

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA	IEC TYPE	11 KW	2929 RPM
K160M-2 FRAME	3 PHASE	400 VOLTS	50 HZ / CYCLES
90.3 EFFICIENCY	19.8 AMPS	54 IP	IC411 IC
2 POLE	S1 DUTY	0.889 PF	N/A EFF2
VALIADIS MANUFACTURER	SERIAL NO.	F INS.CLASS	DELTA CONNECTION

TEST DATA	LOCKED ROTOR							
	NO LOAD	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125% LOAD	ROTOR
EFFICIENCY	0	84.73	89.24	90.36	90.31	90.18	89.73	
PF	0.120	0.671	0.805	0.866	0.889	0.894	0.896	0.484
RPM	3000	2996	2971	2948	2929	2921	2908	0
SLIP	0.00%	0.15%	0.96%	1.75%	2.38%	2.63%	3.08%	100.00%
AMPS	5.85	6.98	11.04	15.22	19.77	21.66	24.68	144.9
VOLTS	400	400	400	400	400	400	400	400
TORQUE NM	0	8.8	17.7	26.7	35.9	39.6	45.2	85.7
KW INPUT	0.485	3.25	6.16	9.13	12.18	13.42	15.32	48.63
KW OUTPUT	0	2.75	5.50	8.25	11.00	12.10	13.75	

LOSSES(kw)	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125%LOAD
STATOR LOSS Pcu1	0.046	0.115	0.218	0.369	0.44	0.57
STATOR LOSS %	1.42%	1.87%	2.39%	3.03%	3.30%	3.75%
ROTOR LOSS Pcu2	0.004	0.056	0.152	0.275	0.33	0.45
ROTOR LOSS %	0.13%	0.90%	1.66%	2.26%	2.50%	2.91%
CORE LOSS Pfe	0.241	0.241	0.241	0.241	0.241	0.241
CORE LOSS %	7.42%	3.91%	2.64%	1.98%	1.80%	1.57%
WINDAGE/FRICTION Pfw	0.216	0.216	0.216	0.216	0.216	0.216
WINDAGE/FRICTION %	6.65%	3.50%	2.37%	1.77%	1.61%	1.41%
STRAY LOAD LOSS Ps	0.016	0.031	0.046	0.061	0.067	0.077
STRAY LOAD LOSS %	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%

Losses are measured/calculated as per IEC 34-2 - The Summation of Losses Method

All data is measured at Nominal Volts

TEMPERATURES

STATOR RESISTANCE COLD	0.4877667 OHMS @	17.2 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	0.629 OHMS @	90 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	0.609 OHMS	after test of temp rise	BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	50.8 DEG.C.	at full load steady state at	30 SECS
WINDING TEMPERATURE RISE	52.6 DEG.C.	at full load steady state at	0 SECS
PT100 TEMPERATURE OF DE WINDING	74.3 DEG.C.	at full load steady state at ambient	26 DEG.C.
PT100 TEMPERATURE OF NDE WINDING	N/A DEG.C.	at full load steady state at ambient	26 DEG.C.
PT100 TEMPERATURE DE BEARING	61.5 DEG.C.	at full load steady state at ambient	26 DEG.C.
PT100 TEMPERATURE NDE BEARING	N/A DEG.C.	at full load steady state at ambient	26 DEG.C.
PT100 TEMPERATURE IN TERMINAL BOX	39.3 DEG.C.	at full load steady state at ambient	26 DEG.C.
PT100 TEMPERATURE ON STATOR LEADS	44.9 DEG.C.	at full load steady state at ambient	26 DEG.C.

OTHER

NOISE LEVEL(Lp)	74 dB(A) @ 1meter	INSULATION RESISTANCE	500 MEG.OHMS
VIBRATION LEVEL	1 mm/sec on no load	D.E. BEARING	180209KZ2
WEIGHT	125 kg	N.D.E.BEARING	180209KZ2
H-POT TEST VOLTS	1800 VOLTS		

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	DRAWN		DOCUMENT NO.
	APPRVD		
	CHECKED		

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MAJOR CONTENTS	UNIT	TEST VALUE
STATOR RESISTANCE OF PHASE TO PHASE	90 DEG.C	OHM 0.629
NO LOAD CURRENT		AMP 5.85
NO LOAD INPUT		kW 0.485
CORE LOSS(Pfe)		kW 0.241
WINDAGE FRICTION LOSS(Pfw)		kW 0.216
STATOR WINDING LOSS(Pcu1)		kW 0.369
ROTOR WINDING LOSS(Pcu2)		kW 0.275
STRAY LOAD LOSS(Ps)		kW 0.061
FULL LOAD CURRENT		AMP 19.77
LOCKED ROTOR CURRENT		AMP 144.93
LOCKED ROTOR CURRENT/FULL LOAD CURRENT		P.U. 7.3
LOCKED ROTOR INPUT @ FULL LOAD		kW 48.63
FULL LOAD TORQUE		N.m 35.89
LOCKED ROTOR TORQUE		N.m 85.69
LOCKED ROTOR TORQUE/FULL LOAD TORQUE		P.U. 2.39
PULL OUT TORQUE		N.m 110.7
PULL OUT TORQUE/FULL LOAD TORQUE		P.U. 3.09
PULL UP TORQUE		N.m 75.68
PULL UP TORQUE/FULL LOAD TORQUE		P.U. 2.11
EFFICIENCY @ FULL LOAD		% 90.31
POWER FACTOR @ FULL LOAD		0.889
FULL LOAD SLIP		% 2.381
FULL LOAD SPEED		r/min 2929
STATOR WINDING TEMPERATURE RISE	30 SECS	K 50.8
D.E. BEARINGS TEMPERATURE BY PT100		Deg. C 61.5
TEMPERATURE ON LEADS BY PT100		Deg. C 44.9
TEMPERATURE IN TERMINAL BOX BY PT100		Deg. C 39.3
AMBIENT TEMPERATURE OF TESTING		Deg. C 26.0
SOUND PRESSURE LEVEL		dB(A) 74
VIBRATION		mm/s 1.0
MOMENT OF INERTIA		kgm2 0.0380
WEIGHT		kg 125

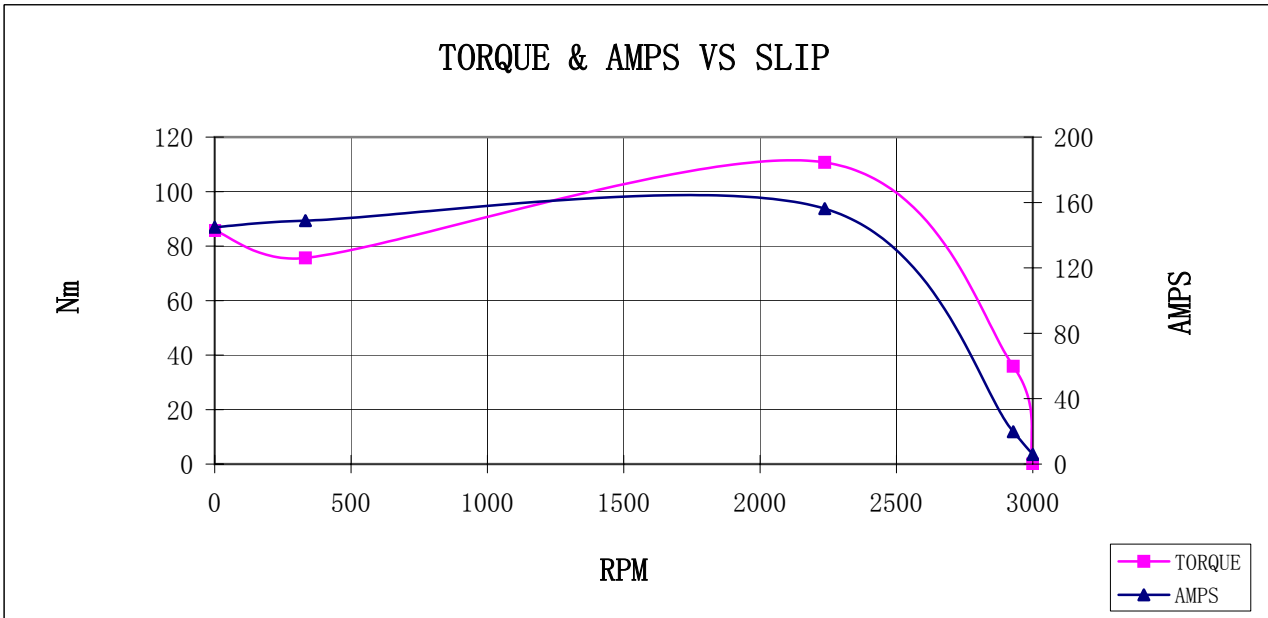
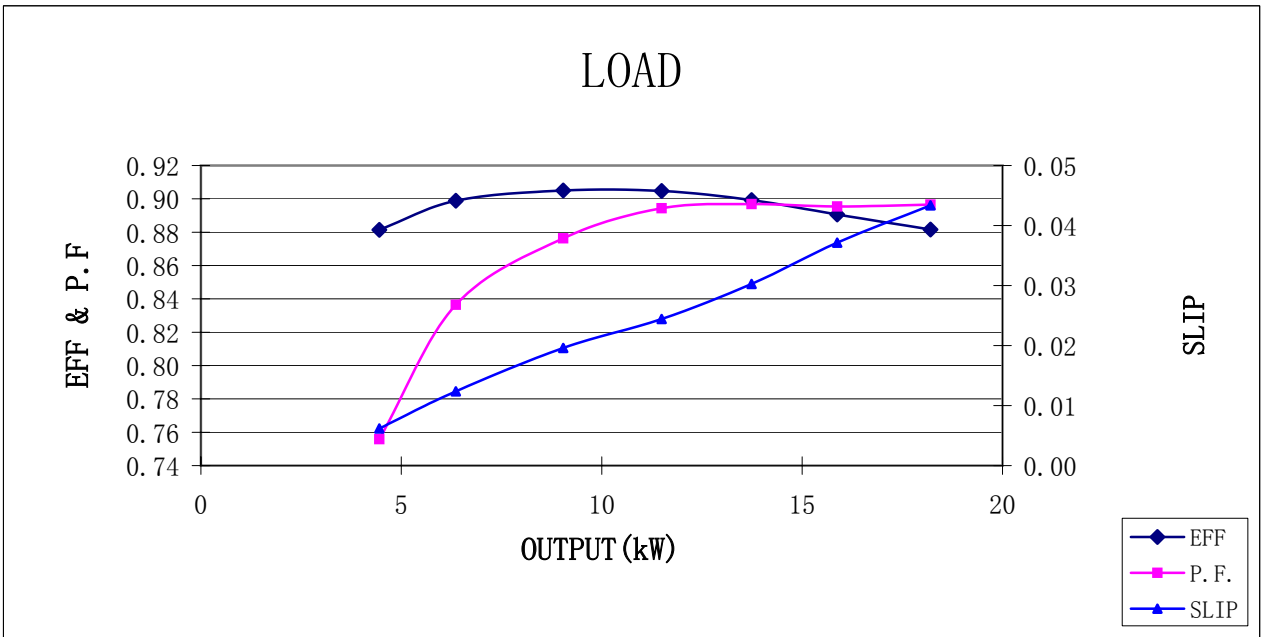
The data above is calculated as per IEC 34-2,all data at nominal Volts

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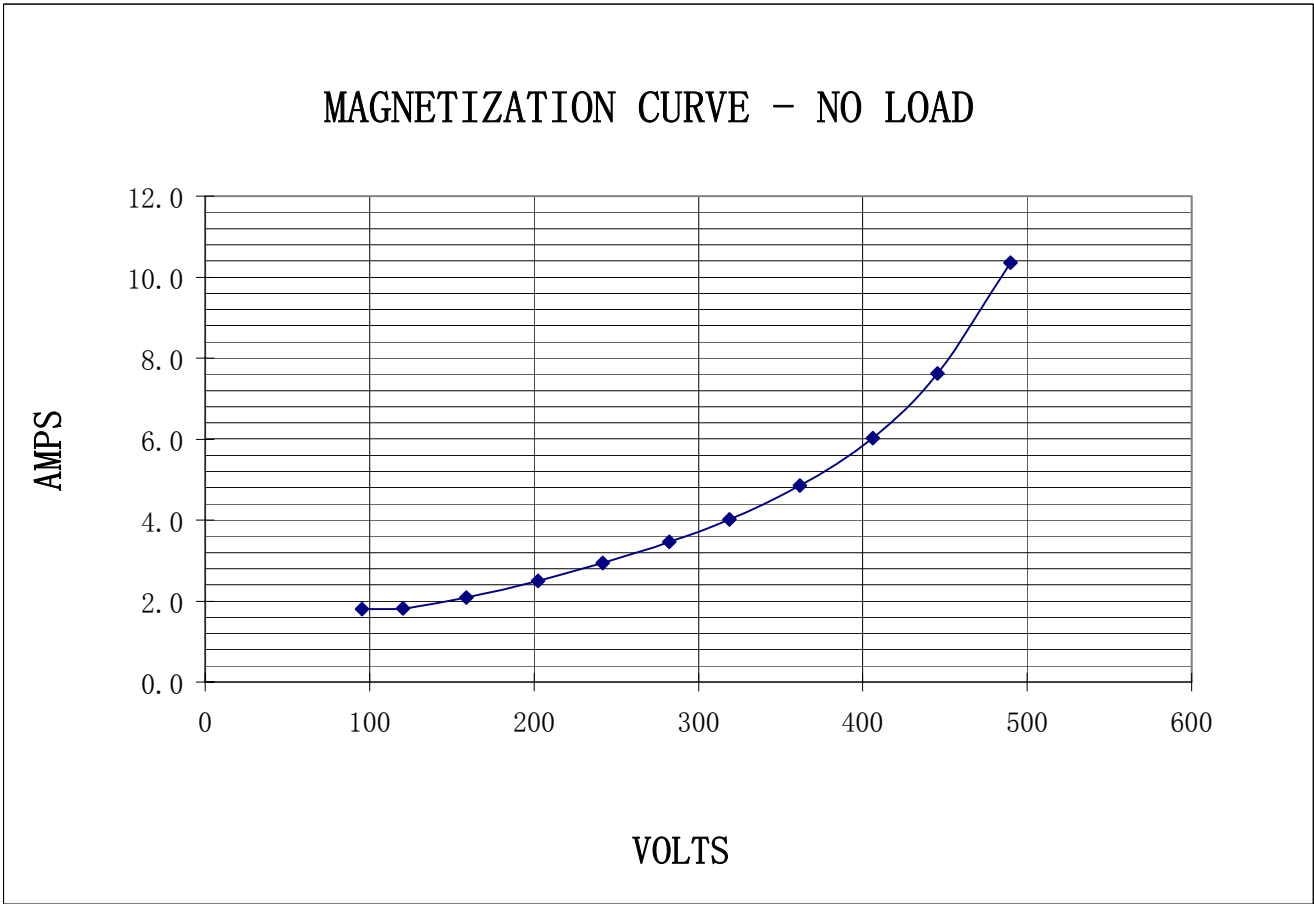


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