

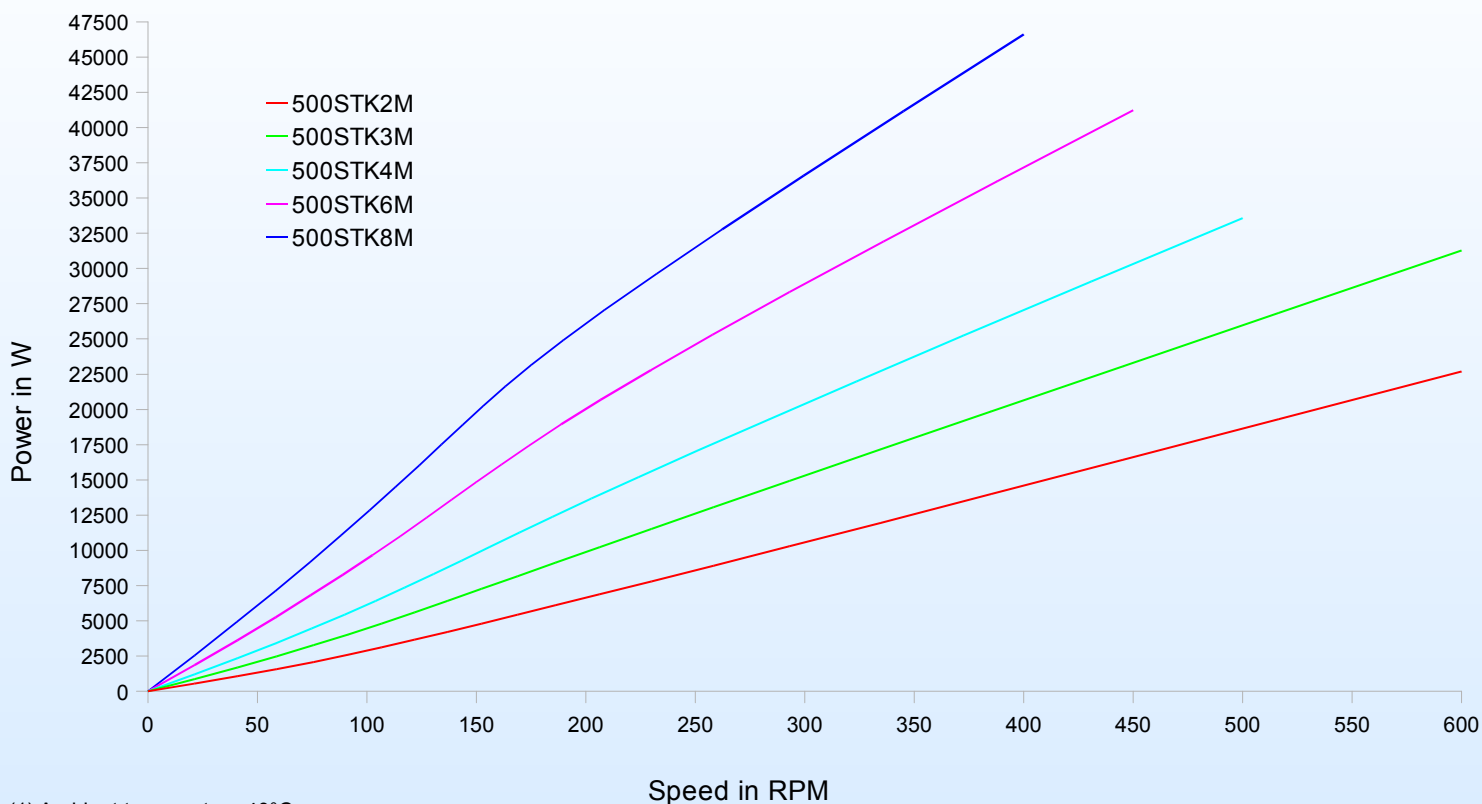
TECHNICAL CHARACTERISTICS

500 STK ALTERNATORS

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

		500STK2M		500STK3M		500STK4M		500STK6M		500STK8M	
Rated speed		Rpm		150	600	150	600	150	500	150	400
Rated Power at Rated speed	Rated power (1)(2)	W		4700	22701	7157	31276	9741	33573	14892	46616
	Input torque at rated speed(1)(2)	N.m		376	396	547	538	736	693	1100	1197
	Efficiency at rated power (1)(2)	%		80	91	84	93	84	93	86	93
	Current at rated power (1)	Amps		11.7	50.7	17.9	83.3	23.1	80	36.3	107.5
	Voltage at rated power (1)(2)(3)	V		237	267	237	225	250	251	242	230
Rated Power at Half speed	Rated Power at half speed (1)(2)	W		1835	10465	2968	15372	4142	17333	6440	26874
	Input torque at half speed (1)(2)	N.m		365	380	546	545	735	744	1102	1434
	Efficiency at half speed (1)(2)	%		63	88	70	90	72	89	75	90
Number of poles (number of pairs of poles)		36 (18)									
Cogging torque		N.m		3.9		5.8		7.8		11.7	
Phase resistance at 20°C		Ohm		2	0.13	1.03	0.05	0.71	0.05	0.38	0.03
Phase inductance (5)		mH		14.7	0.93	8.9	0.41	7.4	0.55	4.5	0.37
Voltage at no load (back emf) at 20°C (4)		V		319	319	304	261	319	290	304	261
Rotor inertia		10 ⁻³ Kg.m ²		433		649		865		1296	
Weight		Kg		43		58		73		103	
Power cable square section (6)		mm ²		4x1.5	4x10	4x2.5	<u>4x16</u>	4x4	<u>4x16</u>	4x6	<u>4x25</u>
Power cable diameter		mm		Ø8	Ø16.7	Ø9.6	4xØ11	Ø11.1	4xØ11	Ø13.4	4xØ13.5

Alternator 500STK 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)