

## CASE STUDY DATA SHEET

## Stainless Steel MCCB and MCB Boards, rated at IP56 and IP66

When one of Britain's busiest container ports decided to upgrade part of its electrical distribution system they contacted the Blakley Projects Team to see if we could assist with the design and manufacture of a significant quantity of high specification MCCB and MCB distribution boards. A few months later, a total 16 no. 630A boards and 80 no. 200A MCB boards are nearing completion.

Due to the corrosive atmosphere of the marine environment it was agreed that investing in enclosures fabricated from grade 316L stainless steel would pay dividends in the long run. Various finishes were considered (electropolished, brushed, etc.) but a painted finish was decided upon, with a topcoat shade of Signal Grey (RAL 7004).

The assemblies are all to be installed in exposed external locations and the MCCB distribution assemblies required Furse Surge Protection Devices, which provide Type 1, 2 and 3 protection to BS EN 61643. The SPD is installed within the enclosure in close proximity to the incoming terminals and a remote condition indicator is visible when the main door is open.

Again due to the installation environment, the enclosures are either bottom or side entry and a projecting canopy is fitted to the top of each enclosure. Brass gland plates are fitted throughout. The enclosures for the MCCB based assemblies provide protection to IP56 and the MCB based assemblies are protected to IP66.

The MCCB assemblies incorporate Schneider PowerPact 630A MCCB pan assemblies. The incoming device is a 630A non-automatic MCCB / Isolator. The switch actuator is located behind the main padlockable door but the door incorporates a hinged cover which enables the main switch to be turned off even when the main door is padlocked shut. The switch actuator itself can be padlocked in the OPEN position. The MCCB pan assembly is 6 way TP and is fitted with 5 no. NSX160F 160A TP MCCBs which feed MCB boards and 1 no. NSX160F 125A TP MCCB to protect the Surge Protection device.

The MCB boards incorporate a 200A 4P incoming switch, which feeds a 24 way TP MCB ISOBAR pan assembly. The pan assembly is fitted with 7 no. 32A TP MCB / VIGI combinations to supply remote reefer sockets (to feed refrigerated containers). A single-pole 6A MCB is fitted, to supply local lighting. Remaining ways are blanked off.

If you would like to discuss an application requiring high IP rating MCCB or MCB boards, please contact the Blakley team who would be pleased to discuss your requirements.







Part No. A7293141 - MCCB Distribution Board, 630A, 6 way, IP56 rated, Stainless Steel



Part No. A7293020 - MCB Distribution Board, 200A, 24 way, IP66 rated, Stainless Steel

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