

T2 STANDARD TRANSFORMER DATA SHEET

S.No.	Description	Units	Particulars
1	Manufacturer		Wilson Power Solutions Ltd
2	Applicable Standard		IEC 60076
3	General Arrangement Dwg		WPS-T2-315-AL-GA
4	Transformer Rating	kVA	315
5	Rated High Voltage @ No Load	Volts	11000
6	Rated Low Voltage @ No Load	Volts	433
7	Minimum Insulation of HV (Um/LI/AC)	kV	12 / 75 / 28
8	Minimum Insulation of LV (Um/LI/AC)	kV	1.1 / - / 3
9	Line Current LV / HV	A	420.02 / 16.53
10	Insulating Fluid		Mineral Oil
11	Fans		No
12	Pumps		No
13	Type of Cooling		ONAN
14	Number of Phases		3
15	Frequency	Hz	50
16	Vector Group		Dyn11
17	Impedance Voltage (Z) (Subject to +/- IEC tol. Limits)	%	4.75
18	Symmetrical Short Circuit Current in LV	kA	8.74 (Approx.)
19	Symmetrical Short Circuit Current in HV Rated Tap	kA	0.34 (Approx.)
20	Core Material		CRGO
21	No Load Losses	W	324
22	Load Losses @ 75°C	W	2800
23	Losses as per EU Regulation No. 548/2014		Meets Tier-2 Requirement
24	Resistance	%	0.89 (Approx.)
25	Reactance	%	4.67 (Approx.)
26	Positive sequence resistance at principal tap	P. U.	0.0089 (Approx.)
27	Positive sequence reactance at principal tap	P. U.	0.0467 (Approx.)
28	Positive sequence reactance at minimum tap	P. U.	0.0442 (Approx.)
29	Positive sequence reactance at maximum tap	P. U.	0.0492 (Approx.)
30	Zero sequence resistance	P. U.	0.0071 (Approx.)
31	Zero sequence reactance	P. U.	0.0370 (Approx.)
32	Regulation type	-	DETC
33	Tapping on HV	%	+5.0, +2.5, 0.0, -2.5, -5
34	Design Ambient Temperature	°C	40
35	Temp Rise of Top Oil	°C	60

36	Temp Rise of Winding	°C	65
37	Altitude	m	<1000
38	Pollution class		C4H
39	Sound Power Level	dB (A)	54
40	HV Conductor Material		Aluminium
41	LV Conductor Material		Aluminium
42	Paint Finish Colour		Dark Admiralty Grey (BS 632 shade)
43	Transformer Type		Free Breathing, bolted cover type
44	HV termination type		Cable Box - 12kV, 3-Pole, (Facing-'E' BS:2562) with 1 take off per phase
45	LV termination type		Cable box - 1.1kV, 4-Pole, (Facing-'F', BS:2562) with 1 take off per phase & Neutral
46	Neutral		Located inside - cable box
47	Harmonic distortion	THD%	<5%
Accessories			
48	Drain & Sampling Valve		Yes
49	Radiator Valves		No
50	Dehydrating Breather		Yes
51	Pressure Relief Device		No
52	Oil Temperature Indicator		No
53	Buchholz unit		No
54	Winding Temperature Indicator		No
55	Magnetic Liquid Level Indicator		No
56	Conservator		No
57	HV CTs		No
58	LV CTs		No
59	Neutral CTs		No
60	Disconnecting links HV		No
61	Disconnecting links LV		No
62	Marshalling box		No
63	Bund		No
Overall Dimensions			
64	Length	mm	1595
65	Width	mm	1239
66	Height	mm	1764
67	Oil	L	685
68	Weight	kg	2100

Testing Requirement							
69	Routine tests		Yes. Kindly refer below for the list of routine tests conducted at manufacturing facility.				
	<p>Comments: All losses, dimensions & weights are provisional only subject to confirmation following detailed design.</p> <p>List of Routine Tests - Per IEC 60076-1:</p> <ol style="list-style-type: none"> 1. Measurement of winding resistance (11.2) 2. Measurement of voltage ratio and check of phase displacement (11.3) 3. Measurement of short-circuit impedance and load loss (11.4) 4. Measurement of no-load loss and current (11.5) 5. Dielectric routine tests (IEC 60076-3) 6. Tests on on-load tap-changers, where appropriate (11.7) 7. Leak testing with pressure for liquid-immersed transformers (tightness test) (11.8) 8. Check of the ratio and polarity of built-in current transformers (If applicable) 9. Check of core and frame insulation for liquid immersed transformers with core or frame 						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center; padding: 5px;">Prepared By</th><th style="text-align: center; padding: 5px;">Checked & Approved By</th></tr> <tr> <td style="text-align: center; padding: 5px;">Nikhil N</td><td style="text-align: center; padding: 5px;">Srinivasan S R</td></tr> </table>			Prepared By	Checked & Approved By	Nikhil N	Srinivasan S R
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