CLAIMS

1. An apparatus for controlling power distribution comprising:

an input unit (11) for receiving power from a busbar contact (12);

a control unit (13) connected to the input unit (11) for controlling power; and

an output unit (14) for distributing power to a load via an outgoing terminal (15);

wherein said input unit (11) comprises at least a first connector (16) for connecting with at least a first contact device (17) coupled to the busbar contact (12), and that said output unit (14) comprises at least a second connector (18) for connecting with at least a second contact device (19) coupled to the outgoing terminal (15);

characterized in that the input unit (11) comprises a spring mechanism (22) coupled to the busbar contact (12), and said first contact device (17) as an interconnecting bridge between the busbar contact (12) and said first connector (16), said first connector (16) is received by receiving end of said first contact device (17), while being in a closed position, the receiving end is exerted by an expansion force to open the receiving end so as to receive said first connector (16), in a manner that the exertion of the expansion force causes the opposite end, being coupled to a busbar contact (12), to be compressed by reaction force and provides contact pressure onto the busbar contact (12), such that self-aligning of said first connector (16) to said first contact device (17) is facilitated;

the output unit (14) comprises said second contact device (19) with a spring mechanism (23) which is located between connection of said second contact device (19) to said second connector (18) and the connection of said second contact device (19) to the outgoing terminal (15), and said second contact device (19) is configured for aligning said second connector (18) through connection with said second contact device (19), and that the first connector (16) is a connecting pin containing a section with a polygonal cross-section having a rectangular surface area, while the first contact device (17) is configured to accommodate and clamp the specified first contact, such that the first contact device

(17) is made in a manner it contains a part of a flat surface for engagement with the busbar contact (12) and the first connector (16), and while the flat surface of the first contact device (17) on the busbar contact (12) is larger than the flat surface of the first connector (16) for preventing welding of the contacts on the busbar contact (12) during an electrical short circuit.

2. An apparatus for controlling power distribution according to claim 1, wherein said at least a first contact device (17) and said at least a second contact device (19) are configured for preventing contact repulsion.

3. An apparatus for controlling power distribution according to claim 1, wherein said first contact device (17) is configured for preventing contact welding at the busbar contact (12).

4. An apparatus for controlling power distribution according to claim 1, wherein said first connector (16) and said second connector (18) are connecting pins.

5. An apparatus for controlling power distribution according to claim 4, wherein said connecting pins comprise a polygonal cross section area.

6. An apparatus for controlling power distribution according to claim 1, wherein said first contact device (17) is for receiving and clamping the busbar contact (12) at one end of said first contact device (17), and for receiving and clamping said first connector (16) at another end of said first contact device (17).

7. An apparatus for controlling power distribution according to claim 1, wherein said second contact device (19) is for receiving and clamping said second connector (18) at one end of said second contact device (19).

8. An apparatus for controlling power distribution according to claim 7, wherein another end of said second contact device (19) comprises single layer protrusion which is bent and terminated at said outgoing terminal (15).

9. An apparatus for controlling power distribution according to claim 7, wherein another end of said second contact device (19) comprises double layer protrusion which is bent and terminated at the outgoing terminal (15).

10. An apparatus for controlling power distribution according to claim 1, wherein said first contact device (17) and said second contact device (19) comprise a spring mechanism.