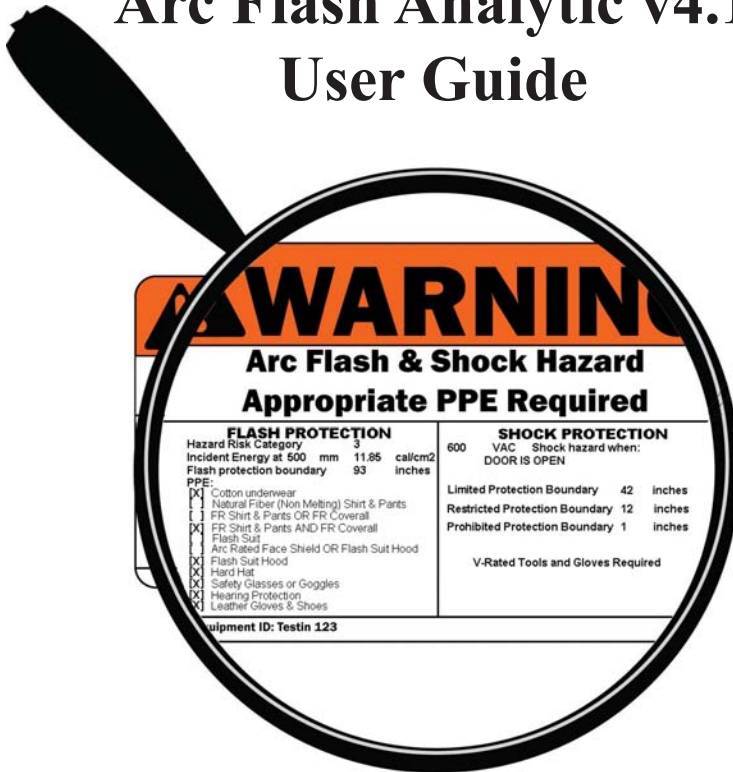


# ArcAD

## Arc Flash Analytic v4.1 User Guide



## Arc Flash Hazard Analysis and Label Making Without the Fuss



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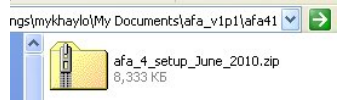
## Getting Started

### Installing Arc Flash Analytic version 4.1

- Download installation wizard to your PC or insert the installation CD into CD drive.

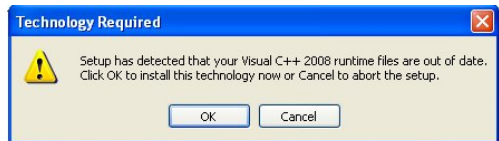
Arc Flash Analytic v4.1 package comes in form of a self-extracting ZIP file containing single executable file.

- Double click the ZIP file icon to open up the archive
- Click on Extract button to extract included EXE file
- Double click the EXE file icon to launch the installation wizard.



The installation wizard will check your system files and may attempt to install updated runtime resources.

- Click OK button to proceed



Welcome screen will come up

- Click Next button and follow instructions to complete the installation



### About the program

Arc-Flash-Analytic v4.1 ( AFA v4.1 ) is a powerful, easy to use Windows based program developed to assist in performing arc flash and shock hazard analysis in low and medium voltage power systems. With Arc-Flash-Analytic, it is also easy to create customized arc flash warning labels, reducing the cost of obtaining compliance with NFPA 70E and Canadian CSA Z462 standards.

### AFA V4.1 Key Features

#### IEEE 1584 EMPIRICALLY DERIVED MODEL AND LEE METHOD

Applicable for systems with voltages in the range of 208V to 46kV, short circuit currents in the range of 700A to 106kA, switchgears, MCC, panels, cables and arc in open air.

#### IEEE 1584 FUSE EQUATIONS

Applicable for systems protected by current limiting Class RK1 and Class L fuses.

## IEEE 1584 LOW VOLTAGE CIRCUIT BREAKER EQUATIONS

Applicable for systems protected by molded case, insulated case circuit breakers (MCCB & ICCB), or LVPCB low voltage power circuit breakers.

## NFPA 70E PHASE TO GROUND ARCING FAULTS ON OVERHEAD LINES

Applicable for up to 242 kV open air systems.

### **AFA V4.1 Key Capabilities**

#### 1) Determine

- √ Arcing current
- √ Incident energy
- √ Flash protection boundary
- √ Limited, restricted, prohibited shock approach boundaries
- √ Initial arc pressure
- √ Arc TNT explosive equivalent
- √ Hazard risk category
- √ Typical clothing system

2) Save input configurations, calculation results for future reference or printing.

3) Generate arc flash warning labels in electronic JPG, BMP and PDF formats

4) Customize labels by selecting and adding information displayed on them.

5) Perform analysis using metric, imperial units, or a mix of both

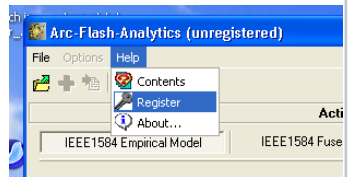
6) Create warning labels in English, French or Spanish languages

### **Registering the program**

- Click on *Windows START* button
- Select *ARC-FLASH-ANALYTIC* from *All PROGRAMS Program Manager*
- Click on *ArcFlash* icon to launch the program

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

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



Registration screen will pop up. Enter your individual registration credentials including your first and last names, company name and your license key exactly as they appear on a letter or email accompanying your AFA v4.1 purchase.

## **NOTE**

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

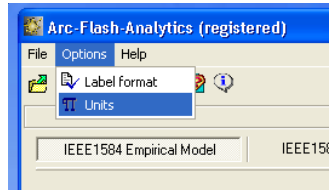
## Options Menu

Use Options to view and modify units of measurement and label layout settings.

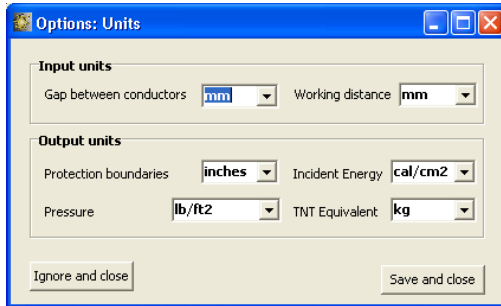
### Units of measurement

- Click on Options menu and select Units.

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



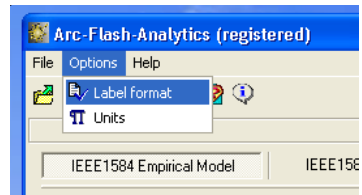
This feature allows you to switch units of measurement for a wide variety of input and output data including protection boundaries, incident energy, working distance, arc flash initial pressure, arc flash explosive equivalent and more. The program would also automatically convert all relevant values to new units of measurement, including input, output data and label readings.



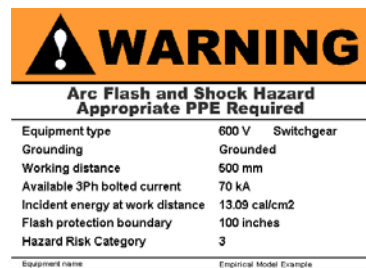
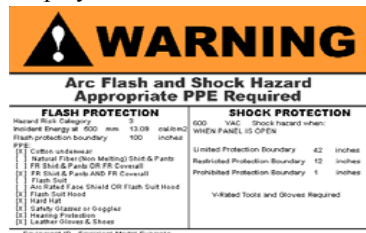
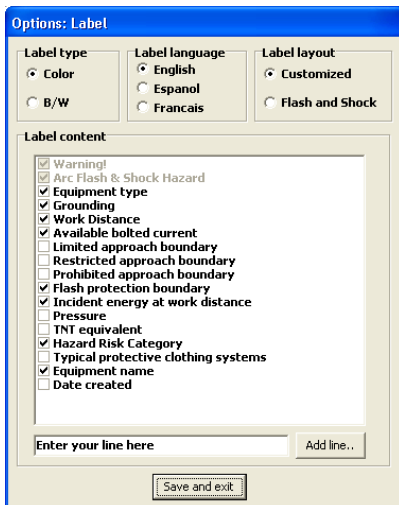
### Label Format

- Click on Options menu and select Label Format

The *Label format* screen will pop up showing preset label type, language, label layout and label content.

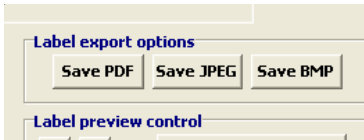


You can add or modify the list of information displayed on the label.



## Saving Label

From *Label Preview* window, click on *Save PDF* or *Save JPG* or *Save BMP* buttons to save the label in any one of the available electronic formats.

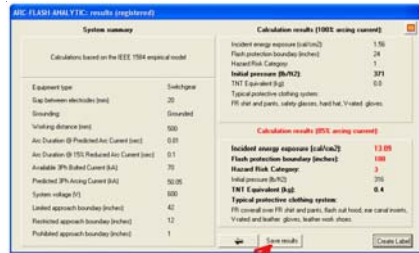


You will need standard laser or inkjet printer to produce warning labels created using Arc Flash Analytic software.

**Note:** We offer label printing services. Please visit [www.arcadvisor.com](http://www.arcadvisor.com) website or contact us for more information.

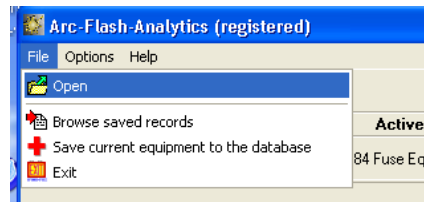
## Saving Calculation Results

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

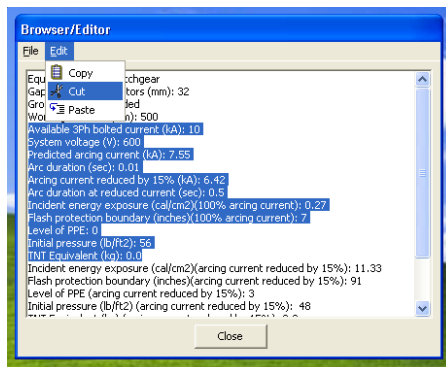


## Opening Results Files

• 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*

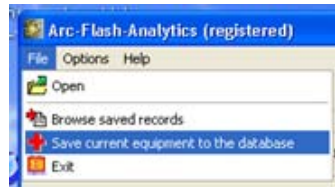


If you need more complex editing, import the file into your favorite text manipulation processor MS Word for example and do what you need to do.



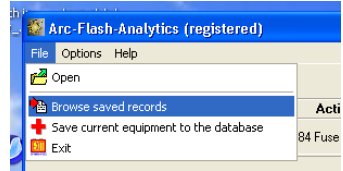
## Saving Equipment Configuration

- Click on Save current equipment to the database from File menu to save the configuration.

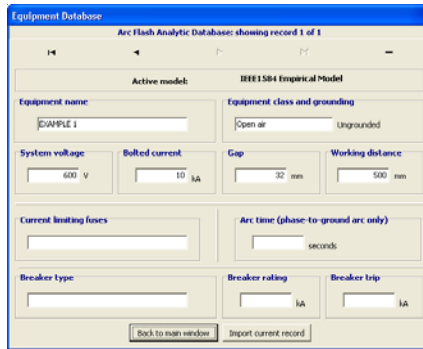


## Importing Equipment Configuration

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



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



## Help About the Program

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

## Contact Information

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