BLAKLEY ELECTRICS

TRANSFORMER
DATA SHEET

ITU series

General purpose, single phase, double wound, transformer assemblies rated from 100VA to 3000VA, housed in robust, portable GRP enclosures, compound filled. As standard, ITU series transformers are of Class 1 construction and require an incoming protective conductor.

Applications

Designed for use in portable applications or damp environments, ITU series transformers are available in a wide range of power ratings and voltage ratios and can incorporate a variety of fitments including MCBs, RCDs, Fusegear, Sockets and Isolators.

Enclosures

Portable pattern with stout carrying handle, ITU series enclosures are moulded from high impact resistant GRP, standard colour yellow - other colours available to order. Enclosures are non-vented and have an IP55 rating (the overall IP rating of the assembly may be governed by external fitments, such as socket outlets).

Ratings

Single phase, continuously rated at 100VA, 150VA, 200VA, 250VA, 350VA, 500VA, 750VA, 1000VA, 1500VA, 2000VA and 3000VA.
Transformer windings are designed and manufactured in accordance with BS EN 61558 Parts 1, 2-4, 2-6 and 2-23, as applicable.

Rating	Dimensions, mm	Weight
100VA	165 x 165 x 175	4.0 kg
150VA	165 x 165 x 175	4.5 kg
200VA	165 x 165 x 175	6.0 kg
250VA	165 x 165 x 175	7.0 kg
350VA	165 x 165 x 175	7.5 kg
500VA	165 x 165 x 175	8.0 kg
750VA	195 x 195 x 220	13.0 kg
1000VA	195 x 195 x 220	15.0 kg
1500VA	195 x 195 x 220	20.0 kg
2000VA	300 x 300 x 280	24.0 kg
3000VA	300 x 300 x 280	45.0kg

Voltages

Primary Voltages - 230 and 400 volts
Secondary Voltages - 12, 24, 25, 42, 50, 110 and 230 volts

BS7671:2018 permits a supply voltage tolerance of -6% / +10%. Any variation in the voltage connected to the primary of the transformer will proportionally vary the secondary voltage and also alter the inrush current characteristics. To address the impact of supply voltage variation, voltage tappings can be incorporated into the primary winding. We would be pleased to quote for transformers with multiple primary tappings.

Transformers with dual secondary windings are available to feed power tools at 110 volts and inspection lamps at 24 volts. The earthing arrangement of secondary windings must be specified. PTO for guidance on the earthing of transformer windings.

Fitments

ITU series transformers can be fitted with a wide combination of MCBs, RCDs, Fusegear, Sockets and Switch Disconnectors. Our Customer Service Centres would be pleased to quote against your specific requirements.

Alternative Products

TLW and TSW series of standard wall mounting transformer fitted with socket outlets. Refer to data sheet TRDS011.

TH series of IP55 wall / floor mounting transformer rated from 2 to 10kVA. Refer to data sheet TRDS021.

TH series of non-standard, heavy duty industrial transformers, rated from 0.1 to 25 kVA. Refer to data sheet TRDS015.

Please refer to our website or contact our Customer Service Centres for full details of all Blakley Power Products.

ITU Series, 230:24V (SELV),
1 x 16A socket outlet

Experts in **high performance** power and lighting products
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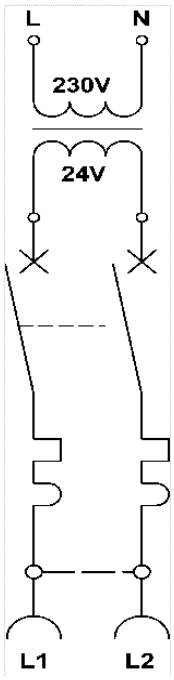
North: Suite 38, Pure Offices, Turnberry Park Road, Morley, Leeds LS27 7LE T: 0333 188 0285

Guidance on the Earthing of Secondary Windings

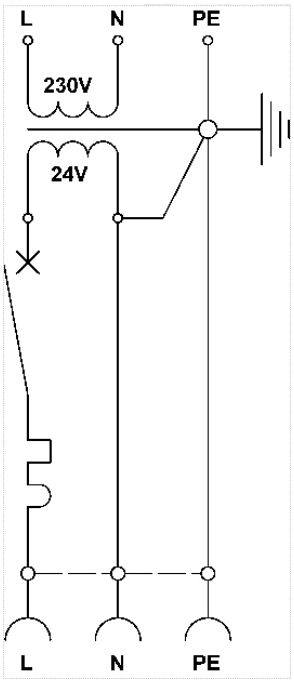
To enable us to supply transformers correctly configured for each installation it is necessary to specify the earthing arrangement of the secondary winding.

Detailed below are the normal earthing arrangements for standard ITU series transformers.

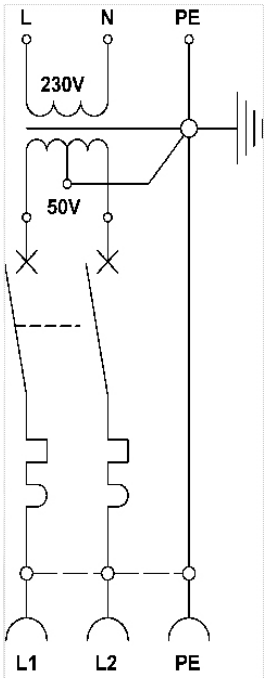
Secondary Voltage	Earthing Arrangement	BS 7671 Definition	Comments
12 Volts	Earth Free	Separated Extra Low Voltage (SELV)	Normally hard wired Over current protection to be DP
24, 25, 42 or 50 Volts	Earth Free	Separated Extra Low Voltage (SELV)	Sockets to be 2P Over current protection to be DP
24, 25, 42 or 50 Volts	Neutral Earthed	Protective Extra Low Voltage (PELV)	Sockets to be SP+N+E Over current protection to be SP
24, 25, 42 or 50 Volts	Centre-tapped to Earth	Protective Extra Low Voltage (PELV)	Sockets to be 2P+E Over current protection to be DP
110 Volts	Centre-tapped to Earth	Reduced Low Voltage (RLV)	Sockets to be 2P+E Over current protection to be DP
120 Volts	Neutral Earthed	Low Voltage (LV)	Sockets to be SP+N+E. Over current protection to be SP. (USA domestic voltage)
230 Volts	Neutral Earthed	Low Voltage (LV)	Sockets to be SP+N+E Over current protection to be SP
230 Volts	Earth Free	Protection by Electrical Separation	Maximum of one socket (feeding one appliance). Over current protection to be DP



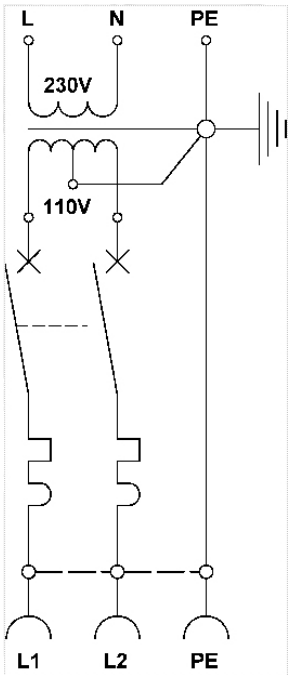
(i) SELV
Earth Free



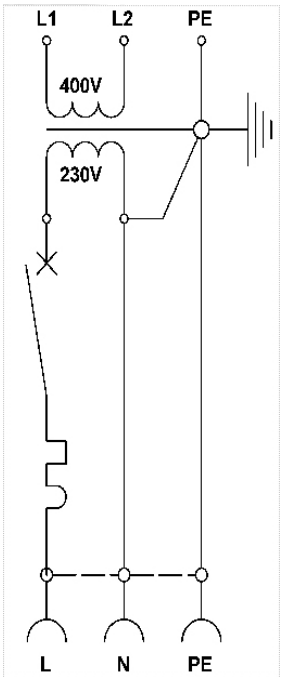
(ii) PELV
Neutral Earthed



(iii) PELV
Centre Tapped to Earth



(iv) RLV
Reduced Low Voltage



(v) LV
Neutral Earthed