

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA		IEC TYPE		11 KW		968 RPM		
K160L-6 FRAME		3 PHASE		400 VOLTS		50 HZ / CYCLES		
89.2 EFFICIENCY		22.6 AMPS		54 IP		IC411 IC		
6 POLE		S1 DUTY		0.787 PF		N/A EFF2		
VALIADIS MANUFACTURER		SERIAL NO.		F INS.CLASS		DELTA CONNECTION		

TEST DATA	NO LOAD	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125% LOAD	LOCKED ROTOR
EFFICIENCY	0	83.74	88.76	89.63	89.18	89.01	88.22	
PF	0.066	0.434	0.636	0.735	0.787	0.806	0.814	0.471
RPM	1000	993	985	977	968	964	958	0
SLIP	0.00%	0.74%	1.51%	2.30%	3.20%	3.58%	4.18%	100.00%
AMPS	10.25	10.93	14.05	18.08	22.61	24.35	27.63	135.6
VOLTS	400	400	400	400	400	400	400	400
TORQUE NM	0	26.5	53.4	80.7	108.6	119.9	137.1	247.2
KW INPUT	0.468	3.28	6.20	9.20	12.33	13.59	15.59	44.24
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	0.118	0.196	0.324	0.507	0.59	0.76
STATOR LOSS %	3.61%	3.16%	3.52%	4.11%	4.32%	4.85%
ROTOR LOSS Pcu2	0.021	0.086	0.197	0.368	0.45	0.61
ROTOR LOSS %	0.64%	1.38%	2.14%	2.99%	3.33%	3.89%
CORE LOSS Pfe	0.333	0.333	0.333	0.333	0.333	0.333
CORE LOSS %	10.15%	5.38%	3.62%	2.70%	2.45%	2.14%
WINDAGE/FRICTION Pfw	0.044	0.044	0.044	0.044	0.044	0.044
WINDAGE/FRICTION %	1.35%	0.71%	0.48%	0.36%	0.33%	0.28%
STRAY LOAD LOSS Ps	0.016	0.031	0.046	0.062	0.068	0.078
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	0.5136667 OHMS @	17.7 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	0.661 OHMS @	90 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	0.673 OHMS	after test of temp rise	BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	71.3 DEG.C.	at full load steady state at	30 SECS
WINDING TEMPERATURE RISE	74.6 DEG.C.	at full load steady state at	0 SECS
PT100 TEMPERATURE OF DE WINDING	94.3 DEG.C.	at full load steady state at ambient	24.9 DEG.C.
PT100 TEMPERATURE OF NDE WINDING	N/A DEG.C.	at full load steady state at ambient	24.9 DEG.C.
PT100 TEMPERATURE DE BEARING	76.4 DEG.C.	at full load steady state at ambient	24.9 DEG.C.
PT100 TEMPERATURE NDE BEARING	N/A DEG.C.	at full load steady state at ambient	24.9 DEG.C.
PT100 TEMPERATURE IN TERMINAL BOX	62.9 DEG.C.	at full load steady state at ambient	24.9 DEG.C.
PT100 TEMPERATURE ON STATOR LEADS	68.2 DEG.C.	at full load steady state at ambient	24.9 DEG.C.

OTHER			
NOISE LEVEL(Lp)	58	dB(A) @ 1meter	INSULATION RESISTANCE 500 MEG.OHMS
VIBRATION LEVEL	1.3	mm/sec on no load	D.E. BEARING 180309-KZ2
WEIGHT	147	kg	N.D.E.BEARING 180209-KZ2
H-POT TEST VOLTS	1800	VOLTS	

VALIADIS S.A.		SCALE	N/A	
		DATE	2003.06.18	REV
K160L-6		DRAWN		DOCUMENT NO.
11 kW		APPRVD		
400 VOLTS 50 Hz		CHECKED		

RESULT SUMMARY

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VALIADIS MANUFACTURER	SERIAL NO.	F INS.CLASS	DELTA CONNECTION

MAJOR CONTENTS	UNIT	TEST VALUE
STATOR RESISTANCE OF PHASE TO PHASE	90 DEG.C	OHM 0.661
NO LOAD CURRENT		AMP 10.25
NO LOAD INPUT		kW 0.468
CORE LOSS(Pfe)		kW 0.333
WINDAGE FRICTION LOSS(Pfw)		kW 0.044
STATOR WINDING LOSS(Pcu1)		kW 0.507
ROTOR WINDING LOSS(Pcu2)		kW 0.368
STRAY LOAD LOSS(Ps)		kW 0.062
FULL LOAD CURRENT		AMP 22.61
LOCKED ROTOR CURRENT		AMP 135.56
LOCKED ROTOR CURRENT/FULL LOAD CURRENT		P.U. 6.0
LOCKED ROTOR INPUT @ FULL LOAD		kW 44.24
FULL LOAD TORQUE		N.m 108.57
LOCKED ROTOR TORQUE		N.m 247.19
LOCKED ROTOR TORQUE/FULL LOAD TORQUE		P.U. 2.28
PULL OUT TORQUE		N.m 306.9
PULL OUT TORQUE/FULL LOAD TORQUE		P.U. 2.83
PULL UP TORQUE		N.m 206.19
PULL UP TORQUE/FULL LOAD TORQUE		P.U. 1.90
EFFICIENCY @ FULL LOAD		% 89.18
POWER FACTOR @ FULL LOAD		0.787
FULL LOAD SLIP		% 3.204
FULL LOAD SPEED		r/min 968
STATOR WINDING TEMPERATURE RISE	30 SECS	K 71.3
D.E. BEARINGS TEMPERATURE BY PT100		Deg. C 76.4
TEMPERATURE ON LEADS BY PT100		Deg. C 68.2
TEMPERATURE IN TERMINAL BOX BY PT100		Deg. C 62.9
AMBIENT TEMPERATURE OF TESTING		Deg. C 24.9
SOUND PRESSURE LEVEL		dB(A) 58
VIBRATION		mm/s 1.3
MOMENT OF INERTIA		kgm2 0.1160
WEIGHT		kg 147

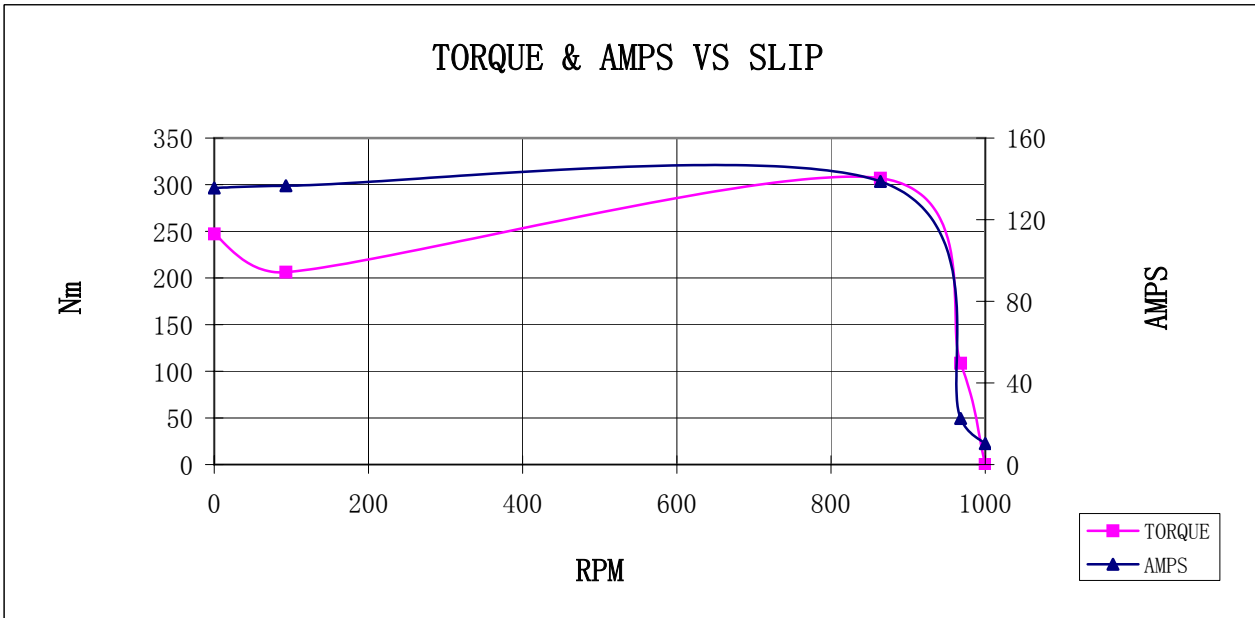
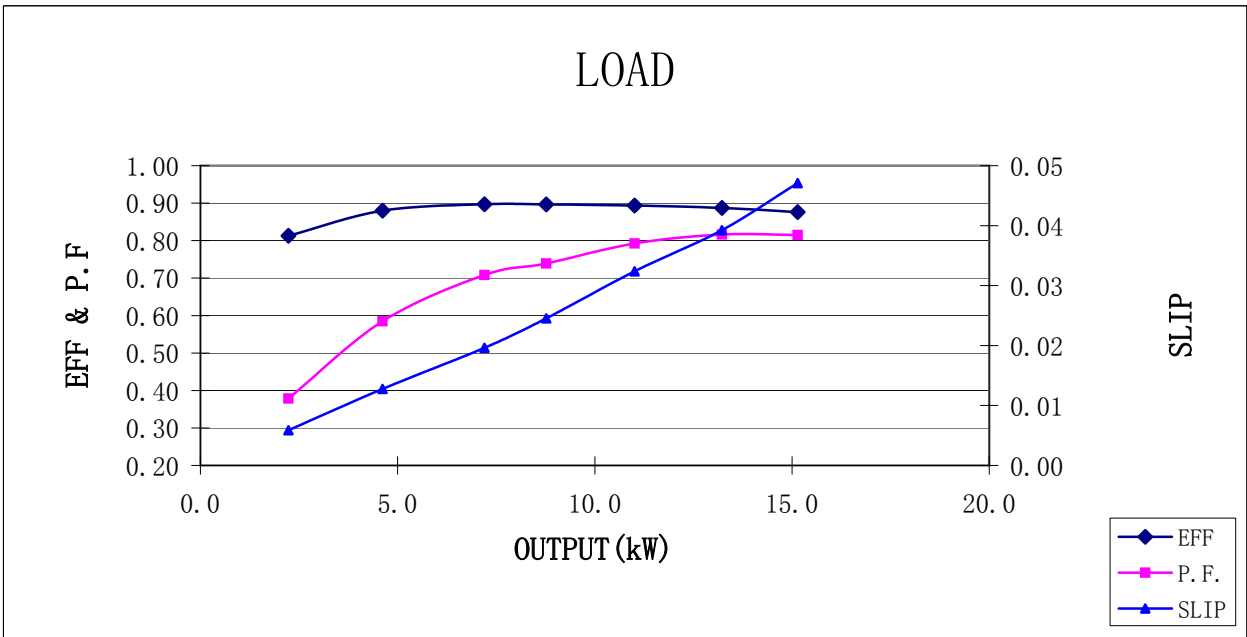
The data above is calculated as per IEC 34-2,all data at nominal Volts

VALIADIS S.A. K160L-6 11 kW 400 VOLTS 50 Hz	SCALE	N/A	
	DATE	2003.06.18	REV
	DRAWN		DOCUMENT NO.
	APPRVD		
	CHECKED		

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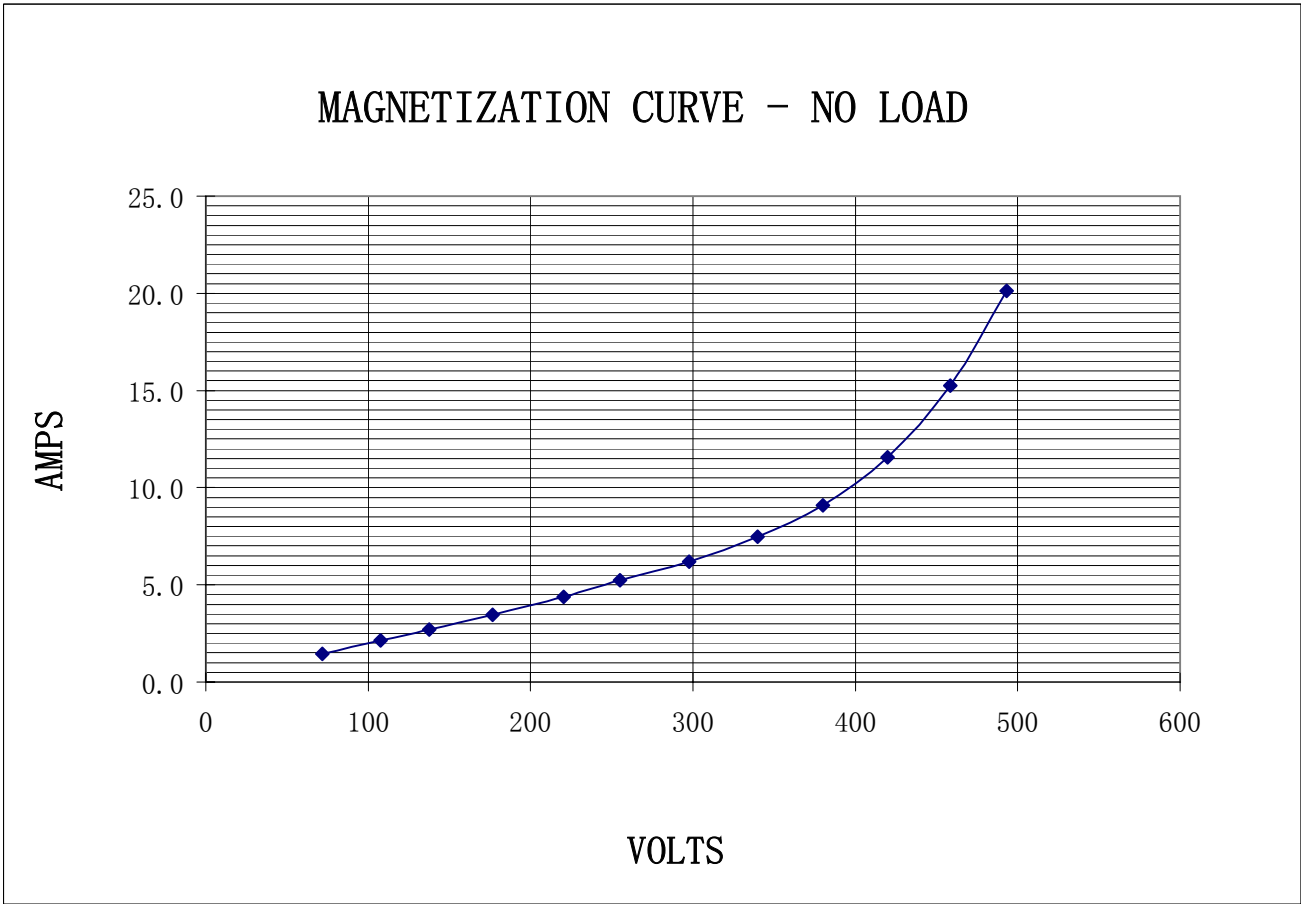


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