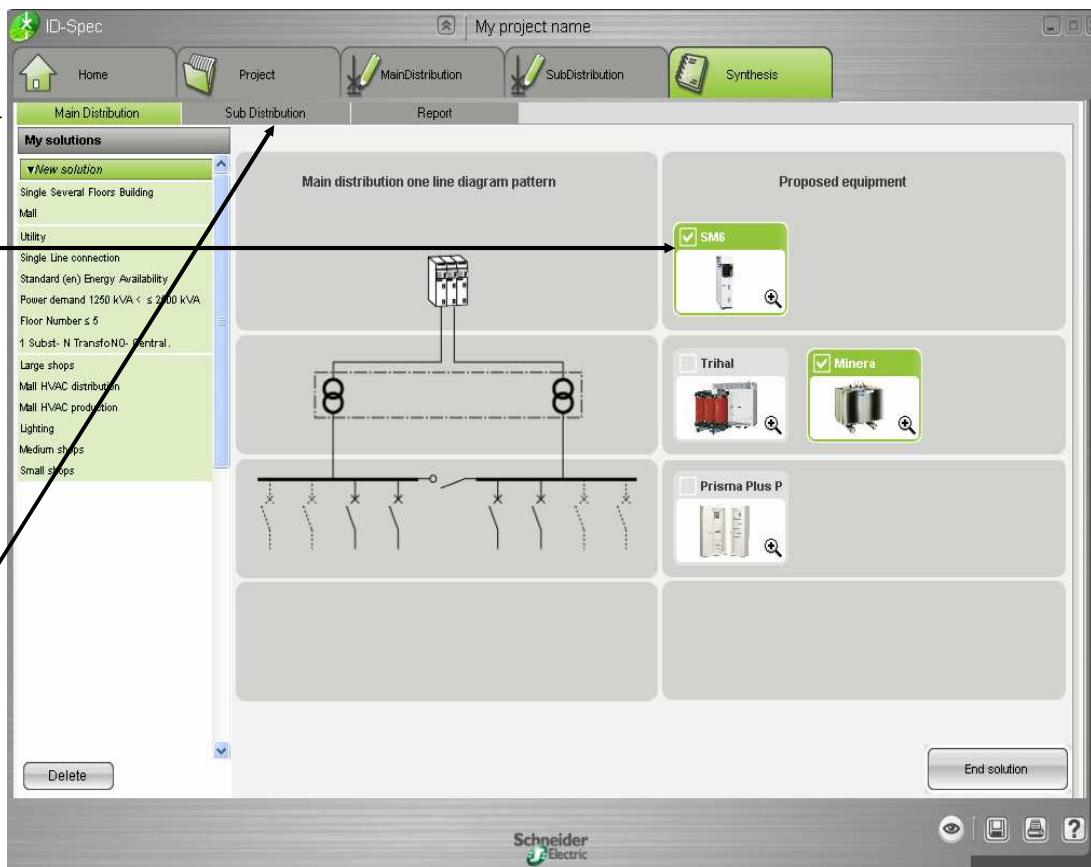
Step 4a: Select the Main Distribution equipment

In the Main Distribution sub-thumb

1. Select the offer you want to specify for each equipment of the single line diagram

It is possible to select several offers for one equipment.
It is possible to have more information about one offer, by clicking on the zoom in the right bottom corner of the offer label

2. Click on the Sub Distribution sub thumb



Step 4b: View the sub distribution summary

In the Sub Distribution sub-thumb

1. View the sub distribution summary

It summarizes for each circuit the one line diagram recommended, the equipment requirements, and the proposed offer.

You can select the column and rank the lines.

2. Click on the Report sub thumb

The screenshot shows the ID-Spec software interface. The 'Sub Distribution' sub-thumb is active, displaying a 'My solutions' list on the left and two tables: 'Busbar trunking system (BTS) connection' and 'LV switchboard connection'. The 'Report' sub-thumb is also visible in the navigation bar.

Distributi...	LV config	Backup	UPS	IP	IK	Proposed equipments
Mall HVAC distri...	Distributed	Radial	No Generator	No UPS	30 07	KSA;KNA;KB
Lighting	Distributed	Radial	LV Generator	No UPS	30 07	KSA;KNA;KB
Small shops	Distributed	Radial	LV Generator	No UPS	30 07	KSA;KNA;KB

Distributi...	LV config	Backup	UPS	IP	IK	Withdra...	Form	Service ...	Proposed equipments
Large shops	Centralized	Radial	LV Generator	No U...	30 07	FFF	1	121	Prisma Plus G;Prisma Plus P
Mall HVAC produ...	Centralized	Radial	LV Generator	No U...	30 07	FFF	1	121	Prisma Plus G;Prisma Plus P
Medium shops	Centralized	Radial	LV Generator	No U...	30 07	FFF	1	121	Prisma Plus G;Prisma Plus P

Step 4c: Generate the report for your customer

In the Report sub-thumb:

1. Define the content of the pre-design specification

By selecting the proposed specification chapter

2. Edit report

3. End the solution

You will be asked about the name you want to give to the solution

