



Certificate no. 4001132

TB168
PRODUCT DATA
054/212605
PA05/05325

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

Class II Hybrid FSP Isolating Transformer with copper conductors
NR/L2/SIGELP/30007 650/ 2x110/140V 450VA + 50/60V 3A DC



Dimensions	337x189x 285mm high	Weight	31Kg	Colour	BS381c shade 632 Dark Admiralty Grey
General arrangement drawing	GA-TB168 overleaf		O&M Manual : Trans-Tronic ClassII-Hybrid-FSP- Tx O&M		
Primary (Input) ClassII	T0-T605-T650-T695		Secondary's (output) ClassI 2 x t0-t107-t110-t113-t140 450VA + 50/60v 3A DC		
Rating	Full load	2 x 450VA + 3A DC		Intermittent 2 x 540VA + 3A DC for 15 minutes in each hour, 2 x 450VA + 3A DC remaining 45 minutes	
Primary terminals	Screw up clamp 0.5 -10mm ²		Secondary terminals Screw up clamp 0.5-10mm ²		
Functional earth	Screw up clamp 0.5-10mm ²		Enclosure IP32		
Efficiency	95%	@ 80% full load	Regulation	3.4%	Impedance 3.8%
No load losses	20 watts		Full load losses 60 watts		
Primary resistance @ 20°C	6.20 ohms @ 650V		Secondary resistance @ 20°C Secondary 1 0.22 ohms @ 110V Secondary 2 0.22 ohms @ 110V Secondary Inductance 0.58mH @ 110V		
Primary Inductance	19mH @ 650V		Output current at full load Secondary 1 4.09A @ 110V Secondary 2 4.09A @ 110V DC 50/60V @ 3A		
Input current at full load	1.94A @ 605V	1.82A @ 650v	1.71A @ 695V	Output current at 120% full load 3.22A @ 140V 3.22A @ 140V	
Input current at 120% of full load (15 minutes in each hour)	2.27 @ 605V	2.11A @ 650v	1.98A @ 695V	DC 50/60V @ 3A	
Peak inrush current	9.3x FLC (16.2A at 650V)		I ² t	2.1 A ² s	X/R ratio 0.45
Prospective short circuit secondary current @ 20°C	150A		single Secondary or 220A both secondary's for 5 seconds		
Insulation resistance (500v)	Primary to core >100M ohms Secondary to core >100M ohms Primary to secondary >100M ohms		Dielectric strength Primary to core 5.2Kv Secondary to core 2.8Kv Primary to secondary 5.2Kv		Impulse withstand 8Kv
Recommended input fuse protection	Max load<900VA	BS88 & 10x38 gG IEC 60269-1 &-2 2A			
	Max load=> 900VA	BS88 & 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	16/02/2016	