User guide

SAT Easy Print Label printing software

Version 3.40
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I. Minimum configuration required
Windows XP SP2 or Vista operating system.
17" screen, resolution 1280x800, also works on 15" screens.
Disk space 263.6 MB.

II. Software installation
Close all applications and run the installation by double clicking on “Install_SAT_n°version.exe”.
You must have administrator rights on your station.
The installation is automatic. Prerequisites are installed only if they do not exist on your computer. If you do not have the installation disk, Internet access is compulsory.
A font is delivered and must be installed before using the software for the first time. This is the SymbolElec© font. It includes all standardized symbols commonly used in electrical engineering.
The application has been developed using the Microsoft .NET platform which requires the installation of prerequisites.

1. Prerequisites
   • Framework .NET 3.5 SP1 (208 MB)
   • SQL server compact (2.6 MB)
   • Microsoft Office access base management (6 MB)

2. Parameter
   The installer allows you to customize the disk location of your installation.
   Once the software is installed and the computer restarted, run the software by double-clicking on the desktop shortcut or in the start menu:

   At first startup of your application, the software will ask for your e-mail. Pressing «F11» key, you can change at any time.
   If you have Internet access, each time “SAT Easy Print” is started, the program checks whether a software update is available and will request you confirmation to install it.

   You can find all of our models and our marker offers at the website
   http://www.abb.com/lowvoltage/, under the heading «raccordement» (France) or «connection devices» (other countries)

III. General presentation
SAT Easy Print is a label printing software for the marking of electrical engineering equipments and more specifically for ABB terminal blocks.
The software has been designed for adhesive label sheets: SAT5, SAT6, SAT8 and other models.
A page of data is linked to a model which comprises a marker zone and if necessary margins.
The zone may have one or more strips, depending on the model. Each strip is broken down into markers.

The software provides help tools and tools for handling markers, authorizing the selection of a specific marker, a strip, a line or a column of strips or the whole marker zone.

IV. Presentation of the software
The SAT Easy Print software is easy to use, it works in the same way as a traditional text editor. It has a similar presentation to that of the Microsoft Office word processing with a menu at the top, a work zone in the middle and a status bar at the bottom of the screen. It includes a Documents tab which requires nothing more than a basic knowledge of any kind of word processing.
Users of this tab can create their documents and projects using, if they wish, serial number counters and data sources, adding their own serial numbers.
The data sources or the serial numbers configured may be used directly.
The production of a document involves creating pages linked to models and completing the markers, either manually using the keyboard, or by importing data from a serial number generator or from a file or database type data source.
V. Documents management

SAT Easy Print is delivered with pre-defined models to use in your documents.

The created documents may contain several pages and must be saved in a project.

A project may contain one or more documents.

A document can be saved within a project for later use in the software database; DataBase Directory located at the root of the SAT Easy Print software (by default C:\Program Files\SAT Easy Print).

Projects, documents and pages designed can also be exported to a directory on your disk in the form of files (*.sat) and be imported at any time.

These import and export functions are used to archive old projects in order to reduce the size of the base, which will then only contain frequently used data. They are also used to copy/paste documents or pages from one project to another.

1. Screen definition

1.1. Status bar

The status bar contains useful informations such as the zoom percentage, the current processing or the position of the rulers.

1.2. Work zone

The work zone includes a pop-up menu which can be accessed by right-clicking on the mouse. These pop-up menus contain nearly all actions which can be carried out from your screen. These actions can be accessed without passing via the general menu.

1.3. Zoom

At the bottom right of your screen, you can access the zoom parameters. The "-" moves you away from your document and the "+" moves you closer. The "R" button brings the zoom level back to 100%. Select your zoom size by clicking on 100% (from 50% to 1000%).
2. Presentation of SAT sheets

Example of basic models which are:
SAT5, SAT6, SAT8...

3. Importing a model

To import a new model published by ABB, save it on your disk. You must then right-click on the work zone, then select **import a new model**.

These new models can be printed on the blank SAT sheets.
VI. Documents

This window corresponds to the main zone of the software. It is used to create all your markers sheets.

central zone = work zone
The "Documents" module includes all the management tools for formatting the markers, import, etc. These tools are available in the side panels.

1. Documents management

SAT Easy Print has a main menu which contains all management actions. You can:

- select an existing project from the list of available projects;
- create a new document;
- select a document from among those of the current project.

2. Pop-up menu

A pop-up menu, accessible by right-clicking on the mouse contains all actions required for your documents management. You can:

- print your documents and your pages
- export or import documents and pages
- create or delete a project, a document or a page
- organize documents of a project or pages of a document
- close the project in order to select another from the list or create a new one
- adapt the document to characteristics of your printer: shift your pages horizontally or vertically
- import a new model published by ABB.

3. Creation of projects, documents and corresponding pages

Using the New project button from the main menu (or the pop-up menu), create a project which by default will open a document (D1) and a page (P1).

When creating new projects, new documents or new pages, it's possible to indicate the number of pages to create. All pages created will have the same model.

3.1. Post a project

Edit the project to configure its parameters. Then right-click on the mouse to add a document or a page.
3.2. Format toolbar

Once your project is created, in the central zone you have a specialized toolbar broken down into four tabs:

3.2.1. Markers zone

This is dedicated to the choice of the selection mode: by checking "Page", a single click on the marker selects the page. Select "Line", "Column", "Strip" or "Document" to adapt your selection. A single click on a marker applies the selection mode. You can accumulate selections; work in pre-defined zones which are not side-by-side and thus have multi-selection.

If no markers zone is checked, the marker is selected by default. Double-click to deselect. When several selections have been made, a single click on the "Deselection" button cancels them all.

The text format of selected markers is produced using actions located in this zone.

So, choose the font, color, style. Set the text alignment and its orientation (the default option is the center vertical and horizontal).

3.2.2. Structure

To act on the model structure (change margins colors, borders, etc.), proceed by clicking and double-clicking on margins. Actions on these margins assume that the pages have previously been selected.

3.2.3. Show

This tab determines whether or not all or part of the structure of your model is shown.

3.2.4. Other actions

This tab makes available the most commonly used actions for documents management. Info-bubbles appear when moving the cursor over the buttons: Save the current project; Edit the current project; Print preview; Adjust before printing; Organize the projects; Cancel the latest changes; Export the current page; Import a *.sat file (see Format paragraph)

3.3. Import toolbar

This bar is arranged into four tabs:

3.3.1. Data

Data is imported from serial number generators or from file or database type data sources.

Select a serial numbers in the tab (press the refresh key to regenerate your serial numbers). For data sources with several columns, select the column of your choice before importing your data.

The Edit key modifies and creates data sources and serial numbers generators.

3.3.2. Import options

You can import your data horizontally or vertically in selected markers, add on the 2nd line, checking import only, specify the target of the import at the level of Data and/or Markers.

3.3.3. Other actions

Tools allowing the adjustment and the modification of your imported data. These actions apply to selected markers; they are used to insert special characters, carry out a Find/Replace, shift of your data to the right or to the left, set all selected markers to zero, etc.

3.3.4. Electrical symbols

This component allows the integration of electrical symbols during a manual seizure.
3.4. Creation of a serial number

In the data toolbar, select serial numbers, then Edit.

This window is used to create and to edit serial numbers; it is the serial number generator.

To add a serial number, click on Add. A serial number can include:

- a prefix: numerical or alphabetical fixed value;
- two counters (serial numbers) (numerical or alphabetical), only one of which is the master. Each proposes a start value and an end value (numerical or alphabetical);
- a suffix: numerical or alphabetical fixed value;
- a progression spacing which defines the incrementation value;
- a serial number: numerical or alphabetical fixed value.
- A generation number: It consists on producing the same serial for several times.

You can also create a repetition serial number. This involves repeating a data item a few times.

To test your generator, press the simulate button and view the result in the simulation zone on the right of your screen.

3.5. Import of a data source

A data source consists of a file or a database.

In the data toolbar, check Sources, then click on Edit. In this window, you can import data sources.

To add a source, select the source type, then right-click on the mouse and click on Add, or on the New button.

During the import, you must specify a request. A request is used to gather data from several tables and display the result. To do this, indicate the name of the folder you wish to import. By default, the software will point to the first Excel file folder but it is possible to select another.

You can open the file from this window to verify the content or make modifications. A refresh action is recommended in this case.

You can check Assisted query creation mode for select usual columns.

To test your data source, press the Simulate button and view the result in the simulation zone on the right of your screen.

Your source data set, close the window Edition data sources. Select the source from the Import toolbar. Choose markers and click on Import.
Click on data columns to sort them in one direction, then in the other.

The **filters** zones, located above the columns, filter your data and display (only) the data useful for your work. To search for a term or a character sequence, enter a space followed by your request (ex: ‘space’ + "office", to search for all records containing the word "office"). Without the space, your search is restricted only to records which begin with the word "office".

### 3.6. Optimization of import

Imports from an Excel or CSV file must be organized so that the import in SAT Easy Print is in line to your.

The first line of the both Excel and CSV files represent, in fact, the columns’ header. The columns’ names are listed within the import pad.

None indicated column header within the file, will be replaced by a capital C followed by the number of the relative column. *Fx=Column (Field) + index.*

Importing limit: 50 columns

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### 3.7. Add special characters

Clicking on the button opens a window allowing the insertion of special characters. By default, the **force the character font** box is checked: whatever the character font of your selected markers, it will be replaced by the font of your special characters. If you uncheck this box and the font selected in the markers does not correspond to the font of the special characters, these will not be imported.

Extract of the standardized symbols commonly used in electrical engineering of the symbolElec® font:

- Earth; ground
- Functional earthing; functional grounding (US)
- Protective earth; protective ground
- Alternative current (indication of frequency range: medium)
- Both direct and alternating current
- Frame or chassis
- Direct current
- Alternating current
- Rectifier, general
- Dangerous voltage
- Signal lamp
- Three phase winding, star
- Three phase winding, delta
- Equipotentiality
- Plus, positive polarity
- Minus; negative polarity

### 3.8. Find/Replace

The **Find/Replace** tool offers various options.

**Find/Replace from the start of the sequence:** replaces the value sought at the start of values of markers selected.

**Find/Replace to the end of the sequence:** replaces the value sought at the end of the values of the markers selected.

**Find/Replace for the whole sequence:** replaces the value sought each time that this value is found in markers selected.

**Find/Replace electric symbols**
3.9. Entry
Data can be entered using generators (serial number or data source), or entered manually.

3.9.1. Integration of external sources
1. Click on the type of selection.
2. Select your markers.
3. Choose your type of insertion (serial number or source and column)
4. Click on import

3.9.1.1. options
This tab allows you to achieve your imports:

- By checking import only, the data is imported within the limits of the selection; the values imported are provisionally deleted from the counters window in order to import the rest of the data to a new page.

The Data and Markers fields are used to specify the target of the import:

- Data: It is a line number from the serial going to be extracted. A simple click on the line from which you want to start import will memorize this data.
- Markers: It corresponds to the marker from which the import task will begin corresponding to the given selection. A tool tip (a little window that appears when the mouse moves on) displays the marker’s number according to your selection, in addition to the both vertical and horizontal import mode choice. For better readability, the state bar at the bottom of the screen will contain the line, the column and the current reference number in addition to the count of the selected markers.

The selected markers indexation is leveraged each time the selection is changed and it is the similar case when the changes affect the import mode of either the horizontal or the vertical “import” tools bar.

3.9.2. Manual integration
1. Click on the type of selection.
2. Select your markers.
3. Click on the marker of the first entry and enter your data manually or by copying/pasting. Use the tab key to move to the next marker.

3.9.3. Input zone
In order to deal directly with the marker, the user should click on it. A combined right click with the control key enables the user to deal with the new input zone (A tool tip for an eventual intervention will be displayed). To exit this tool, it will be enough to double click upon it.

The much easier way is to click on a given mark, this will make its number automatically positioned within the import zone.

In the previous example the import is made from line 7 relative the selection sixth marker.
The **tabulation** makes move to the next selected mark, according to either the vertical or horizontal import tools bar which is located at the left hand level of the screen.

The combined **shift** and **tab** key enables the inverse direction.

The navigation is also provided by hitting the **“enter”** key which becomes exactly equivalent to the **“tab”** key if it were in the new input zone.

The **enter** key is no longer enabled within the tool tip zone.

To add a line as a part of the manual mode, the user ought to hit the “enter” key by being within the scope of the mark it self.

An electric symbols panel appears within the “**Import**” tools bar just at the right hand of the screen. The chosen character within the tab is added to the opened mark within the new input zone if this last one is opened.

The new relative area to the corresponding mark is sensitive according to the import format.

### 3.9.4. Format
You must select your markers in the same way (stage 1 and 2).

Then, in the format toolbar, you can modify the format of characters (modification of the attributes: color, font, size and style of the text indicated) and the format of your markers.

#### 3.9.4.1. Font
The font tab is used to define a font for the selected markers. Select a font in the local menu.

#### 3.9.4.2. Size
Select the font size from the list.

#### 3.9.4.3. Color
Click on the color palette and select a color.

#### 3.9.4.4. Format
Click on one or more options (bold, italics or underlined).

### 3.9.5. Alignment
Click on one of the alignment control buttons to modify the alignment: left, center, right.

### 3.9.6. Orientation
You can define vertical (text reading upwards or downwards) or horizontal orientation for the content of the markers.

### 3.9.7. Structure
This tab is used to make changes to the structure page or document depending on the selection (change the color of margins or direct printing of the page(s)).

#### 3.9.5. Show
You have the option of printing with different displays. The preview is the actual result of the printing.

- A: Show box backgrounds
- B: Show box borders
- C: Show separators
- D: Show without any marking (recommended on SAT 5, 6, 8)

After making your choice, right-click on the mouse, then click on **Print preview** (To print, see print paragraph).

### 3.9.6. Other actions
- **Save "1"**: save the project or save the project under another name, by right-clicking on the mouse. This function can be found in the ribbon menu.
- **Edit "2"**: edit your project when you wish to change the name of the document or that of the current page and/or change the default SAT. To do this, right-click on the mouse.
- **Print preview "3"**: view your project as it will be printed.
- **Adjustment "4"**: if the print is not precise, you have the option of modifying the adjustment (mm or pixel). By increasing the horizontal adjustment, the page is shifted to the right. By reducing it, the page is shifted to the left. Likewise, the document can also be ad-
justed vertically: increasing the value shifts the document downwards. If one of the values exceeds the limit which is authorized, a notification appears and the Apply button becomes inactive until the correction of this value.

Example: Width of left margin = 50. If a positive adjustment of 60 is reached, the margin left will be a -10 so error message appears.

It is also possible to carry out a adjusting the height of the margin is high less than 13.75 mm. This setting will be considered like error and the Apply button will be deactivated.

Moreover, if the width or height of the margins is not sufficient to make an adjustment, it’s possible to act on the width and height of vertical separators and horizontal. The adjustment of separators make a validation of values.

- **Organize “5”**: this function is used to store projects in the order of your choice. Organise by:
  - project
  - document
  - page

- **Cancel the changes “6”**: deletes the last changes made, including unselected markers. This tool can be found in the quick access bar.

- **Import / Export “7” and “8”**: imports or exports the current page.

### 3.10. Copy/Paste/Move

You can copy / cut and paste data from one marker to another. Copy or move a value from one marker to another.

Right-click or use the keyboard shortcuts Ctrl A to select all, Ctrl C to copy, Ctrl X to cut and Ctrl V to paste.

### 3.11. The capacity markers overtaking

Whenever the markers are beyond the limits those marked by a red background. The overtaking control is leveraged following the character changes size, the font family, and the associated font size (bold, italic, …)

The manual input zone is closely sensitive to that control, the marker will change to red whenever the first character that causes the overtaking is introduced and this could be said in the other sense.

### 3.12. Print and preview

Two options are available: **Print preview** and **Print**.

#### 3.12.1. Print

The **Print** function of the ribbon menu or the pop-up menu is used to print directly without borders and without backgrounds (display in an automatic preview).
4. Project management

In the projects tab, create your projects in advance and list all projects.

4.1. List of projects

Display your pop-up menu by right-clicking on the mouse and click on Add, Edit or Delete a project.

This pop-up menu authorizes archiving or re-opening of a project. It provides access to the detail of the project by displaying the list of documents and pages.

It is also possible to organize the documents and pages. This order shall be respected each time you need to access the list of documents or the list of pages.

Projects with the archived status will no longer form part of the lists of projects in the document management all the time they have this status.

Export button in the quick access bar of the main menu offers the possibility to create an export to excel or send it by mail.

If the Excel export is carried out under the same file name, it is added to the list. The date of export allows to identify them.

If an export is done on a file opened in Excel, the application will display a warning on the lack of access in writing to the file.

All standard functions of Excel can be used to organize your data (filter, search, print ...).

4.2. Projects

A menu accessible by right-clicking on the mouse is used to export or import projects to hard disk. These functions replace the "copy/paste" function for a project and are used to physically archive projects on the disk of your computer. These files will have the extension *.sat

4.3. Information project

The project name, the document name, and the page number are all automatically printed on the boards.

The statement “Page :” will be translated depending on the employed language.
VII. Errors Messages

When the application signals an error, drag your mouse cursor to the corresponding area to know the reason of the error that has occurred.

VIII. Keyboard shortcut list

4.1. Documents
- Ctrl + « Num pad key ‘+’ « : Increase the zoom
- Ctrl + « Num pad key ‘-’ « : Decrease the zoom
- Ctrl + S : Save the current project
- Ctrl + Z : Cancel all the changes
- Ctrl + N : Add a new project
- Ctrl + P : Print the selected pages
- Ctrl + E : Export the current project
- Ctrl + I : Import a project
- Ctrl + F : Show Find/Replace form
- Ctrl + O : Show Projects organization form
- Ctrl + A : To select all
- Ctrl + C : To copy
- Ctrl + X : To cut
- Ctrl + V : To paste
- Insert : Insert a new page
- Shift + Del (« Suppr ») : Delete the selected pages
- F3 : Show Print adjustment form

4.2. Projects
- Insert : Add a new project
- Shift + Del (« Suppr ») : Delete the selected project
- Ctrl + E : Export the selected project
- Ctrl + I : Import a project
- Ctrl + O : Show Projects organization form

4.3. Serial numbers
- Insert : Add a new counter
- Shift + Del (« Suppr ») : Delete the selected counter

4.4. Data sources
- Insert : Add a new Data source
- Shift + Del (« Suppr ») : Delete the selected Data source
IX. What you need to know about

1. Projects:
   • You wish to create a new project:
     `Documents/Projects`  
     `Documents/Documents`.
   • You wish to copy a project:
     `Documents/Documents`: select your project from the list of projects (at the top left of your work zone). Right-click on the mouse and select “Save project as...”. Your project is then duplicated.
     Export your project (using the pop-up menu: right-click). Import it by right-clicking on the mouse. If you do not rename your project, it is duplicated with the same name followed by an asterisk (*). Rename your project via the «Edit» pop-up menu.

2. Print
   • You wish to print a project:
     `Documents`, view your project and check your pages. Select all the pages of the current document. Go to the print preview to print your pages as on the screen (with the borders or the backgrounds). Click on “Print” if you wish to print without marking.
     The current version is not intended to print a whole project in one go.
   • You wish to print a document:
     `Documents`, view your project and your document, then select one or more pages of your document before printing (either through the preview, or by direct printing).
     You wish to adjust the print of your document to your printer:
     if your print is offset in relation to the marker sheet, first select a single page and print it using the print preview key in order to retain the backgrounds of the margins and the markers which will help you to calculate and determine the offset; then carry out an offset using the Adjust the print key.

3. Save / Exports / imports
   • You wish to save your project on the disk of your computer:
     `Documents`, view your project and export it to the directory of your choice.
   • You can also export your projects one at a time without opening them from the Projects tab.
     Right-click in the list, then select Export.
     Possibility of exporting a document or a page.
   • You can also import your projects from the Projects tab.
     Right-click in the list, then select Import.
     Possibility of importing a document or a page in the documents tab.

4. Serial number
   • Serial numbers: You wish to create a new counter:
     `Documents/Documents`: check Serialnumber and access the serial number management: press the Edit button of the Import tool bar, located to the right of the work zone.

5. Data sources
   • Data sources: You wish to create a new data source:
     `Documents/Documents`: check Sources and access the data source management: press the Edit button of the Import tool bar located to the right of your work zone.

6. SAT model
   • You wish to use a model:
     `Documents` you have the models published by ABB: select a default model for all or part of a project.
     In the same document, you can use pages associated with different models.
   • You wish to add a model to your database: you have just retrieved a new SAT model from the ABB.fr site:
     `Documents`, open the pop-up menu by right-clicking on the mouse and select Import model.
Note: