

# TRANSFORMERS BROCHURE



# Industry experts in Transformers



Distribution



Protection



**Transformers** 



Site Lighting

## We're industry experts in Transformers

The design and manufacture of transformer assemblies to the construction industry has been a key activity for over 40 years. However, for many years we have counted the Rail, Defence and Nuclear sectors as key users of our industrial transformers and we have developed products to meet the demands of these different industries. In addition to developing transformers for specific industry sectors, we also design and manufacture a wide range of power transformers in ratings ranging from 100VA to 250kVA and in voltages from 12 volts to 3300 volts for more widespread applications.

Our transformers are generally double wound, presented in a range of metal and insulated enclosure designs, providing ingress protection from IP20 to IP55. They can incorporate a variety of distribution, protection and control devices, including sockets, isolators, fuses, MCBs and RCD.

Assemblies are manufactured to our own exacting standards and come equipped with all necessary switchgear and distribution equipment, as required.

We stock a wide range of standard industrial and construction site transformers and manufacture bespoke units for specific industries and applications and design to customer specific requirements.

In addition to our core areas of activity, we also manufacture isolation transformers for the aerospace sector and autowound transformers for applications where voltage transformation is for functional and not safety reasons. We also manufacture transformer rectifier sets, for the aerospace and military sectors, including 28V DC assemblies for specialist communications applications and battery charging. We are approved suppliers of transformers to organisations such as BAA, BNFL, London Underground and Network Rail.

This brochure provides an overview of our comprehensive range of Transformer products for fixed and temporary installation, our full range can be found on our website at www.blakley.co.uk. If you can't find what you are looking for, please contact our Customer Service Centre, who will be pleased to help. If you require a non-standard product or wish to discuss a specific application, our Project Sales Team is on hand to discuss your requirements. They can also be contacted via our Customer Service Centre.









# **About Blakley Electrics**

Established in 1957, Blakley Electrics Ltd are a market leader in the design and manufacture of high performance power and lighting products.

Harnessing over 60 years of experience in fabrication and electrical assembly, most Blakley products are designed and manufactured in-house, within our Quality Management System, which is accredited to British Standard ISO9001:2015.

Our manufacturing expertise is underpinned by a combination of investment in leading production technology, modern facilities and machinery, and a skilled workforce at our Engineering and Manufacturing Centre in Essex and our assembly plant in Kent.

At our Sales and Customer Support offices in Kent and Leeds, our knowledgeable teams are always on hand to provide advice and guidance.

Product demonstrations, project discussions and customer training are also available at our dedicated Customer Demonstration Centre in Kent.

What we do

**Permanent Distribution** 

**Temporary Distribution** 

**Transformers** 

Site Lighting

**Protection** 



# **Standard Industrial Transformers**

Our standard industrial transformers are manufactured for general industrial applications and requirements. They typically incorporate step-up or step-down, double-wound isolation transformers manufactured in accordance with relevant sections of BS EN 61558. For applications where the voltage is being transformed for functional rather than safety reasons, we offer a limited range of auto-wound transformers.

#### **Eco-Tx Series Transformers**



Transformers for Zero Off-load Losses. Unlike conventional transformers, no power can be consumed unless a plug is inserted into a socket and the socket switch is turned to the ON position.

## SP Series Multi Voltage Assemblies



Single Point Distribution Assemblies are factory built assemblies supplied complete with different combinations of switchgear, transformers and socket outlets rated at 230V, 110V and 24V. The standard range of SP assemblies is available with ingress protection of IP20, IP44 or IP55

## **Wall Mounting Transformers**



2 to 10KVA, fitted with outgoing MCB / RCCB. Wall mounting transformers to feed remote 110V distribution boards and equipment.

1 to 3KVA, fitted with sockets, stock wall mounting transformers with sockets.

#### Step-up Transformers 110:230V



STLP series Step-up Transformer Assembly (110:230V), 2 kVA, 1 x16A & 1 x 13A 230V socket. STS series Step-up Transformer Assembly (110:230V), 3 kVA, 1

x16A & 1 x 13A 230V socket.

#### **Transformer Distribution Cubicles**



Available in wall mounting or floor standing enclosures and combine transformers rated from 2 kVA to 10 kVA with up to 16 no. double -pole outgoing MCBs.

Standard TDCs are fitted with a 300mA 110V RCD on the secondary, to ensure compliance with BS7671 Regulation 411.8.3, which specifies a 5 second disconnection time for RLV circuits.

#### **Auto Transformers**



Auto transformers for hotel rooms and similar applications where a domestic 115V supply is required.



# **Construction Site Transformers**

Construction site transformers provide a 110V RLV supply and are available in ratings from 3 kVA to 20 kVA, single-phase and three-phase options, in a range of enclosure designs.

Different distribution arrangements of 16A and 32A sockets and / or hard wired lighting outlets with MCB protection and the option of RCD protection are available.

Models are also available with plug-in mains connection via an appliance inlet (fixed plug), as are dedicated Site Lighting Transformers with integral time clock and contactors for the automatic control of lighting circuits.

#### **Standard Site Transformers**



Site Transformers have a 110V RLV output to supply power tools and other pieces of portable site equipment. Fitted with socket outlets, with or without RCD protection. Models are available fitted with appliance inlets.

#### **Site Lighting Transformers**



With hard wire connections to lighting circuits, with and without RCD protection. Lighting connections are configured for 3 core circuits, except for those with time clocks, which are configured for 4 core circuits.

# Site Power & Lighting Transformers



Rated at 10 kVA, incorporating sockets to feed power tools and hard wired connections to feed dedicated 3 core lighting circuits. Sockets are MCB protected and hard wired circuits are MCB or MCB / RCD protected. Transformers have a 110V RLV output.

#### Slim Line Site Transformers



Rated at 5kVA single-phase and 7.5kVA three-phase, with Power and Lighting options.

#### Mini Site Transformers



Ideal for sites where space is at a premium or where lifting with mechanical aids is impractical.

#### **Portable Tool Transformers**



Provide a 110V RLV supply for power tools and temporary lighting. Ratings from 3000VA to 5000VA, housed in robust, all insulated GRP enclosures available with 16A and 32A sockets.



# **Rail Sector Transformers**

#### **TH Series Transformer**



TH Series Transformers for London Underground.

## **Buffer Stop Light Transformer**



Enclosed transformer assembly providing an isolated, earth free, LV supply.

#### **Isolation Transformers**



A range of double-wound, 1:1 ratio transformers to provide isolation between DNO and traction / signalling earthing systems used within the Rail Industry.

#### **Transformer Distribution Racks**



Assemblies typically comprise of 3 no. vertical sections, each incorporating a main isolator, a 110V step-down 6kVA transformer and a 12 way MCB board suitable for DP MCBs. An optional Master Isolator can also be incorporated.

## **Points Heating Transformers**



Network Rail Approved for use across the UK rail system. Transformer for AC Points Heating, rated at 5kVA and 10kVA, single phase and provide an earth free isolated supply. Offered with AC or DC outputs.

## **LUL Transformer Distribution Cubicles**



Combines a step-down, double-wound transformer with a double-pole MCB distribution arrangement and utilises a double-wound transformer with dual 55V secondary windings to LUL specification. The assembly provides a 110 volt Reduced Low Voltage Supply.



# **Bespoke Industrial Transformers**

#### **TH Series Transformers**



Floor / wall mounting transformers with a wide range of voltage ratios and ratings up to 25kVA, housed in steel enclosures rated up to IP55 with a range of finishes.

## **ITLW Series Transformers**



Wall mounting transformers with a wide range of voltage ratios and ratings up to 3.0kVA, housed in insulated enclosures, fitted with sockets, MCBs, etc.

#### **ITU Series Transformers**



Portable transformers with a wide range of voltage ratios and ratings up to 3kVA, housed in insulated enclosures, fitted with sockets, MCBs, etc.

#### **TLW Series Transformers**



Wall mounting transformers with a wide range of voltage ratios and ratings up to 2kVA, housed in steel enclosures fitted with sockets, MCBs, etc

#### **TS/TTS Series Transformers**



TS and TTS series General purpose, single phase (TS) and threephase (TTS), doublewound, enclosed type transformer assemblies, rated from 2.5 to 25 kVA single-phase and from 1 to 25 kVA three phase.

#### **OT Series Transformer**



Open type transformers for panel mounting, etc., rated up to 25kVA, single or three phase.



# **Bespoke Industrial Transformers**

## **TXL Series Transformers**



Double-wound, step-down, step-up and 1:1 ratio isolation transformers in ratings from 30kVA to 250kVA in voltages of up to 3300V. Available in a range of indoor and outdoor enclosures.

## **Nuclear Specific Transformers**



Versions are available to provide a 110V RLV supply for power tools or with a 110V NE LV output to supply controls and instrumentation. Transformers can be supplied to other specifications.





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Experts in **high performance** power and lighting products