

# TRANSFORMER DATA SHEET

## **TLW** series

General purpose, single phase, double wound, enclosed type transformer assemblies, rated from 100VA to 2000VA.

#### **Applications**

Designed for installation in plant rooms, workshops, etc., TLW 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**

Fabricated from 1.5mm sheet steel with a durable paint finish, shade Dark Admiralty Grey. Enclosures are wall mounting and can be supplied vented to IP21 and IP23 or non-vented to IP44. The wall mounting brackets can be repositioned on site to make the enclosure floor mounting.

#### **Ratings**

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

#### **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 winding will proportionally vary the secondary voltage and also alter the inrush current characteristics.

To address the impact of supply voltage variations, voltage tappings can be incorporated into the primary winding. We would be pleased to quote for transformers with primary tappings.

Transformers with dual secondary windings can be supplied i.e. to feed a power tool at 110 volts and an inspection lamp at 24 volts. The earth connection of the secondary winding must be specified - PTO for guidance on the earthing of transformer windings.

#### **Fitments**

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

### Standard Models

Part No.	Туре	Description		
S210127	TLW/1/F/S1/IP44	1 kVA continuous rating (1500 VA intermittent), 230:110 CTE, 1 x 16A socket, DP fuse protected, IP44		
S210126	TLW/2/F/S2/IP44	2 kVA continuous rating (3300VA intermittent), 230:110 CTE, 2 x 16A sockets, DP fuse protected, IP44		
S210332	TLW/I/2/C1/S2/IP44	As 210126 but incorporating 16A DP MCB protection on the secondary and a DP switch on the primary / input		
The transformers in the above accomplies have primary windings tenned at				

The transformers in the above assemblies have primary windings tapped at 220.230.240 and 250 volts.

Please see data sheet TRDS014 for details of other stock transformers.

Part S210126 - TLW/2//F/S2/IP44

Weights and Dimensions W x D x H					
Rating	Dimensions, mm	Weight			
100VA	205 x 179 x 192	4.0 kg			
150VA	205 x 179 x 192	4.5 kg			
200VA	205 x 179 x 192	6.0 kg			
250VA	205 x 179 x 192	7.0 kg			
350VA	205 x 179 x 192	7.5 kg			
500VA	205 x 179 x 192	8.0 kg			
750VA	259 x 259 x 284	13.0 kg			
1000VA	259 x 259 x 284	15.0 kg			
1500VA	259 x 259 x 284	20.0 kg			
2000VA	259 x 259 x 284	24.0 kg			

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# **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 TLW 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



