

400A Lift Supply Panel for London Underground with Castell Key Interlocked Changeover Arrangement



As part of the updating of ten Central London Underground Stations, the Blakley project team have been involved in developing a composite Lift Supply Panel, which is designed to be located in existing switch rooms. In addition to meeting a demanding electrical specification and exacting LUL material requirements, the panels have also been designed to be “split” into two sections, as the restricted access makes it impossible for a fully assembled panel to be manoeuvred into position on site.

Each panel has a 400A Mains supply and a 63A Auxiliary (back-up) supply and feeds two lifts. In normal mode, each lift is fed from the Mains supply via a separate switch fuse within the Lift Supply Panel. If the Mains supply should fail or if it is decided to feed a lift from the auxiliary supply (for planned maintenance), the relevant Lift Supply switch fuse is opened, which opens the contactor that feeds the lift. A unique Castell key is removed from the switch fuse and inserted into an associated, remote Lift Control Switch assembly (one per lift). As the Castell key is inserted in to the relevant Lift Control Switch, a second contactor closes, which feeds the lift from the Auxiliary supply. Each pair of contactors is mechanically and electrically interlocked to prevent simultaneous closure and a series of indicator lights is incorporated to show the status / availability of the two supplies. The changeover arrangements for both lifts are completely independent i.e. both lifts can be fed from the Mains supply, both from the Auxiliary supply, or either one can be fed from the Mains and either one can be fed from the Auxiliary supply.

In addition to designing bespoke changeover panels, we also produce standard Automatic Mains Failure panels in ratings from 100A to 2000A, data sheet DDS201 refers. However, the Blakley Projects Team is on hand to discuss any non-standard manual or automatic source changeover assemblies which may be required to supply critical loads.