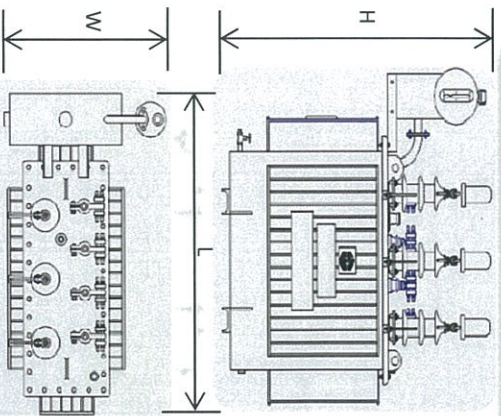


	Single Phase										Three Phase															
	22000-460/230					19000-460/230					22000-400/230					19000-400/230										
Rating Power	30	50	30	50	30	50	30	50	30	50	100	160	250	315	400	500	630	750	800	1000	1250	1500	1600	2000	2500	3000
No-Load Loss (Watt)	120	150	120	150	120	150	120	150	120	150	250	360	500	750	900	1000	1300	1350	1400	1600	1900	2200	2200	2300	2600	3800
Load-Loss 75°C (Watt)	430	670	430	670	430	670	430	670	430	670	1550	2100	2950	3900	4600	5500	6500	10000	10500	13000	16000	19000	19800	23000	28000	33000
Impedance voltage 75°C (%)	2	2.2	2	2.2	2	2.2	2	2.2	2	2.2	4	4	4	4	4	4	4	6	6	6	6	6	6	6	7	7
Rated Current HV (amp.)	1.36	2.27	1.58	2.63	1.31	2.62	4.20	6.56	8.27	10.50	10.50	13.12	16.53	19.68	20.99	26.24	32.80	39.36	41.99	52.49	65.61	82.87	88.89	109.00	137.00	165.00
Rated Current LV (amp.)	65.22	108.70	65.22	108.70	72.17	144.34	230.94	360.84	454.66	577.35	577.35	721.69	909.33	1082.53	1154.70	1443.38	1804.22	2165.06	2309.40	2886.75	3608.44	4330.13	4530.13	5430.13	6630.13	8030.13
Sound Level(Lp,a 0.3m) (dB(A))	45	45	45	45	45	45	47	48	50	50	50	52	52	54	54	54	56	56	56	56	56	56	56	56	56	56
Efficiency at P.F.=1 (%)	98.08	98.49	98.08	98.49	98.08	98.49	98.28	98.63	98.79	98.92	98.75	98.83	98.94	98.93	98.96	98.98	99.08	99.08	99.08	99.04	99.08	99.10	99.10	99.12	99.20	99.22
at 25% Load (%)	98.51	98.75	98.51	98.75	98.51	98.75	98.43	98.74	98.91	99.02	98.92	98.99	99.06	99.08	99.06	99.04	99.06	99.06	99.06	99.04	99.06	99.08	99.08	99.10	99.17	99.20
at 50% Load (%)	98.42	98.61	98.42	98.61	98.42	98.61	98.18	98.53	98.73	98.86	98.77	98.85	98.92	98.96	98.96	98.83	98.85	98.85	98.85	98.83	98.85	98.87	98.89	98.97	99.00	99.02
at 75% Load (%)	98.20	98.39	98.20	98.39	98.20	98.39	97.83	98.23	98.49	98.64	98.64	98.72	98.78	98.78	98.51	98.56	98.59	98.61	98.64	98.74	98.74	98.77	98.77	98.77	98.79	98.79
at 100% Load (%)	98.20	98.39	98.20	98.39	98.20	98.39	97.83	98.23	98.49	98.64	98.64	98.72	98.78	98.78	98.51	98.56	98.59	98.61	98.64	98.74	98.74	98.77	98.77	98.77	98.79	98.79
Voltage regulation at 100% Load	1.98	2.12	1.98	2.12	1.98	2.12	3.65	3.47	3.34	3.26	3.30	3.25	3.22	3.17	4.65	4.64	4.62	4.61	4.59	4.53	5.16	5.16	5.16	5.16	5.15	5.15
at P.F.=0.8 (%)	1.90	1.97	1.90	1.97	1.90	1.97	3.27	3.04	2.87	2.77	2.81	2.75	2.71	2.66	3.86	3.84	3.82	3.81	3.79	3.72	4.18	4.18	4.18	4.17	4.17	4.17
at P.F.=0.9 (%)	1.44	1.36	1.44	1.36	1.44	1.36	1.96	1.62	1.38	1.25	1.31	1.22	1.17	1.11	1.50	1.48	1.45	1.44	1.41	1.32	1.36	1.36	1.36	1.34	1.34	1.34
at P.F.=1 (%)	1.44	1.36	1.44	1.36	1.44	1.36	1.96	1.62	1.38	1.25	1.31	1.22	1.17	1.11	1.50	1.48	1.45	1.44	1.41	1.32	1.36	1.36	1.36	1.34	1.34	1.34
Overall dimension																										
Height (H)	1200	1270	1330	1360	1060	1140	1170	1320	1570	1620	1670	1720	1770	1770	1770	1880	1960	2080	2080	2300	2400	2400	2400	2480	2480	2480
Large (L)	690	700	700	750	920	1000	1120	1150	1480	1570	1650	1670	1830	1830	2210	2180	2210	2210	2210	2280	2410	2410	2410	2710	2710	2710
Width (W)	560	700	700	700	610	660	680	730	800	880	920	930	1030	1030	1350	1300	1350	1350	1350	1380	1460	1460	1460	2140	2140	2140
Total Weight	260	400	340	430	420	595	805	1030	1250	1500	1750	2050	2400	2400	4500	3850	4500	4500	4500	4570	5150	6050	6050	7100	7100	7100
Oil Quantity	75	110	110	130	110	150	200	265	330	400	450	490	620	620	900	800	900	1030	1030	1370	1540	1540	1540	1950	1950	1950

Three Phase

	Three Phase													
	33000-400/230													
Rating Power	50	100	160	250	315	400	500	630	800	1000	1250	1500	2000	2500
No-Load Loss (Watt)	170	260	370	520	800	950	1100	1400	1550	1800	2000	2350	2800	3300
Load-Loss 75°C (Watt)	950	1550	2100	2950	3900	4600	5500	6500	10500	13000	16000	19000	23000	28000
Impedance voltage 75°C (%)	4	4	4	4	4	4	4	4	6	6	6	6	6	7
Rated Current HV (amp.)	0.87	1.75	2.80	4.37	5.51	7.00	8.75	11.02	14.00	17.50	21.87	26.24	34.99	43.74
Rated Current LV (amp.)	72.17	144.34	230.94	360.84	454.66	577.35	721.69	909.33	1154.70	1443.38	1804.22	2165.06	2886.75	3608.44
Sound Level(Lp,a 0.3m) (dB(A))	45	46	47	48	50	50	52	52	54	54	56	56	56	56
Efficiency at P.F.=1 (%)	98.20	98.59	98.76	98.89	98.69	98.78	98.86	98.87	98.91	98.97	99.05	99.07	99.16	99.20
at 25% Load (%)	98.40	98.72	98.89	99.00	98.89	98.96	99.02	99.05	98.97	99.00	99.05	99.06	99.15	99.18
at 50% Load (%)	98.16	98.51	98.72	98.85	98.75	98.83	98.89	98.94	98.77	98.80	98.84	98.85	98.96	98.99
at 75% Load (%)	97.81	98.22	98.48	98.53	98.53	98.53	98.70	98.76	98.52	98.54	98.58	98.60	98.73	98.76
at 100% Load (%)	97.81	98.22	98.48	98.53	98.53	98.53	98.70	98.76	98.52	98.54	98.58	98.60	98.73	98.76
Voltage regulation at 100% Load	3.65	3.47	3.34	3.26	3.30	3.25	3.22	3.17	4.64	4.63	4.62	4.61	4.53	5.16
at P.F.=0.8 (%)	3.27	3.04	2.87	2.77	2.81	2.75	2.71	2.66	3.84	3.83	3.82	3.81	3.72	4.18
at P.F.=0.9 (%)	1.96	1.62	1.38	1.25	1.31	1.22	1.17	1.11	1.48	1.47	1.45	1.44	1.32	1.36
at P.F.=1 (%)	1.96	1.62	1.38	1.25	1.31	1.22	1.17	1.11	1.48	1.47	1.45	1.44	1.32	1.36
Overall dimension														
Height (H)	1310	1400	1400	1500	1670	1720	1750	1850	1880	2020	2100	2230	2360	2450
Large (L)	1040	1130	1220	1250	1600	1740	1780	1840	1950	2170	2250	2310	2420	2530
Width (W)	610	700	720	720	800	880	920	950	1060	1230	1340	1380	1450	1500
Total Weight	600	870	1060	1370	1550	1900	2100	2480	2750	3240	4520	5040	5920	6970
Oil Quantity	190	270	310	385	470	530	560	620	790	1020	1150	1290	1520	1740



23/1 Moo 7 Bangna-trad Rd., Soi Watsadu, Bangkhaw,
 Bangplee, Samutprakarn 10540, THAILAND
 Tel: 02-316-3355 (Auto), 02-316-6827 Fax: 02-750-1584