

**Type 3Ph 50Hz Oil-immersed transformer N<sub>2</sub> Gas Sealed Type**

**HV side** 22 KV. With off-circuit tap changer +/- 2 X 2.5%

**LV side** 400 /230 V. Vector connection Dyn11



Rating Power	... KVA.	50	100	160	250	315	400	500	630	750	800	1000	1250	1500	1600	2000	2500
No-Load loss	... Watt	160	250	360	500	700	850	1000	1200	1250	1300	1600	1800	2000	2100	2700	3200
Load loss 75°C	... Watt	950	1550	2100	2950	3900	4600	5500	6500	10600	11000	13500	16000	18900	19500	22700	26800
Impedance voltage 75°C	... %	4	4	4	4	4	4	4	4	6	6	6	6	6	6	6	6
Z <sub>LV</sub>	...mOhm	128.0	64.00	40.00	25.60	20.32	16.00	12.80	10.16	12.80	12.00	9.60	7.68	6.40	6.00	4.80	3.84
Reactance Voltage	... %	3.52	3.69	3.78	3.82	3.80	3.83	3.85	3.86	5.83	5.84	5.85	5.86	5.87	5.87	5.89	5.90
X <sub>LV</sub>	...mOhm	112.6	59.00	37.79	24.46	19.32	15.32	12.31	9.81	12.44	11.68	9.35	7.50	6.26	5.87	4.71	3.78
Resistance Voltage	... %	1.90	1.55	1.31	1.18	1.24	1.15	1.10	1.03	1.41	1.38	1.35	1.28	1.26	1.22	1.14	1.07
R <sub>LV</sub>	...mOhm	60.80	24.80	13.13	7.55	6.29	4.60	3.52	2.62	3.02	2.75	2.16	1.64	1.34	1.22	0.91	0.69
Rated Current HV	... amp.	1.31	2.62	4.20	6.56	8.27	10.50	13.12	16.53	19.68	21.00	26.24	32.80	39.37	41.99	52.49	65.61
Rated Current LV	... amp.	72	144	231	361	455	577	722	909	1,083	1,155	1,443	1,804	2,165	2,309	2,887	3,609
I short circuit LV ( I <sub>sc</sub> )	... KA	1.8	3.6	5.8	9.0	11	14	18	23	18	19	24	30	36	38	48	60
Sound level ( L <sub>pa</sub> 0.3m )	... dB(A)	48	51	51	51	56	56	56	57	58	58	58	60	60	60	60	62
Efficiency at P.F. = 1																	
at 25% Load	... %	98.28	98.63	98.79	98.92	98.82	98.88	98.94	98.99	98.99	99.02	99.03	99.11	99.16	99.18	99.18	99.23
at 50% Load	... %	98.43	98.74	98.91	99.02	98.95	99.01	99.06	99.11	98.97	99.00	99.01	99.08	99.11	99.14	99.17	99.21
at 75% Load	... %	98.18	98.53	98.73	98.86	98.79	98.87	98.92	98.98	98.73	98.77	98.79	98.86	98.89	98.92	98.98	99.03
at 100% Load	... %	97.83	98.23	98.49	98.64	98.56	98.66	98.72	98.79	98.44	98.49	98.51	98.60	98.63	98.67	98.75	98.81
Voltage regulation at 100% load																	
at P.F. = 0.8	... %	3.65	3.47	3.34	3.26	3.30	3.25	3.22	3.17	4.70	4.68	4.66	4.62	4.61	4.58	4.52	4.48
at P.F. = 0.9	... %	3.27	3.04	2.87	2.77	2.81	2.75	2.71	2.66	3.92	3.89	3.87	3.82	3.80	3.77	3.71	3.66
at P.F. = 1	... %	1.96	1.62	1.38	1.25	1.31	1.22	1.17	1.11	1.58	1.55	1.52	1.45	1.43	1.39	1.31	1.25
Overall dimension																	
L	... mm.	960	1130	1180	1310	1270	1520	1570	1640	1900	1990	2150	2030	2100	2130	2340	2460
W	... mm.	635	650	830	730	850	920	930	950	1200	1260	1350	1230	1280	1300	1430	1470
H	... mm.	1280	1280	1400	1420	1445	1540	1610	1645	1670	1670	1710	1830	1980	2035	2035	2165
Total weight	... Kg.	580	770	1035	1295	1450	1765	2065	2350	2550	2605	3355	3765	4200	4370	5540	6910
Oil quantity	... Litr.	220	215	280	320	345	410	455	585	650	725	730	920	1000	1040	1290	1580

Note : The data in this table are indicative and can be modified at any time.