



ALTERNATOR DATA SHEET

Frame Size HC5E

CHARACTERISTICS

WEIGHTS:	Wound Stator Assembly:	1621 lb	730 kg
	Rotor Assembly:	1308 lb	589 kg
	Complete Assembly:	3430 lb	1545 kg
MAXIMUM SPEED:		2250 rpm	
EXCITATION CURRENT:	Full Load	1.72 Amps	
	No Load	0.40 Amps	
INSULATION SYSTEM:	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	525	575	640	616	509	509	509
	kVA	656	719	800	770	636	636	636
125°C Rise Ratings	kW	498	545	600	580	480	480	480
	kVA	623	681	750	725	600	600	600
105°C Rise Ratings	kW	456	500	540	526	440	440	440
	kVA	570	625	675	658	550	550	550
80°C Rise Ratings	kW	400	440	475	456	384	384	384
	kVA	500	550	594	570	480	480	480
REACTANCES (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		3.87	3.53	2.92	2.95	3.14	2.63	2.34
Transient		0.19	0.17	0.14	0.14	0.17	0.15	0.13
Subtransient		0.13	0.12	0.10	0.10	0.12	0.10	0.09
Negative Sequence		0.25	0.23	0.19	0.19	0.19	0.16	0.14
Zero Sequence		0.11	0.10	0.08	0.08	0.09	0.07	0.06
MOTOR STARTING Maximum kVA (90% Sustained Voltage)		<u>Broad Range</u>		<u>600</u>	<u>600</u>	<u>Broad Range</u>		<u>1633</u>
TIME CONSTANTS (Sec)		<u>Broad Range</u>		<u>600</u>	<u>600</u>	<u>Broad Range</u>		<u>600</u>
Transient		0.080		0.080	0.080	0.080		0.080
Subtransient		0.012		0.012	0.012	0.012		0.012
Open Circuit		2.500		2.500	2.500	2.500		2.500
DC		0.019		0.019	0.019	0.019		0.019
WINDINGS (@20°C)		<u>Broad Range</u>		<u>600</u>	<u>600</u>	<u>Broad Range</u>		<u>600</u>
Stator Resistance (Ohms per phase)		0.0086		0.0136	0.0136	0.0086		0.0086
Rotor Resistance (Ohms)		1.9600		1.9600	1.9600	1.9600		1.9600
Number of Leads		12		6	6	12		12

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