



## Blackburn Starling Achieves New Levels

Established in 1870, Nottingham based Blackburn Starling has been producing electrical switchboards since the 1920's, and from the early 1960's began designing and producing high quality Motor Control Centres.

As an independent producer, it was deemed appropriate to develop a propriety busbar support system that was initially tested to 31MVA for 1s. Since those days we have continued to

develop and test our designs and capabilities to ensure compliance with the introduction of and changes to - BS4070:1966, BS5486, and BS EN 60439:1999.

Over the past 40 years we have instigated and maintained a continuous improvement program ensuring ongoing development and testing of our products. Accreditation at fault levels of 25kA for 1s, 50 kA for 1 and 3s, 70kA for 1s, and to 80kA for 1s were developed to satisfy historical market sectors.



To ensure continued development into additional market sectors we have recently tested and achieved **fault levels at 100kA for 1s**.



The system specification being: -

Busbars	In = 6300A	Icw = 100kA,	Ue= 690V
Vertical	In = 2400A	n = 2.3	Ui = 1000V
ACB	In = 3200A	(230kA peak)	Uimp = 8kV

A series of short circuit tests were applied to the entire 3-phase neutral and earth system, including horizontal and vertical busbars (for feeding high density feeder sections = 20 x 200A) and ACB connections, this was then followed by dielectric testing at 3.5kV.

The busbar supports are manufactured from DMC - grade 43-2140 - UL94-V0 rated.

Switchboards incorporating 4P, 6300A, 100kA busbars and ACB's (or paralleled supplies) are increasingly used on installations requiring heavy power distribution, secure switching systems or oversized neutrals to cater for the harmonics generated by computer-based installations.

Larger incoming circuits/fault levels can reduce the need to use higher impedance transformers as a means to reduce the fault rating - these higher transformers losses increase plant-operating costs over the typical 30-year life of our products.





***BLACKBURN STARLING's*** range of product portfolio includes fixed pattern, plug-in, and withdrawable Switchboards and Motor Control Centres at both LV and MV (to 24kV) voltages, as well as extensive ICA / PLC / SCADA / MIS / MES systems.