

**TB165**  
**PRODUCT DATA**  
**054/212375**  
**PA05/05983**

Whitting Valley Road, Old Whittington, Chesterfield, Derbyshire S41 9EY UK  
 Telephone: +44 (0) 1246 264260 Fax: +44 (0) 1246 455281  
 Web: www.trans-tronic.co.uk E mail: sales@trans-tronic.co.uk

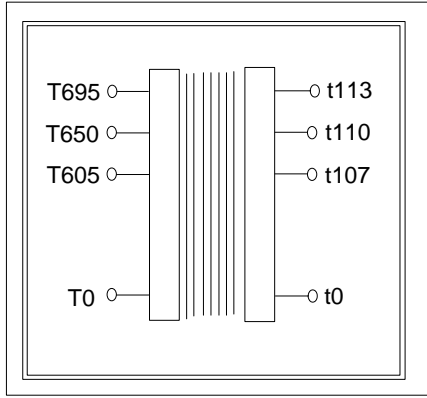
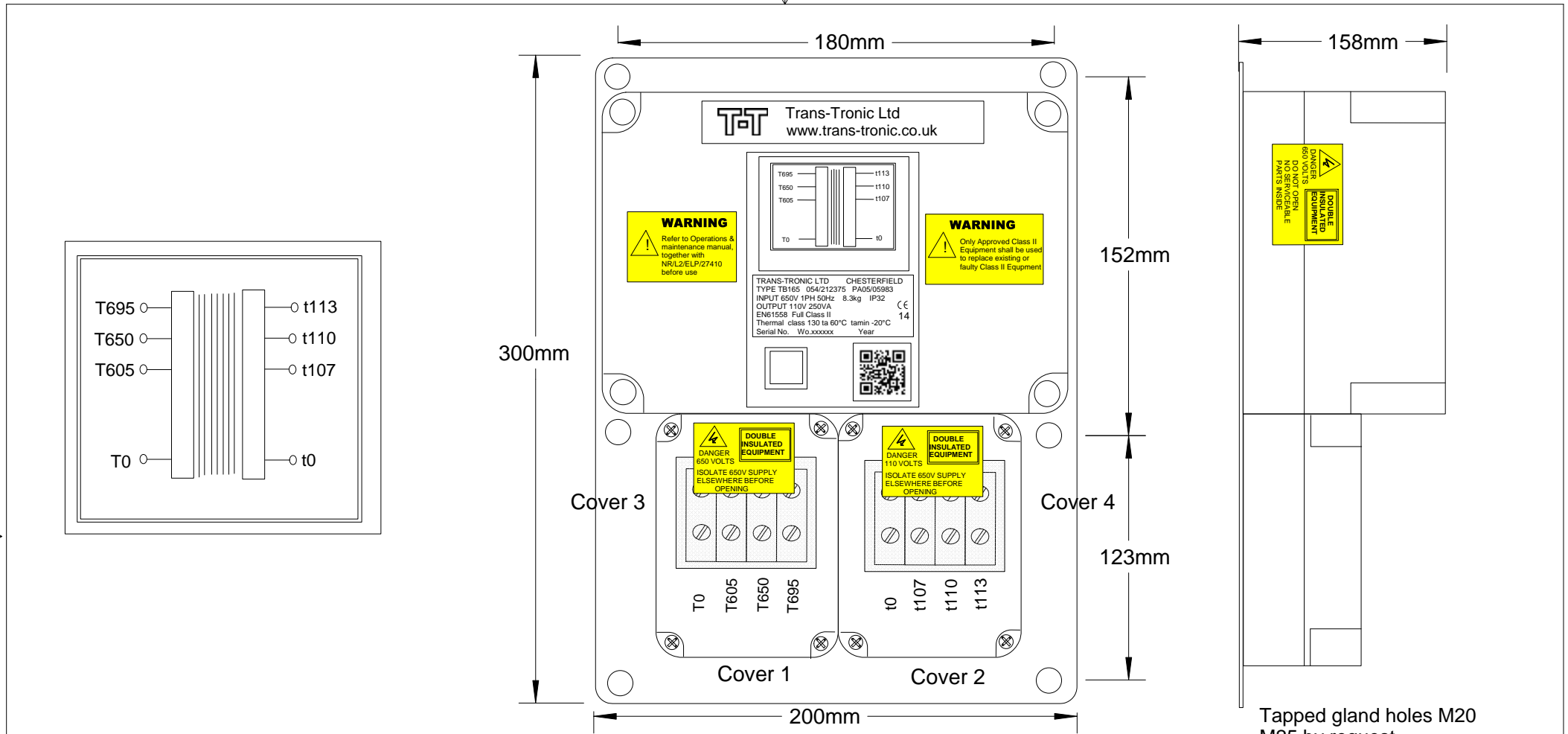
**COIL WINDING – TRANSFORMER DESIGN & MANUFACTURE**

**Description:** Full Class II Isolating Transformer for Non-Critical Auxiliary Circuits  
 BS EN61558 650/110V 250VA



This is a full class II product which does not require functional or protective earthing  
 The product complies with NR/L2/SIG30007 excluding clause 5.14.2.

Dimensions	200 x 158 x 300mm high 8.3Kg	Colour	RAL 7035	
General arrangement drawing	A4-GA-TB165	O&M Manual	: Trans-Tronic Class II- Tx O&M	
Primary (Input) ClassII	T0-T605-T650-T695	Secondary (output) Class II	t0-t117-t110-t113	
Rating	Full load 250VA Intermittent 300VA for 15 minutes in each hour, 250VA for remaining 45 minutes			
Primary terminals	Screw up clamp 0.5-10mm <sup>2</sup>	Secondary terminals	Screw up clamp 0.5-10mm <sup>2</sup>	
		Enclosure	IP32	
Efficiency	94% @ 80% load	Regulation	4.9%	Impedance 11.2%
No load loss	3.2watts	Full load loss	16 watts	
Primary resistance @ 20°C	39 ohms @ 650V	Secondary resistance @ 20°C	1.1 ohms @ 110V	
Primary Inductance	500mH @ 650V	Secondary Inductance	16mH @ 110V	
Input current at full load rating	0.45A @ 605V 0.42A @ 650v 0.39A @ 695V	Output current at full load rating	2.27A	
Maximum Input current at intermittent rating	0.54A @ 605V 0.50A @ 650v 0.47A @ 695V	Maximum output current at intermittent rating	2.73	
Peak inrush current	9.8x FLC (4.01A at 650V)	I <sub>∞</sub>	0.12 A <sup>2</sup> s	X/R ratio 1.9
Prospective short circuit output current @ 20°C	22.3A for 5 seconds			
Insulation resistance (500v)	Primary to base plate >100M ohms	Dielectric strength	Primary to base plate 5.2kV	Impulse withstand 8kV
	Secondary to base plate >100M ohms		Secondary to base plate 5.2kV	
	Primary to secondary >100M ohms		Primary to secondary 5.2kV	
Recommended fuse Protection	Input BS88 2A 10x38 gG IEC 60269-1 &-2 1A	Output	BS88 4A 10x38 gG IEC 60269-1 &-2 4A	
Operational temperature range	-20°C to +60°C		Humidity	Up to 100% RH
Altitude	<2000 metres above sea level		Issue 4	17/03/2015



Primary Terminals 0.5-10mm<sup>2</sup> cable  
 Secondary Terminals 0.5-10mm<sup>2</sup> cable

Tapped gland holes M20  
 M25 by request

Item	Description	Part No.
Case 1	Transformer case+base	21-CASE-E4
Trans1	650/110 250VA classII	TT4659
Cover 1&2	Terminal box cover	21-CASE-Ensto1Cov1
Cover 3&4	Inner terminal cover	68-A4-TB163
Label 1	Full classII frontleft	02-class2-frontleft
Label 2	Full classII frontright	02-class2-frontright
Label 3	Circuit diagram+ Rating plate	TB165 CD+RP
Label 4	650VclassII external	02-class2-650E1ext
Label 5	110VclassII external	02-class2-110E1ext
Label 6	Trans-Tronic	02-trans-tronic
Label 7	650VclassII side	02-class2-650side

Front view

Side view

	Trans-Tronic Ltd Whitting Valley Road, Chesterfield, S41 9EY Tel: 01246 264260 Fax: 01246 455281		
	TITLE Full Class II Isolating transformer for Non-Critical Auxiliary Circuits 650/110V 250VA TB165 054/212375 PA05/05983		
	SIZE <b>A4</b>	DATE 17/03/2015	DWG NO A4-TB165-GA
	SCALE NTS	SHEET 1 of 1	