

## All Insulated Power Clusters, LV / RLV and PELV

Since 2013 the Blakley Projects Team has been involved in a major new power station project in the north-west of England. The initial involvement resulted in us supplying high current outdoor switchboards rated from 250A to 2250A to power the main construction work. Then in 2016, as the construction activity neared completion, we have supplied a total of 66 no. special Power Cluster Assemblies, which will form part of the permanent installation and provide supplies for the long term maintenance of the plant.

The second phase of the project required two types of Power Cluster: both rated at IP66 and both housed in all-insulated enclosures, with key lock and padlock facilities, as well as external, stainless steel, fixing lugs. A clear shield plate is also fitted to achieve an IP2X rating when the door is open. Hygrostatically controlled heaters are fitted, fed from the live side of the incoming isolators, enabling the micro environment within the enclosure to be regulated when the assembly is not in active use.

### LV / RLV Power Cluster

Most assemblies are fitted with LV and RLV sockets to BS EN 60309-2. These assemblies incorporate a 100A TP&N incomer and are fitted with the following sockets:

400V: 1 x 63A 5P, 1 x 32A 5P, 1 x spare way (32A)

230V: 1 x 32A 3P, 1 x 16A 3P, 1 x spare way

110V: 1 x 32A 3P, 1 x 16A 3P, 1 x spare way

400V sockets are switched interlocked to prevent insertion / withdrawal of plugs on load. 110V sockets are fed from an integral 5kVA transformer. All sockets are provided with individual RCD protection, as is the heater circuit. Space is provided for protection devices if spare ways are equipped.

### PELV Power Cluster

The PELV assemblies incorporate a 16A TP incomer and are fitted with a 1kVA 400:24NE transformer with a Protective Extra Low Voltage output. The assembly is fitted with 4 no. 16A, 3P, 24V, IP67 sockets individually protected by 4A DP type "C" MCBs. There is space for a further socket and MCB to be fitted at a later date.

If you would like to discuss a requirement for a special Power Cluster, please contact the Blakley Projects Team, who would be pleased to assist.



LV / RLV Power Cluster, Blakley Part Number A7292020



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PELV Power Cluster, Blakley Part Number A7292021