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Distribution board arrangement

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Description

The invention relates to a distribution board arrangement according to the preamble of Claim 1.

10 Such a distribution board arrangement has been disclosed in DE 196 28 957.2. This comprises an insulated housing in which busbars are accommodated, and on which it is possible to fasten circuit breakers, residual current devices and other electric switching
15 devices. Projecting plug pins which can be connected to the busbars using plug-in technology are located on the fastening sides of the individual switching devices. Located on the insulating housing are cutouts, and located on the switching device are noses or
20 projections which engage in the cutouts on being snapped on. These cutouts or noses serve only to guide the individual switching devices, thereby ensuring that the plug elements can be plugged into the corresponding retaining openings on the busbars.

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The object of the invention is to create a distribution board arrangement in which it is ensured that specific switching devices can also be installed at places predetermined therefor.

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This object is achieved according to the invention by means of the features of Claim 1.

According to the invention, means for ensuring
35 polarization when plugging are located on the fastening side and the insulating housing.

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These means can be constructed as pins on the switching device and openings on the insulating housing, or vice versa, specific switching devices having a pin with a specific diameter which can be inserted only into its associated and fitting opening, whereas other switching devices have a pin with a different diameter which can be inserted into its associated and fitting opening in such a way that a switching device can be mounted only at the point on the insulating housing intended therefor.

The invention and further advantageous refinements and improvements of the invention are to be explained in more detail and described with the aid of the drawing, in which an exemplary embodiment of the invention is illustrated, and in which:

Figure 1 shows a diagrammatic illustration of a switching device, in a perspective view of the fastening surface,

Figure 2 shows a plan view of an insulated housing with a switching device plugged on, and

Figure 3 shows a sectional view in accordance with the line of section III-III in Figure 2.

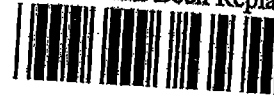
Figure 1 shows the underside of a service switching device 10 which has on its fastening side a cutout 11 on which there are arranged a fixed nose 12 and a movable nose 13 which point towards one another and which can be snapped into place behind attachments 14 and 15, which are of the top-hat rail type, of an insulating housing 16.

Projecting outwards on the fastening surface is a lug-type plug pin 17 which, after mounting, can make contact with terminal contact elements 18 of busbars 19 in the insulating housing 16. Located next to the lug

17 is a pin 20, which protrudes at right angles to the fastening surface and can be plugged into cutouts 21,22 in the mounted state.

- 5 In this arrangement, the pin 20 is adapted to the cutout 21 or to the cutout 22, depending on what sort of switching device the switching device 10 is.

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Patent Claims

1. Distribution board arrangement having circuit
5 breakers, residual current devices, which can be
fastened in line with one another on an insulating
housing, in which busbars are accommodated, and
having contact elements which are fitted on the
fastening side and can be connected to the busbars
10 by means of plug-in technology, characterized in
that means for ensuring polarization when plugging
are provided on the fastening base and the
insulating housing.
- 15 2. Distribution board arrangement according to Claim
1, characterized in that the means are pins on the
switching device and openings on the insulating
housing, or vice versa, and in that specific
switching devices, for example residual current
20 devices, have a pin or an opening with a first
diameter, it being possible to insert associated
pins only into their associated and fitting
opening, whereas other devices, for example
circuit breakers, have a pin or an opening with a
25 second diameter which can be inserted into its
associated fitting opening or pin in such a way
that a switching device of a specific type can be
mounted only at the point on the insulating
housing intended therefor.
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