

Schaltbau DC Contactors for Uninterruptible Power Supplies

Over a number of years Schaltbau have had considerable success with their range of DC Contactors in the European telecom market.

As the boom in cell phones developed, so did the need for repeater stations to cover the entire network. The phone companies were therefore committed, not only to complete geographical coverage but also concerning continuity of service.

In the latter case, breakdowns due to power failure were overcome by fitting battery-powered emergency power supplies (the so-called UPS) to all repeaters.

Apart from the fact that the 48V extra-long-life batteries used in these systems are very expensive, they also have the disadvantage of a significant reduction in capacity following voltage drop due to prolonged usage.



C195 SB Contactor

To avoid this effect, high quality installations ensure that a DC Contactor disconnects the battery as soon as a defined minimum voltage is exceeded. This is where Schaltbau comes into play. In Germany alone, Schaltbau have sold tens of thousands of C163 and C195 Contactors for 100A and 300A applications respectively. Schaltbau's reputation as a supplier of high quality contactors to the rail industry was instrumental in its sales to Siemens, Benning, Elektro, Automatik, Nokia, Ascom and others.

The units are exposed to high ambient temperatures and have to cover a wide voltage range. They are permanently energised and have to guarantee functional reliability in emergency cases, even after several years of use.

Installation companies have been impressed with the maintenance cost savings, particularly in remote areas where the selection of a high quality Schaltbau contactor has ensured a long, trouble-free lifetime.

Going on from the standard range, Schaltbau developed a special contactor for their biggest customer, which offers particular advantages when power supply is a problem.

This latching contactor C195B is pulse controlled so the coil is only under load for a few milli-seconds during the short switching process. This offers a tremendous advantage compared to standard contactors where the coil constantly consumes energy and produces heat.



C400/600 Single-Pole Contactor

The C195SB requires no more energy until the installation gives a second impulse for switch-off. The savings in energy cost related to switching and cooling are significant and pays for the higher priced component in a matter of months.

Another development is the contactor C400/C600 that have been introduced for use in the UMTS systems where increased energy is required. These units are suitable for major continuous currents (400A and 600A respectively).