

ABSTRACT

5 DYNAMIC CONNECTION SWITCHING OF ELECTRIC POWER SUPPLIES

The present invention relates to a system (200) for managing the electric power supply of a plurality of apparatuses (BS1, BS2, BS3, BS4) in a facility (300), in which each of the apparatuses, which consume electric energy, are electrically connected to a plurality of electric power supply sources (A, B, C, D) via at least one distribution device (100, 100'), each of the power supply sources (A, B, C, D) having a predetermined performance curve, and in which said at least one distribution device (100, 100') comprises switching elements ({11, 12, 13, 14; 21, 22, 23, 24}; {11', 12', 13', 14'; 21', 22', 23', 24'}) configured to distribute the electric energy necessary for the operation of the apparatuses, said at least one distribution device (100, 100') comprises: a central processing unit (30, 30') for determining a load plan on the basis of at least one subscribed power for each of the apparatuses and a distribution algorithm; and control circuits configured to control said switching elements ({11, 12, 13, 14; 21, 22, 23, 24}; {11', 12', 13', 14'; 21', 22', 23', 24'}) in real time on the basis of said load plan, in such a way so as to perform dynamic connection switching of said apparatuses (BS1, BS2, BS3, BS4) to the power supply sources (A, B, C, D).

Abstract figure: figure 1