

Dockside Distribution Assemblies

Blakley Electrics designs and manufactures distribution equipment for installation in some very harsh environments and dockyards are amongst the most demanding. Equipment is often installed on exposed quaysides with little or no protection from the sea. In addition the atmosphere is salt laden and therefore very corrosive and assemblies can be subject to physical damage, which can occur as a result of the many different activities being undertaken alongside the equipment.

The Blakley Projects Team have recently been involved with a new Dockside project on a site that has used our equipment for over 25 years. The requirement was for a total of 8 no. 800A distribution assemblies and 4 no. 400A assemblies all to be installed outside, as well as a number of smaller distribution boards to be installed indoors. The outdoor assemblies were to be installed on high gantries, where access is limited to one side only.

In line with previous assemblies supplied to this site, the enclosures have segregation to Form 4 Type 3, with separation between each functional unit and the bus bars, which enables one distribution circuit to be connected or disconnected without the need to isolate the overall assembly. The enclosure bodies, doors, canopies, etc., are all made from 3mm mild steel and provide protection to IP55 (assemblies can also be made to IP56). The enclosures are provided with a high quality paint finish, which comprises of shot blasting, followed by flame spraying in molten zinc (inside and out) followed by a bright yellow polyester powder top coat. The flame sprayed zinc undercoat is the part of the process that ensures an extended life in such a harsh environment; it even ensures a high level of corrosion protection if the paint work is physically damaged.

To minimise the need to open switchgear compartment doors for day to day operation, all devices are fitted with door mounted, interlocked rotary handles, enabling MCCBs to be switched ON and OFF with the doors closed. As the rotary isolator handles are exposed and vulnerable to physical damage, a top hinged, heavy duty cover made from 3mm steel is fitted over each handle. For IP56 applications the covers should be securely fastened. Door fasteners are also provided with retained push-on covers to maximise ingress protection. Each enclosure compartment is fitted with an anti-condensation heater, which is thermostatically controlled.

Cable entry and exit is through the underside of the enclosure via a removable gland plate (one per compartment) and an external bar is provided to enable clamps to be fitted to secure the incoming and outgoing cables. A projecting canopy with gutter is incorporated to reduce the effect of driving rain as far as is practicable.

If you have a requirement for heavy duty, outdoor distribution equipment, please contact the Blakley Projects Team who would be pleased to discuss requirements.



Part Number A7292936,
Dockside Service Unit, rated at 800A with 4 no.
outgoing feeders rated up to 400A



Hinged covers provide physical protection and
ingress protection to MCCB rotary
operating handles



Each functional unit is housed in its own
compartment, fully segregated
from the bus bars.