



Certificate no. 4001132

**TB210**  
**PRODUCT DATA**  
**054/212595**  
**PA05/05325**

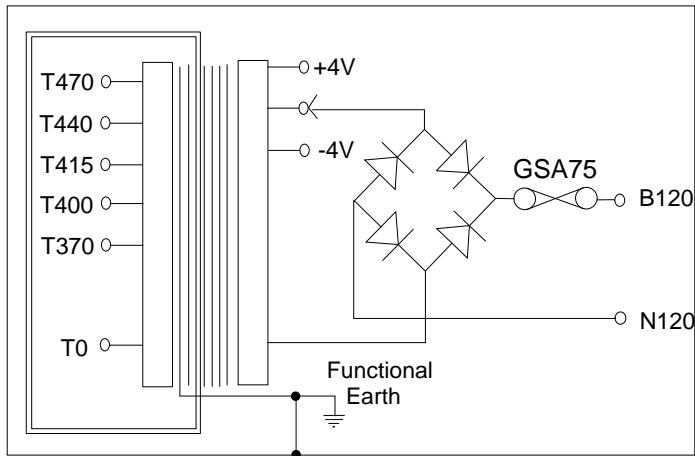
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**COIL WINDING – TRANSFORMER DESIGN & MANUFACTURE**

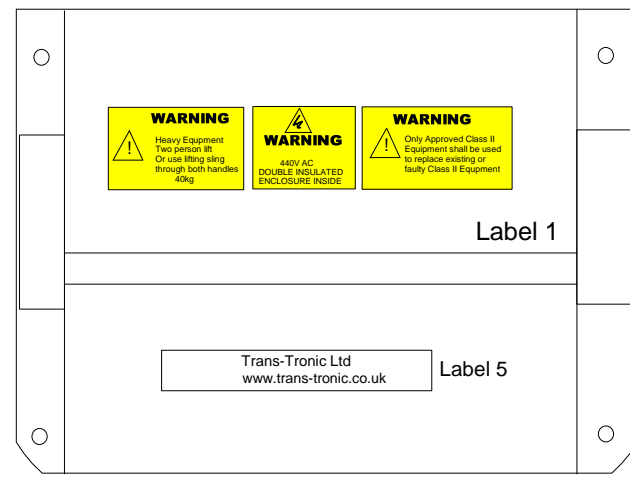
Description:	<b>Class II Hybrid Transformer Rectifier for Point Machines NR/L2/SIG/30007 BR865 type C 440/120v @ 10A DC</b>
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Dimensions	420x290x 250mm high	Weight	40Kg	Colour	BS381c shade 632 Dark Admiralty Grey
General arrangement drawing	GA-TB210 overleaf			O&M Manual:	Trans-Tronic ClassII-Hybrid Point machine Tj
Primary (Input) ClassII	T0-T370-T400-T415-T440-T470			Output ClassI	B120 N120 with ±4v taps 10A continuous
Primary terminals	Screw up clamp 0.5 -6mm <sup>2</sup>		Secondary terminals	Screw up clamp 0.5-16mm <sup>2</sup>	
Functional earth	Screw up clamp 0.5-16mm <sup>2</sup>		Enclosure	IP32	
Suitable for driving 4 x style 63 point motors , 4 x HW2xxx series, 4 x HPSS point motors 8 x clamp lock point motors , 2 x Hydrive point motor					
Primary resistance 0.8ohms @ 415V Primary Inductance 4.2mH			Secondary resistance 0.0.09 ohms Secondary Inductance 0.54mH		
Duty cycle 1 140A surge for 0.1 seconds 60A clutch slipping 0.4 seconds 20A Drive for 10 seconds Every 1 minutes		Duty cycle 2 140A surge for 0.1 seconds 80A clutch slipping 0.4 seconds 40A Drive for 10 seconds Every 2 minutes		Duty cycle 3 140A surge for 0.1 seconds 60A clutch slipping 0.4 seconds 48A Drive for 10 seconds Every 3 minutes	
Input currents at 400V 415V 440V 4.1A 4.0A 3.7A @ 10A Continuous Output 16.2A 15.6A 14.7A @ 40A Drive Output 32.6A 31.0A 30.2A @ 80A Clutch slipping Output			Output Voltage No load <134V 40A DC Output 120±2V 80A DC Output >110V		
Peak inrush current 9.4x FLC (147A at 415V)			I <sub>pt</sub> 162 <sup>2</sup> s		X/R ratio 0.78
Insulation resistance (500v) Primary to body >100M ohms Secondary to body >100M ohms Primary to secondary >100M ohms			Dielectric strength Primary to body 4.8Kv Secondary to body 2.8Kv Primary to secondary 4.8Kv		Impulse withstand <b>8Kv</b>
Recommended fuse Protection BS88 & 10x38gG IEC 60269-1 & 2 20A					
Operational temperature range -20°C to +60°C			Humidity Up to 100% RH		
Altitude <2000 metres above sea level			Issue 3 01/08/2013		



35  
220  
35

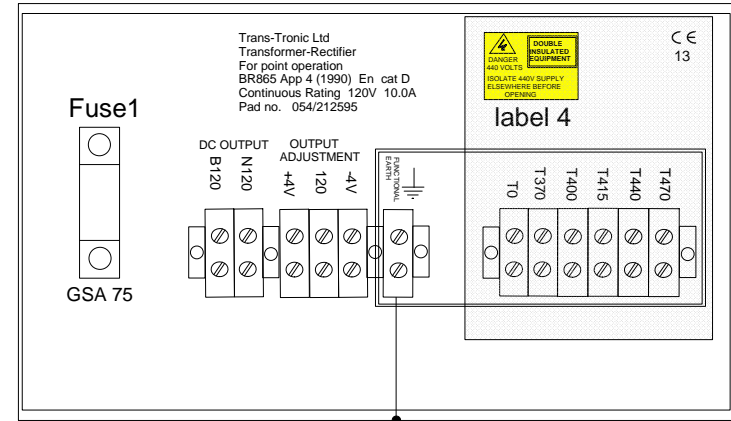


Top view

290

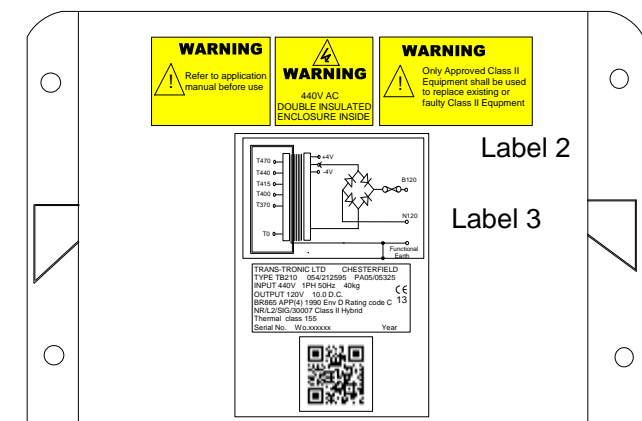
Gland holes  
25mm dia  
2 hole LHS  
1 holes RHS

Case 1 Cover 1

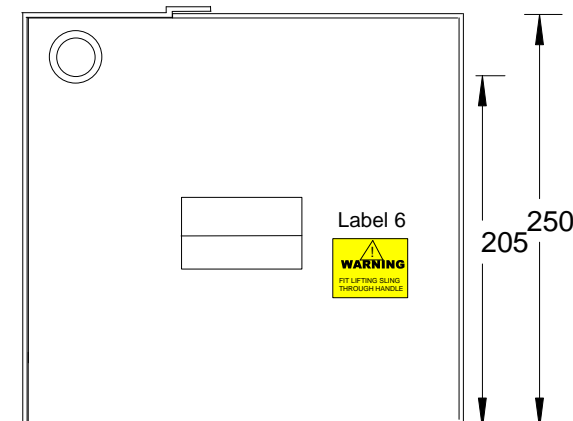


Internal view with case lid removed

40  
170  
40



Front view



Side view  
Fixing holes  
8mm dia

390mm  
420mm

260mm

Item	Description	Part No.
Case 1	Trans/Rect case	21-CASE-TR3DG
Trans 1	440/120v 10A classII	TT4491
Cover 1	TR3 Poly carb	21-TR3-COV1
Fuse1	Rectifier Fuse GSA75	01-75A-GSA
Label 1	440VClassIITR3top	02-class2-440TR3top
Label 2	440VClassIITR3 front	02-class2-440TR3front
Label 3	Circuit diagram + Rating plate	TB210CD+RP
Label 4	440VClassII internal	02-class2-440int
Label 5	TRANS-TRONIC	02-Trans-Tronic
Label 6	Lifting warning	02-class2-lifting

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TITLE GA drawing for ClassII Hybrid points machine  
440/120V @ 10.0A cont DC 054/212595 PA05/05325

SIZE <b>A4</b>	DATE 01/08/2013	DWG NO <b>A4-TB210-GA</b>	REV <b>4</b>
SCALE NTS		SHEET 1 of 1	