

Site Transformers with Floodlights

At Blakley Electrics, site transformers and 110V site lighting are both key parts of our range and occasionally the two combine...

The Blakley Project Team were recently involved with a major project which had large floor areas requiring 110V power and lighting but, during the initial phases, no walls were available on which to mount floodlights. The site team wanted to avoid the use of free-standing towers and so attention turned to the site transformers, which were to be installed from the early stages of the installation and were to remain in-situ until the end of the project.

Following discussions with the site team, the Blakley designers were able to develop an assembly which comprised of a 10kVA three-phase site transformer fitted with removable Unistrut uprights supporting a head assembly incorporating 4 no. 150W, 110V LED floodlights. Each upright was also fitted with a 44W, 110V, IP65, anti-corrosive LED fitting with integral, maintained emergency back-up.

As the lighting was not required to be on permanently (24/7), luminaires were controlled via an integral, 110V, time clock / contactor arrangement. The time clock incorporated Near Field Communication allowing the ON / OFF settings to be prepared on a mobile phone App and easily uploaded to the time clock. To enable emergency lights to be switched off without discharging batteries, the emergency fittings were supplied via a 4 core cable, which provided an unswitched (permanent) supply to the emergency modules.

The site transformer was fitted with 16A and 32A 110V socket outlets. In line with best practice, the sockets had individual MCB protection and were group protected by a common 300mA 110V RCCB, ensuring the 5 second disconnection time required for 110V RLV circuits was met. In addition, the two lighting circuits were individually protected by MCB/RCCB, ensuring they were not only suitably protected but that the lighting would not be compromised if a fault occurred on a socket circuit.

From a shipping perspective, the site transformer and lighting array were supplied as separate assemblies. Both parts were fully wired and prepared at our factory and on-site assembly of the two parts was easy to carry out. The lighting arrays can be removed once walls become available to mount floodlights.

From an installation perspective, although the base assembly weighs-in at around 100kg, our recommendation is that the transformers are fixed in position. Additional measures may also be required if units are to be installed outside.

If you think a combined site transformer / floodlight assembly might suit your project, please contact the Blakley team who will be pleased to assist.



Part No. A7010084 Site Transformer, 10kVA three-phase also fitted with 4 x 150W 110V LED floodlights and 2 x 44W 5' 110V LED anti-corrosive luminaires, time clock controlled