

User Manual for Electrical Design Analysis Simulator Software (EDASS)

Electrical Design Analysis Simulator Software (EDASS) is an offline standalone software in which an engineer can evaluate existing and new electrical system designs made by students of the electrical engineering department. This manual is a guide through the basic usage of the software.

- a. Main Form
- b. Add Project
 - Add Distribution Panelboard
 - Add Subfeeder
 - Add Branch Circuit
 - Add Transformer/Generator
 - Add Main Feeder
- c. Generate Report Form
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General Usage

Browsing Project Records

1. On the project section, select the project details you wish to browse through.
2. Use the navigation buttons ('Previous' and 'Next') to find the project you wish to open.
3. On the toolbar, place the pointer to 'View' and from there; click 'Load Records' to show the records and details of the project.

Adding Project Records

1. On the project section, click 'Add' button.
2. Fill-in the required fields (Project Code, Name, Owner, Type, Voltage Level and Phase).
3. Click 'Save' Button. A dialog box will appear confirming if you wish to save the record.

Adding Individual Calculations (Distribution Panelboard, Subfeeder, Branch Circuit, and Transformer/Generator)

1. On the tab control, select the tab 'Distribution Panelboard'.
2. Click 'Add' button.
3. Fill-in the Number then click 'Save'.
4. Select 'Subfeeder' tab control. Repeat steps 2 and 3.
5. Select 'Branch Circuit' tab control. Click 'Add' then fill in the required fields marked with asterisk (*).
6. Click 'Compute' Button to show the desired output.
7. Click 'Save' Button. A dialog box will appear confirming if you wish to save the record.

8. Add as many branch circuits depending on the design you are evaluating.
9. After saving, select the 'Subfeeder' tab control.
10. Fill in the required fields marked with asterisk (*).
11. Click 'Balance Check' whether if balancing is necessary or not then click 'Compute' and 'Save'.
12. Add as many subfeeders depending on the design you are evaluating.
13. Proceed to the first tab control which is the 'Distribution Panelboard'.
14. Fill in the required fields marked with asterisk (*). Click 'Compute' then 'Save'.
15. For the transformer and generator rating, click 'Add', fill in the required fields marked with asterisk (*), click 'Compute' then 'Save'.

Adding Main Feeder

1. After filling-up the individual calculations, click 'Add' Button on the main feeder section.
2. Fill-in the required fields.
3. Click 'Compute' Button to show the desired output.
4. Click 'Save' Button. A dialog box will appear confirming if you wish to save the record.

Deleting Records

1. Every section on the main form and tab control consists of a 'Delete' Button.
2. Browse the project code, DP Number, Subfeeder Number, Branch Circuit Number, TG records and main feeder for the records you wish to delete. Deleting record means that you cannot revert it.
3. Click 'Delete' Button. A dialog box will appear confirming if you wish to delete a record.

Generating a Report

1. Browse a project you wish to view the summary of the design.
2. On the toolbar, place the pointer to 'File' and from there; click 'Generate Report' to show the summary of the design.
3. A report will be generated using Crystal Report Viewer.

Calculating the Illumination

1. On the toolbar, place the pointer to 'View' and from there; click 'Illumination Calculator'. A new window will appear.
2. Fill-in the required fields marked with asterisk (*).
3. Click 'Compute' Button to display the number of luminaire.