

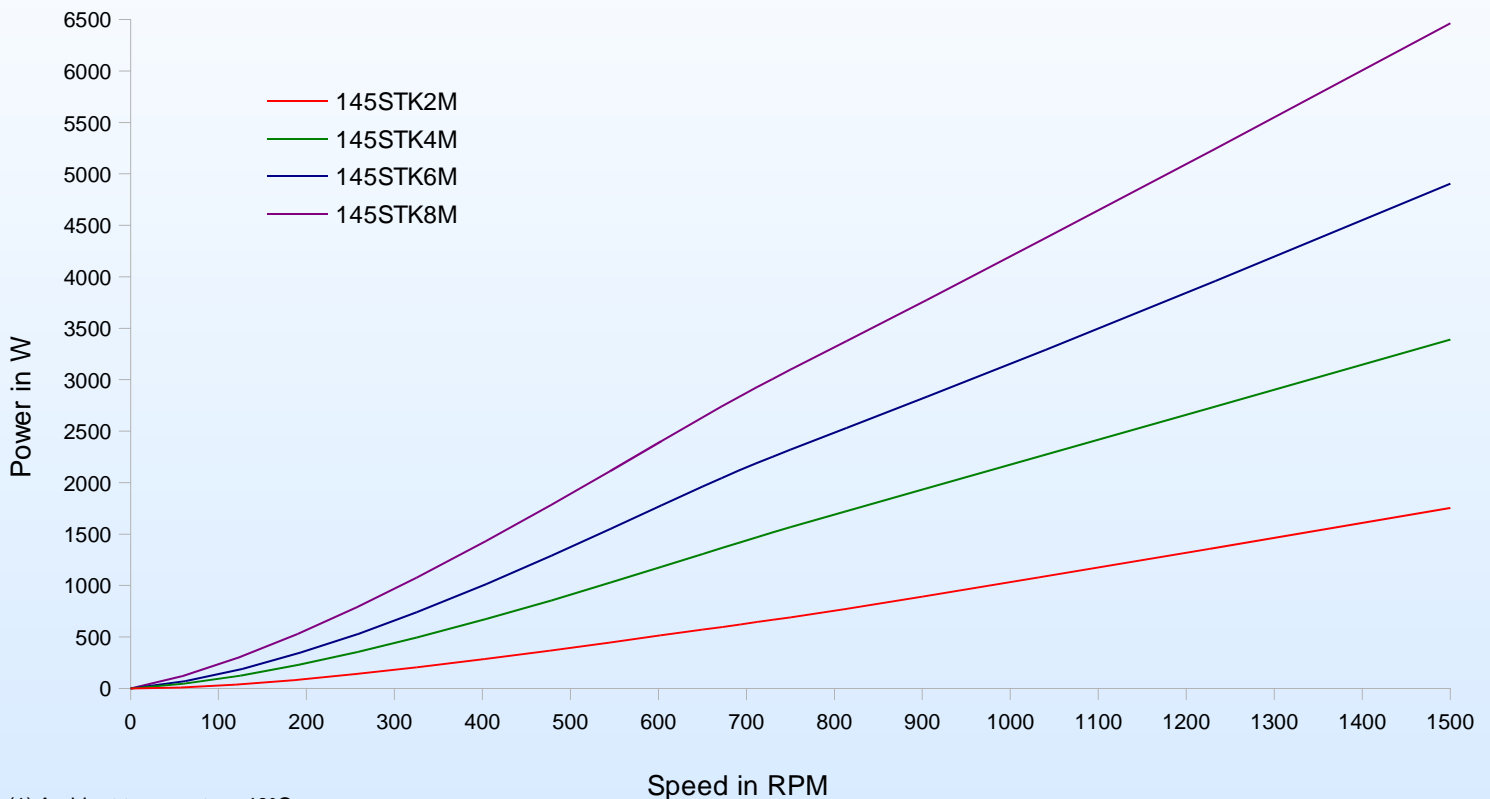
TECHNICAL CHARACTERISTICS

145 STK ALTERNATORS

See also the curves of Voltage, Torque, Efficiency vs Speed

			145STK2M		145STK4M		145STK6M		145STK8M	
Rated speed		Rpm	650	1500	650	1500	650	1500	650	1500
Rated Power at Rated speed	Rated power (1)(2)	W	571	1752	1307	3389	1962	4904	2633	6462
	Input torque at rated speed(1)(2)	N.m	11.2	13.9	25.4	25.2	36	35.9	47.8	47
	Efficiency at rated power (1)(2)	%	75	81	76	86	81	87	81	88
	Current at rated power (1)	Amps	1.4	4.3	3.2	8	4.8	13	6.4	16
	Voltage at rated power (1)(2)(3)	V	244	250	243	260	246	231	249	248
Rated Power at Half speed	Rated Power at half speed (1)(2)	W	204	690	493	1566	739	2319	1075	3097
	Input torque at half speed (1)(2)	N.m	8.9	11.5	20.7	25.4	28.8	36	43.5	47.8
	Efficiency at half speed (1)(2)	%	68	77	70	78	76	82	73	83
Number of poles (number of pairs of poles)			12 (6)							
Cogging torque		N.m	0.2		0.4		0.6		0.8	
Phase resistance at 20°C		Ohm	19.8	4.53	8.6	1.4	4.11	0.59	3.18	0.51
Phase inductance (5)		mH	105	24	60	10	34	4.9	25.8	4.1
Voltage at no load (back emf) at 20°C (4)		V	365	393	390	367	357	312	361	334
Rotor inertia		10 ⁻³ Kg.m ²	1.28		2.24		3.19		4.14	
Weight		Kg	6.2		10.4		14.5		18.7	
Power cable square section (6)		mm ²	4x1.5		4x1.5		4x1.5		4x1.5	
Power cable diameter		mm	Ø8.6		Ø8.6		Ø8.6		Ø8.6	

Alternator 145STK Power - Speed



- (1) Ambient temperature 40°C
Wind speed 10 m/s cooling the housing
Winding temperature rise < 100°C
Stator housing in contact with the ambient air or integral on all its peripheral area with a metallic armature in contact with the ambient air
Stator housing secured on a metallic frame getting an area equal to twice the cross section of the housing
- (2) Operation in sine wave mode with unity power factor
- (3) Line to line voltage. Voltage level may be adapted according to the application; please contact us
- (4) Line to line voltage, alternator at no load, rated speed and at 20°C
- (5) For current at rated power
- (6) For currents lower than 53 Amps, one cable
For currents over 53 Amps, four single wires output (highlighted in the table)