

ArcAD

DC Arc Flash Analytic Version 1.0 User Guide.

DC Power System Arc Flash Hazard
Analysis and Labeling Software



PC Version for Windows 9X / NT / XP / 7 / VISTA

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Getting Started

Installing DC Arc Flash Analytic version 1.0

DCAFA V1.0 software package comes in the form of a single executable file.

- *Download installation wizard to your PC or insert the installation CD into CD drive.*
- *Double click the EXE file icon to launch the installation wizard.*



Welcome screen will appear.

- *Click Next button and follow instructions to complete the installation.*



About the program

The *DC Arc Flash Analytic (DCAFA V1.0)* is a software program for arc flash and shock hazard analysis in DC power systems, including but not limited to photo-voltaics, battery banks, rectifiers, and telecommunications equipment.

The program takes system voltage, available short circuit current, fixed or variable gap between electrodes, circuit time constant, electrode material, protective device type and rating, or a preset arc duration value, and determines incident energy released by arc flash, hazard risk category at working distance, arc flash and shock protection boundaries.

Among various key capabilities, the DCAFA V1.0 performs analysis using metric or imperial units, saves input configurations and calculation results for future reference or printing, and generates customized arc flash warning labels in different electronic formats.

Visit us at www.arcadvisor.com for more On-line and PC based solutions for short circuit, arc flash hazard analysis and labeling.

Registering the program

- Click on Windows *START* button
- Select *DC Arc Flash Analytics* from the Program List
- Click on *DC-AFA-2011* icon to launch the program



First time you launch the program, you will need to register to unlock the program features inactivated in unregistered / demo version.

- Click on *Help* menu
- Select *Register* option

Registration screen will appear. Enter your individual registration credentials, including your first and last names, company name and your individual registration key exactly as they appear on a letter or email accompanying your DCAFA v1.0 purchase.



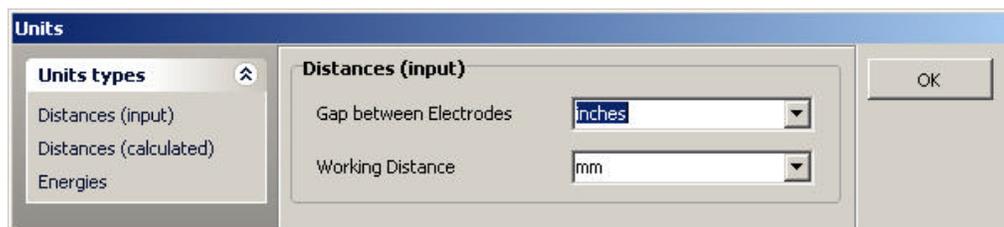
Note:

**Registration key comes with the purchase of the software.
Please contact us for your individual registration key.**

Units of measurement

- Click on *Options* menu and select *Units*

The *Units* screen will pop up showing default units of measurement for input and output data.

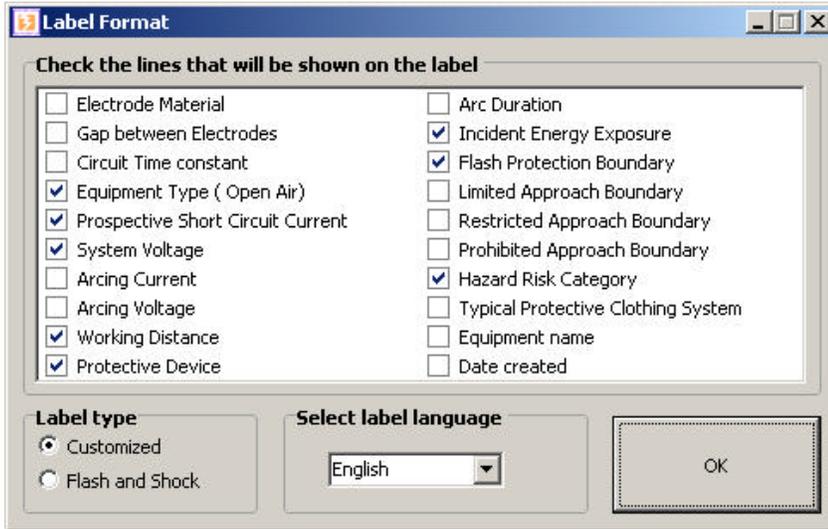


This feature allows you to switch units of measurement for wide variety of input and output data including protection boundaries, incident energy, working distance and more. Click [OK] button to close *Units* screen. The program would also automatically convert all the relevant values to new units of measurement, including input and output data, and label readings.

Label Format

- Click on Options menu and select Label Format

The *Label format* screen will appear showing preset label type, language, label layout and label content. You can add or modify the list of information displayed on the label.



Two alternate label layouts

Saving Labels

From *Label Preview* window, click on Save PDF or Save JPG or Save BMP buttons to save arc flash & shock hazard warning labels in any one of the available electronic formats.

You will need a standard laser or inkjet printer to produce warning labels, created using DC Arc Flash Analytics software.

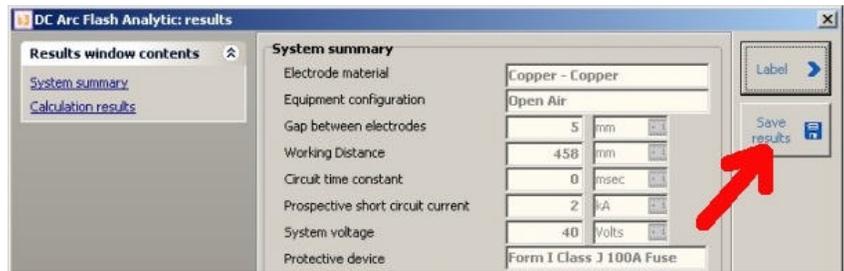


Note:

We offer label printing services. Please visit www.arcadvisor.com website or contact us for more information.

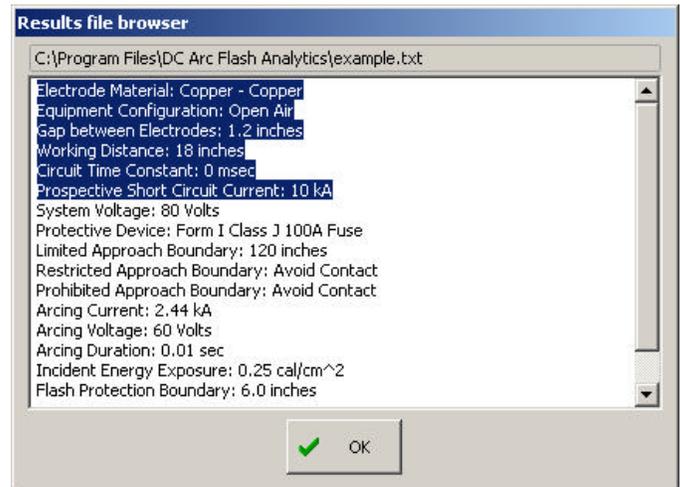
Saving Calculation Results

By pressing *Save Results* button from *Calculation Results* screen, the results could be saved to a text file for future reference or printing.



Opening Results Files

Click on Open from File menu to open an existing results file, inspect its current content, do simple editing operations including Cut, Copy and Paste to and from the clipboard, Save and Print.



If you need more complex editing, import the file into your favorite text manipulation processor (MS Word for example) and do what you need to do.

Saving Equipment Configuration

Click on Save equipment configuration from File menu to save equipment configuration from the main program screen.



Importing Equipment Configuration

- Click on Browse Saved Records from File menu to import previously saved equipment configuration.

Name	Config.	Vsys	Work. Dist.	El. Material	Gap	t	Isc	Prot. Dev.
CONFIGURATION 1	Open Air	40	458	Copper - Copper	2	0	2	Form I Class J 100A
CONFIGURATION 2	Open Air	500	458	Aluminum - Aluminum	350	10	10	Form I Class J 100A
CONFIGURATION 3	Open Air	350	458	Copper - Steel	120	10	7	Form I Class L 2000A
CONFIGURATION 4	Open Air	120	458	Steel - Steel	50	50	50	Form I Class L 2000A

Use navigation buttons to select a record and click on Import current record button to copy the data into the program's main window.

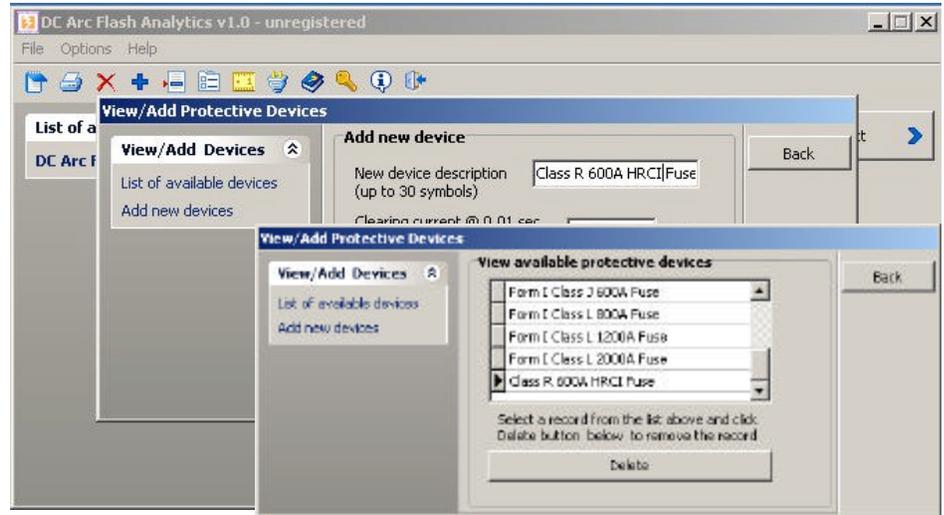
Populating Protective Device Library

Click on Circuit Protection devices from File menu to import previously saved equipment configuration.

- Click on Add New Devices link to open up Add Protective Device dialogue screen.
- Fill up New Device Description and Clearing Current text boxes. Click [OK] button to save the data.



Click on List of Available Devices link to review the list of available protective devices. Now when you click [Back] button and return to the main program screen, you will notice the new protective device appearing under Protective Device drop down menu.



Program Help

If you have any question or problems with the installation, running the program, arc flash hazard analysis, or creating warning labels using the program tool, please check the program Help or contact us.

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