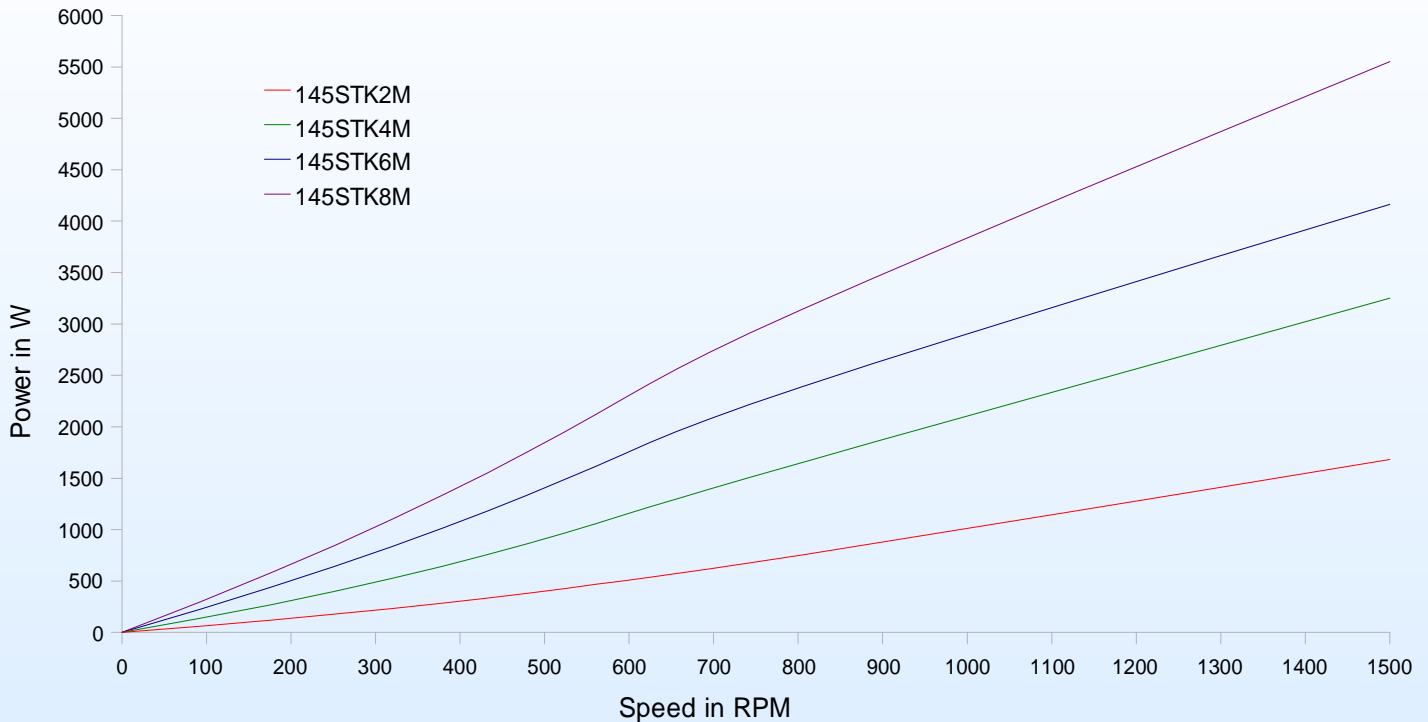


# TECHNICAL CHARACTERISTICS

## 145 STK ALTERNATORS

			145STK2M		145STK4M		145STK6M		145STK8M	
Rated speed			650	1500	650	1500	650	1500	650	1500
Data for Rated speed	Rated speed	Rpm	650	1500	650	1500	650	1500	650	1500
	Rated power (1)(2)	W	571	1683	1285	3250	1937	4163	2539	5550
	Input torque at rated speed(1)(2)	N.m	11	13	25	24	35	30	46	40
	Efficiency at rated power (1)(2)	%	76	81	77	86	81	88	81	88
	Current at rated power (1)	Amps	1.4	4.2	3.2	8.1	4.9	10.4	6.4	13.9
	Voltage at rated power (1)(2)(3)	V	133	133	133	133	133	133	133	133
Data for Half speed	Power at half speed (1)(2)	W	204	667	460	1538	769	2296	1016	3007
	Input torque at half speed (1)(2)	N.m	10	11	23	25	33	35	43	46
	Efficiency at half speed (1)(2)	%	58	78	58	79	68	83	69	83
	Cogging torque	N.m	0.2		0.4		0.6		0.8	
	Phase resistance at 20°C	Ohm	20.7	4.55	8.65	1.36	4.17	0.59	3.00	0.42
	Phase inductance (5)	mH	106.55	23.4	61.99	9.81	34.01	4.9	26.57	3.67
	Phase voltage at no load (EMF) at 20°C (4)	V	210.5	228.6	227.1	206.7	206.3	179.9	209.8	180
	Rotor inertia	10 <sup>-3</sup> Kg.m <sup>2</sup>	1.28		2.24		3.19		4.14	
	Weight	Kg	6.2		10.4		14.5		18.7	
	Power cable square section (6)	mm <sup>2</sup>	4x1.5		4x1.5		4x1.5		4x1.5	
	Power cable diameter	mm	Ø10.2		Ø10.2		Ø10.2		Ø10.2	

Alternator 145STK Power - Speed



(1) Ambient temperature 40°C

Windflow 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 with unity power factor and sine wave voltage

(3) Single phase voltage; rated voltage is 230Vac phase to phase. Voltage level may be adapted according to the application

(4) Single phase voltage, Alternator at no load, rated speed and at 20°C; multiply by  $\sqrt{3}$  ( $\approx 1.732$ ) for phase to phase voltage at no load.

(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)

**ALXION**

**Automatique  
& Productique**