

Form 4 Mains Distribution Assemblies for Major Construction Projects

Many large construction projects run for 24 hours a day, 7 days a week and some run for years on end. On such projects there simply isn't the opportunity to isolate main panels to undertake day to day activities such as connecting or disconnecting supplies to tower cranes, welfare facilities or sub-distribution boards. In order to allow these routine activities to be carried out safely, we have seen an increased demand for site Mains Distribution Assemblies (MDAs) with segregation to Form 4A Type 3. With this method of construction, the switchgear (functional units) and bus bars are housed in separate, fully segregated compartments, enabling each outgoing MCCB to be accessed individually.



2000A Form 4 Mains Distribution Assembly (to be mounted on to the main stand on site)

As a response to the increased level of demand for Form 4 MDAs, we have developed a modular design, which can meet a very wide range of distribution requirements. Incomers and outgoing MCCBs rated above 800A are housed in individual enclosure sections, whilst lower current MCCBs (up to 800A) are housed in double-sided sections measuring 1700mm in length. Each side of a 1700mm section can incorporate either 3 no. compartments for MCCBs rated up to 800A, 4 no. compartments for MCCBs rated up to 630A or 5 no. compartments for MCCBs rated up to 250A. The front and rear of each section is independent of the other i.e. the rear could be configured for 3 no. 800A compartments and the front for 5 no. 250A compartments or 4 no. 630A compartments. Also, a Form 4 MDA can comprise of multiple 1700mm sections and the drawing on page 2 shows a 3200A assembly with 3 no. 1700mm double-sided distribution sections, housing a total of 24 no. feeders across the three sizes of compartment. Each compartment incorporates a padlockable door, a removable gland plate and a screw-fixed shield plate. When a shield plate is removed, it will be found that the live side of each MCCB is fitted with a supplementary terminal cover, which does not need to be removed in order to access the load terminals.

In addition to the basic switchgear, Form 4 MDAs can accommodate a very wide range of optional extras including Test Sockets, anti-condensation heaters, surge protection devices, web enabled metering, variable RCD protection, socket outlets, special paint finishes, etc.

MDAs with Form 4 segregation are generally rated at 800A and above, although we are able to supply lower rated assemblies if required.

Mains Distribution Assembly, Form 4 Type 3, 3200A, Modular Construction

