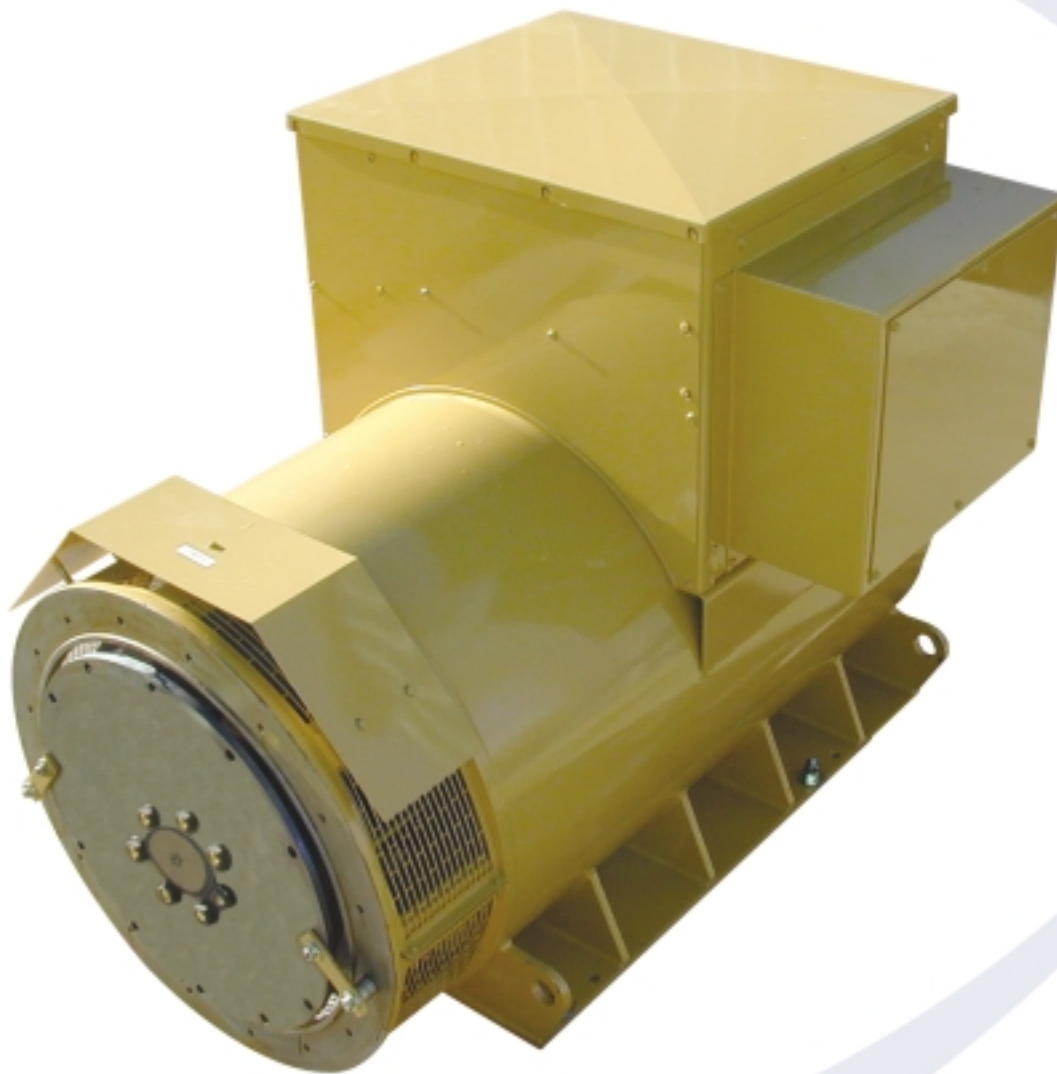


# PACKAGED GENERATOR



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# Packaged Generators:

**New Kato Engineering Packaged Generator Line:** The new Kato Engineering line of generators is a group of commercial and industrial quality generators that can meet the broadest range of standby or prime power requirements. These highly reliable generators provide the design innovation available only from a leader in the manufacturing of rotating electrical machinery. The product quality you expect from Kato is designed into every Kato generator.

**Over 75 Years of Experience:** Kato generators have long been providing reliable electrical power worldwide in baseload and emergency standby applications ranging from industrial and marine to telecommunications and construction. Kato's 75 years of rotating electrical equipment experience comes with every Kato generator.

**Conformity:** The new Kato line of generators conforms to the applicable parts of IEEE, NEMA, IEC and ISO standards. The generators have CSA listing and are suitable for submission as a component for UL 2200 certification. Marine generators may be certified to ABS, Lloyd's Register Shipping, Bureau Veritas, DNV, RINA and others.

**Service:** Sales, customer and product service, logistics planning and warehousing are positioned throughout the U.S.A. Technical support and repair service needs are provided by Kato's nationwide network.

**Quality Standards:** The new Kato line of generators is manufactured in a plant that is certified to the new quality standard TS-16949, which includes ISO 9001. This was the first generator manufacturing plant to achieve this certification.

**Basic Construction & Bearings:** The generators are fully guarded per NEMA MG 1-25.4. Optional protection can be provided to meet the requirements of IP-22 or IP-23. Cast iron end brackets and fabricated steel frames are standard. Bearings are pre-lubricated, double shield, ball type, single row conrad, C3 fit with provisions for adding and /or changing grease. Minimum B-10 bearing life is 40,000 hours for single bearing units.

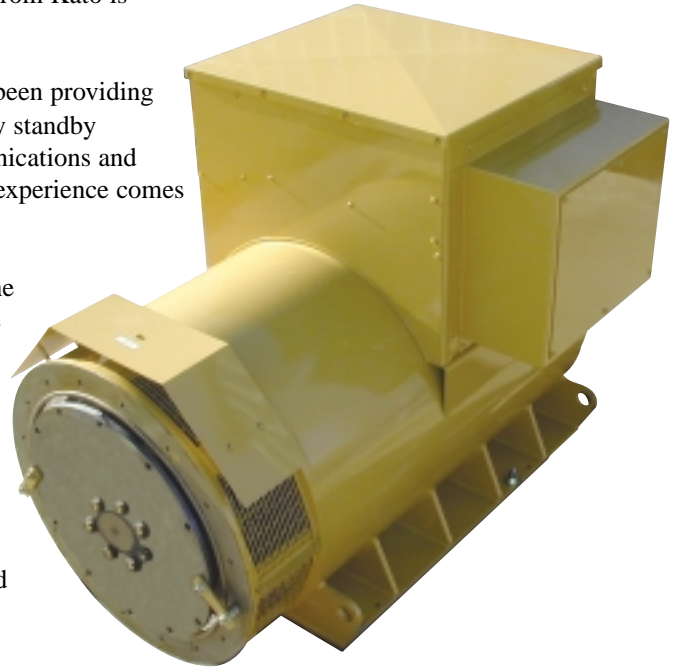
**Ratings:** Standard designs range from 200 kW to 2500 kW, three phase, 105° C rise in 4-pole, 1800 RPM machines. Standard designs range from 200 kW to 1750 kW, three phase, 105° C rise in 6-pole, 1200 RPM machines. All standard 50 Hz and 60 Hz three phase voltages are available up to 400 Volts, 50 Hz and 480 Volts, 60 Hz. In addition, all standard 50 Hz and 60 Hz single-phase voltages are available in the 1800 RPM generators up to 1150 kW

**Standard Features:** NEMA Class H insulation is standard throughout the generators. A solid state, fully encapsulated voltage regulator is included as standard.

**Special Ratings & Features:** Three phase 60 Hz voltages to 4160 Volts and 50 Hz voltages to 3300 Volts are available. In voltages above 480 Volts, form-wound stators are used. Form windings are also available upon special order in 50 Hz, 400 Volt and 60 Hz, 480 Volts.

## Options:

- Digital voltage regulator with VAR/PF control
- Reactive droop paralleling
- Cross-current compensation paralleling
- EMI filter
- Manual voltage control



## 40 to 80 Frame 480 Volt 1800 RPM 60Hz

Voltage	480	480	480	480	480
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kW, 60 Hz, 1800 RPM				
MTG41	170	190	210	210	220
MTG42	190	210	225	225	240
MTG43	195	225	250	250	275
MTG44	205	250	275	275	290
MTG45	240	310	340	340	360
MTG46	275	310	350	350	375
MTG47	280	320	355	355	380
MTG48	340	400	450	450	475
MTG49	395	425	475	475	500
MTG51	490	525	575	575	610
MTG52	510	545	610	610	650
MTG53	525	590	650	650	700
MTG54	555	635	700	700	750
MTG55	655	680	755	755	800
MTG56	690	725	800	800	875
MTG57	700	775	875	875	950
MTG58	715	800	900	900	1000
MTG61	800	900	1000	1000	1050
MTG62	900	1000	1100	1100	1150
MTG63	1000	1150	1250	1250	1325
MTG64	1150	1250	1400	1400	1475
MTG65	1250	1400	1500	1500	1575
MTG81	1400	1600	1750	1750	1850
MTG82	1600	1800	2000	2000	2100
MTG83	1800	2000	2250	2250	2375
MTG84	2000	2250	2500	2500	2625
MTG85	2250	2500	2750	2750	3000

# Typical Data: 105° C Rise

Model	Rating kW 480V 60 Hz	Efficiency - % $\eta$	Synchronous reactance $X_d$	Transient reactance $X'_d$	Subtransient reactance $X''_d$	Quad. synchronous reactance $X_q$	Quad. subtransient reactance $X''_q$	Leakage reactance $X_l$	Negative sequence reactance $X_2$	Zero sequence reactance $X_0$	Short circuit transient time constant $T'_d$	Short circuit subtransient time constant $T''_d$	Open circuit transient time constant $T'_{do}$	Armature time constant $T_a$	Short circuit ratio $K_{sc}$	Phase resistance - Ohms $\Omega$
MTG41	190	90.6	426.7	44.85	27.43	254.2	29.81	17.34	28.62	0.52	0.1340	0.0035	1.275	0.0168	0.2863	0.0326
MTG42	210	91.6	375.1	38.60	23.21	223.3	25.67	14.69	24.44	0.45	0.1406	0.0035	1.366	0.0172	0.3473	0.0246
MTG43	225	93.0	312.6	31.34	18.43	185.9	20.85	11.68	19.64	0.38	0.1502	0.0036	1.498	0.0190	0.4367	0.0167
MTG44	250	92.5	347.4	34.82	20.47	206.5	23.17	12.98	21.82	0.42	0.1502	0.0036	1.498	0.0190	0.3960	0.0167
MTG45	310	93.5	313.1	30.51	17.48	185.9	20.31	11.10	18.89	0.38	0.1624	0.0036	1.667	0.0208	0.4649	0.0106
MTG46	310	93.6	320.7	31.17	17.82	190.4	20.75	11.32	19.29	0.39	0.1635	0.0037	1.682	0.0210	0.4299	0.0108
MTG47	320	93.7	372.8	35.85	20.28	221.2	23.87	12.90	22.08	0.45	0.1689	0.0037	1.757	0.0218	0.3126	0.0115
MTG48	400	95.0	276.7	26.03	14.41	164.0	17.34	9.19	15.87	0.34	0.1874	0.0038	1.874	0.0238	0.4925	0.0061
MTG49	425	94.8	317.1	29.68	16.36	187.9	19.78	10.43	18.07	0.39	0.1843	0.0038	1.969	0.0243	0.3820	0.0064
MTG51	525	94.3	408.7	33.19	24.00	208.4	23.44	13.22	23.72	1.36	0.1681	0.0041	2.071	0.0280	0.2871	0.0071
MTG52	545	94.5	378.7	29.40	20.87	193.2	20.65	12.49	20.76	1.41	0.1938	0.0050	2.496	0.0284	0.3384	0.0053
MTG53	590	94.9	334.1	25.57	17.89	169.8	18.01	9.62	17.95	1.11	0.1762	0.0044	2.302	0.0265	0.3614	0.0046
MTG54	635	95.5	314.5	23.56	16.40	160.2	16.62	9.83	16.51	1.17	0.2051	0.0046	2.737	0.0305	0.4461	0.0036
MTG55	680	95.8	362.2	26.98	18.73	184.5	19.10	11.28	18.92	1.35	0.2092	0.0047	2.808	0.0349	0.3410	0.0035
MTG56	725	95.4	259.4	18.70	12.62	131.4	13.17	6.64	12.90	0.87	0.2092	0.0047	2.808	0.0349	0.5004	0.0029
MTG57	775	95.7	284.4	20.52	13.87	144.1	14.51	7.34	14.19	0.95	0.1887	0.0043	2.614	0.0281	0.4386	0.0030
MTG58	800	95.9	303.0	22.13	14.74	152.7	15.33	8.36	15.03	1.01	0.1744	0.0044	2.387	0.0282	0.3949	0.0034
MTG61	900	95.6	321.3	23.20	16.24	157.9	33.27	8.89	23.57	0.77	0.2605	0.0047	3.606	0.0360	0.3817	0.0027
MTG62	1000	95.9	299.7	21.15	14.58	147.3	31.18	8.17	22.12	0.77	0.2648	0.0046	3.752	0.0400	0.4091	0.0021
MTG63	1150	96.0	277.5	19.53	13.22	137.8	27.98	7.67	20.60	0.82	0.2921	0.0052	4.152	0.0430	0.4652	0.0022
MTG64	1250	96.3	310.0	22.32	15.49	152.8	19.41	9.21	24.16	0.88	0.2788	0.0054	3.872	0.0380	0.3887	0.0013
MTG65	1400	96.4	367.1	26.64	18.61	181.1	23.47	11.20	21.04	0.88	0.2827	0.0056	3.896	0.0430	0.3108	0.0012
MTG81	1600	96.8	352.0	27.98	18.96	168.1	17.84	10.85	18.40	1.07	0.4970	0.0072	6.253	0.0490	0.3512	0.0009
MTG82	1800	97.0	350.0	23.94	14.76	165.4	13.95	7.48	14.36	4.17	0.4822	0.0061	7.048	0.0380	0.3804	0.0009
MTG83	2000	97.0	319.8	21.77	13.49	151.2	12.94	6.98	13.22	2.79	0.4947	0.0063	7.267	0.0390	0.4463	0.0007
MTG84	2250	97.3	350.5	24.08	15.01	165.9	14.52	7.94	14.76	1.05	0.5014	0.0067	7.298	0.0570	0.3869	0.0005
MTG85	2500	97.4	365.0	25.09	15.86	173.1	15.53	8.89	15.69	6.42	0.5193	0.0071	7.557	0.0610	0.3899	0.0005

Reactances - %

Time Constants - seconds

## 40 to 80 Frame 400 Volt 1500 RPM 50Hz

Voltage	400	400	400	400	400
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kVA, 50 Hz, 1500 RPM				
MTG41	170	180	190	190	200
MTG42	190	200	225	225	240
MTG43	200	240	250	250	275
MTG44	215	255	270	270	290
MTG45	270	280	340	340	360
MTG46	290	310	350	350	360
MTG47	290	315	350	350	380
MTG48	360	410	460	460	500
MTG49	365	425	475	475	500
MTG51	470	510	565	565	600
MTG52	485	525	580	580	615
MTG53	525	570	630	630	665
MTG54	570	650	720	720	765
MTG55	635	670	730	730	770
MTG56	665	725	800	800	850
MTG57	675	775	875	875	950
MTG58	685	800	900	900	1000
MTG61	800	900	1000	1000	1050
MTG62	900	1000	1100	1100	1150
MTG63	1000	1150	1250	1250	1325
MTG64	1150	1250	1400	1400	1475
MTG65	1250	1350	1500	1500	1575
MTG81	1400	1600	1750	1750	1850
MTG82	1600	1800	2000	2000	2100
MTG83	1800	2000	2250	2250	2375
MTG84	2000	2250	2500	2500	2625
MTG85	2250	2500	2750	2750	3000

# Typical Data: 105° C Rise

Model	Rating kVA 400V 50 Hz	Efficiency - %	Synchronous reactance	Transient reactance	Subtransient reactance	Quad. synchronous reactance	Quad. subtransient reactance	Leakage reactance	Negative sequence reactance	Zero sequence reactance	Short circuit transient time constant	Short circuit subtransient time constant	Open circuit transient time constant	Armature time constant	Short circuit ratio	Phase resistance - Ohms
		$\eta$	$X_d$	$X'_d$	$X''_d$	$X_q$	$X''_q$	$X_l$	$X_2$	$X_0$	$T'_d$	$T''_d$	$T'_{do}$	$T_a$	$K_{cc}$	$\Omega$
MTG41	190	89.5	409.6	43.05	26.34	244.1	28.62	16.64	27.48	0.49	0.1340	0.0035	1.275	0.0168	0.2982	0.0326
MTG42	210	90.6	360.1	37.06	22.28	214.3	24.64	14.10	23.46	0.44	0.1406	0.0035	1.366	0.0172	0.3618	0.0246
MTG43	225	92.3	300.1	30.09	17.69	178.4	20.02	11.21	18.85	0.36	0.1502	0.0036	1.498	0.0190	0.4549	0.0167
MTG44	230	92.1	306.8	30.76	18.08	182.4	20.46	11.46	19.27	0.37	0.1502	0.0036	1.498	0.0190	0.4450	0.0167
MTG45	300	92.9	290.9	28.34	16.24	172.7	18.87	10.32	17.55	0.35	0.1624	0.0036	1.667	0.0208	0.5004	0.0106
MTG46	310	93.0	307.9	29.93	17.11	182.8	19.92	10.87	18.52	0.37	0.1635	0.0037	1.682	0.0210	0.4478	0.0108
MTG47	320	93.1	357.9	34.41	19.47	212.3	22.91	12.38	21.19	0.43	0.1689	0.0037	1.757	0.0218	0.3256	0.0115
MTG48	390	94.4	259.0	24.36	13.49	153.5	16.23	8.60	14.86	0.32	0.1874	0.0038	1.874	0.0238	0.5261	0.0061
MTG49	425	94.3	304.4	28.50	15.70	180.4	19.98	10.01	17.34	0.37	0.1843	0.0038	1.969	0.0243	0.3980	0.0064
MTG51	520	94.0	388.7	31.56	22.82	198.2	22.29	12.57	22.56	1.29	0.1681	0.0041	2.071	0.0280	0.3019	0.0071
MTG52	550	94.2	366.9	28.48	20.21	187.2	20.01	12.10	20.11	1.29	0.1938	0.0050	2.496	0.0284	0.3492	0.0053
MTG53	590	94.6	320.8	24.54	17.17	163.0	17.29	9.24	17.23	1.07	0.1762	0.0044	2.302	0.0265	0.3795	0.0046
MTG54	635	95.3	301.9	22.62	15.75	153.8	15.96	9.44	15.85	1.12	0.2051	0.0046	2.737	0.0305	0.4647	0.0036
MTG55	680	95.5	347.7	25.90	17.98	177.1	18.34	10.83	18.16	1.30	0.2092	0.0047	2.808	0.0349	0.3552	0.0035
MTG56	725	95.2	249.0	17.95	12.12	126.1	12.65	6.37	12.38	0.83	0.2092	0.0047	2.808	0.0349	0.5212	0.0029
MTG57	775	95.4	273.0	19.70	13.31	138.3	13.92	7.05	13.62	0.91	0.1887	0.0043	2.614	0.0281	0.4569	0.0030
MTG58	800	95.9	304.4	28.50	15.70	180.4	19.98	10.01	17.34	0.97	0.1744	0.0044	2.387	0.0282	0.398	0.0034
MTG61	900	95.4	308.4	22.27	15.59	151.6	31.94	8.53	22.63	0.74	0.2605	0.0047	3.361	0.0363	0.3977	0.0027
MTG62	1000	95.7	287.7	20.30	13.99	141.4	29.93	7.84	21.24	0.74	0.2648	0.0046	3.752	0.0399	0.4261	0.0021
MTG63	1150	95.9	266.4	18.75	12.69	132.2	26.86	7.36	19.78	0.78	0.2921	0.0052	4.152	0.0426	0.4846	0.0022
MTG64	1250	96.2	297.6	21.43	14.87	146.7	18.64	8.84	23.19	0.84	0.2788	0.0054	3.872	0.0380	0.4049	0.0013
MTG65	1350	96.3	339.8	24.66	17.23	167.6	21.72	10.37	27.88	0.88	0.2827	0.0056	3.896	0.0434	0.3375	0.0012
MTG81	1600	96.7	338.0	26.86	18.21	161.4	17.13	10.41	17.67	1.03	0.4970	0.0072	6.253	0.0489	0.658	0.0009
MTG82	1800	96.9	336.0	22.99	14.17	158.8	13.39	7.18	13.78	4.01	0.4822	0.0061	7.048	0.0381	0.3962	0.0009
MTG83	2000	97.0	307.0	20.90	12.95	145.1	12.43	6.70	12.69	2.68	0.4947	0.0063	7.267	0.0394	0.4649	0.0007
MTG84	2250	97.3	336.5	23.12	14.41	159.2	13.94	7.62	14.17	1.00	0.5014	0.0067	7.298	0.0572	0.4030	0.0005
MTG85	2500	97.4	350.4	24.08	15.22	166.2	14.91	8.54	15.07	6.16	0.5193	0.0071	7.557	0.0606	0.4062	0.0005

Reactances - %

Time Constants - seconds

## 60 to 80 Frame 4160 Volt 1800 RPM 60Hz

Voltage	4160	4160	4160	4160	4160
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kW, 60 Hz, 1800 RPM				
MTG61	800	900	1000	1000	1050
MTG62	900	1000	1100	1100	1150
MTG63	100	1150	1250	1250	1325
MTG64	1150	1250	1400	1400	1475
MTG65	1250	1400	1500	1500	1575
MTG81	1400	1600	1750	1750	1850
MTG82	1600	1800	2000	2000	2100
MTG83	1800	2000	2250	2250	2375
MTG84	2000	2250	2500	2500	2625
MTG85	2250	2500	2750	2750	3000

# Typical Data: 105° C Rise

Model	Rating kW 4160V 60 Hz	Efficiency - % $\eta$	Synchronous reactance $X_d$	Transient reactance $X'_d$	Subtransient reactance $X''_d$	Quad. synchronous reactance $X_q$	Quad. subtransient reactance $X''_q$	Leakage reactance $X_l$	Negative sequence reactance $X_2$	Zero sequence reactance $X_0$	Short circuit transient time constant $T'_d$	Short circuit subtransient time constant $T''_d$	Open circuit transient time constant $T_{do}$	Armature time constant $T_a$	Short circuit ratio $K_{sc}$	Phase resistance - Ohms $\Omega$
MTG61	900	95.7	313.7	24.01	17.44	155.0	34.11	10.24	24.02	0.95	0.2740	0.0052	3.580	0.0437	0.4029	0.1785
MTG62	1000	95.8	398.8	28.07	19.31	196.0	41.42	10.78	29.22	1.03	0.2641	0.0047	3.752	0.044	0.2757	0.1870
MTG63	1150	96.2	329.2	23.08	15.70	161.9	19.52	9.14	23.65	0.89	0.2742	0.0052	3.913	0.0340	0.3638	0.1193
MTG64	1250	96.3	402.0	27.81	18.96	197.6	40.95	10.96	28.88	1.19	0.2827	0.0051	4.086	0.0570	0.2777	0.1154
MTG65	1400	96.5	316.9	22.73	15.78	156.2	19.91	9.47	25.88	0.81	0.2827	0.0051	4.086	0.057	0.3949	0.0800
MTG81	1600	96.9	305.4	23.56	15.67	145.5	14.71	8.75	15.19	0.86	0.4918	0.0069	6.374	0.045	0.4605	0.0690
MTG82	1800	96.7	324.6	23.97	15.73	154.5	15.06	8.92	15.39	0.85	0.5010	0.0067	6.787	0.035	0.4247	0.0059
MTG83	2000	96.8	335.6	22.97	14.37	158.9	13.80	7.67	14.08	0.94	0.5070	0.0063	7.408	0.033	0.4145	0.0502
MTG84	2250	97.2	334.1	24.74	16.30	159.1	15.83	9.38	16.07	1.04	0.5292	0.0072	7.147	0.054	0.4063	0.0394
MTG85	2500	97.2	378.9	29.76	20.52	181.5	20.15	12.64	20.34	1.34	0.5408	0.0081	6.886	0.074	0.3425	0.0337

Reactances - %

Time Constants - seconds



## 60 to 80 Frame 3300 Volt 1500 RPM 50Hz

Voltage	3300	3300	3300	3300	3300
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kVA, 50 Hz, 1500 RPM				
MTG61	800	900	1000	1000	1050
MTG62	900	1000	1100	1100	1150
MTG63	1000	1150	1250	1250	1325
MTG64	1150	1250	1400	1400	1475
MTG65	1250	1350	1500	1500	1575
MTG81	1400	1600	1750	1750	1850
MTG82	1600	1800	2000	2000	2100
MTG83	1800	2000	2250	2250	2375
MTG84	2000	2250	2500	2500	2625
MTG85	2250	2500	2750	2750	3000

# Typical Data: 105° C Rise

Model	Rating kVA 3300V 50 Hz	Efficiency - % $\eta$	Synchronous reactance $X_d$	Transient reactance $X'_d$	Subtransient reactance $X''_d$	Quad. synchronous reactance $X_q$	Quad. subtransient reactance $X''_q$	Leakage reactance $X_l$	Negative sequence reactance $X_2$	Zero sequence reactance $X_0$	Short circuit transient time constant $T'_d$	Short circuit subtransient time constant $T''_d$	Open circuit transient time constant $T'_{do}$	Armature time constant $T_a$	Short circuit ratio $K_{sc}$	Phase resistance - Ohms $\Omega$
MTG61	900	95.5	329.8	26.41	19.41	165.0	36.94	11.66	25.45	1.00	0.2740	0.0052	3.580	0.0437	0.3591	0.1785
MTG62	1000	95.3	419.1	30.73	21.35	208.3	44.59	12.15	3096	1.09	0.2641	0.0047	3.752	0.0443	0.2558	0.1870
MTG63	1150	96.0	346.1	25.32	17.55	172.2	36.71	10.34	25.05	0.95	0.2742	0.0052	3.913	0.0341	0.3289	0.1193
MTG64	1250	96.0	422.2	30.11	20.63	209.8	43.94	11.03	30.59	1.26	0.02827	0.0051	4.086	0.0566	0.2564	0.1154
MTG65	1400	96.3	333.1	24.83	17.50	166.0	37.10	10.56	26.89	0.86	0.2832	0.0055	3.949	0.0433	0.3533	0.0800
MTG81	1600	96.8	323.5	24.96	16.60	154.1	15.59	9.27	16.09	0.92	0.4918	0.0069	6.374	0.0445	0.3954	0.0690
MTG82	1800	96.5	343.9	25.39	16.67	163.6	15.95	8.92	16.31	0.90	0.5010	0.0067	6.787	0.0351	0.3668	0.0059
MTG83	2000	96.6	355.6	24.33	15.22	168.3	14.62	8.12	14.92	1.00	0.5070	0.0063	7.408	0.0334	0.3574	0.0502
MTG84	2250	97.1	354.0	26.21	17.27	168.5	16.77	9.93	17.02	1.11	0.5292	0.0072	7.147	0.0543	0.3526	0.0394
MTG85	2500	97.1	401.4	31.53	21.74	192.3	21.35	13.39	21.54	1.42	0.5408	0.0081	6.886	0.0737	0.0314	0.0337

Reactances - %

Time Constants - seconds

## 500 to 800 Frame 480 Volt 1200 RPM 60Hz

Voltage	480	480	480	480	480
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kW, 60 Hz, 1200 RPM				
MTG516	190	225	250	250	290
MTG526	250	285	315	315	360
MTG536	320	350	375	375	430
MTG616	375	460	525	250	285
MTG626	455	530	600	315	360
MTG636	560	725	820	375	430
MTG816	750	900	975	975	1120
MTG826	820	975	1015	1015	1165
MTG836	850	980	1125	1125	1290
MTG846	950	1100	1200	1200	1380
MTG846B	1100	1250	1350	1350	1550
MTG846C	1250	1400	1500	1500	1725
MTG866	1440	1750	2100	2100	2415

# Typical Data: 105° C Rise

Model	Rating kW 480V 60 Hz	Efficiency - % $\eta$	Synchronous reactance $X_d$	Transient reactance $X'_d$	Subtransient reactance $X''_d$	Quad. synchronous reactance $X_q$	Quad. subtransient reactance $X''_q$	Leakage reactance $X_l$	Negative sequence reactance $X_2$	Zero sequence reactance $X_0$	Short circuit transient time constant $T'_d$	Short circuit subtransient time constant $T''_d$	Open circuit transient time constant $T'_{do}$	Armature time constant $T_a$	Short circuit ratio $K_{sc}$	Phase resistance - Ohms $\Omega$
MTG516	225	91.4	187.9	33.45	18.08	140.0	32.12	9.93	25.10	9.85	0.2277	0.0075	1.279	0.0269	0.7861	0.016
MTG526	285	92.3	209.9	36.47	19.16	153.2	35.36	10.44	27.26	11.06	0.2390	0.0077	1.376	0.0286	0.6245	0.0125
MTG536	350	93.3	188.6	32.29	16.62	140.2	31.35	8.86	23.98	9.98	0.2645	0.0082	1.545	0.0322	0.7034	0.0081
MTG616	460	92.6	180.2	27.23	19.90	97.4	18.32	10.45	18.64	1.04	0.3335	0.0081	2.208	0.0261	0.7777	0.0056
MTG626	530	92.7	217.7	32.33	22.31	117.5	21.38	12.37	22.04	1.24	0.3378	0.0080	2.275	0.0258	0.5721	0.0059
MTG636	725	93.9	216.4	30.07	20.18	116.3	20.52	11.27	20.35	1.22	0.3554	0.0087	2.558	0.0311	0.8777	0.0033
MTG816	900	94.1	185.2	26.67	17.41	102.0	16.49	9.34	16.95	0.95	0.3693	0.0124	2.753	0.0310	0.7381	0.0022
MTG826	975	94.2	216.2	30.51	19.38	118.9	18.53	10.44	18.95	1.07	0.3991	0.0119	2.829	0.0298	0.554	0.0024
MTG836	980	94.8	262.1	36.26	23.07	144.0	22.39	12.47	22.73	1.31	0.4109	0.0131	2.970	0.0380	0.4065	0.0022
MTG846	1100	95.4	150.5	19.02	11.38	82.0	11.2	5.74	11.30	0.80	0.4140	0.0115	3.278	0.0335	0.8720	0.0010
MTG846B	1250	95.4	171.0	21.61	12.93	93.18	12.75	6.53	12.84	0.91	0.4146	0.0119	3.280	0.0341	0.7673	0.0011
MTG846C	1400	95.4	191.5	24.20	14.48	104.4	14.28	7.31	14.38	1.02	0.4150	0.0122	3.285	0.0345	0.6851	0.0012
MTG866	1750	95.8	184.3	24.39	15.35	101.0	15.36	8.29	15.35	0.93	0.4805	0.0135	3.631	0.0422	0.7141	0.0008

Reactances - %

Time Constants - seconds

## 500 to 800 Frame 400 Volt 1000 RPM 50Hz

Voltage	400	400	400	400	400
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kVA, 50 Hz, 1000 RPM				
MTG516	190	225	250	250	290
MTG526	250	285	315	315	360
MTG536	320	350	375	375	430
MTG616	425	488	525	525	285
MTG626	463	531	588	588	360
MTG636	563	688	769	769	430
MTG816	938	1125	1219	1219	1400
MTG826	1025	1219	1269	1269	1460
MTG836	1063	1225	1406	1406	1615
MTG846	1188	1375	1500	1500	1725
MTG846B	1375	1563	1688	1688	1940
MTG846C	1563	1750	1875	1875	2155
MTG866	1800	2188	2625	2625	3020

# Typical Data: 105° C Rise

Model	Rating kVA 400V 50 Hz	Efficiency - % $\eta$	Synchronous reactance $X_d$	Transient reactance $X'_d$	Subtransient reactance $X''_d$	Quad. synchronous reactance $X_q$	Quad. subtransient reactance $X''_q$	Leakage reactance $X_l$	Negative sequence reactance $X_2$	Zero sequence reactance $X_0$	Short circuit transient time constant $T'_d$	Short circuit subtransient time constant $T''_d$	Open circuit transient time constant $T'_{do}$	Armature time constant $T_a$	Short circuit ratio $K_{sc}$	Phase resistance - Ohms $\Omega$
MTG516	225	90.5	180.4	32.11	17.35	134.4	30.83	9.53	24.09	9.45	0.2277	0.0075	1.279	0.0269	0.7980	0.016
MTG526	285	91.4	201.5	35.01	18.39	149.9	33.94	10.03	26.17	10.61	0.2390	0.0077	1.376	0.0286	0.6506	0.0125
MTG536	350	92.8	181.1	30.99	15.96	134.6	30.09	8.50	23.02	9.58	0.2645	0.0082	1.545	0.0322	0.7327	0.0081
MTG616	488	92.1	203.2	30.69	21.38	109.8	20.65	11.79	21.01	1.17	0.3335	0.0081	2.208	0.0261	0.6258	0.0056
MTG626	531	92.0	232.1	34.47	23.78	125.3	23.22	13.19	23.50	1.32	0.3378	0.0080	2.275	0.0258	0.5043	0.0059
MTG636	688	93.6	218.3	30.33	20.36	117.4	20.70	11.37	20.53	1.23	0.3554	0.0087	2.558	0.0311	0.5302	0.0033
MTG816	781	94.1	171.0	24.63	16.07	94.2	15.23	8.62	15.65	0.87	0.3963	0.0124	2.753	0.0310	0.7311	0.0022
MTG826	875	94.0	206.4	29.12	18.5	113.5	17.68	9.97	18.09	1.02	0.3991	0.0119	2.829	0.0298	0.5525	0.0024
MTG836	919	94.4	261.4	36.16	23.0	143.6	22.32	12.43	22.66	1.31	0.4109	0.0131	2.970	0.0380	0.4025	0.0022
MTG846	1125	95.3	163.7	20.69	12.38	89.21	12.21	6.25	12.29	0.87	0.4140	0.0115	3.278	0.0335	0.7428	0.0010
MTG846B	1250	95.3	181.9	22.99	13.75	99.12	13.56	6.94	13.66	0.97	0.4146	0.0119	3.280	0.0341	0.6685	0.0011
MTG846C	1488	95.1	216.4	27.36	16.37	118.0	16.14	8.26	16.25	1.16	0.4150	0.0122	3.285	0.0345	0.5618	0.0012
MTG866	1925	95.5	215.6	28.53	17.96	118.2	17.97	9.7	17.97	1.09	0.4805	0.0135	3.631	0.0422	0.5647	0.0008

Reactances - %

Time Constants - seconds

## 600 to 800 Frame 4160 Volt 1200 RPM 60Hz

Voltage	4160	4160	4160	4160	4160
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kW, 60 Hz, 1200 RPM				
MTG626	385	450	505	505	580
MTG636	460	600	730	730	840
MTG646	630	750	810	810	930
MTG816	665	800	900	900	1035
MTG826	755	900	975	975	1120
MTG836	910	975	1125	1125	1290
MTG846	990	1100	1200	1200	1380
MTG846B	1100	1250	1350	1350	1550
MTG846C	1250	1400	1500	1500	1725
MTG866	1440	1750	2100	2100	2415

# Typical Data: 105° C Rise

Model	Rating kW 4160V 60 Hz	Efficiency - % $\eta$	Synchronous reactance $X_d$	Transient reactance $X'_d$	Subtransient reactance $X''_d$	Quad. synchronous reactance $X_q$	Quad. subtransient reactance $X''_q$	Leakage reactance $X_l$	Negative sequence reactance $X_2$	Zero sequence reactance $X_0$	Short circuit transient time constant $T'_d$	Short circuit subtransient time constant $T''_d$	Open circuit transient time constant $T'_{do}$	Armature time constant $T_a$	Short circuit ratio $K_{sc}$	Phase resistance - Ohms $\Omega$
MTG626	450	91.1	145.1	19.65	12.73	77.46	12.39	6.42	12.56	0.74	0.3264	0.0055	2.411	0.0116	1.11	0.6540
MTG636	600	93.4	168.1	23.23	15.53	90.29	15.79	8.60	15.66	0.95	0.3535	0.0079	2.558	0.02336	0.7638	0.7113
MTG646	750	93.7	172.6	23.5	15.66	92.65	16.10	8.69	15.88	0.98	0.3592	0.0082	2.638	0.0254	0.8087	0.2276
MTG816	800	94.0	177.5	25.48	16.59	97.7	15.72	8.86	16.15	0.91	0.3953	0.0117	2.753	0.0269	0.7193	0.2044
MTG826	900	94.3	213.1	30.68	19.79	117.4	18.94	10.89	19.36	1.22	0.4024	0.0128	2.795	0.0348	0.5562	0.1684
MTG836	975	94.6	195.2	26.89	17.04	107.2	16.53	9.14	16.79	0.98	0.4093	0.0117	2.970	0.0288	0.5915	0.163
MTG846	1150	95.0	169.5	21.35	12.72	92.3	12.54	6.37	12.63	0.91	0.4131	0.0107	3.278	0.0257	0.7299	0.1164
MTG846B	1250	95.0	184.3	23.20	13.83	100.4	13.63	6.92	13.73	0.98	0.4135	0.011	3.280	0.0265	0.6715	0.1178
MTG846C	1400	94.9	206.4	25.99	15.49	112.4	15.27	7.75	15.38	1.10	0.4142	0.0115	3.285	0.0268	0.5996	0.1185
MTG866	1750	95.4	198.6	26.23	16.47	108.9	16.48	8.86	16.48	1.01	0.4794	0.0125	3.631	0.0338	0.6240	0.0761

Reactances - %

Time Constants - seconds



## 600 to 800 Frame 3300 Volt 1000 RPM 50Hz

Voltage	3300	3300	3300	3300	3300
Power Factor	0.8	0.8	0.8	0.8	0.8
Rating	Base			Peak	
Application	Continuous			Standby	
Ambient	40° C	40° C	40° C	40° C	40° C
Temp Rise	80° C	105° C	125° C	130° C	150° C
Model	kVA, 50 Hz, 1000 RPM				
MTG626	375	450	500	500	575
MTG636	506	619	688	688	790
MTG646	606	719	769	769	885
MTG816	625	781	925	925	1060
MTG826	719	875	1000	1000	1150
MTG836	769	938	1100	1100	1265
MTG846	969	1125	1156	1156	1330
MTG846B	1063	1219	1250	1250	1435
MTG846C	1231	1375	1406	1406	1620
MTG866	1588	1925	2219	2219	2550

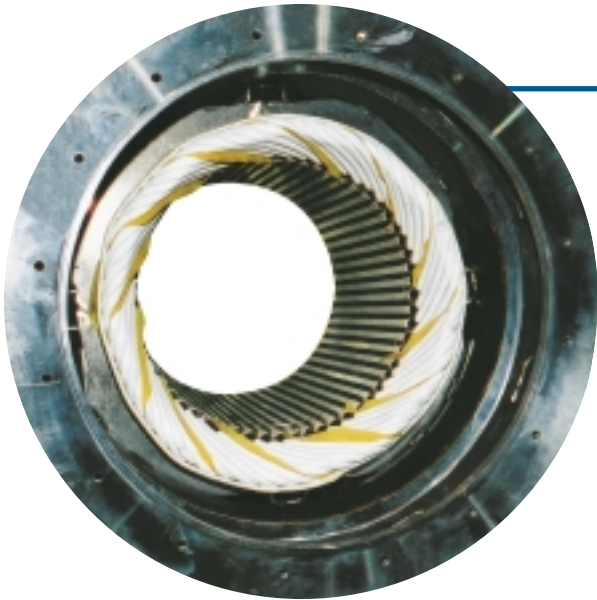
# Typical Data: 105° C Rise

Model	Rating kVA 3300V 50 Hz	Efficiency - % $\eta$	Synchronous reactance $X_d$	Transient reactance $X'_d$	Subtransient reactance $X''_d$	Quad. synchronous reactance $X_q$	Quad. subtransient reactance $X''_q$	Leakage reactance $X_l$	Negative sequence reactance $X_2$	Zero sequence reactance $X_0$	Short circuit transient time constant $T'_d$	Short circuit subtransient time constant $T''_d$	Open circuit transient time constant $T_{do}$	Armature time constant $T_a$	Short circuit ratio $K_{sc}$	Phase resistance - Ohms $\Omega$
MTG626	450	90.6	153.8	20.82	13.48	82.07	13.13	6.81	13.31	0.78	0.3264	0.0055	2.411	0.0116	0.9164	0.6540
MTG636	619	93.0	183.7	25.38	16.97	98.64	17.25	9.40	17.11	1.03	0.3535	0.0079	2.558	0.0234	0.6524	0.7113
MTG646	719	93.5	175.3	23.86	15.90	94.06	16.35	8.82	16.12	0.99	0.3592	0.0082	2.638	0.0254	0.7523	0.2276
MTG816	781	93.7	183.6	26.37	17.17	101.1	16.26	9.16	16.71	0.94	0.3953	0.0117	2.753	0.0269	0.6507	0.2044
MTG826	875	94.0	219.5	31.60	20.38	121.0	19.51	11.22	19.94	1.26	0.4024	0.0128	2.795	0.0348	0.5166	0.1684
MTG836	938	94.3	198.8	27.39	17.36	109.2	16.84	9.31	17.10	1.00	0.4093	0.0117	2.970	0.0288	0.5597	0.163
MTG846	1125	94.8	175.7	22.12	13.18	95.70	13.00	6.60	13.09	0.94	0.4131	0.0107	3.278	0.0257	0.6656	0.1164
MTG846B	1219	94.7	190.3	23.97	14.28	103.7	14.08	7.15	14.18	1.02	0.4135	0.0110	3.280	0.0265	0.6144	0.1178
MTG846C	1375	94.5	214.7	27.04	16.11	117.0	15.89	8.07	16.00	1.15	0.4142	0.0115	3.285	0.0268	0.5446	0.1185
MTG866	1925	94.8	228.5	30.16	18.95	125.2	18.95	10.19	18.95	1.16	0.4794	0.0125	3.631	0.0338	0.5122	0.0761

Reactances - %

Time Constants - seconds

## Random-Wound Stators:



The standard stator cores are constructed of the highest quality non-oriented electrical grade lamination steel. The laminations are precisely stacked and skewed to minimize voltage waveform harmonics.

The stator slots are insulated with NEMA Class H rated materials, and the stator windings are constructed of heavy polyester-polyamide-imide insulation Class 200° C magnet wire.

40 and 50 frames: The stator assemblies are resin treated with multiple dips & bakes of heavy polyester followed by an overcoat of 100% solids epoxy.

60, 80, 600 & 800 frames: Random-wound stator assemblies are vacuum impregnated with heavy polyester followed by an overcoat of 100% solids epoxy.

The wound stator core is encased in a rolled steel frame that is precisely machined to accept a number of standard SAE engine adapters.

Optional temperature detectors can be installed in the stator windings.

Anti-condensation heaters can also be provided.

## Form-Wound Stators:

Stator cores are constructed of the highest quality non-oriented electrical grade lamination steel. The laminations are precisely stacked and skewed to minimize voltage waveform harmonics.

Low Voltage: The stator slots are insulated with NEMA Class H rated materials, and the stator windings are constructed of square or rectangular heavy polyester-polyamide-imide insulation Class 200° C plus double Dacron glass magnet wire. A final layer of polyester glass armor tape is applied.

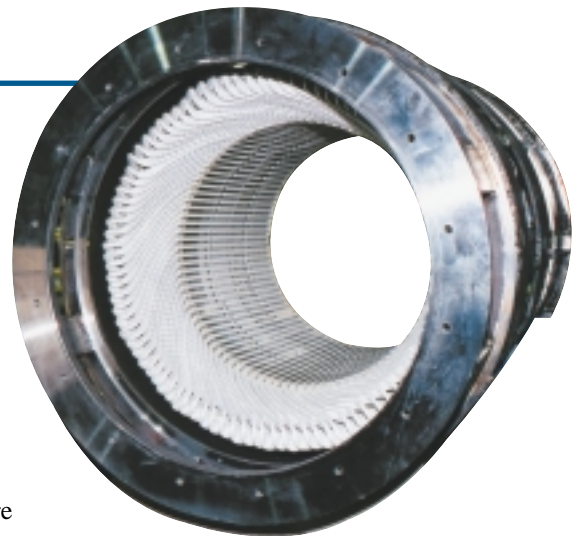
Medium Voltage: The stator windings are constructed of square or rectangular heavy polyester-polyamide-imide insulation Class 200° C plus double Dacron glass magnet wire. Three layers of half-lapped mica tape are applied followed by a layer of polyester glass armor tape.

The stator assemblies are vacuum-pressure impregnated with Class H polyester as standard and vacuum-pressure impregnation Class H epoxy resin as an option.

The wound stator core is encased in a rolled steel frame that is precisely machined to accept a number of standard SAE engine adapters.

Optional temperature detectors can be installed in the stator windings.

Anti-condensation heaters can also be provided.





## Rotors:

Rotor cores are constructed of the highest quality non-oriented electrical grade lamination steel. The lamination pole heads are precisely shaped to provide a sinusoidal line voltage waveform.

The rotor damper circuits are fully connected pole-to-pole for excellent transient response to load changes.

Rotors are insulated with NEMA class H materials and precise layer wound with square or rectangular heavy polyester-polyamide-imide Class 200° C magnet wire.

The rotor windings are insulated layer by layer with a brushed-on epoxy and sealed with a protective sealer overcoat.

Rotors are qualified to 150% overspeed in a 170° C chamber for prototype testing. Testing to 125% overspeed for 5 minutes is standard.

Rotors are balanced to less than 2 mils peak-to-peak.

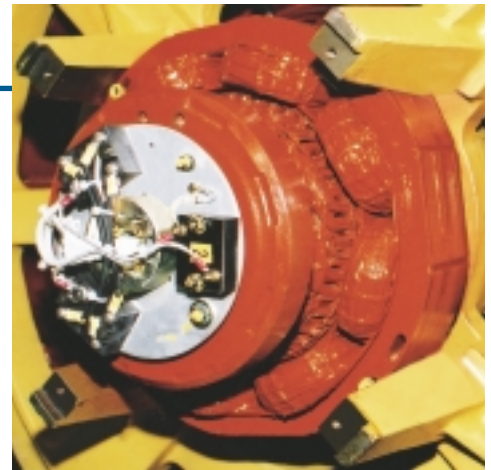
Bearings are anti-friction, regreaseable radial ball type rated for a 40,000 B-10 life.

## Permanent Magnet Exciters:

The permanent magnet stator core is mounted outboard of the bearing and is constructed of the highest quality non-oriented lamination steel, insulated with NEMA Class H materials throughout. It is wound with heavy polyester-polyamide-imide magnet wire.

The rotor assembly, mounted outboard of the bearing, consists of a high energy density rare-earth magnet disc fitted between two cast iron end plates in a Lundel style arrangement and is epoxied in place. The rotor assembly is mounted on an aluminum shaft sleeve to eliminate magnetic leakage.

The PMG system is capable of supplying a minimum short circuit support current of 300% of the rating (250% for 50 Hz operation) for 10 seconds.



## Insulation Systems:

Random-Wound Stators: Multiple dips and bakes with Class H polyester varnish and epoxy overcoat.

Form-Wound Stators: Vacuum-pressure impregnation with Class H polyester or optional Class H epoxy.

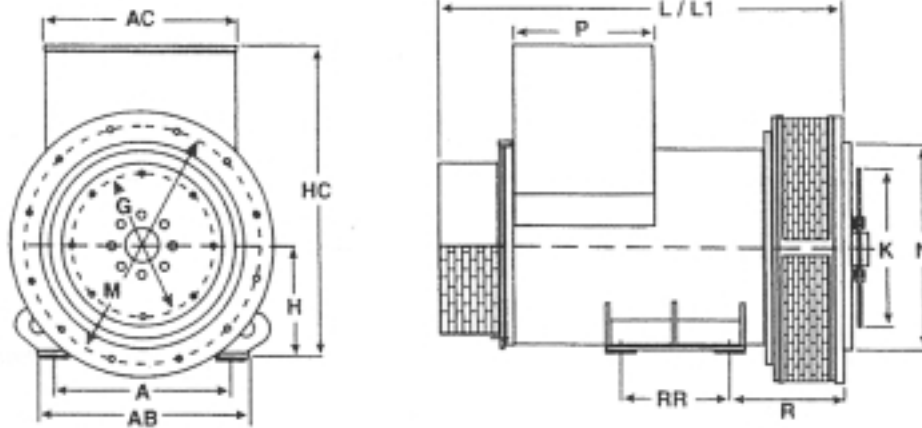
Rotors: Class H epoxy brushed wet on each layer during winding.

# Automatic Voltage Regulator LS65-12B



<b>Output Power (with a 240 Vac Input):</b>	12 Adc @ 65 Vdc maximum continuous. 25 Adc @ 125 Vdc forcing for 10 seconds.																		
<b>AC Input Power:</b>	180 to 264 Vac, single-phase or three-phase, 50/60 Hz, or 63 to 105 Vac; three-phase, 100 to 240 Hz, PMG, 3125 VA maximum 240 Vac; single-phase, 100 to 240 Hz, PMG, 3125 VA.																		
<b>AC Sensing Voltage:</b>	180 to 264 Vac, 50/60 Hz; single- or three-phase.																		
<b>External Voltage Adjust Rheostat:</b>	10 kohm, 2 W, potentiometer																		
<b>Regulation Accuracy:</b>	±0.5% of voltage setpoint																		
<b>Voltage Drift:</b>	±1% voltage variation for a 40°C (104°F) change.																		
<b>Response Time:</b>	< 4 milliseconds																		
<b>Frequency Compensation:</b>	1 or 2 V/Hz jumper selectable with knee adjustable from 45 Hz to 65 Hz.																		
<b>EMI Suppression:</b>	Internal filter																		
<b>Voltage Build-Up:</b>	Internal provisions for automatic voltage build-up from generator residual voltages as low as six Vac.																		
<b>Overexcitation Shutdown:</b>	Overexcitation protection starts timing at 90 Vdc ±5% and takes the output to zero in greater than 30 seconds. The output can be 125 Vdc for greater than 10 seconds.																		
<b>Droop:</b>	1 A or 5 A, <10 VA, Adjustable from 0 to 10% at rated input current, 0.8 power factor																		
<b>Power Dissipation:</b>	50 W maximum.																		
<b>UL Recognized/CSA Certified:</b>	UL Recognized per Standard 508, UL File NO. E97035. CSA Certified per Standard CAN/CSA-C22.2 No. 14-95, CSA File No. LR 23131																		
<b>CE Conformity:</b>	Conforms to: <table style="margin-left: 40px; border: none;"> <tr> <td>Radiated Emissions</td> <td>EN50081-2</td> </tr> <tr> <td>Radiated Immunity:</td> <td></td> </tr> <tr> <td>    Electric field</td> <td>EN61000-4-3 (10 V/m</td> </tr> <tr> <td>    Conducted</td> <td>EN61000-4-6 (10 VRMS)</td> </tr> <tr> <td>Conducted Emissions</td> <td>EN50081-2 (EN55011, Class A)</td> </tr> <tr> <td>ESD Immunity</td> <td>EN50082-2 (4 KV contact, 8 KV air)</td> </tr> <tr> <td>EFT Immunity</td> <td>EN50082-2 (2 KV coupling clamp)</td> </tr> <tr> <td>Magnetic Immunity</td> <td>EN50082-2 (30ARMS, 50 Hz)</td> </tr> <tr> <td>Safety:</td> <td>EN61010-1</td> </tr> </table>	Radiated Emissions	EN50081-2	Radiated Immunity:		Electric field	EN61000-4-3 (10 V/m	Conducted	EN61000-4-6 (10 VRMS)	Conducted Emissions	EN50081-2 (EN55011, Class A)	ESD Immunity	EN50082-2 (4 KV contact, 8 KV air)	EFT Immunity	EN50082-2 (2 KV coupling clamp)	Magnetic Immunity	EN50082-2 (30ARMS, 50 Hz)	Safety:	EN61010-1
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EFT Immunity	EN50082-2 (2 KV coupling clamp)																		
Magnetic Immunity	EN50082-2 (30ARMS, 50 Hz)																		
Safety:	EN61010-1																		
<b>Operating and Storage Temperature:</b>	-40°C (-40°F) to +70°C (+158°F).																		
<b>Shock:</b>	Withstands up to 20 g in each of three mutually perpendicular axes.																		
<b>Vibration:</b>	Withstands the following accelerations at the stated frequency: 0.5 g; 18 to 2000 Hz																		
<b>Weight:</b>	Approximately 1.1 kg (2.5 lbs.)																		

# Dimensions: Single Bearing



## 41 - 58 Frame

Model	Frame	AC	H	HC	A	AB	L*	L1*	P	R	RR	Kg/Lbs.
MTG41	41	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1069(42.1)	964(38.0)	442(17.4)	366.6(14.43)	254.5(10.02)	684/1504
MTG42	42	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1069(42.1)	964(38.0)	442(17.4)	366.6(14.43)	254.5(10.02)	722/1588
MTG43	43	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1069(42.1)	964(38.0)	442(17.4)	366.6(14.43)	254.5(10.02)	783/1724
MTG44	44	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1069(42.1)	964(38.0)	442(17.4)	366.6(14.43)	254.5(10.02)	783/1724
MTG45	45	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1187(46.8)	1084(42.7)	442(17.4)	366.6(14.43)	374.5(14.74)	908/1998
MTG46	46	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1187(46.8)	1084(42.7)	442(17.4)	366.6(14.43)	374.5(14.74)	917/2017
MTG47	47	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1187(46.8)	1084(42.7)	442(17.4)	366.6(14.43)	374.5(14.74)	975/2146
MTG48	48	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1347(49.0)	1244(49.0)	442(17.4)	366.6(14.43)	508.0(22.05)	1181/2597
MTG49	49	592(23.3)	314.5(12.38)	928.4(36.60)	508(20.0)	622.0(24.50)	1347(49.0)	1244(49.0)	442(17.4)	366.6(14.43)	508.0(22.05)	1236/2718
MTG51	51	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1484(58.4)	1350(53.1)	566(22.3)	435.1(17.13)	400.05(15.75)	1584/3485
MTG52	52	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1484(58.4)	1350(53.1)	566(22.3)	435.1(17.13)	400.05(15.75)	1606/3534
MTG53	53	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1605(63.2)	1471(57.9)	566(22.3)	435.1(17.13)	560.09(22.05)	1775/3905
MTG54	54	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1605(63.2)	1471(57.9)	566(22.3)	435.1(17.13)	560.09(22.05)	1834/4035
MTG55	55	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1605(63.2)	1471(57.9)	566(22.3)	435.1(17.13)	560.09(22.05)	1937/4240
MTG56	56	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1738(68.4)	1604(63.1)	566(22.3)	435.1(17.13)	630.0(24.8)	2202/4844
MTG57	57	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1738(68.4)	1604(63.1)	566(22.3)	435.1(17.13)	630.0(24.8)	2227/4900
MTG58	58	726(28.6)	399.5(15.73)	1090(42.93)	686(27.01)	788.0(31.02)	1738(68.4)	1604(63.1)	566(22.3)	435.1(17.13)	630.0(24.8)	2267/4988

L\* with PMG; L1\* without PMG

All dimensions shown in millimeters (inches)

## SAE Adapter

SAE #	N	M
4	361.9(14.250)	381.0(15.000)
3	409.6(16.125)	428.6(16.875)
2	447.7(17.625)	466.7(18.375)
1	511.1(20.125)	530.2(20.875)
1/2	584.2(23.000)	619.1(24.375)
0	647.7(25.500)	679.5(26.750)
00	787.4(31.000)	850.9(33.500)

## Drive Disc

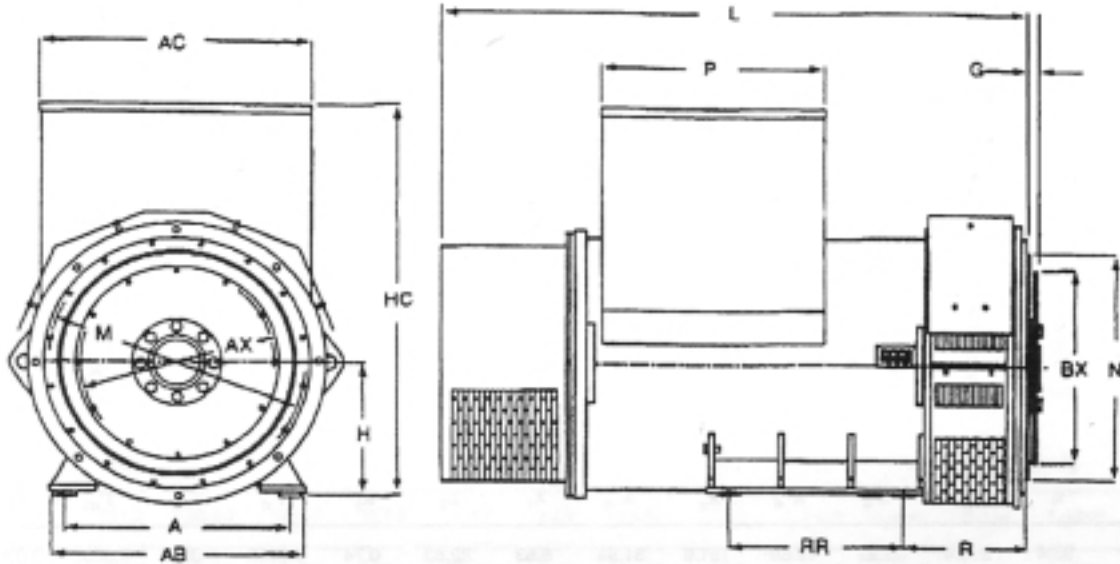
SAE #	K	G	No. of Holes
8	263.5(10.375)	244.5(9.625)	6
10	314.3(12.375)	295.3(11.625)	8
11.5	352.4(13.875)	333.4(13.125)	8
14	466.7(18.375)	438.2(17.250)	8
18	571.5(22.500)	542.9(21.375)	6
21	637.1(26.500)	641.4(25.250)	12
24	733.4(28.875)	692.2(27.250)	12

## Available Combinations

Frame	Adapter						Disc			
	3	2	1	1/2	0	00	11.5	14	18	21
41 - 49	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51 - 58			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Dimensions: Single Bearing



## 61 - 85 Frame

Model	Frame	AC	H	HC	A	AB	L	P	R	RR	Kg/Lbs.
MTG61	61	908(35.8)	457(18.0)	1369(53.9)	749(29.5)	852(33.5)	1952(76.9)	757(29.8)	418(16.46)	584(22.99)	2491/5492
MTG62	62	908(35.8)	457(18.0)	1369(53.9)	749(29.5)	852(33.5)	1952(76.9)	757(29.8)	418(16.46)	584(22.99)	2691/5933
MTG63	63	908(35.8)	457(18.0)	1369(53.9)	749(29.5)	852(33.5)	1952(76.9)	757(29.8)	418(16.46)	584(22.99)	2853/6290
MTG64	64	908(35.8)	457(18.0)	1369(53.9)	749(29.5)	852(33.5)	1983(78.1)	757(29.8)	418(16.46)	584(22.99)	3021/6660
MTG65	65	908(35.8)	457(18.0)	1369(53.9)	749(29.5)	852(33.5)	1983(78.1)	757(29.8)	418(16.46)	584(22.99)	3127/6894
MTG81	81	1149(45.2)	559(22.0)	1471(57.9)	950(37.4)	1052(41.4)	2084(82.0)	757(29.8)	466(18.35)	711(27.99)	4189/9235
MTG82	82	1149(45.2)	559(22.0)	1471(57.9)	950(37.4)	1052(41.4)	2084(82.0)	757(29.8)	466(18.35)	711(27.99)	4440/9789
MTG83	83	1149(45.2)	559(22.0)	1471(57.9)	950(37.4)	1052(41.4)	2244(88.3)	757(29.8)	466(18.35)	711(27.99)	4866/10728
MTG84	84	1149(45.2)	559(22.0)	1471(57.9)	950(37.4)	1052(41.4)	2244(88.3)	757(29.8)	466(18.35)	711(27.99)	5067/11171
MTG85	85	1149(45.2)	559(22.0)	1471(57.9)	950(37.4)	1052(41.4)	2244(88.3)	757(29.8)	466(18.35)	711(27.99)	5191/11444

All dimensions shown in millimeters (inches)

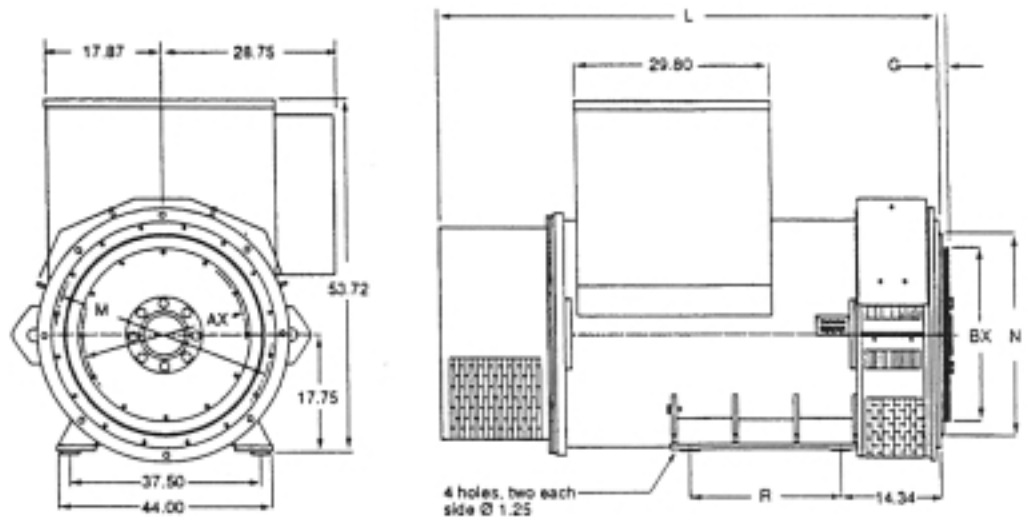
## SAE Adapter

SAE #	N	M	No. of Holes	Hole Diameter
0	647.7(25.500)	679.5(26.750)	16	13.5(.53)
00	787.4(31.00)	850.9(33.500)	16	13.5(.53)

## Drive Disc

SAE #	AX	BX	G	No. of Holes	Hole Diameter
18	542.9(21.375)	571.5(22.500)	15.7(.62)	6	17.5(.68)
21	641.4(25.250)	673.1(26.500)	0.0	12	17.5(.68)
24	692.2(27.250)	733.3(28.875)	0.0	12	21.4(.84)

# Dimensions: Single Bearing



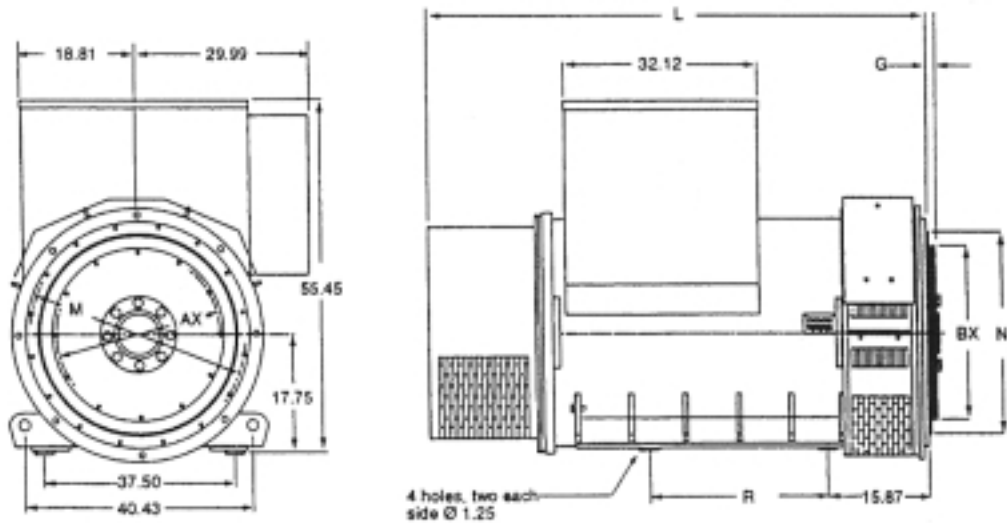
## 616 - 646 Frame

Model	Frame	L	R	Kg/Lbs.
MTG616	616	1808.5(71.2)	838.2(33.0)	2268/5000
MTG626	626	1808.5(71.2)	838.2(33.0)	2359/5200
MTG636	636	1986.3(78.2)	1016.0(40.0)	2427/5350
MTG646	646	1986.3(78.2)	1016.0(40.0)	2948/6500

All dimensions shown in millimeters (inches)



# Dimensions: Single Bearing



## 816 - 866 Frame

Model	Frame	L	R	Kg/Lbs.
MTG816	816	1960.9(77.2)	584.2(23.0)	3402/7500
MTG826	826	1960.9(77.2)	584.2(23.0)	3856/8500
MTG836	836	2207.3(86.9)	838.2(33.0)	4309/9500
MTG846	846	2207.3(86.9)	838.2(33.0)	4763/10500
MTG866	866	*	*	5670/12500

\*Available in two bearing only. See Kato for dimensions.  
All dimensions shown in millimeters (inches)

## SAE Adapter

SAE #	N	M	No. of Holes	Hole Diameter
0	647.7(25.500)	679.5(26.750)	16	13.5(.53)
00	787.4(31.00)	850.9(33.500)	16	13.5(.53)

## Drive Disc

SAE #	AX	BX	G	No. of Holes	Hole Diameter
18	542.9(21.375)	571.5(22.500)	15.7(.62)	6	17.5(.68)
21	641.4(25.250)	673.1(26.500)	0.0	12	17.5(.68)
24	692.2(27.250)	733.3(28.875)	0.0	12	21.4(.84)

**KATO** Engineering Inc. is a leading manufacturer of precision-engineered, high-quality AC generators, motor generator sets and controls for prime, standby and peak-shaving power. **KATO** designs and builds generators for a variety of applications. **KATO** generators supply power to tap the world's resources; oil, gas, coal, uranium, copper, iron ore and lumber are all extracted from the earth with the help of **KATO** generators. **KATO** furnishes the power to keep the world moving; tankers, freighters, locomotives, aircraft and mass transit systems all use **KATO** equipment. Any place where dependable, controllable electrical power is needed; hospitals, computer centers and telecommunication stations all rely on **KATO** generators to supply dependable, clean power. The ruggedly-constructed **KATO** generators survive the harshest environments, and the **KATO** name has become synonymous with dependable power generation worldwide.

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