

# VALIADIS S.A.

## ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA		IEC TYPE		250 KW		988 RPM	
K355L-6 FRAME		3 PHASE		400 VOLTS		50 HZ / CYCLES	
95.6 EFFICIENCY		426.6 AMPS		55 IP		IC411 IC	
6 POLE		S1 DUTY		0.885 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	91.40	94.54	95.36	95.56	95.55	95.50
PF	0.060	0.539	0.748	0.848	0.885	0.893	0.901	0.266
RPM	1000	996	993	991	988	987	986	0
SLIP	0.00%	0.43%	0.70%	0.95%	1.18%	1.29%	1.45%	100.00%
AMPS	123.58	183.14	255.29	334.83	426.63	465.45	524.13	2511.5
VOLTS	400	400	400	400	400	400	400	400
TORQUE NM	0	599.7	1202.7	1808.6	2417.1	2661.6	3029.6	4717.3
KW INPUT	5.097	68.38	132.22	196.62	261.60	287.81	327.21	462.40
KW OUTPUT	0	62.50	125.00	187.50	250.00	275.00	312.50	

LOSSES(kW)	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125%LOAD
STATOR LOSS Pcu1	0.455	0.885	1.522	2.471	2.94	3.73
STATOR LOSS %	0.67%	0.67%	0.77%	0.94%	1.02%	1.14%
ROTOR LOSS Pcu2	0.274	0.897	1.817	3.019	3.61	4.64
ROTOR LOSS %	0.40%	0.68%	0.92%	1.15%	1.26%	1.42%
CORE LOSS Pfe	3.678	3.678	3.678	3.678	3.678	3.678
CORE LOSS %	5.38%	2.78%	1.87%	1.41%	1.28%	1.12%
WINDAGE/FRICTION Pfw	1.073	1.073	1.073	1.073	1.073	1.073
WINDAGE/FRICTION %	1.57%	0.81%	0.55%	0.41%	0.37%	0.33%
STRAY LOAD LOSS Ps	0.342	0.661	0.983	1.308	1.439	1.636
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	0.0073133 OHMS @	27.6 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	0.009 OHMS @	90 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	0.009 OHMS	after test of temp rise	BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	69.2 DEG.C.	at full load steady state at	120 SECS
WINDING TEMPERATURE RISE	81.1 DEG.C.	at full load steady state at	0 SECS
PT100 TEMPERATURE OF DE WINDING	76.8 DEG.C.	at full load steady state at ambient	26.1 DEG.C.
PT100 TEMPERATURE OF NDE WINDING	NO DEG.C.	at full load steady state at ambient	26.1 DEG.C.
PT100 TEMPERATURE DE BEARING	65.6 DEG.C.	at full load steady state at ambient	26.1 DEG.C.
PT100 TEMPERATURE NDE BEARING	N/A DEG.C.	at full load steady state at ambient	26.1 DEG.C.
PT100 TEMPERATURE IN TERMINAL BOX	42 DEG.C.	at full load steady state at ambient	26.1 DEG.C.
PT100 TEMPERATURE ON STATOR LEADS	51.3 DEG.C.	at full load steady state at ambient	26.1 DEG.C.

OTHER			
NOISE LEVEL(Lp)	84	dB(A) @ 1meter	INSULATION RESISTANCE 500 MEG.OHMS
VIBRATION LEVEL	2.1	mm/sec on no load	D.E. BEARING N322C3
WEIGHT	1798	kg	N.D.E.BEARING 6322C3
H-POT TEST VOLTS	1800	VOLTS	

<b>VALIADIS S.A.</b> <b>K355L-6</b> <b>250 kW</b> <b>400 VOLTS      50 Hz</b>	SCALE	N/A	
	DATE	2003.08.11	REV
	DRAWN		DOCUMENT NO.
	APPRVD		
CHECKED			

RESULT SUMMARY

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<b>NAMEPLATE DATA</b>	<b>IEC TYPE</b>	<b>250 KW</b>	<b>988 RPM</b>
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<b>95.6 EFFICIENCY</b>	<b>426.6 AMPS</b>	<b>55 IP</b>	<b>IC411 IC</b>
<b>6 POLE</b>	<b>S1 DUTY</b>	<b>0.885 PF</b>	<b>N/A EFF2</b>
<b>VALIADIS MANUFACTURER</b>	<b>SERIAL NO.</b>	<b>F INS.CLASS</b>	<b>DELTA CONNECTION</b>

MAJOR CONTENTS	UNIT	TEST VALUE
STATOR RESISTANCE OF PHASE TO PHASE	90 DEG.C	0.009051
NO LOAD CURRENT	AMP	123.58
NO LOAD INPUT	kW	5.097
CORE LOSS(Pfe)	kW	3.678
WINDAGE FRICTION LOSS(Pfw)	kW	1.073
STATOR WINDING LOSS(Pcu1)	kW	2.471
ROTOR WINDING LOSS(Pcu2)	kW	3.019
STRAY LOAD LOSS(Ps)	kW	1.308
FULL LOAD CURRENT	AMP	426.63
LOCKED ROTOR CURRENT	AMP	2511.52
LOCKED ROTOR CURRENT/FULL LOAD CURRENT	P.U.	5.9
LOCKED ROTOR INPUT @ FULL LOAD	kW	462.40
FULL LOAD TORQUE	N.m	2417.10
LOCKED ROTOR TORQUE	N.m	4717.30
LOCKED ROTOR TORQUE/FULL LOAD TORQUE	P.U.	1.95
PULL OUT TORQUE	N.m	5741.8
PULL OUT TORQUE/FULL LOAD TORQUE	P.U.	2.38
PULL UP TORQUE	N.m	3937.88
PULL UP TORQUE/FULL LOAD TORQUE	P.U.	1.63
EFFICIENCY @ FULL LOAD	%	95.56
POWER FACTOR @ FULL LOAD		0.885
FULL LOAD SLIP	%	1.182
FULL LOAD SPEED	r/min	988
STATOR WINDING TEMPERATURE RISE	120 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

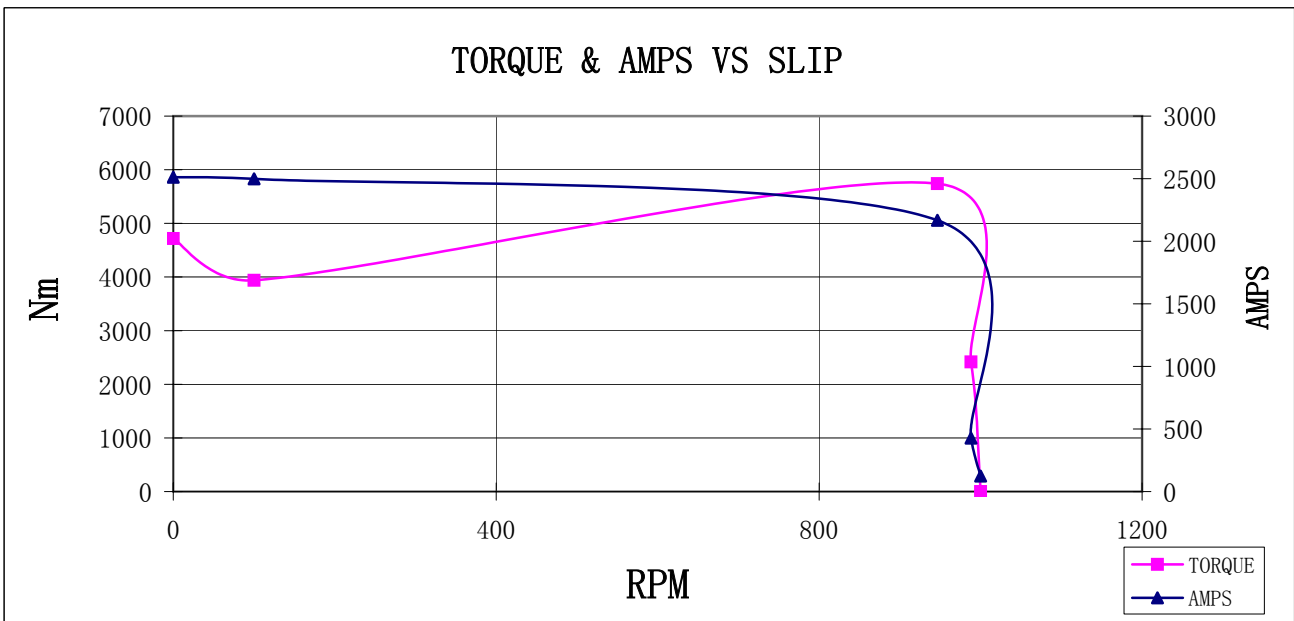
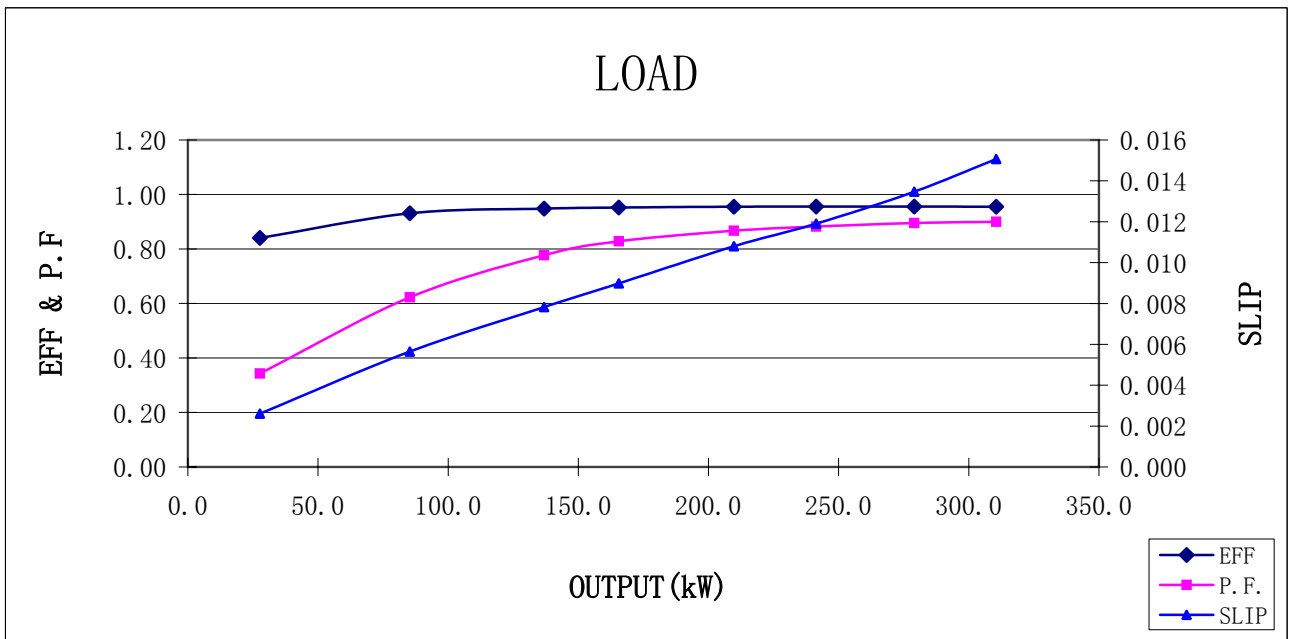
The data above is calculated as per IEC 34-2, all data at nominal Volts

<b>VALIADIS S.A.</b>  <b>K355L-6</b> <b>250 kW</b>  <b>400 VOLTS      50      Hz</b>	<b>SCALE</b>	N/A	
	<b>DATE</b>	2003.08.11	<b>REV</b>
	<b>DRAWN</b>		<b>DOCUMENT NO.</b>
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<b>VALIADIS S.A.</b>	<b>SCALE</b>	N/A	
	<b>DATE</b>	2003.08.11	<b>REV</b>
<b>K355L-6</b> <b>250 kW</b> <b>400 VOLTS 50 Hz</b>	<b>DRAWN</b>		<b>DOCUMENT NO.</b>
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### NAMEPLATE DATA

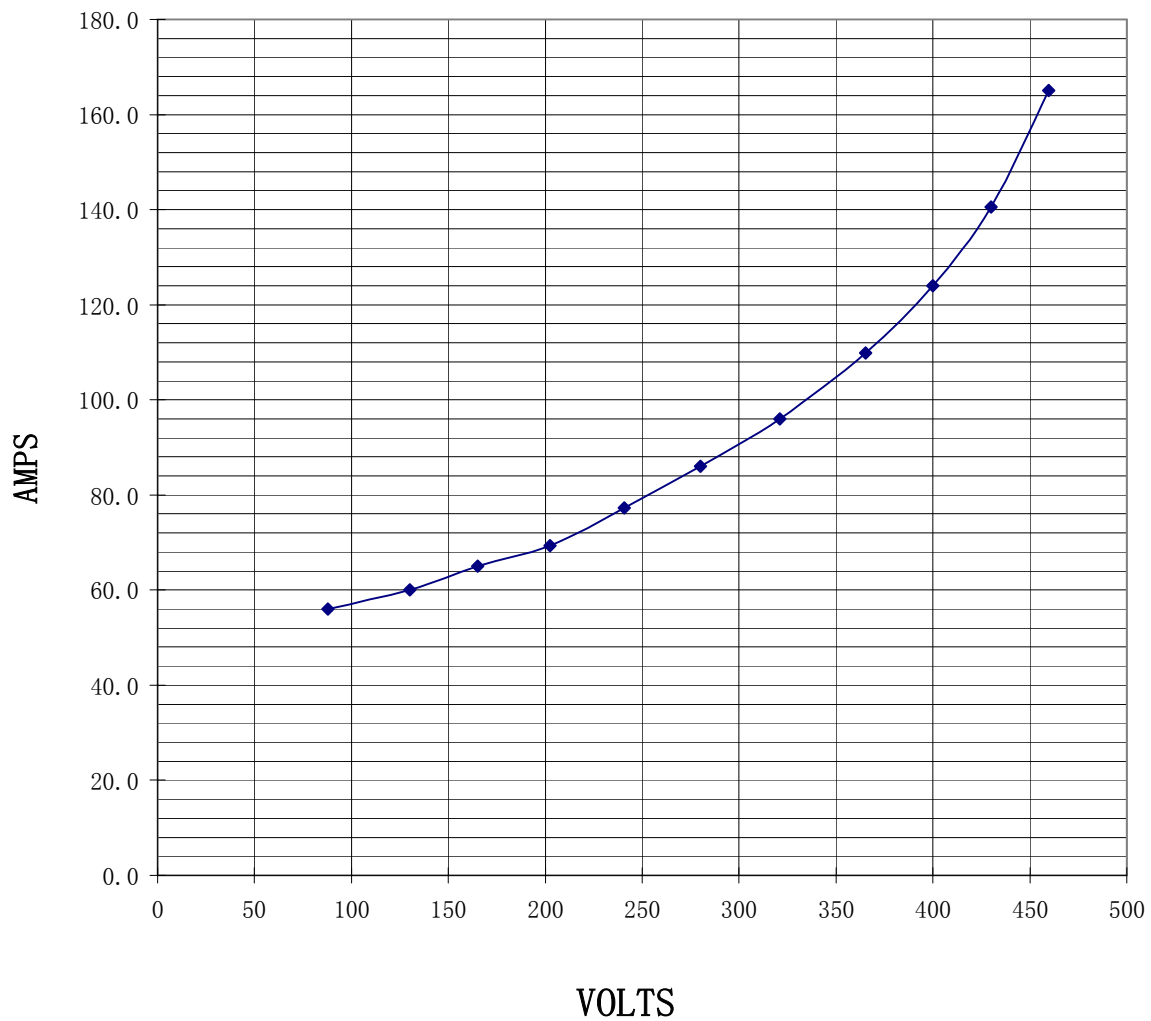
K355L-6 FRAME  
 95.6 EFFICIENCY  
 6 POLE  
 VALIADIS MANUFACTURER

IEC TYPE  
 3 PHASE  
 426.6 AMPS  
 S1 DUTY  
 SERIAL NO.

250 KW  
 400 VOLTS  
 55 IP  
 0.885 PF  
 F INS.CLASS

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

### MAGNETIZATION CURVE - NO LOAD



<b>VALIADIS S.A.</b>	SCALE	N/A	
	DATE	2003.08.11	REV
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