

Mains Distribution Assembly, 630A, with Form 4 Segregation

To enable major construction projects to meet fast track delivery programs without compromising on-site safety, we have seen a significant increase in the adoption of primary Mains Distribution Assemblies (MDAs) with Form 4 segregation, which enable distribution cables to be safely connected or disconnected without the need to isolate the complete assembly.

On a recent critical infrastructure project it was decided that a series of sub-distribution MDAs rated at 630A also required Form 4A Type 3 segregation. Ten of these bespoke assemblies were required for the project and they had to be on site in Europe within 8 weeks of order placement. It's a good job we like a challenge!

In order to meet these various requirements, the Blakley team were able to adapt the modular design of our higher current Form 4 assemblies to meet this lower current requirement. A 630A distribution compartment was re-purposed as the compartment to house the main incoming MCCB and a second 630A compartment was redesigned to incorporate socket outlets. The interior of the "socket" compartment was itself segregated, with one sub-section housing a 160A 4P MCCB, which feeds a second sub-section housing MCBs and RCCBs to protect the associated sockets. Each sub-section has its own shield plate. A further 4 no. compartments were provided, each fitted with a 125A 4P MCCB.

The incoming section also incorporated a kWhr meter and phase indicators. Each outgoing MCCB was protected by a Blakley Electrics MRCD series earth leakage relay, providing Type A variable time and current RCD protection in accordance with BS EN 60947-2 annex m. In line with our higher current Form 4 MDAs, each MCCB compartment incorporated a padlockable door with door stay, a dedicated gland plate and a shield plate. The bus bar chamber was segregated from the rest of the assembly, meeting IPXXB requirements.

The MDAs were shipped direct from our Harlow site to an overseas destination. To minimise the risk of damage in transit, the MDAs were mounted on purpose built pallets and the consignment was shipped door to door on a dedicated vehicle.

If you would like to discuss a possible requirement for Form 4 MDAs, whether high or low current, please contact the Blakley Electrics Projects Team who will be pleased to be of assistance.



Part Number A7194411 630A MDA with MCCBs and bus bars segregated to Form 4A Type 3



Part Number A7194411 630A MDA showing separate compartments for MCCBs