



# ALTERNATOR DATA SHEET

Frame Size **HC5F**

## CHARACTERISTICS

<b>WEIGHTS:</b>	Wound Stator Assembly:	1776 lb	800 kg
	Rotor Assembly:	1512 lb	681 kg
	Complete Assembly:	3738 lb	1684 kg
<b>MAXIMUM SPEED:</b>		2250	rpm
<b>EXCITATION CURRENT:</b>	Full Load	1.72	Amps
	No Load	0.40	Amps
<b>INSULATION SYSTEM:</b>	Class H Throughout		

3 Ø RATINGS (0.8 power factor) (Based on specific temperature rise at 40°C ambient temperature)	60 Hz (winding no)				50 Hz (winding no)			
	110/190 220/380 (311/312)	120/208 240/416 (311/312)	139/240 277/480 (311/312)	347/600 (07/17)	110/190 220/380 (311/312)	120/208 240/415 (311/312)	127/220 254/440 (311/312)	
150°C Rise Ratings	kW	570	625	700	700	568	568	552
	kVA	713	781	875	875	710	710	690
125°C Rise Ratings	kW	538	590	660	660	536	536	520
	kVA	673	738	825	825	670	670	650
105°C Rise Ratings	kW	500	550	600	600	496	496	480
	kVA	625	688	750	750	620	620	600
80°C Rise Ratings	kW	440	484	528	528	432	432	416
	kVA	550	605	660	660	540	540	520
<b>REACTANCES</b> (per unit ± 10%) (Based on full load at 125C Rise Rating)		110/190 220/380	120/208 240/416	139/240 277/480	347/600	110/190 220/380	120/208 240/415	127/220 254/440
Synchronous		3.64	3.33	2.80	2.80	2.90	2.43	2.10
Transient		0.17	0.15	0.13	0.13	0.17	0.14	0.12
Subtransient		0.12	0.11	0.09	0.09	0.11	0.09	0.08
Negative Sequence		0.23	0.21	0.18	0.18	0.18	0.15	0.13
Zero Sequence		0.10	0.09	0.08	0.08	0.08	0.07	0.06
<b>MOTOR STARTING</b>		<u>Broad Range</u>		<u>600</u>	<u>Broad Range</u>			
Maximum kVA (90% Sustained Voltage)		2429		2429	1769			
<b>TIME CONSTANTS</b> (Sec)		<u>Broad Range</u>		<u>600</u>	<u>Broad Range</u>			
Transient		0.080		0.080	0.080			
Subtransient		0.012		0.012	0.012			
Open Circuit		2.500		2.500	2.500			
DC		0.019		0.019	0.019			
<b>WINDINGS</b> (@20°C)		<u>Broad Range</u>		<u>600</u>	<u>Broad Range</u>			
Stator Resistance (Ohms per phase)		0.0062		0.0098	0.0062			
Rotor Resistance (Ohms)		2.1600		2.1600	2.1600			
Number of Leads		12		6	12			

Single phase power can be taken up to 40% of 3 phase- ratings