

# VALIADIS S.A.

## ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA		IEC TYPE		132 KW		987 RPM		
K315L-6 FRAME		3 PHASE		400 VOLTS		50 HZ / CYCLES		
94.8 EFFICIENCY		231.4 AMPS		55 IP		IC411 IC		
6 POLE		S1 DUTY		0.869 PF		N/A EFF2		
VALIADIS MANUFACTURER		SERIAL NO.		F INS.CLASS		DELTA CONNECTION		

TEST DATA								LOCKED
	NO LOAD	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125% LOAD	ROTOR
EFFICIENCY	0	90.45	93.88	94.68	94.81	94.70	94.51	
PF	0.059	0.641	0.797	0.852	0.869	0.868	0.863	0.425
RPM	1000	995	993	990	987	986	983	0
SLIP	0.00%	0.45%	0.70%	0.98%	1.29%	1.44%	1.68%	100.00%
AMPS	74.67	82.12	127.28	177.23	231.36	255.04	291.92	1512.9
VOLTS	400	400	400	400	400	400	400	400
TORQUE NM	0	316.7	635.0	955.2	1277.6	1407.5	1603.3	2493.8
KW INPUT	3.059	36.48	70.30	104.57	139.23	153.32	174.58	445.92
KW OUTPUT	0	33.00	66.00	99.00	132.00	145.20	165.00	

LOSSES(kw)	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125%LOAD
STATOR LOSS Pcu1	0.234	0.563	1.091	1.860	2.26	2.96
STATOR LOSS %	0.64%	0.80%	1.04%	1.34%	1.47%	1.70%
ROTOR LOSS Pcu2	0.156	0.475	0.990	1.747	2.15	2.85
ROTOR LOSS %	0.43%	0.68%	0.95%	1.26%	1.40%	1.63%
CORE LOSS Pfe	2.010	2.010	2.010	2.010	2.010	2.010
CORE LOSS %	5.51%	2.86%	1.92%	1.44%	1.31%	1.15%
WINDAGE/FRICTION Pfw	0.893	0.893	0.893	0.893	0.893	0.893
WINDAGE/FRICTION %	2.45%	1.27%	0.85%	0.64%	0.58%	0.51%
STRAY LOAD LOSS Ps	0.182	0.352	0.523	0.696	0.767	0.873
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	0.018757 OHMS @	28.2 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	0.023 OHMS @	90 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	0.024 OHMS	after test of temp rise	BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	69.2 DEG.C.	at full load steady state at	90 SECS
WINDING TEMPERATURE RISE	73.8 DEG.C.	at full load steady state at	0 SECS
PT100 TEMPERATURE OF DE WINDING	104.8 DEG.C.	at full load steady state at ambient	29.5 DEG.C.
PT100 TEMPERATURE OF NDE WINDING	NO DEG.C.	at full load steady state at ambient	29.5 DEG.C.
PT100 TEMPERATURE DE BEARING	89 DEG.C.	at full load steady state at ambient	29.5 DEG.C.
PT100 TEMPERATURE NDE BEARING	N/A DEG.C.	at full load steady state at ambient	29.5 DEG.C.
PT100 TEMPERATURE IN TERMINAL BOX	53.3 DEG.C.	at full load steady state at ambient	29.5 DEG.C.
PT100 TEMPERATURE ON STATOR LEADS	63 DEG.C.	at full load steady state at ambient	29.5 DEG.C.

### OTHER

NOISE LEVEL(Lp)	71	dB(A) @ 1meter	INSULATION RESISTANCE	350	MEG.OHMS
VIBRATION LEVEL	1.8	mm/sec on no load	D.E. BEARING	N319C3	
WEIGHT	1282	kg	N.D.E.BEARING	6319C3	
H-POT TEST VOLTS	1800	VOLTS			

VALIADIS S.A.		SCALE	N/A	
		DATE	2003.07.10	REV
K315L-6 132 kW 400 VOLTS 50 Hz		DRAWN		DOCUMENT NO.
		APPRVD		
		CHECKED		

RESULT SUMMARY

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<b>NAMEPLATE DATA</b>	<b>IEC TYPE</b>	<b>132 KW</b>	<b>987 RPM</b>
K315L-6 <b>FRAME</b>	<b>3 PHASE</b>	<b>400 VOLTS</b>	<b>50 HZ / CYCLES</b>
<b>94.8 EFFICIENCY</b>	<b>231.4 AMPS</b>	<b>55 IP</b>	<b>IC411 IC</b>
<b>6 POLE</b>	<b>S1 DUTY</b>	<b>0.869 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	0.023161
NO LOAD CURRENT	AMP	74.67
NO LOAD INPUT	kW	3.059
CORE LOSS(Pfe)	kW	2.010
WINDAGE FRICTION LOSS(Pfw)	kW	0.893
STATOR WINDING LOSS(Pcu1)	kW	1.860
ROTOR WINDING LOSS(Pcu2)	kW	1.747
STRAY LOAD LOSS(Ps)	kW	0.696
FULL LOAD CURRENT	AMP	231.36
LOCKED ROTOR CURRENT	AMP	1512.92
LOCKED ROTOR CURRENT/FULL LOAD CURRENT	P.U.	6.5
LOCKED ROTOR INPUT @ FULL LOAD	kW	445.92
FULL LOAD TORQUE	N.m	1277.64
LOCKED ROTOR TORQUE	N.m	2493.83
LOCKED ROTOR TORQUE/FULL LOAD TORQUE	P.U.	1.95
PULL OUT TORQUE	N.m	3655.9
PULL OUT TORQUE/FULL LOAD TORQUE	P.U.	2.86
PULL UP TORQUE	N.m	2081.50
PULL UP TORQUE/FULL LOAD TORQUE	P.U.	1.63
EFFICIENCY @ FULL LOAD	%	94.81
POWER FACTOR @ FULL LOAD		0.869
FULL LOAD SLIP	%	1.291
FULL LOAD SPEED	r/min	987
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

<b>VALIADIS S.A.</b>  <b>K315L-6</b> <b>132 kW</b>  <b>400 VOLTS      50      Hz</b>	<b>SCALE</b>	N/A	
	<b>DATE</b>	2003.07.10	<b>REV</b>
	<b>DRAWN</b>		<b>DOCUMENT NO.</b>
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	<b>CHECKED</b>		

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K315L-6 FRAME  
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 6 POLE  
 VALIADIS MANUFACTURER

### IEC TYPE

3 PHASE  
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 S1 DUTY  
 SERIAL NO.

132 KW

400 VOLTS

55 IP

0.869 PF

F INS.CLASS

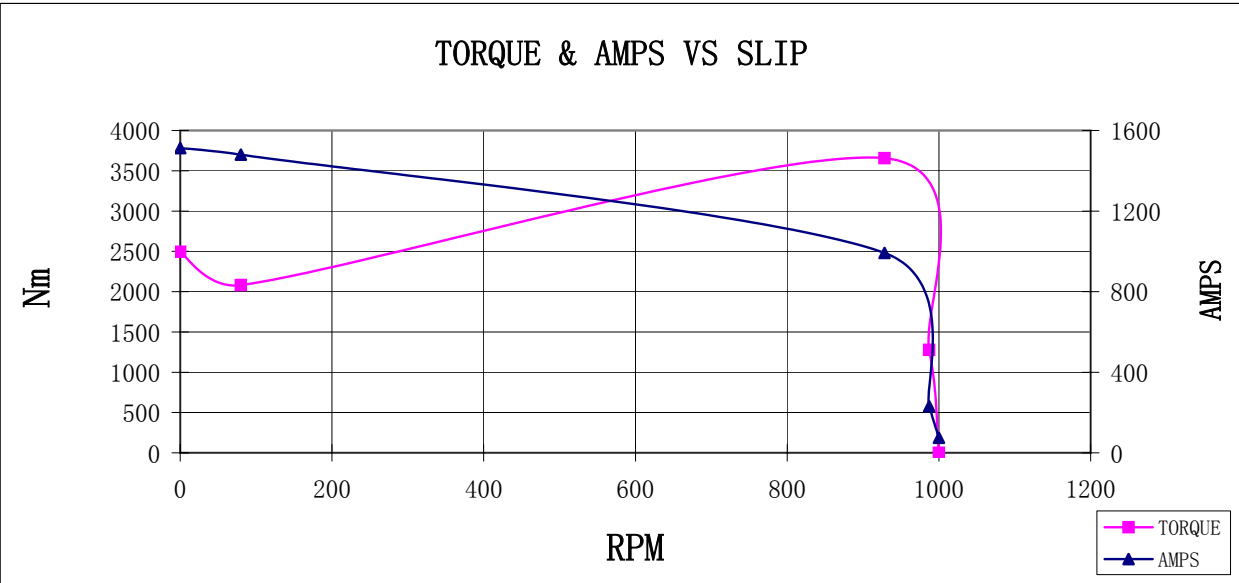
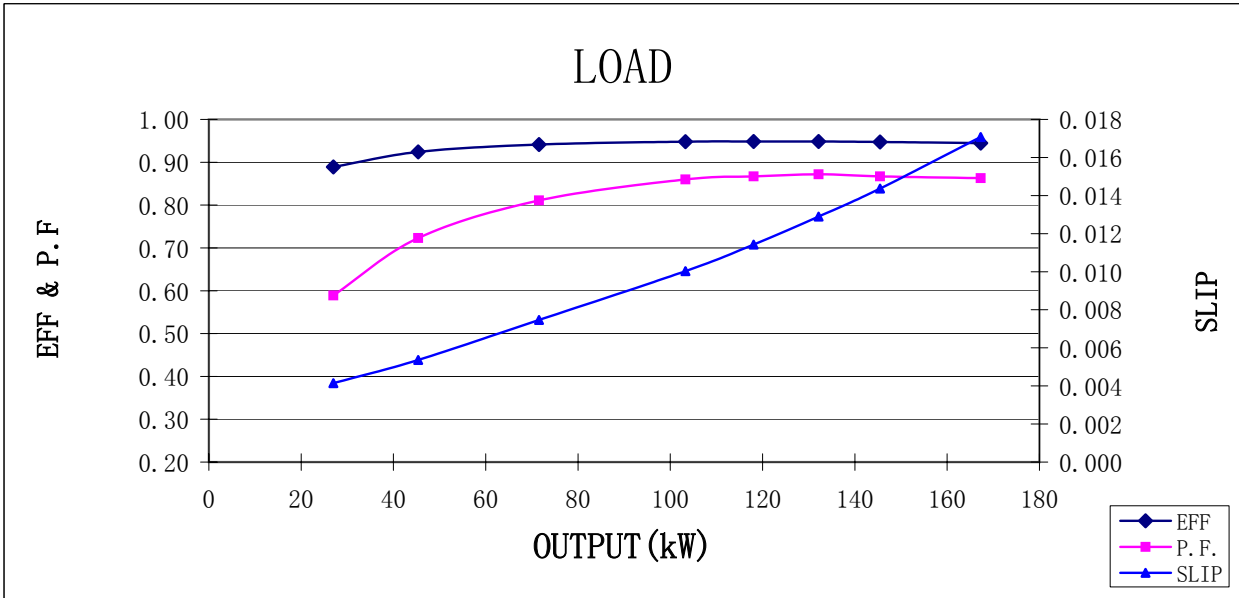
987 RPM

50 HZ / CYCLES

IC411 IC

N/A EFF2

DELTA CONNECTION



<b>VALIADIS S.A.</b>	SCALE	N/A	
	DATE	2003.07.10	REV
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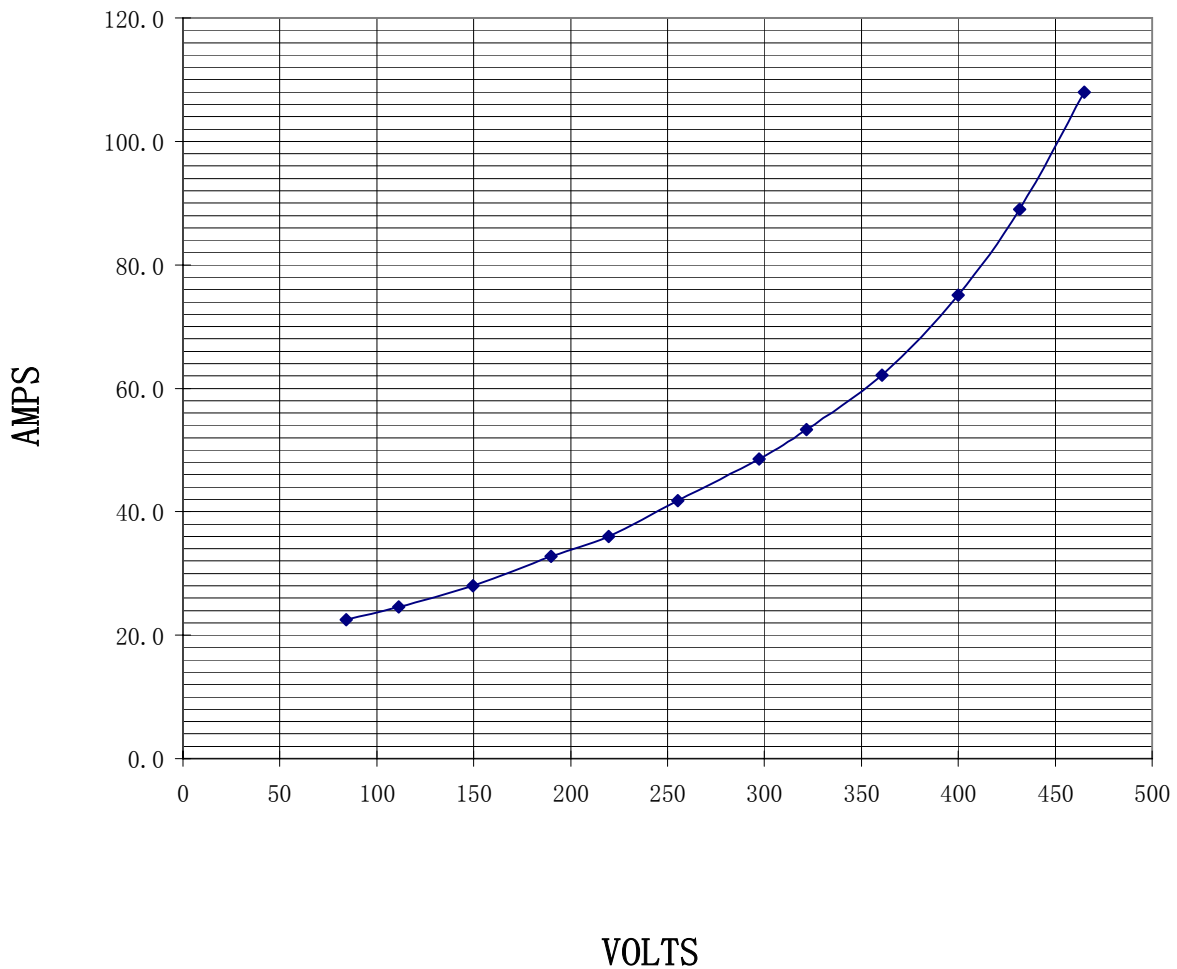
### 132 KW

400 VOLTS  
 55 IP  
 0.869 PF  
 F INS.CLASS

### 987 RPM

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

### MAGNETIZATION CURVE - NO LOAD



<b>VALIADIS S.A.</b>  K315L-6 132 kW 400 VOLTS      50 Hz	SCALE	N/A	
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