

### Custom Power Clusters

We manufacture a comprehensive range of standard, multi-voltage, multi-socket Power Cluster and Power Cluster Plus assemblies, which are fully wired and tested, factory built distribution assemblies for permanent installation. They drastically reduce installation time, as assemblies are supplied from a single supply cable, with all switchgear, transformers, etc., incorporated within the Power Cluster.

In addition to our standard range, we regularly manufacture non-standard Power Clusters and three recent examples are shown alongside.

#### A7293011

This assembly was designed and manufactured to a very exacting standard, as it is being installed in a new nuclear generation facility, which demands a very high level of reliability over an extended operational life. The assembly incorporates a 4kVA, 400:110/24V transformer, which is of toroidal design to allow it to be incorporated within a slim enclosure. Due to the high inrush current associated with toroidal power transformers, the transformer is supplied via a thermistor, which restricts the inrush current.

#### A7293096

This assembly is to be installed in an outdoor location at a major sporting venue. It is a multi-purpose distribution assembly and is likely to be used by Ordinary Persons, who may have had limited training in the use of electrical equipment. For this reason the socket outlets are switched and interlocked, which only allows plugs to be inserted or withdrawn when the socket switch is in the OFF position. Each socket is protected by an MCB and a 30mA sensitivity RCCB. The enclosure is fabricated from ferritic stainless steel with a painted finish. Ferritic stainless is a lower cost option than grade 304 or 316 stainless but it provides a high level of resistance to corrosion.

#### A7293016

This a high current Power Cluster Plus assembly with an incoming isolator rated at 250A. The assembly is to be installed on a long term nuclear decommissioning project. The outgoing side is fitted with 1 no. 125A and 2 no. 63A mechanically interlocked 400V 5P sockets. The assembly is also fitted with 2 no. 32A 5P 400V sockets and an MCB to supply an integral 3.5kVA continuously rated, 230:110V transformer, which provides a Reduced Low Voltage supply to 2 no. 16A 110V IP67 sockets. The 16A, 32A and 63A sockets are individually protected by MCB / 30mA RCD combinations. The 125A socket is protected by an MCB / 300mA RCD combination.

If you would like to discuss a possible application for a custom Power Cluster, please contact the Blakley Projects Team, who will be pleased to be of service.



Power Cluster Plus, Part Number A7293011, Stainless Steel Enclosure with Bead Blast Finish.



Power Cluster, Part Number A7293096, with Enclosure Fabricated from Ferritic Stainless Steel



Power Cluster Plus, Part A7293016, fitted with 400V 125A, 63A and 32A sockets and 110V 16A Sockets