

TECHNICAL INFORMATION

Electrical Switchgear and Controlgear Assemblies

4.2 BUSBAR SYSTEM

4.2.1 BUSBAR CONFIGURATION

The busbar system is the heart of any Low Voltage Panel, and it provides the electrical connections between the incoming Air Circuit Breaker and the outgoing units. It is thus essential that the busbar system is a reliable tested system meeting the requirements of temperature rise, short circuit and other conditions as described in the International Standards.

The Løgstrup Busbar System consists of modular components, which allows unlimited variations and ratings. Three, four and five wire systems can be designed with ease, and ratings up to 6300A are standard.

The Busbar System is based on a two bar per phase system, both horizontal and vertical, eliminating time consuming drilling and bending of copper bars. The Busbar joints are by means of bolts and nuts of 8.8 quality in connection with special spring washers type DIN 6796. All bolts are tightened with a torque as described in section 4 page 43 in The Løgstrup Product Catalogue.

The connections between the horizontal and vertical bars are made by a special busbar connector system and it secures a good and stable connection.



When joining two panel sections special fishplate connections are used. They are easy to mount and secure a good and reliable connection.



The busbar holder components are manufactured from a high grade polymer which provides a high insulation for the copper bar, good mechanical and thermal strength to meet the stress during a short circuit and ability to withstand variations in temperature during service conditions.

The system has been tested by IPH, ASTA and KEMA laboratories, and has passed type tests according to IEC 439-1, EN60439-1, DIN VDE 0660-500/04 and BS 5486-2.