

50 Hz

Voltage			Continuous								Standby								
			F - 105/40°C				H - 125 /40°C				H - 150 /40°C				H - 163 /27°C				
C	Y	Δ	YY	kWm	%	kWe	kVA	kWm	%	kWe	kVA	kWm	%	kWe	kVA	kWm	%	kWe	kVA
380	190	220		1654	96.0	1588	1985	1781	95.9	1708	2135	1858	95.8	1780	2225	1914	95.7	1832	2290
400	200	230		1703	96.3	1640	2050	1831	96.1	1760	2200	1913	96.0	1836	2295	1967	96.0	1888	2360
415	208	240		1701	96.4	1640	2050	1830	96.2	1760	2200	1911	96.1	1836	2295	1965	96.1	1888	2360
440	220	254		1662	96.5	1604	2005	1793	96.4	1728	2160	1869	96.3	1800	2250	1921	96.2	1848	2310

60 Hz

Voltage			Continuous								Standby								
			F - 105/40°C				H - 125 /40°C				H - 150 /40°C				H - 163 /27°C				
C	Y	Δ	YY	kWm	%	kWe	kVA	kWm	%	kWe	kVA	kWm	%	kWe	kVA	kWm	%	kWe	kVA
416	208	240		1877	96.1	1804	2255	2017	96.0	1936	2420	2098	95.9	2012	2515	2163	95.8	2072	2590
440	220	254		1965	96.1	1888	2360	2113	96.0	2028	2535	2198	95.9	2108	2635	2265	95.9	2172	2715
460	230	266		2033	96.2	1956	2445	2188	96.0	2100	2625	2271	96.0	2180	2725	2344	95.9	2248	2810
480	240	277		2131	96.1	2048	2560	2292	96.0	2200	2750	2386	95.9	2288	2860	2454	96.0	2356	2945

	50 Hz				60 Hz			
Telephone Interference	THF<2%				TIF<50			
Cooling Air	2.69 m <sup>3</sup> /sec 5700 cfm				3.45m <sup>3</sup> /sec 7300 cfm			
Voltage Series Star	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
kVA Base Rating	2135	2200	2200	2160	2420	2535	2625	2750
Xd Dir. Axis Synchronous	3.71	3.45	3.20	2.80	4.38	4.10	3.89	3.74
X'd Dir. Axis Transient	0.21	0.19	0.18	0.15	0.24	0.23	0.22	0.21
X''d Dir. Axis Subtransient	0.15	0.14	0.13	0.11	0.17	0.16	0.15	0.15
Xq Quad. Axis Reactance	2.38	2.22	2.06	1.80	2.82	2.64	2.50	2.41
X''q Quad. Axis Subtransient	0.28	0.26	0.24	0.21	0.33	0.31	0.30	0.28
XL Leakage Reactance	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
X2 Negative Sequence	0.20	0.19	0.18	0.15	0.24	0.22	0.21	0.21
X0 Zero Sequence	0.04	0.04	0.03	0.03	0.04	0.04	0.04	0.04
Reactances Are Saturated	Values are per unit at rating and voltage indicated							
T'd Transient Time Const.					0.16s			
T''d Sub-Transtime Const.					0.01s			
T'do O.C. Field Time Const.					2.89s			
Ta Armature Time Const.					0.02s			
Short Circuit Ratio					1/Xd			
A.V.R. (Voltage Regulation)	AUX Excited				R6/2 G1 ( ± 0.5 % ) - Optional			
Substained Short Circuit	AUX EXCITED MACHINES SUSTAIN A SHORT CIRCUIT CURRENT 3 TIMES THE RATED CAPACITY FOR 3s							
Enclosure	IP23							
Stator WDG. Resistance	0.0008 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED							
Rotor WDG. Resistance	2.42 Ohms at 22°C							
Exciter Stator Resistance	16 Ohms at 22°C							
Exciter Rotor Resistance	0.056 Ohms PER PHASE AT 22°C							
Waveform Distortion	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%							
Maximum Overspeed	2250rpm							
Bearing Drive End	BALL. 6232 - C3. (ISO)							
Bearing Non-drive End	BALL. 6319 - C3. (ISO)							

**COMPLIANCE WITH STANDARDS**

- MBH industrial generators meet the requirements of IEC 34, GB755, BS 5000, NEMA MG 1.22, VDE 0530 & CSA. These are manufactured in an ISO 9001 environment 2000 version & can be integrated in a "CE" marked machine.

**ELECTRICAL PERFORMANCE**

- The Main Stator is wound to 2/3 pitch. This eliminates triplen (3rd, 9th, 15th ...) harmonics on the voltage waveform, which is an optimum design for trouble-free supply of non-linear loads.

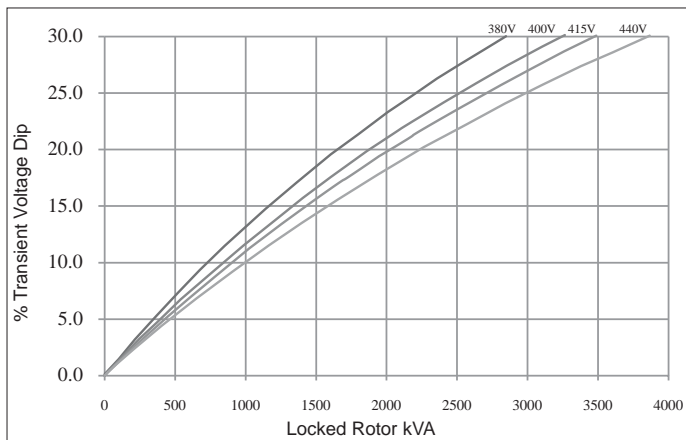
**VOLTAGE REGULATORS**

- R6/2 G1 AVR - Standard: This AVR is incorporated into AUX winding control system. The AUX winding provides power via the AVR to the main exciter, giving a source of constant excitation power independent of generator output. Additional feature permitting parallel operation with other ac generators, using a 'droop kit'.

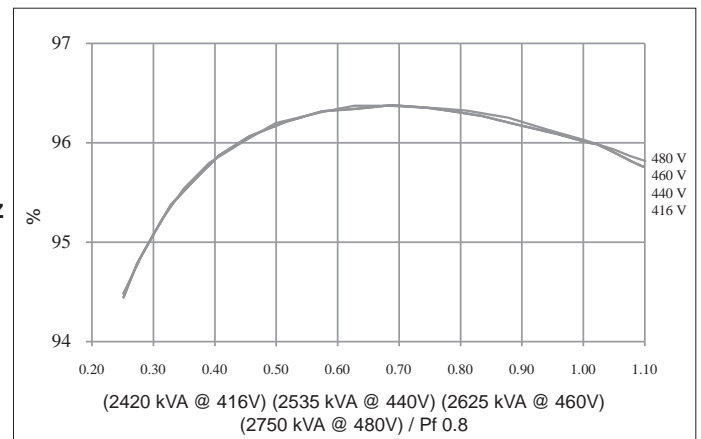
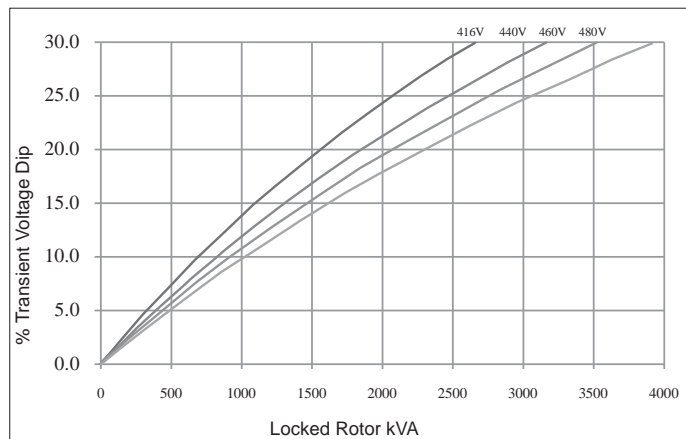
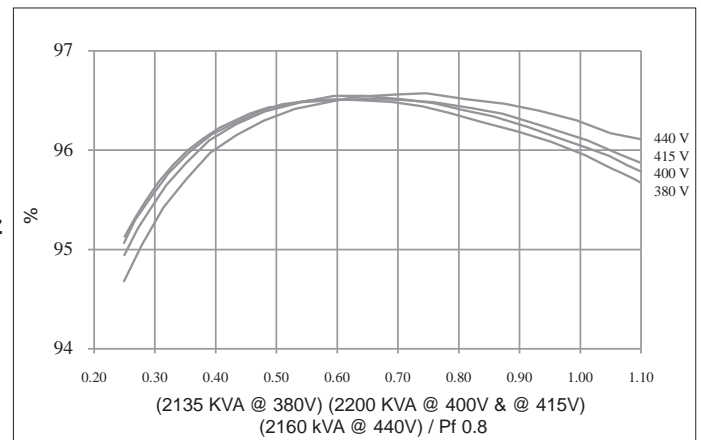
**INSULATION / IMPREGNATION**

- The insulation system is class 'H'.

**LOCKED ROTOR MOTOR STARTING CURVE**



**THREE PHASE EFFICIENCY CURVES**



	Weight Comp. Generator	WR <sup>2</sup> Inertia	Shipping Weights in a crate	Packing Crate Size
1 BEARING	3100 kg	52.2511 kgm <sup>2</sup>	3160 kg	200 x 105 x 145 (cm)
2 BEARING	3100 kg	51.3341 kgm <sup>2</sup>	3160 kg	230 x 105 x 145 (cm)

Specifications may change without notice. Check with your distributor for more information.

Ref. DS-H5WI4-01-B