

Specialist Transformer Assemblies for Rail Applications

Portable Tool Transformers

Portable Tool Transformers (PTTs) are designed and manufactured in accordance with NR specification NR-L2-ELP-40045, although the output is RLV in accordance with BS7671 and not earth free. The primary purpose of PTTs is to provide a permanent source of 110V trackside power, which can be used whilst new Point Heating installations are carried out and can then be used in the long term for all types of track maintenance related activities. The installation of a permanent source of temporary power removes the logistical burden of providing generators to feed temporary works in remote locations.

Feeds from PTTs can be hardwired to remote socket outlets or socket outlets can be fitted directly to the PTT. A variety of over current devices and RCDs can be incorporated to meet different requirements, including DC immune RCDs that are suitable for installation in DC electrified "third rail" areas found predominantly in the old Southern Region.

In order to meet the 15 year design life, PTTs are housed in heavy duty, sheet steel enclosures with a galvanized finish. In addition, to ensure longevity and low maintenance, all types are filled with petroleum jelly, which aids cooling and insulates the windings from the effects of the elements. To facilitate safe maintenance, PTTs incorporate a double-pole incoming isolator that can be padlocked in the OFF position. The isolator controls the feed to the primary winding, which incorporates tapplings and can be utilised to help offset the effect of volt drop on long supply runs.

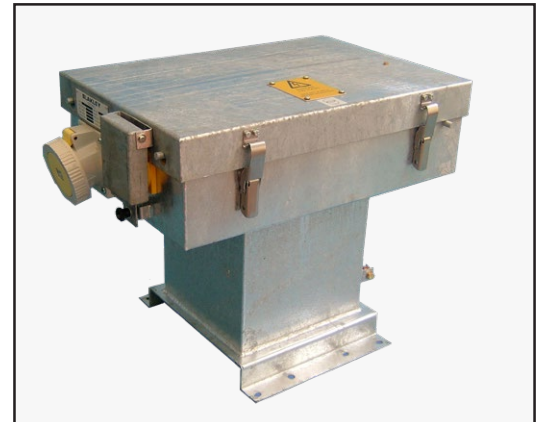
Tunnel Power Transformers

We have designed and manufactured power transformers with 110V Reduced Low Voltage outputs for installation in tunnels and bridges. These are usually supplied in wall mounting enclosures and incorporate loop-in / out incoming terminals, enabling a run of assemblies to be fed from a single source. The design of these assemblies is generally developed with the customer to meet specific installation requirements and we welcome the opportunity to be involved early in the design process.

Buffer Stop Light Transformers

Buffer stop lights are installed in close proximity to live tracks and they must be fed from a 110V earth free isolated supply to ensure that they cannot interfere with signalling systems, even under fault conditions. Buffer stop lights are generally low wattage LEDs and part S210379 is a typical buffer stop light transformer, rated at 500VA with 6 no. outgoing ways, each DP fuse protected at 1A. It is fitted with an incoming main switch, padlockable in the OFF position.

S210379 is supplied in a wall mounting, galvanized, IP55 enclosure. Buffer stop light transformers can also be supplied in GRP enclosures with MCB protection.



Portable Tool Transformer, 4 kVA, 230:110V



Tunnel Power Transformer, 6 kVA, 400:110V



Power & Lighting Tunnel Assembly, providing 400V, 230V and 110V supplies



S210379 Buffer Stop Light Transformer