

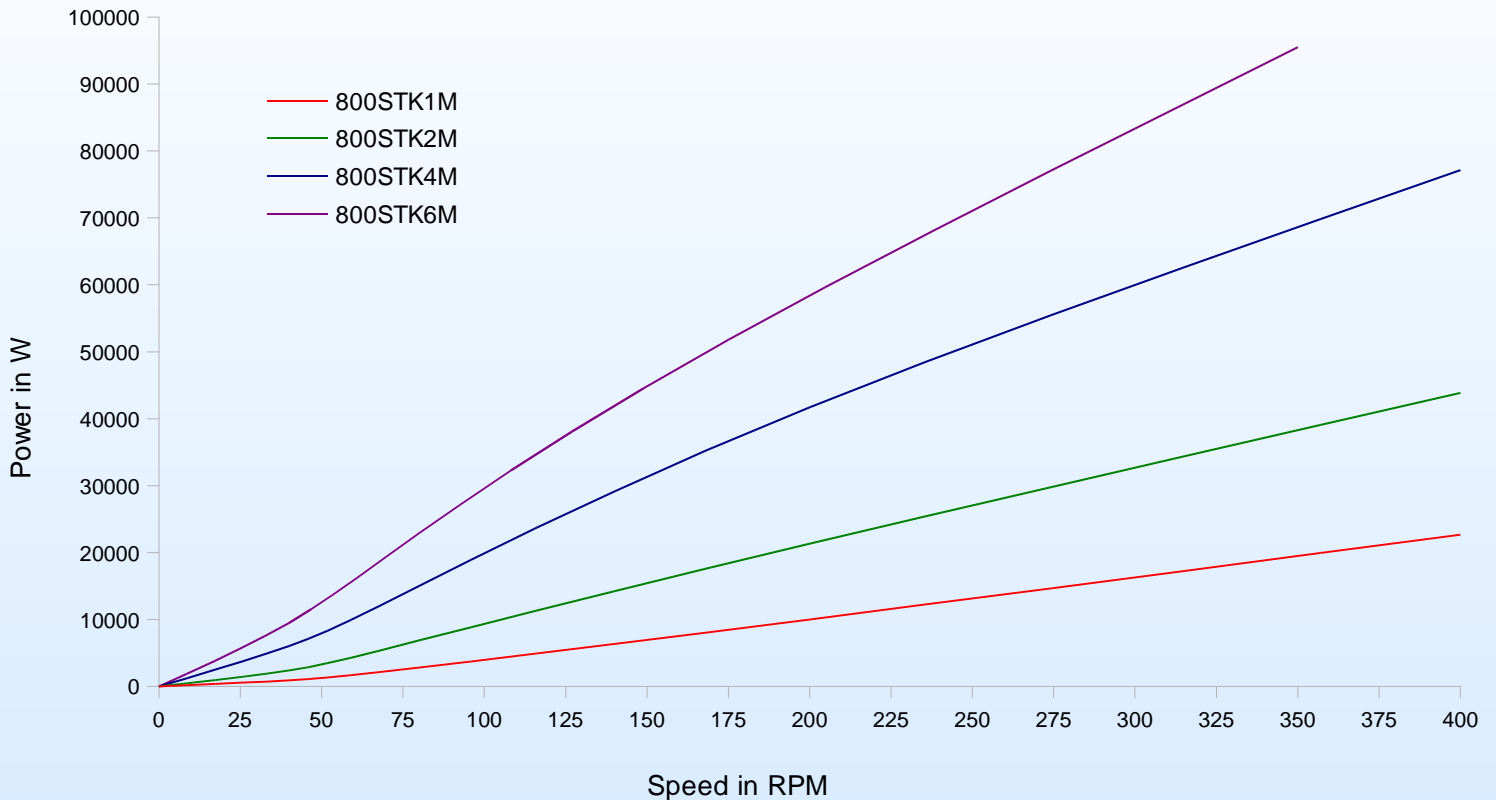
# TECHNICAL CHARACTERISTICS

## 800 STK ALTERNATORS

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

		800STK1M		800STK2M		800STK4M		800STK6M			
Rated speed		Rpm		80	400	80	400	80	400	80	350
Rated Power at Rated speed	Rated power (1)(2)	W	2823	22678	6860	43865	15029	77145	22884	95484	
	Input torque at rated speed(1)(2)	N.m	478	611	1049	1135	2196	1962	3259	2771	
	Efficiency at rated power (1)(2)	%	71	89	79	93	82	94	84	94	
	Current at rated power (1)	Amps	7.3	56.3	17	102.9	38.4	203	52.8	190	
	Voltage at rated power (1)(2)(3)	V	231	238	238	253	230	226	255	300	
Rated Power at Half speed	Rated Power at half speed (1)(2)	W	911	10009	2395	21318	6026	41694	9488	51789	
	Input torque at half speed (1)(2)	N.m	366	582	813	1161	2196	2188	3152	3084	
	Efficiency at half speed (1)(2)	%	60	82	71	88	68	91	72	92	
Number of poles (number of pairs of poles)		48 (24)									
Cogging torque		N.m	5.5		11		22		33		
Phase resistance at 20°C		Ohm	6.45	0.2	1.7	0.06	0.53	0.02	0.36	0.02	
Phase inductance (5)		mH	31	0.94	14.1	0.48	6.3	0.18	4.9	0.27	
Voltage at no load (back emf) at 20°C (4)		V	342	299	324	298	307	256	333	336	
Rotor inertia		10 <sup>-3</sup> Kg.m <sup>2</sup>	1270		2540		5080		7620		
Weight		Kg	55		82		138		193		
Power cable square section (6)		mm <sup>2</sup>	4x1.5	<u>4x10</u>	4x2.5	<u>4x25</u>	4x6	<u>4x70</u>	4x10	<u>4x50</u>	
Power cable diameter		mm	Ø8.6	<u>4xØ9.5</u>	Ø10.8	4x Ø13.5	Ø14	4x Ø20.1	Ø17.6	4x Ø17.1	

### Alternator 800STK 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)