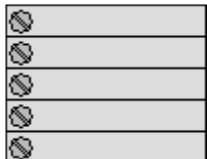


## TechTip: Sorting terminals

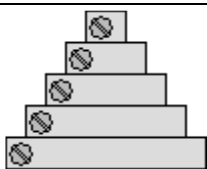
... and why the sorting does not form multi-level terminals anymore.

The sorting functions for terminal strips always affect the [Terminal device](#).


- All terminals have the same device position and are located on the same level:

Row	Main terminal	Terminal designation	Level	Preview
1, 2,	<input checked="" type="checkbox"/>	1	0	
3, 4,	<input type="checkbox"/>	2	0	
5	<input type="checkbox"/>	3	0	
	<input type="checkbox"/>	4	0	
	<input type="checkbox"/>	5	0	

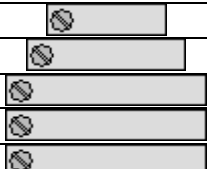
- All terminals have the same device position and are located on decreasing levels. All terminals belong to a multi-level terminal.

Row	Main terminal	Terminal designation	Level	Preview
6, 7,	<input checked="" type="checkbox"/>	L1	5	
8, 9,	<input type="checkbox"/>	L2	4	
10	<input type="checkbox"/>	L3	3	
	<input type="checkbox"/>	N	2	
	<input type="checkbox"/>	PE	1	

- Terminals 6, 7 and 8 form a multi-level terminal since the levels are decreasing. The terminals 9 and 10 are independent terminals respectively. However, they also belong to the same terminal device. The device positions are therefore identical.

Row	Main terminal	Terminal designation	Level	Preview
11,	<input checked="" type="checkbox"/>	6	3	
12,	<input type="checkbox"/>	7	2	
13,	<input type="checkbox"/>	8	1	
14,	<input type="checkbox"/>	9	0	
15	<input type="checkbox"/>	10	0	

- Even if the levels of terminals 11, 12 and 13 are decreasing, they are not independent terminals since the device positions are different. Therefore each terminal is its own terminal device.

Row	Main terminal	Terminal designation	Level	Preview
16	<input checked="" type="checkbox"/>	11	3	
17	<input type="checkbox"/>	12	2	
18	<input type="checkbox"/>	13	1	
19	<input type="checkbox"/>	14	0	
20	<input type="checkbox"/>	15	0	

## Sorting possibilities

In the terminal strip navigator the sorting takes place via the **Sort terminal strip** popup menu, in the **Edit terminal strip** dialog via the **[Sort]** button.

### Delete sorting

Deletes both the device position as well as the sort code.

#### Warning:

An automatic combination of the terminals into terminal devices from one main terminal to the next one takes place subsequently in the **terminal strip navigator**.

In the **Edit terminal strip** dialog, this only happens after the button **[Apply]** or **[OK]** has been clicked. If a new sorting is performed beforehand, each terminal is viewed individually.

### Sorting according to different criteria

The different types of sorting are described in the EPLAN Help in the section "[Dialog Edit terminal strip](#)".

## Behavior of multi-level terminals

#### Note:

The difference between multi-level terminals and terminal devices is not obvious at a glance neither in the terminal strip navigator nor in the **Edit terminal strip** dialog. If necessary, you have to observe the properties of the corresponding terminals.

Only levels that are numbered in ascending or descending order are combined within a device as a multi-level terminal.













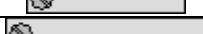







Special case "Level 0": This level cannot be used for the formation of multi-level terminals.

Multi-level terminal generation therefore changes the device position and the levels by using the functionality **[Generate multi-level terminal]**.

## Graphical distinction between "Delete sorting" in the terminal strip navigator and in the "Edit terminal strip" dialog

On the basis of the descriptions above in the first section the sorting is now deleted.

The following terminal overview is displayed:

Row	Main terminal	Terminal designation	Level	Preview
1	<input checked="" type="checkbox"/>	1	0	
2	<input type="checkbox"/>	2	1	
3	<input type="checkbox"/>	3	1	
4	<input type="checkbox"/>	4	1	
5	<input type="checkbox"/>	5	0	
6	<input checked="" type="checkbox"/>	6	3	
7	<input type="checkbox"/>	7	2	
8	<input type="checkbox"/>	8	1	
9	<input type="checkbox"/>	9	0	
10	<input type="checkbox"/>	10	0	
11	<input checked="" type="checkbox"/>	11	3	
12	<input type="checkbox"/>	12	2	
13	<input type="checkbox"/>	13	1	
14	<input type="checkbox"/>	14	0	
15	<input type="checkbox"/>	15	0	
16	<input checked="" type="checkbox"/>	L1	5	
17	<input type="checkbox"/>	L2	4	
18	<input type="checkbox"/>	L3	3	
19	<input type="checkbox"/>	N	2	
20	<input type="checkbox"/>	PE	1	

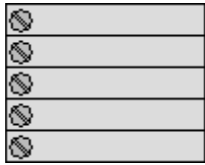
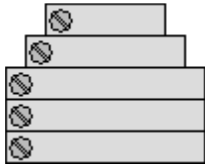
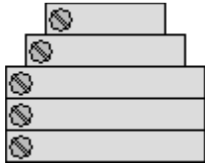
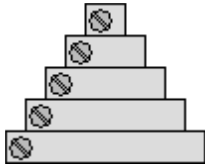
The device position and the sort code are empty respectively.

Without device position and sort code the terminals are displayed alphanumerically sorted. The terminals L1, L2, L3, N and PE are now in the last positions.

This status is only retained within this dialog!

Button	Effect
<b>[Cancel]</b>	The "Delete sorting" action is reversed.
<b>[OK]</b>	In the background terminals are combined from one main terminal to the next one into terminal devices.
<b>[Apply]</b>	Terminals are combined from one main terminal to the next into terminal devices.

After **[Apply]**

Row	Main terminal	Terminal designation	Level	Preview
1, 2, 3, 4, 5	<input checked="" type="checkbox"/>	1	0	
	<input type="checkbox"/>	2	1	
	<input type="checkbox"/>	3	1	
	<input type="checkbox"/>	4	1	
	<input type="checkbox"/>	5	0	
6, 7, 8, 9, 10	<input checked="" type="checkbox"/>	6	3	
	<input type="checkbox"/>	7	2	
	<input type="checkbox"/>	8	1	
	<input type="checkbox"/>	9	0	
	<input type="checkbox"/>	10	0	
11, 12, 13, 14, 15	<input checked="" type="checkbox"/>	11	3	
	<input type="checkbox"/>	12	2	
	<input type="checkbox"/>	13	1	
	<input type="checkbox"/>	14	0	
	<input type="checkbox"/>	15	0	
16, 17, 18, 19, 20	<input checked="" type="checkbox"/>	L1	5	
	<input type="checkbox"/>	L2	4	
	<input type="checkbox"/>	L3	3	
	<input type="checkbox"/>	N	2	
	<input type="checkbox"/>	PE	1	






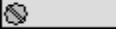








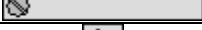




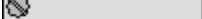
The terminals were combined in accordance with the order of the terminal devices.

## Differences between the sortings in the terminal strip navigator and in the "Edit terminal strip" dialog

Example: "Page-based" sorting


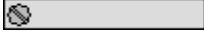


















### Individual steps in the "Edit terminal strip" dialog

#### 1. [Sort] > Delete sorting

Row	Main terminal	Terminal designation	Level	Preview
1	<input checked="" type="checkbox"/>	1	0	
2	<input type="checkbox"/>	2	1	
3	<input type="checkbox"/>	3	1	
4	<input type="checkbox"/>	4	1	
5	<input type="checkbox"/>	5	0	
6	<input checked="" type="checkbox"/>	6	3	
7	<input type="checkbox"/>	7	2	
8	<input type="checkbox"/>	8	1	
9	<input type="checkbox"/>	9	0	
10	<input type="checkbox"/>	10	0	
11	<input checked="" type="checkbox"/>	11	3	
12	<input type="checkbox"/>	12	2	
13	<input type="checkbox"/>	13	1	
14	<input type="checkbox"/>	14	0	
15	<input type="checkbox"/>	15	0	
16	<input checked="" type="checkbox"/>	L1	5	
17	<input type="checkbox"/>	L2	4	
18	<input type="checkbox"/>	L3	3	
19	<input type="checkbox"/>	N	2	
20	<input type="checkbox"/>	PE	1	

















The terminals L1, L2, L3, N and PE have been moved to the end.




2. **[Sort]** > Page-based

Row	Main terminal	Terminal designation	Level	Preview
1	<input checked="" type="checkbox"/>	1	0	
2	<input type="checkbox"/>	2	1	
3	<input type="checkbox"/>	3	1	
4	<input type="checkbox"/>	4	1	
5	<input type="checkbox"/>	5	0	
6	<input checked="" type="checkbox"/>	L1	5	
7	<input type="checkbox"/>	L2	4	
8	<input type="checkbox"/>	L3	3	
9	<input type="checkbox"/>	N	2	
10	<input type="checkbox"/>	PE	1	
11	<input checked="" type="checkbox"/>	6	3	
12	<input type="checkbox"/>	7	2	
13	<input type="checkbox"/>	8	1	
14	<input type="checkbox"/>	9	0	
15	<input type="checkbox"/>	10	0	
16	<input checked="" type="checkbox"/>	11	3	
17	<input type="checkbox"/>	12	2	
18	<input type="checkbox"/>	13	1	
19	<input type="checkbox"/>	14	0	
20	<input type="checkbox"/>	15	0	

Through the page orientation the terminals L1, L2, L3, N and PE have moved up again (in accordance with their placement on the page). The terminals are not combined.

3. **[Apply]**

Row	Main terminal	Terminal designation	Level	Preview
1	<input checked="" type="checkbox"/>	1	0	
2	<input type="checkbox"/>	2	1	
3	<input type="checkbox"/>	3	1	
4	<input type="checkbox"/>	4	1	
5	<input type="checkbox"/>	5	0	
6	<input checked="" type="checkbox"/>	L1	5	
7	<input type="checkbox"/>	L2	4	
8	<input type="checkbox"/>	L3	3	
9	<input type="checkbox"/>	N	2	
10	<input type="checkbox"/>	PE	1	
11	<input checked="" type="checkbox"/>	6	3	
12	<input type="checkbox"/>	7	2	
13	<input type="checkbox"/>	8	1	
14	<input type="checkbox"/>	9	0	
15	<input type="checkbox"/>	10	0	
16	<input checked="" type="checkbox"/>	11	3	










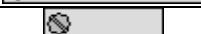










Row	Main terminal	Terminal designation	Level	Preview
17	<input type="checkbox"/>	12	2	
18	<input type="checkbox"/>	13	1	
19	<input type="checkbox"/>	14	0	
20	<input type="checkbox"/>	15	0	

Each terminal is a separate terminal device, since new device positions were already assigned during the sorting.

### First steps in the terminal strip navigator

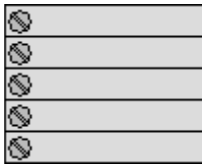
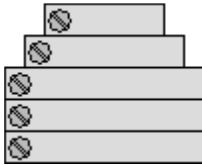
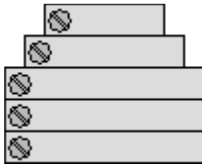
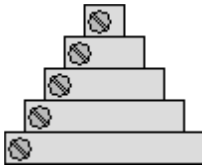
A different result is achieved with the terminal strip navigator since combining is first carried out before sorting. By way of illustration the result is shown in the editing dialog here.

#### 1. [Sort] > Delete sorting

Row	Main terminal	Terminal designation	Level	Preview
1	<input checked="" type="checkbox"/>	1	0	
2	<input type="checkbox"/>	2	1	
3	<input type="checkbox"/>	3	1	
4	<input type="checkbox"/>	4	1	
5	<input type="checkbox"/>	5	0	
6	<input checked="" type="checkbox"/>	6	3	
7	<input type="checkbox"/>	7	2	
8	<input type="checkbox"/>	8	1	
9	<input type="checkbox"/>	9	0	
10	<input type="checkbox"/>	10	0	
11	<input checked="" type="checkbox"/>	11	3	
12	<input type="checkbox"/>	12	2	
13	<input type="checkbox"/>	13	1	
14	<input type="checkbox"/>	14	0	
15	<input type="checkbox"/>	15	0	
16	<input checked="" type="checkbox"/>	L1	5	
17	<input type="checkbox"/>	L2	4	
18	<input type="checkbox"/>	L3	3	
19	<input type="checkbox"/>	N	2	
20	<input type="checkbox"/>	PE	1	

The terminals L1, L2, L3, N and PE have been moved to the end (identical with the image shown above).

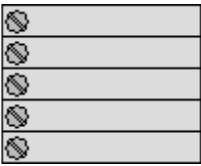
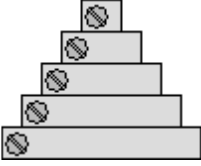


2. **[Apply]** (happens automatically in the Navigator)

Row	Main terminal	Terminal designation	Level	Preview
1, 2, 3, 4, 5	<input checked="" type="checkbox"/>	1	0	
	<input type="checkbox"/>	2	1	
	<input type="checkbox"/>	3	1	
	<input type="checkbox"/>	4	1	
	<input type="checkbox"/>	5	0	
6, 7, 8, 9, 10	<input checked="" type="checkbox"/>	6	3	
	<input type="checkbox"/>	7	2	
	<input type="checkbox"/>	8	1	
	<input type="checkbox"/>	9	0	
	<input type="checkbox"/>	10	0	
11, 12, 13, 14, 15	<input checked="" type="checkbox"/>	11	3	
	<input type="checkbox"/>	12	2	
	<input type="checkbox"/>	13	1	
	<input type="checkbox"/>	14	0	
	<input type="checkbox"/>	15	0	
16, 17, 18, 19, 20	<input checked="" type="checkbox"/>	L1	5	
	<input type="checkbox"/>	L2	4	
	<input type="checkbox"/>	L3	3	
	<input type="checkbox"/>	N	2	
	<input type="checkbox"/>	PE	1	

The terminals are combined from one main terminal to the next main terminal into terminal devices.



3. [Sort] > Page-based

Row	Main terminal	Terminal designation	Level	Preview
1, 2, 3, 4, 5	<input checked="" type="checkbox"/>	1	0	
	<input type="checkbox"/>	2	1	
	<input type="checkbox"/>	3	1	
	<input type="checkbox"/>	4	1	
	<input type="checkbox"/>	5	0	
6, 7, 8, 9, 10	<input checked="" type="checkbox"/>	L1	5	
	<input type="checkbox"/>	L2	4	
	<input type="checkbox"/>	L3	3	
	<input type="checkbox"/>	N	2	
	<input type="checkbox"/>	PE	1	
11, 12, 13, 14, 15	<input checked="" type="checkbox"/>	6	3	
	<input type="checkbox"/>	7	2	
	<input type="checkbox"/>	8	1	
	<input type="checkbox"/>	9	0	
	<input type="checkbox"/>	10	0	
16, 17, 18, 19, 20	<input checked="" type="checkbox"/>	11	3	
	<input type="checkbox"/>	12	2	
	<input type="checkbox"/>	13	1	
	<input type="checkbox"/>	14	0	
	<input type="checkbox"/>	15	0	

The terminal devices are sorted in such a way that the sorting criteria respectively affect the **first** terminal of the device. This does not have to be the main terminal. In this image the terminals L1 to PE have moved upwards again (line 6 - 10).