



AUCOTEC
Create Synergy – Connect Processes

Engineering Base

Terminal Connection Assistant

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1 Terminal Connection Assistant - Assistant for the Representation of Distributed Terminals

With this assistant, you can individually assign terminal connections in the graphic. This function is required if the terminal connections are to be represented in a distributed manner. In this process, several users can work in the same project simultaneously.



The changes made only affect the symbol of the selected terminal(s).

When multiple terminals are displayed in a distributed manner, the terminal connectors are named (e.g. A, B, C).



The terminal attribute **Lock Structure** must not be marked so that a terminal can be edited.

To run the terminal connection assistant

1. Click **Open Sheet with Visio** to open the circuit diagram containing the terminal that is displayed in a distributed manner.
2. Select the terminal that is represented in a distributed manner (first representation on the diagram).

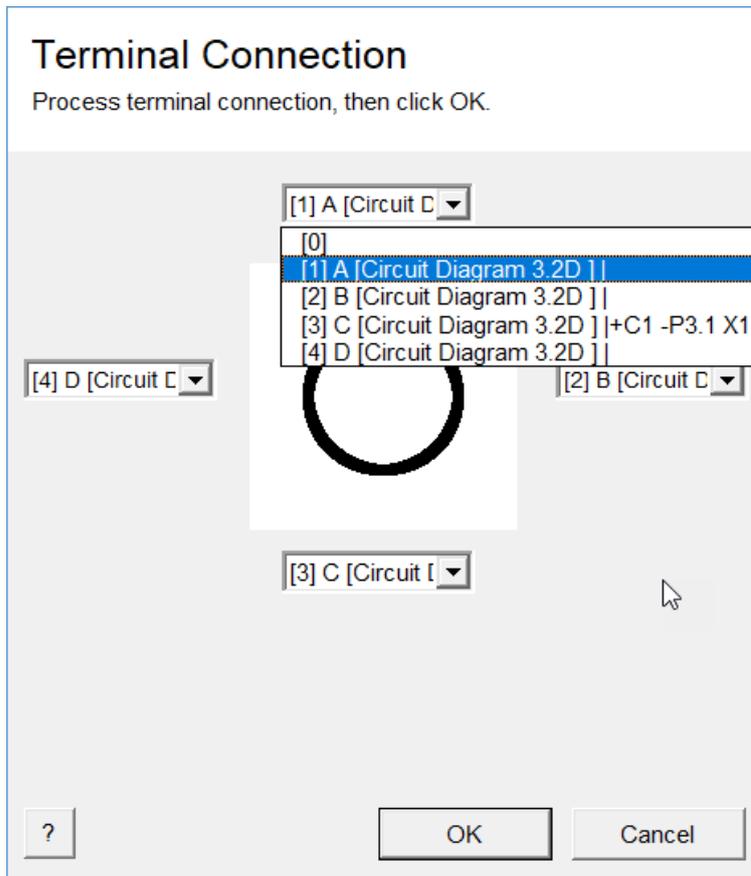
You can also select several symbols at the same time.

- Select a terminal symbol, then select further terminal symbols while keeping the **CTRL** key pressed.
- Drag a selection frame around all terminal symbols you want to edit.

If you have also selected symbols other than only terminal symbols, a message is displayed.

3. On the shortcut menu, click **Terminal Connection** or click **Select Assistant**, select the **Terminal Connection** assistant and click **Run**.

This opens the **Terminal Connection** dialog.



All connectors (A, B, C, D) are listed for the terminal.

If the **Lock Structure** attribute is selected at the terminal, the pin position [0] is not displayed in the selection list.

Depending on whether you have selected one or several terminal symbols, the following information is displayed in the selection lists of the pins:

- one terminal selected:
[pin position] pin designation [cross-reference to the pin display in the diagram]] designation of the target connector
 e.g. [1] A [Circuit Diagram 2.3.D]]+C1 -S2.1 14.
- several terminals selected:
[pin position] pin designation

For the distributed display, the connectors of the terminal are distributed over the terminal representations placed several times, i.e. the connectors are represented at a different position in the graphic representation.



Changing the position of the connectors in the graphic representation does not affect the order of the connectors in the Explorer!

With regard to the plant objects, e.g. the connector **A** remains on position 1, but **A** at the symbol is displayed at another location.

4. Via the pull-down menu, assign the pin position [0] to the connectors which are not to be considered in this representation in the diagram.
5. Click **OK** to save the changes.

6. On the diagram, select the terminal that is represented in a distributed manner (second representation).
7. Start the **Terminal Connection** assistant.
8. Assign the pin position [0] to the connectors which are not to be considered in this representation in the diagram.
9. Click **OK** to save the changes.

Cancel closes the assistant without saving the changes made.



The Terminal Connection assistant has created a connection with the pin position =0 (electrical) in the object model (explorer) which is available at the distributed terminal shapes several times. This connector is automatically managed by the Terminal Connection assistant.

The following aspects need to be considered for multiple selections of terminal symbols:

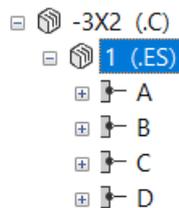
- The selected terminals must have the same number of pins.
- All pins of one pin position must have the same pin designation. (e.g. all pins of pin position "1" have the pin designation "A").
- The pins may be distributed differently at the symbols. The pins of all symbols are displayed in a unique way by the Terminal Connection assistant.

1.1 Example of a terminal with 4 pins

The objective is that the first representation of the terminal is to be executed only with pin A and the representation with the pins B and C is to be executed on another sheet or path.

For this purpose, the terminal has to be placed twice, and both shapes have to be processed using the Terminal Connection assistant.

The following example shows how a terminal (+C1 -3X2 1) can be displayed in a distributed manner on the circuit diagram.



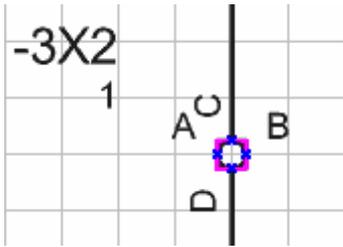
Representation of the sample terminal in the Explorer

4 Record(s)	Part of	Designation	Comment	Type	Pin Position
Filter	*	*	*	*	*
1	+C1 -3X2 1	A		Electrical	1
2	+C1 -3X2 1	B		Electrical	2
3	+C1 -3X2 1	C		Electrical	3
4	+C1 -3X2 1	D		Electrical	4

Connector diagram of the sample terminal +C1 -3X2 1

Procedure

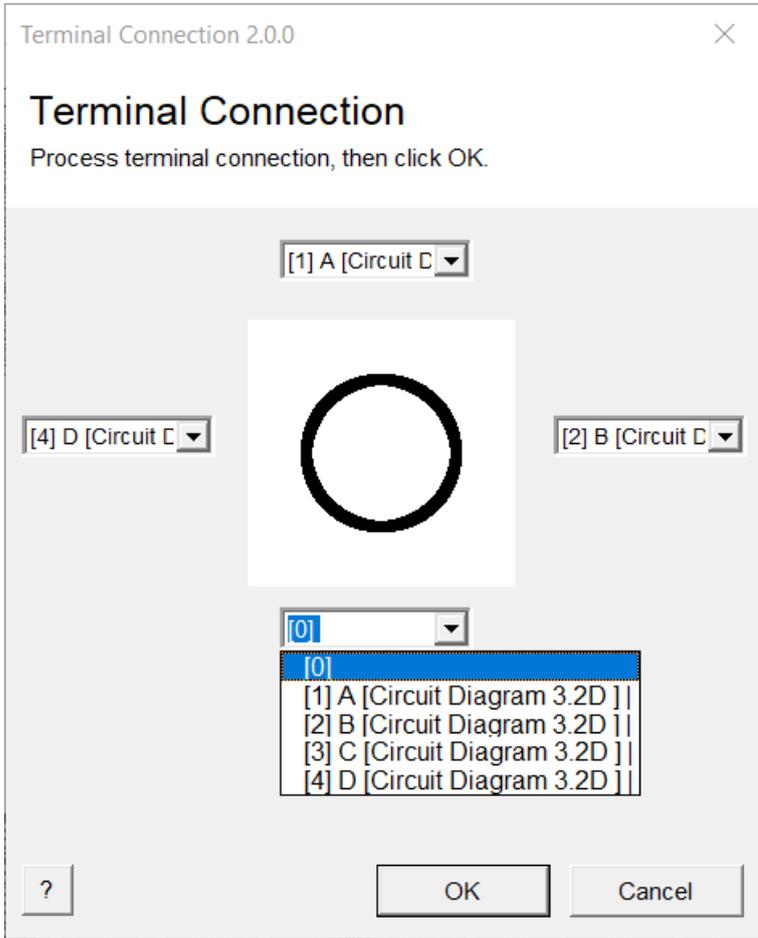
1. Open the required circuit diagram.
2. Mark the terminal in the Explorer and drag the matching terminal shape to the diagram. All 4 named pins are displayed at the shape.



Sample terminal in a circuit diagram

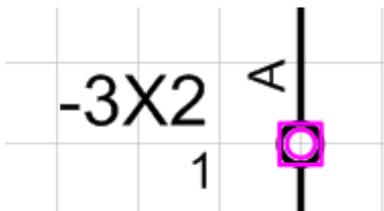
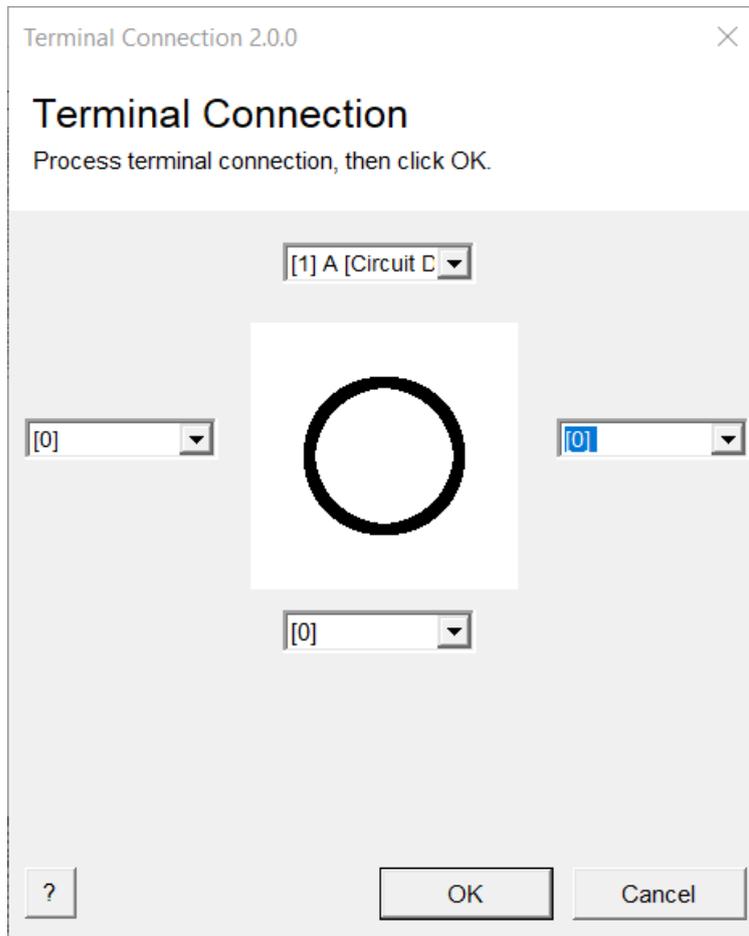
The objective is to represent the terminal only with the pin A at this position.

- 3. Start the Terminal Connection assistant as described above.



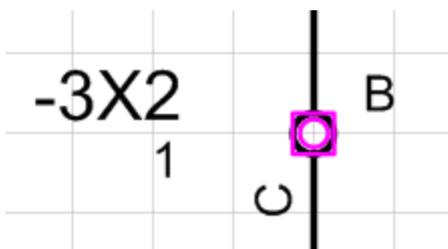
Sample terminal in the Terminal Connection assistant

- Assign the pin position [0] to the connectors B, C and D via the pull-down menu and click **OK**.



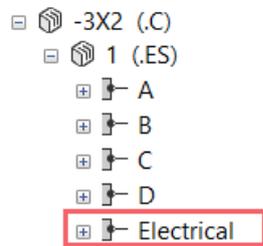
First representation of the sample terminal – only the pin A is displayed at the shape.

- Place the second shape of the terminal on another path or another sheet.
- Start the Terminal Connection assistant as described above.
- Assign the pin position [0] to the connectors A and D via the pull-down menu and click **OK**.



Second representation of the sample terminal – only the pins B and C are displayed at the shape.

Now, the terminal is represented in a distributed way. A pin with pin position = 0 (Electrical), created by the Terminal Connection assistant in the object model (Explorer), is then available at each of the distributed terminal shapes.



Display of a multiply represented sample terminal in the Explorer