VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA		IEC	**TYPE**	160	**KW**	990	**RPM**
K355M-6	**FRAME**	3	**PHASE**	400	**VOLTS**	50	**HZ / CYCLES**
95.4	**EFFICIENCY**	276.7	**AMPS**	55	**IP**	IC411	**IC**
6	**POLE**	S1	**DUTY**	0.875	**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	91.18	94.32	95.19	95.36	95.33	95.22	
PF	0.057	0.581	0.734	0.824	0.875	0.887	0.897	0.374
RPM	1000	998	996	993	990	989	987	0
SLIP	0.00%	0.17%	0.41%	0.67%	0.97%	1.10%	1.29%	100.00%
AMPS	86.34	109.00	166.86	220.93	276.72	300.57	337.98	1752.9
VOLTS	400	400	400	400	400	400	400	400
TORQUE NM	0	382.8	767.4	1154.2	1543.7	1700.3	1935.8	3232.1
KW INPUT	3.404	43.87	84.82	126.06	167.78	184.63	210.03	454.15
KW OUTPUT	0	40.00	80.00	120.00	160.00	176.00	200.00	

LOSSES(kW)	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125%LOAD
STATOR LOSS Pcu1	0.321	0.753	1.321	2.072	2.44	3.09
STATOR LOSS %	0.73%	0.89%	1.05%	1.23%	1.32%	1.47%
ROTOR LOSS Pcu2	0.070	0.331	0.817	1.590	1.98	2.64
ROTOR LOSS %	0.16%	0.39%	0.65%	0.95%	1.07%	1.26%
CORE LOSS Pfe	2.450	2.450	2.450	2.450	2.450	2.450
CORE LOSS %	5.58%	2.89%	1.94%	1.46%	1.33%	1.17%
WINDAGE/FRICTION Pfw	0.786	0.786	0.786	0.786	0.786	0.786
WINDAGE/FRICTION %	1.79%	0.93%	0.62%	0.47%	0.43%	0.37%
STRAY LOAD LOSS Ps	0.219	0.424	0.630	0.839	0.923	1.050
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	0.01395333	OHMS @	16.4	DEG.C.	BETWEEN STATOR LEADS	
STATOR RESISTANCE ADJUSTED	0.018	OHMS @	90	DEG.C.	BETWEEN STATOR LEADS	
STATOR RESISTANCE HOT	0.018	OHMS	after test of	temp rise	BETWEEN STATOR LEADS	
WINDING TEMPERATURE RISE	73.2	DEG.C.	at full load steady state at		90	SECS
WINDING TEMPERATURE RISE	77.0	DEG.C.	at full load steady state at		0	SECS
PT100 TEMPERATURE OF DE WINDING	93.7	DEG.C.	at full load steady state at ambient		17.2	DEG.C.
PT100 TEMPERATURE OF NDE WINDING	NO	DEG.C.	at full load steady state at ambient		17.2	DEG.C.
PT100 TEMPERATURE DE BEARING	73.8	DEG.C.	at full load steady state at ambient		17.2	DEG.C.
PT100 TEMPERATURE NDE BEARING	N/A	DEG.C.	at full load steady state at ambient		17.2	DEG.C.
PT100 TEMPERATURE IN TERMINAL BOX	45.9	DEG.C.	at full load steady state at ambient		17.2	DEG.C.
PT100 TEMPERATURE ON STATOR LEADS	54.5	DEG.C.	at full load steady state at ambient		17.2	DEG.C.

OTHER

NOISE LEVEL(Lp)	85	dB(A) @ 1meter	INSULATION RESISTANCE	500	MEG.OHMS
VIBRATION LEVEL	2.3	mm/sec on no load	D.E. BEARING	NU322C3	
WEIGHT	1600	kg	N.D.E.BEARING	6322C3	
H-POT TEST VOLTS	1800	VOLTS			

VALIADIS S.A.	**SCALE**	N/A		
	DATE		**REV**	
K355M-6	**DRAWN**		**DOCUMENT NO.**	
160 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	0.018038
NO LOAD CURRENT			AMP	86.34
NO LOAD INPUT			kW	3.404
CORE LOSS(Pfe)			kW	2.450
WINDAGE FRICTION LOSS(Pfw)			kW	0.786
STATOR WINDING LOSS(Pcu1)			kW	2.072
ROTOR WINDING LOSS(Pcu2)			kW	1.590
STRAY LOAD LOSS(Ps)			kW	0.839
FULL LOAD CURRENT			AMP	276.72
LOCKED ROTOR CURRENT			AMP	1752.94
LOCKED ROTOR CURRENT/FULL LOAD CURRENT			P.U.	6.3
LOCKED ROTOR INPUT @ FULL LOAD			kW	454.15
FULL LOAD TORQUE			N.m	1543.70
LOCKED ROTOR TORQUE			N.m	3232.06
LOCKED ROTOR TORQUE/FULL LOAD TORQUE			P.U.	2.09
PULL OUT TORQUE			N.m	4598.9
PULL OUT TORQUE/FULL LOAD TORQUE			P.U.	2.98
PULL UP TORQUE			N.m	2916.11
PULL UP TORQUE/FULL LOAD TORQUE			P.U.	1.89
EFFICIENCY @ FULL LOAD			%	95.36
POWER FACTOR @ FULL LOAD				0.875
FULL LOAD SLIP			%	0.974
FULL LOAD SPEED			r/min	990
STATOR WINDING TEMPERATURE RISE	90	SECS	K	73.2
D.E. BEARINGS TEMPERATURE BY PT100			Deg. C	73.8
TEMPERATURE ON LEADS BY PT100			Deg. C	54.5
TEMPERATURE IN TERMINAL BOX BY PT100			Deg. C	45.9
AMBIENT TEMPERATURE OF TESTING			Deg. C	17.2
SOUND PRESSURE LEVEL			dB(A)	85
VIBRATION			mm/s	2.3
MOMENT OF INERTIA			kgm2	8.8500
WEIGHT			kg	1600

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

VALIADIS S.A.	**SCALE**	N/A			
	DATE		**REV**		
K355M-6	**DRAWN**		**DOCUMENT NO.**		
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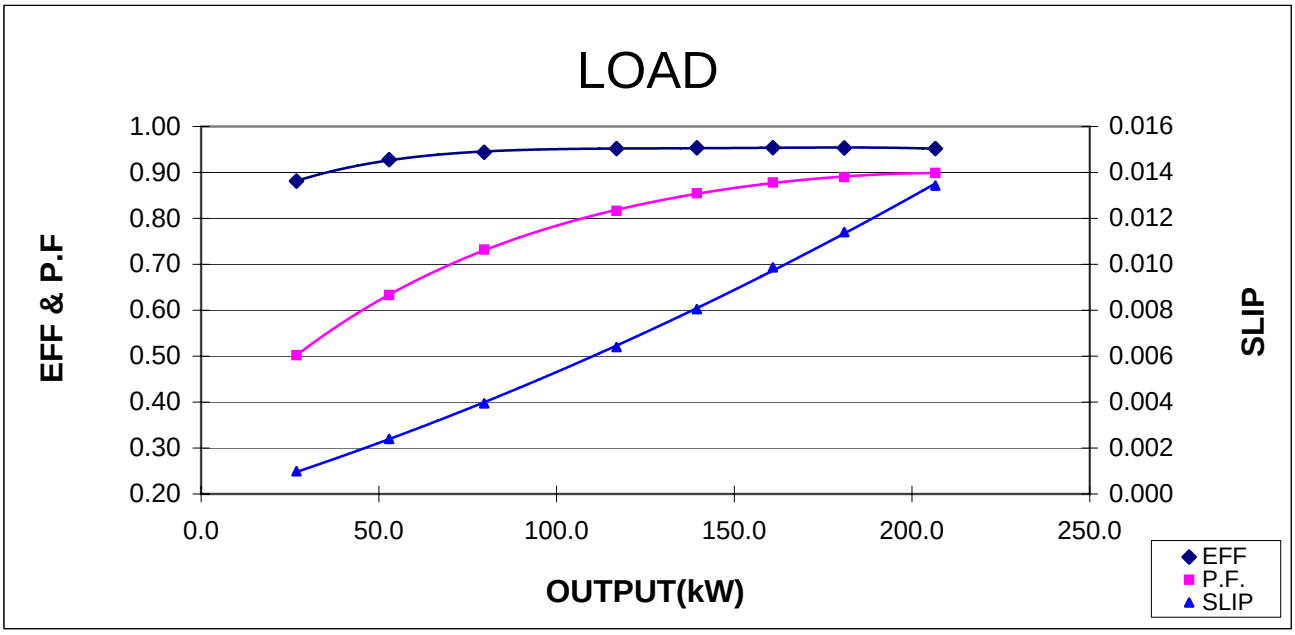

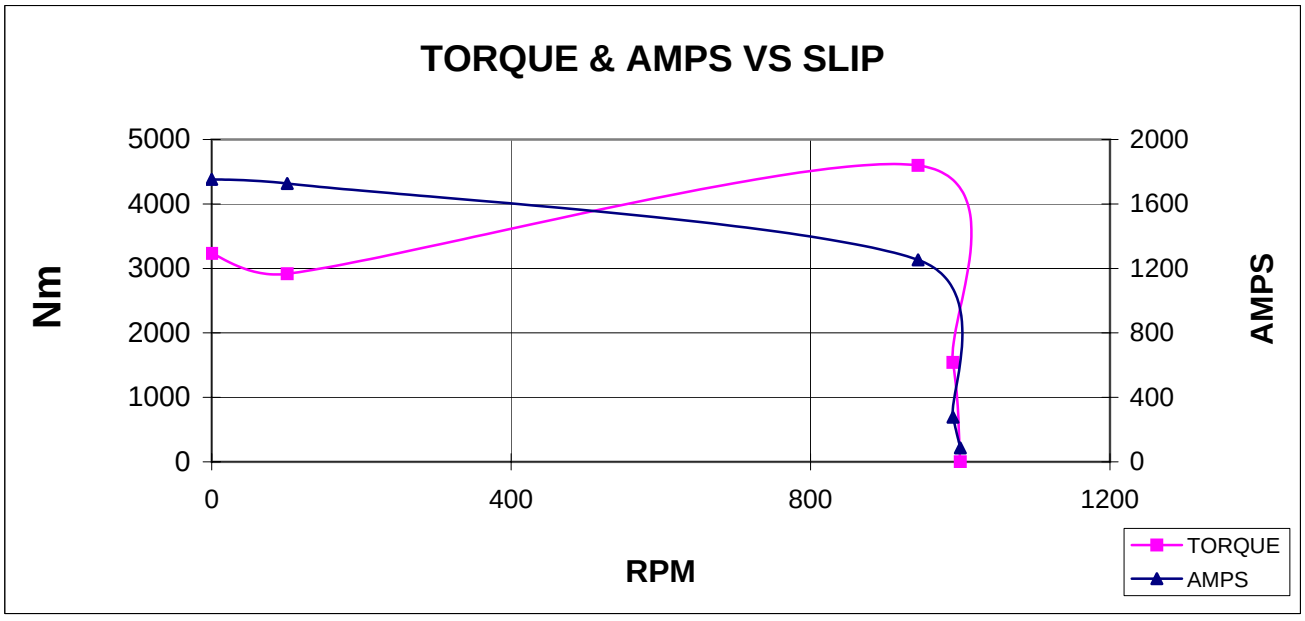

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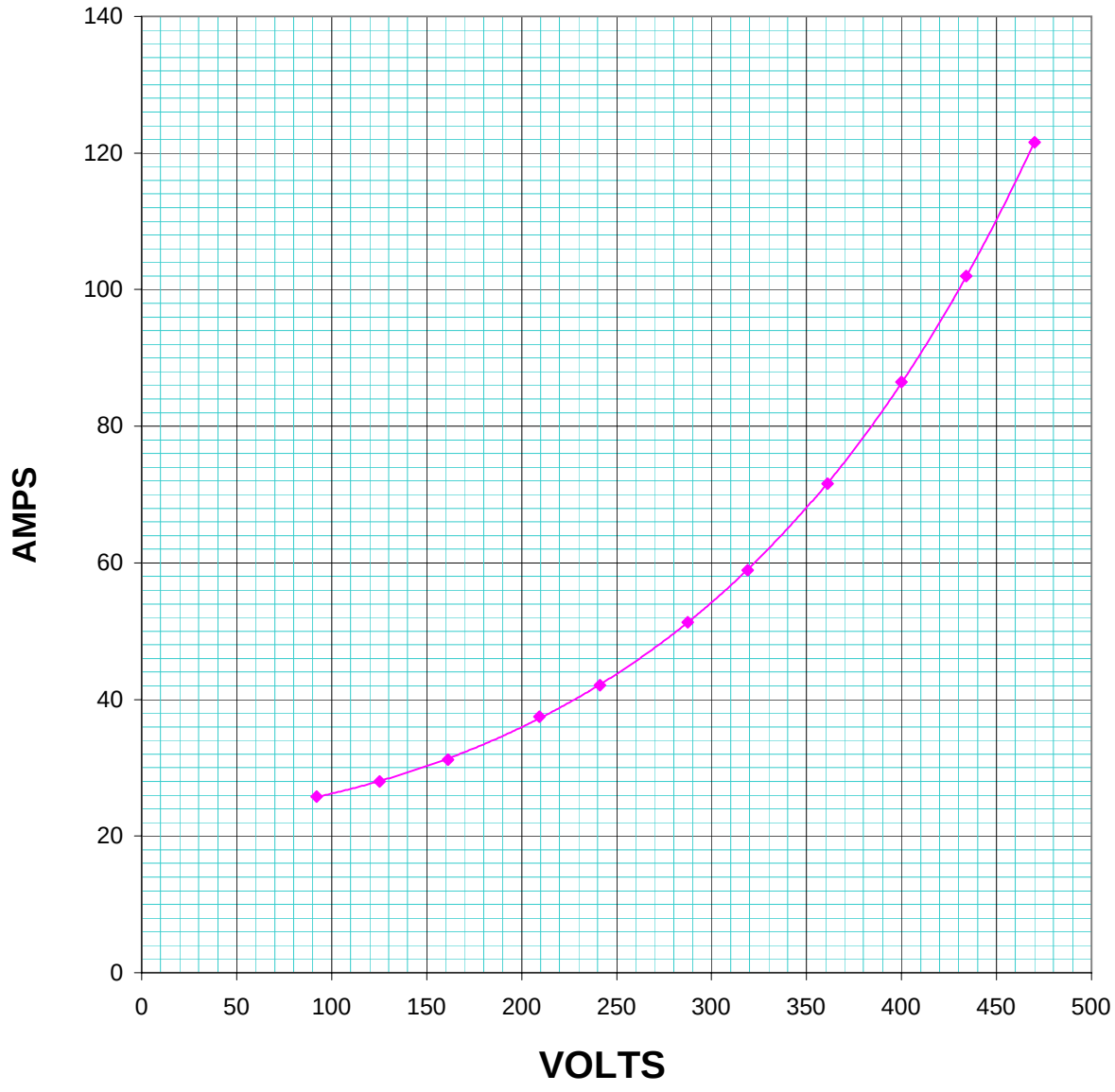
MAGNETIZATION CURVE - NO LOAD



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