

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA		IEC TYPE		55 KW		987 RPM			
K280M-6 FRAME		3 PHASE		400 VOLTS		50 HZ / CYCLES			
93.6 EFFICIENCY		97.2 AMPS		55 IP		IC411 IC			
6 POLE		S1 DUTY		0.873 PF		N/A EFF2			
VALIADIS MANUFACTURER		SERIAL NO.		F INS.CLASS		DELTA CONNECTION			
								LOCKED	
TEST DATA	NO LOAD	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125% LOAD	ROTOR	
EFFICIENCY	0	89.62	93.45	93.85	93.62	93.38	93.01		
PF	0.079	0.692	0.850	0.878	0.873	0.865	0.855	0.357	
RPM	1000	997	994	990	987	985	983	0	
SLIP	0.00%	0.33%	0.63%	0.96%	1.33%	1.50%	1.74%	100.00%	
AMPS	25.17	31.98	49.96	72.28	97.17	108.07	124.73	600.3	
VOLTS	400	400	400	400	400	400	400	400	
TORQUE NM	0	131.8	264.4	397.9	532.6	586.8	668.4	976.9	
KW INPUT	1.386	15.34	29.43	43.95	58.75	64.79	73.92	148.27	
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	0.150	0.365	0.764	1.381	1.71	2.28			
STATOR LOSS %	0.97%	1.24%	1.74%	2.35%	2.64%	3.08%			
ROTOR LOSS Pcu2	0.048	0.177	0.409	0.753	0.93	1.23			
ROTOR LOSS %	0.31%	0.60%	0.93%	1.28%	1.44%	1.67%			
CORE LOSS Pfe	0.717	0.717	0.717	0.717	0.717	0.717			
CORE LOSS %	4.67%	2.44%	1.63%	1.22%	1.11%	0.97%			
WINDAGE/FRICTION Pfw	0.588	0.588	0.588	0.588	0.588	0.588			
WINDAGE/FRICTION %	3.84%	2.00%	1.34%	1.00%	0.91%	0.80%			
STRAY LOAD LOSS Ps	0.077	0.147	0.220	0.294	0.324	0.370			
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	0.0785433 OHMS @		26.8 DEG.C.		BETWEEN STATOR LEADS				
STATOR RESISTANCE ADJUSTED	0.098 OHMS @		90 DEG.C.		BETWEEN STATOR LEADS				
STATOR RESISTANCE HOT	0.097 OHMS		after test of temp rise		BETWEEN STATOR LEADS				
WINDING TEMPERATURE RISE	54.8 DEG.C.		at full load steady state at		90 SECS				
WINDING TEMPERATURE RISE	59.5 DEG.C.		at full load steady state at		0 SECS				
PT100 TEMPERATURE OF DE WINDING	92.5 DEG.C.		at full load steady state at ambient		30.4 DEG.C.				
PT100 TEMPERATURE OF NDE WINDING	N/A DEG.C.		at full load steady state at ambient		30.4 DEG.C.				
PT100 TEMPERATURE DE BEARING	68 DEG.C.		at full load steady state at ambient		30.4 DEG.C.				
PT100 TEMPERATURE NDE BEARING	N/A DEG.C.		at full load steady state at ambient		30.4 DEG.C.				
PT100 TEMPERATURE IN TERMINAL BOX	49 DEG.C.		at full load steady state at ambient		30.4 DEG.C.				
PT100 TEMPERATURE ON STATOR LEADS	56.4 DEG.C.		at full load steady state at ambient		30.4 DEG.C.				
OTHER									
NOISE LEVEL(Lp)	73	dB(A) @ 1meter		INSULATION RESISTANCE		500	MEG.OHMS		
VIBRATION LEVEL	0.5	mm/sec on no load		D.E. BEARING		6316C3			
WEIGHT	556	kg		N.D.E.BEARING		6316C3			
H-POT TEST VOLTS	1800	VOLTS							
VALIADIS S.A. K280M-6 55 kW 400 VOLTS 50 Hz				SCALE	N/A				
				DATE	2003.07.22			REV	
				DRAWN				DOCUMENT NO.	
				APPRVD					
CHECKED									

RESULT SUMMARY

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA	IEC TYPE	55 KW	987 RPM
K280M-6 FRAME	3 PHASE	400 VOLTS	50 HZ / CYCLES
93.6 EFFICIENCY	97.2 AMPS	55 IP	IC411 IC
6 POLE	S1 DUTY	0.873 PF	N/A EFF2
VALIADIS MANUFACTURER	SERIAL NO.	F INS.CLASS	DELTA CONNECTION

MAJOR CONTENTS	UNIT	TEST VALUE
STATOR RESISTANCE OF PHASE TO PHASE	90 DEG.C	0.0975
NO LOAD CURRENT	AMP	25.17
NO LOAD INPUT	kW	1.386
CORE LOSS(Pfe)	kW	0.717
WINDAGE FRICTION LOSS(Pfw)	kW	0.588
STATOR WINDING LOSS(Pcu1)	kW	1.381
ROTOR WINDING LOSS(Pcu2)	kW	0.753
STRAY LOAD LOSS(Ps)	kW	0.294
FULL LOAD CURRENT	AMP	97.17
LOCKED ROTOR CURRENT	AMP	600.34
LOCKED ROTOR CURRENT/FULL LOAD CURRENT	P.U.	6.2
LOCKED ROTOR INPUT @ FULL LOAD	kW	148.27
FULL LOAD TORQUE	N.m	532.56
LOCKED ROTOR TORQUE	N.m	976.94
LOCKED ROTOR TORQUE/FULL LOAD TORQUE	P.U.	1.8
PULL OUT TORQUE	N.m	1341.9
PULL OUT TORQUE/FULL LOAD TORQUE	P.U.	2.5
PULL UP TORQUE	N.m	798.43
PULL UP TORQUE/FULL LOAD TORQUE	P.U.	1.50
EFFICIENCY @ FULL LOAD	%	93.6
POWER FACTOR @ FULL LOAD		0.87
FULL LOAD SLIP	%	1.329
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

VALIADIS S.A. K280M-6 55 kW 400 VOLTS 50 Hz	SCALE	N/A	
	DATE	2003.07.22	REV
	DRAWN		DOCUMENT NO.
	APPRVD		
	CHECKED		

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA

K280M-6 FRAME
 93.6 EFFICIENCY
 6 POLE
 VALIADIS MANUFACTURER

IEC TYPE

3 PHASE
 97.2 AMPS
 S1 DUTY
 SERIAL NO.

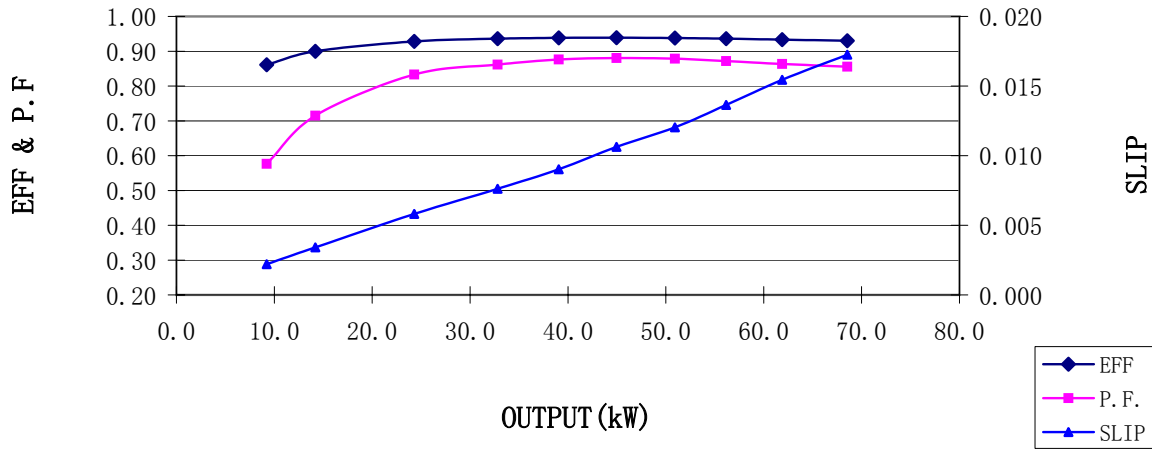
55 KW

400 VOLTS
 55 IP
 0.873 PF
 F INS.CLASS

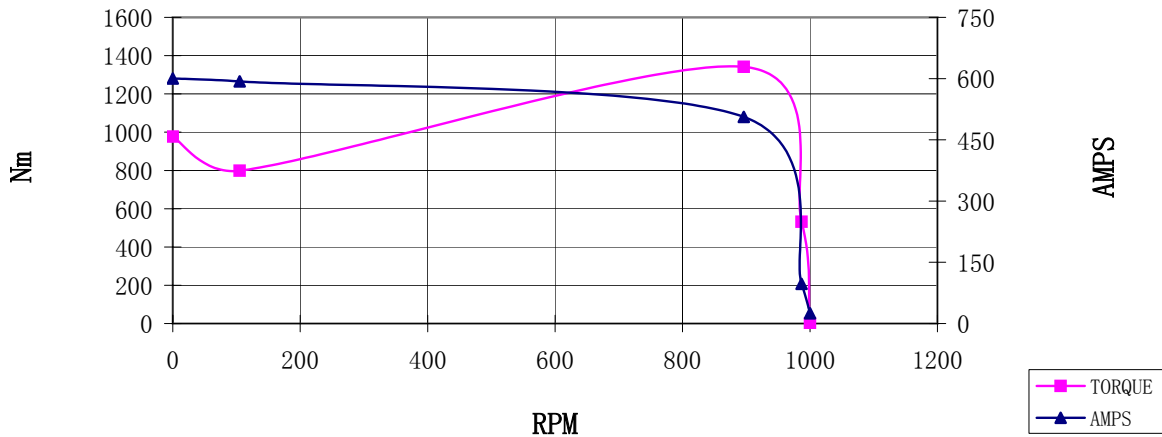
987 RPM

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

LOAD



TORQUE & AMPS VS SLIP



VALIADIS S.A. K280M-6 55 kW 400 VOLTS 50 Hz	SCALE	N/A	
	DATE	2003.07.22	REV
	DRAWN		DOCUMENT NO.
	APPRVD		
	CHECKED		

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA

K280M-6 FRAME

93.6 EFFICIENCY

6 POLE

VALIADIS MANUFACTURER

IEC TYPE

3 PHASE

97.2 AMPS

S1 DUTY

SERIAL NO.

55 KW

400 VOLTS

55 IP

0.873 PF

F INS.CLASS

987 RPM

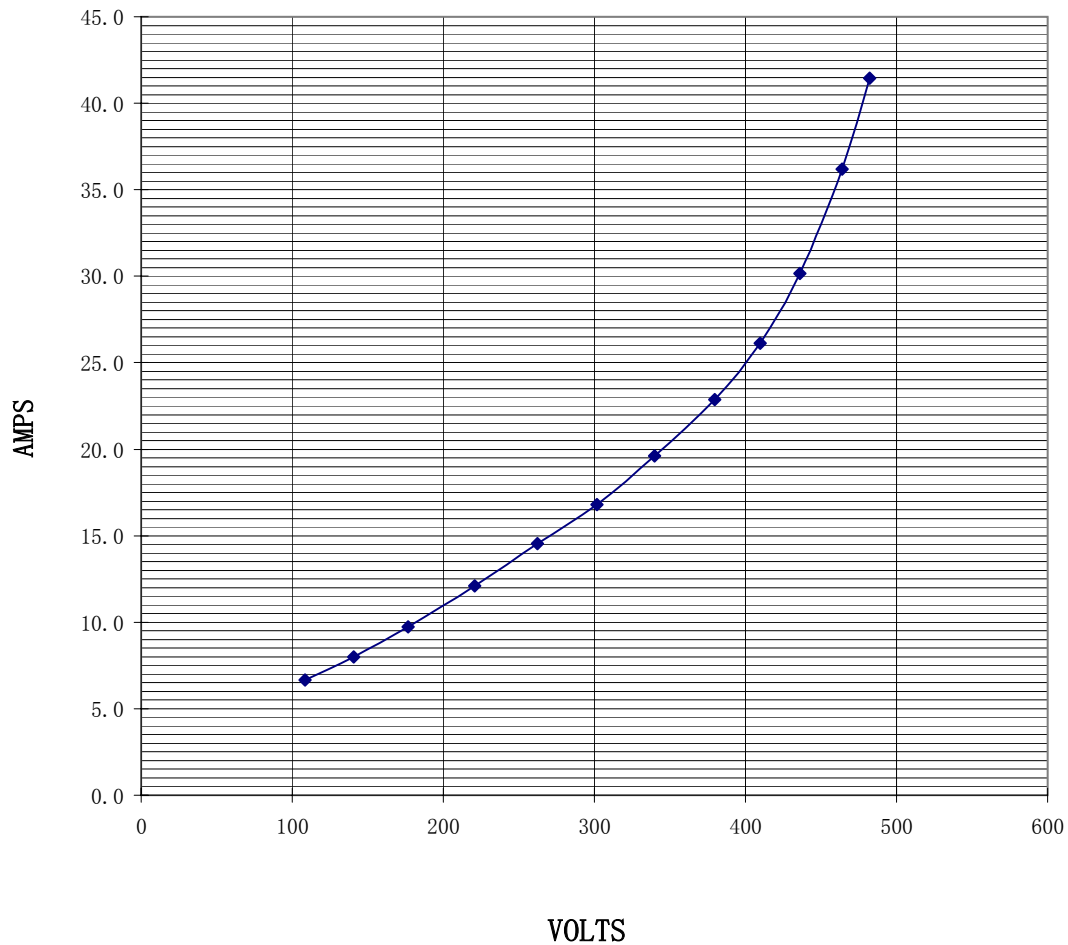
50 HZ / CYCLES

IC411 IC

N/A EFF2

DELTA CONNECTION

MAGNETIZATION CURVE - NO LOAD



VALIADIS S.A.	SCALE	N/A	
	DATE	2003.07.22	REV
K280M-6 55 kW 400 VOLTS 50 Hz	DRAWN		DOCUMENT NO.
	APPRVD		
	CHECKED		