

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA		IEC TYPE		55 KW		2975 RPM		
K250M-2 FRAME		3 PHASE		400 VOLTS		50 HZ / CYCLES		
93.5 EFFICIENCY		96.6 AMPS		55 IP		IC411 IC		
2 POLE		S1 DUTY		0.879 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	85.47	91.27	92.98	93.48	93.45	93.27
PF	0.144	0.664	0.850	0.889	0.879	0.865	0.840	0.439
RPM	3000	2996	2990	2983	2975	2971	2963	0
SLIP	0.00%	0.15%	0.35%	0.57%	0.84%	0.98%	1.23%	100.00%
AMPS	21.54	34.95	51.17	72.03	96.57	108.01	126.69	705.6
VOLTS	400	400	400	400	400	400	400	400
TORQUE NM	0	43.9	87.9	132.1	176.6	194.6	221.7	421.7
KW INPUT	2.146	16.09	30.13	44.37	58.83	64.74	73.71	214.77
KW OUTPUT	0	13.75	27.50	41.25	55.00	60.50	68.75	

LOSSES(kw)	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125%LOAD
STATOR LOSS Pcu1	0.123	0.263	0.521	0.937	1.17	1.61
STATOR LOSS %	0.76%	0.87%	1.17%	1.59%	1.81%	2.19%
ROTOR LOSS Pcu2	0.022	0.100	0.246	0.478	0.61	0.87
ROTOR LOSS %	0.14%	0.33%	0.55%	0.81%	0.95%	1.19%
CORE LOSS Pfe	1.099	1.099	1.099	1.099	1.099	1.099
CORE LOSS %	6.83%	3.65%	2.48%	1.87%	1.70%	1.49%
WINDAGE/FRICTION Pfw	1.011	1.011	1.011	1.011	1.011	1.011
WINDAGE/FRICTION %	6.29%	3.36%	2.28%	1.72%	1.56%	1.37%
STRAY LOAD LOSS Ps	0.080	0.151	0.222	0.294	0.324	0.369
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	0.05378 OHMS @	26 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	0.067 OHMS @	90 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	0.070 OHMS	after test of temp rise	BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	76.9 DEG.C.	at full load steady state at	90 SECS
WINDING TEMPERATURE RISE	77.8 DEG.C.	at full load steady state at	0 SECS
PT100 TEMPERATURE OF DE WINDING	106.8 DEG.C.	at full load steady state at ambient	28.5 DEG.C.
PT100 TEMPERATURE OF NDE WINDING	NO DEG.C.	at full load steady state at ambient	28.5 DEG.C.
PT100 TEMPERATURE DE BEARING	89.5 DEG.C.	at full load steady state at ambient	28.5 DEG.C.
PT100 TEMPERATURE NDE BEARING	N/A DEG.C.	at full load steady state at ambient	28.5 DEG.C.
PT100 TEMPERATURE IN TERMINAL BOX	52.4 DEG.C.	at full load steady state at ambient	28.5 DEG.C.
PT100 TEMPERATURE ON STATOR LEADS	61.4 DEG.C.	at full load steady state at ambient	28.5 DEG.C.

OTHER			
NOISE LEVEL(Lp)	91 dB(A) @ 1meter	INSULATION RESISTANCE	500 MEG.OHMS
VIBRATION LEVEL	2.2 mm/sec on no load	D.E. BEARING	N314
WEIGHT	403 kg	N.D.E.BEARING	313-ZV2
H-POT TEST VOLTS	1800 VOLTS		

VALIADIS S.A.		SCALE	N/A	
		DATE	2003.08.12	REV
K250M-2 55 kW 400 VOLTS 50 Hz		DRAWN		DOCUMENT NO.
		APPRVD		
		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	0.066967
NO LOAD CURRENT	AMP	21.54
NO LOAD INPUT	kW	2.146
CORE LOSS(Pfe)	kW	1.099
WINDAGE FRICTION LOSS(Pfw)	kW	1.011
STATOR WINDING LOSS(Pcu1)	kW	0.937
ROTOR WINDING LOSS(Pcu2)	kW	0.478
STRAY LOAD LOSS(Ps)	kW	0.294
FULL LOAD CURRENT	AMP	96.57
LOCKED ROTOR CURRENT	AMP	705.58
LOCKED ROTOR CURRENT/FULL LOAD CURRENT	P.U.	7.3
LOCKED ROTOR INPUT @ FULL LOAD	kW	214.77
FULL LOAD TORQUE	N.m	176.65
LOCKED ROTOR TORQUE	N.m	421.67
LOCKED ROTOR TORQUE/FULL LOAD TORQUE	P.U.	2.39
PULL OUT TORQUE	N.m	531.6
PULL OUT TORQUE/FULL LOAD TORQUE	P.U.	3.01
PULL UP TORQUE	N.m	328.40
PULL UP TORQUE/FULL LOAD TORQUE	P.U.	1.86
EFFICIENCY @ FULL LOAD	%	93.48
POWER FACTOR @ FULL LOAD		0.879
FULL LOAD SLIP	%	0.842
FULL LOAD SPEED	r/min	2975
STATOR WINDING TEMPERATURE RISE	90 SECS	K
D.E. BEARINGS TEMPERATURE BY PT100		Deg. C
TEMPERATURE ON LEADS BY PT100		Deg. C
TEMPERATURE IN TERMINAL BOX BY PT100		Deg. C
AMBIENT TEMPERATURE OF TESTING		Deg. C
SOUND PRESSURE LEVEL		dB(A)
VIBRATION		mm/s
MOMENT OF INERTIA		kgm2
WEIGHT		kg

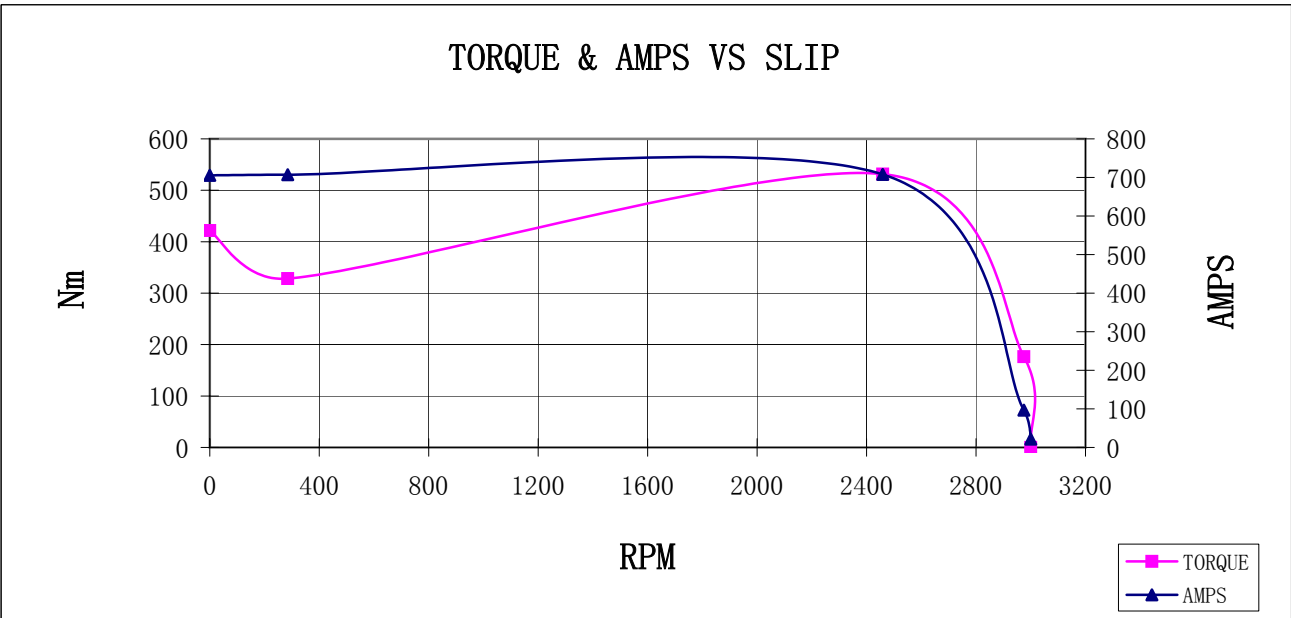
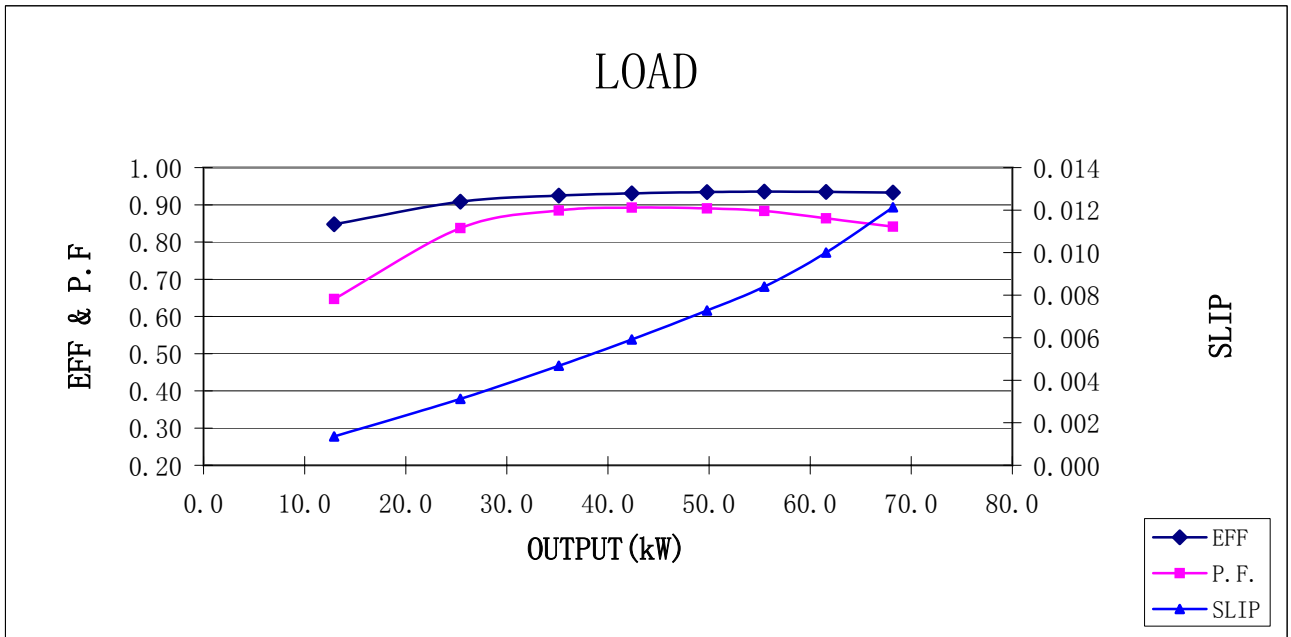
The data above is calculated as per IEC 34-2, all data at nominal Volts

VALIADIS S.A. K250M-2 55 kW 400 VOLTS 50 Hz	SCALE	N/A	
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NAMEPLATE DATA

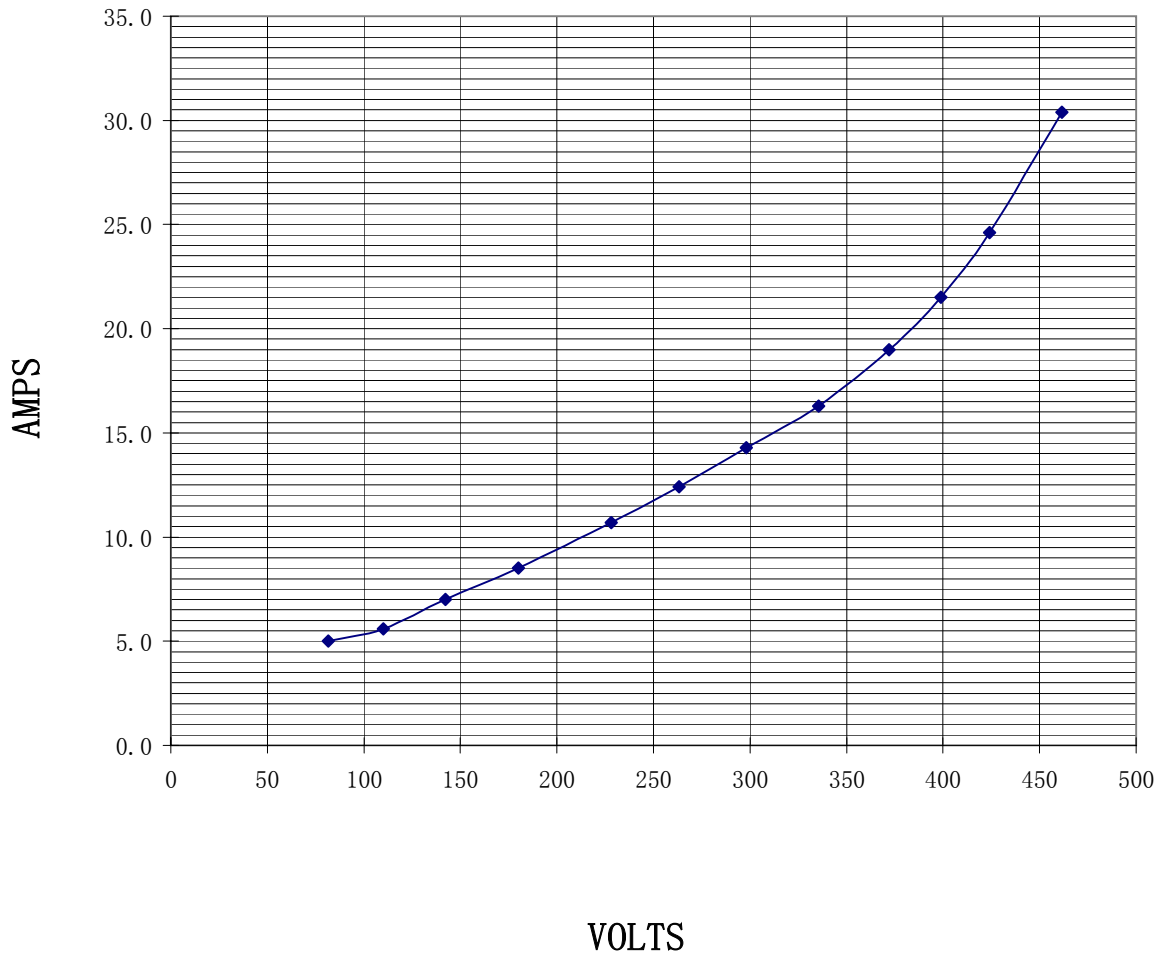
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 3 PHASE
 96.6 AMPS
 S1 DUTY
 SERIAL NO.

55 KW
 400 VOLTS
 55 IP
 0.879 PF
 F INS.CLASS

2975 RPM
 50 HZ / CYCLES
 IC411 IC
 N/A EFF2
 DELTA CONNECTION

MAGNETIZATION CURVE - NO LOAD



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