

## Abstract

The invention relates to a method (38) for operating a power distributor (2), having a  
5 first controller (4), and having a number of connected connection modules (16), each  
of which comprises a base resistor (34), which form a resistor chain (32) connected in  
series, which chain is supplied by means of a DC source (8) of the first controller (4)  
and is guided against a reference potential (10). Each connection module (16) has a  
supply connector (26) and a bus connector (22) of a common bus system (24), which  
10 is signal-connected to the first controller (4). The connection modules (16) are  
equipped or can be equipped with a circuit breaker (18), each of which has a second  
controller (20) for detecting the electrical voltage dropping at the associated base  
resistor (34) and which have a switch element (30) operable by means of the  
respective second controller (20), which element is connected between the side of the  
15 associated base resistor (34) facing away from the first controller (4) and the reference  
potential (10), and which is signal-connected with the associated bus connector (22)  
and energized by means of the supply connector (26). It is ensured that the switch  
element (30) of each circuit breaker (18) is closed if the circuit breaker (18) has no  
assigned address, and by means of the first controller (4), a query (46) is fed into the  
20 bus system (24). By means of the second controller (20), a response (50) is fed into  
the bus system (24) if an electrical voltage drops above the associated base resistor  
(34). Furthermore, the invention relates to a power distributor (2) and a circuit breaker  
(18).

25 FIG. 2