

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA		IEC TYPE		45 KW		2969 RPM	
K225M-2 FRAME		3 PHASE		400 VOLTS		50 HZ / CYCLES	
93,5 EFFICIENCY		78,6 AMPS		55 IP		IC411 IC	
2 POLE		S1 DUTY		0,884 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	86,82	91,61	93,09	93,54	93,56	93,58
PF	0,096	0,673	0,804	0,861	0,884	0,887	0,893	0,384
RPM	3000	2992	2984	2976	2969	2966	2961	0
SLIP	0,00%	0,25%	0,53%	0,79%	1,04%	1,15%	1,29%	100,00%
AMPS	23,70	27,77	44,07	60,76	78,59	86,06	97,14	560,8
VOLTS	400	400	400	400	400	400	400	400
TORQUE NM	0	35,9	72,0	108,3	144,8	159,5	181,5	430,9
KW INPUT	1,582	12,96	24,56	36,26	48,11	52,90	60,11	149,31
KW OUTPUT	0	11,25	22,50	33,75	45,00	49,50	56,25	

LOSSES(kw)	25% LOAD	50% LOAD	75% LOAD	100% LOAD	110% LOAD	125%LOAD
STATOR LOSS Pcu1	0,108	0,271	0,515	0,861	1,03	1,32
STATOR LOSS %	0,83%	1,10%	1,42%	1,79%	1,95%	2,19%
ROTOR LOSS Pcu2	0,030	0,123	0,274	0,484	0,58	0,75
ROTOR LOSS %	0,23%	0,50%	0,76%	1,01%	1,10%	1,24%
CORE LOSS Pfe	0,888	0,888	0,888	0,888	0,888	0,888
CORE LOSS %	6,85%	3,61%	2,45%	1,85%	1,68%	1,48%
WINDAGE/FRICTION Pfw	0,625	0,625	0,625	0,625	0,625	0,625
WINDAGE/FRICTION %	4,82%	2,54%	1,72%	1,30%	1,18%	1,04%
STRAY LOAD LOSS Ps	0,065	0,123	0,181	0,241	0,265	0,301
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	0,074573 OHMS @	25,8 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	0,093 OHMS @	90 DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	0,096 OHMS	after test of temp rise	BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	77,4 DEG.C.	at full load steady state at	30 SECS
WINDING TEMPERATURE RISE	79,3 DEG.C.	at full load steady state at	0 SECS
PT100 TEMPERATURE OF DE WINDING	98,5 DEG.C.	at full load steady state at ambient	20,2 DEG.C.
PT100 TEMPERATURE OF NDE WINDING	N/A DEG.C.	at full load steady state at ambient	20,2 DEG.C.
PT100 TEMPERATURE DE BEARING	79,3 DEG.C.	at full load steady state at ambient	20,2 DEG.C.
PT100 TEMPERATURE NDE BEARING	N/A DEG.C.	at full load steady state at ambient	20,2 DEG.C.
PT100 TEMPERATURE IN TERMINAL BOX	47,5 DEG.C.	at full load steady state at ambient	20,2 DEG.C.
PT100 TEMPERATURE ON STATOR LEADS	62 DEG.C.	at full load steady state at ambient	20,2 DEG.C.

OTHER

NOISE LEVEL(Lp)	79 dB(A) @ 1meter	INSULATION RESISTANCE	500 MEG.OHMS
VIBRATION LEVEL	2,2 mm/sec on no load	D.E. BEARING	312-ZV2
WEIGHT	309 kg	N.D.E.BEARING	312-ZV2
H-POT TEST VOLTS	1800 VOLTS		

VALIADIS S.A.		SCALE	N/A
K225M-2		DRAWN	DOCUMENT NO.
45 kW		APPRVD	
400 VOLTS 50 Hz		CHECKED	

RESULT SUMMARY

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93,5 EFFICIENCY	78,6 AMPS	55 IP	IC411 IC
2 POLE	S1 DUTY	0,884 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	0,093
NO LOAD CURRENT	AMP	23,70
NO LOAD INPUT	kW	1,582
CORE LOSS(Pfe)	kW	0,888
WINDAGE FRICTION LOSS(Pfw)	kW	0,625
STATOR WINDING LOSS(Pcu1)	kW	0,861
ROTOR WINDING LOSS(Pcu2)	kW	0,484
STRAY LOAD LOSS(Ps)	kW	0,241
FULL LOAD CURRENT	AMP	78,59
LOCKED ROTOR CURRENT	AMP	560,81
LOCKED ROTOR CURRENT/FULL LOAD CURRENT	P.U.	7,1
LOCKED ROTOR INPUT @ FULL LOAD	kW	149,31
FULL LOAD TORQUE	N.m	144,82
LOCKED ROTOR TORQUE	N.m	430,91
LOCKED ROTOR TORQUE/FULL LOAD TORQUE	P.U.	2,98
PULL OUT TORQUE	N.m	440,2
PULL OUT TORQUE/FULL LOAD TORQUE	P.U.	3,04
PULL UP TORQUE	N.m	289,50
PULL UP TORQUE/FULL LOAD TORQUE	P.U.	2,00
EFFICIENCY @ FULL LOAD	%	93,54
POWER FACTOR @ FULL LOAD		0,884
FULL LOAD SLIP	%	1,043
FULL LOAD SPEED	r/min	2969
STATOR WINDING TEMPERATURE RISE	30 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. K225M-2 45 kW 400 VOLTS 50 Hz	SCALE	N/A	
	DATE		REV
	DRAWN		DOCUMENT NO.
	APPRVD		
	CHECKED		

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ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA

K225M-2 FRAME
 93,5 EFFICIENCY
 2 POLE
 VALIADIS MANUFACTURER

IEC TYPE

3 PHASE
 78,6 AMPS
 S1 DUTY
 SERIAL NO.

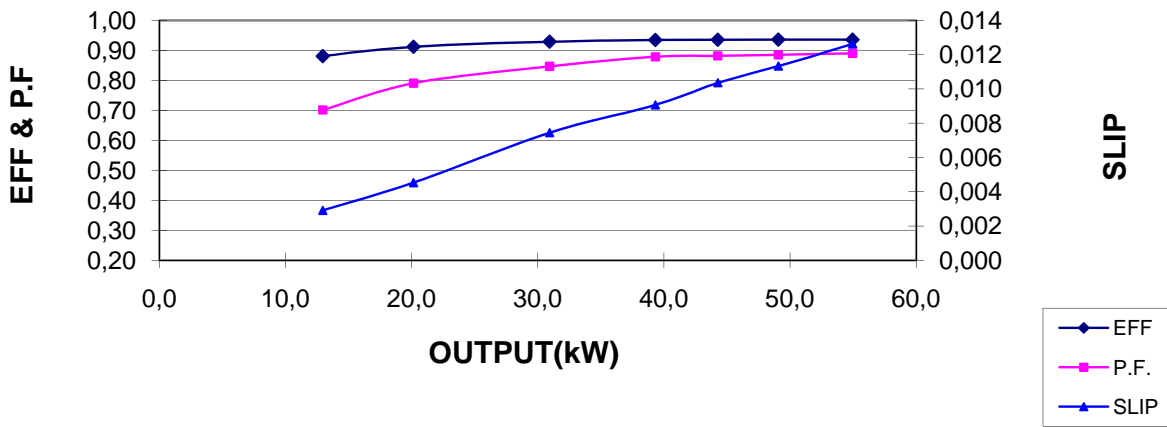
45 KW

400 VOLTS
 55 IP
 0,884 PF
 F INS.CLASS

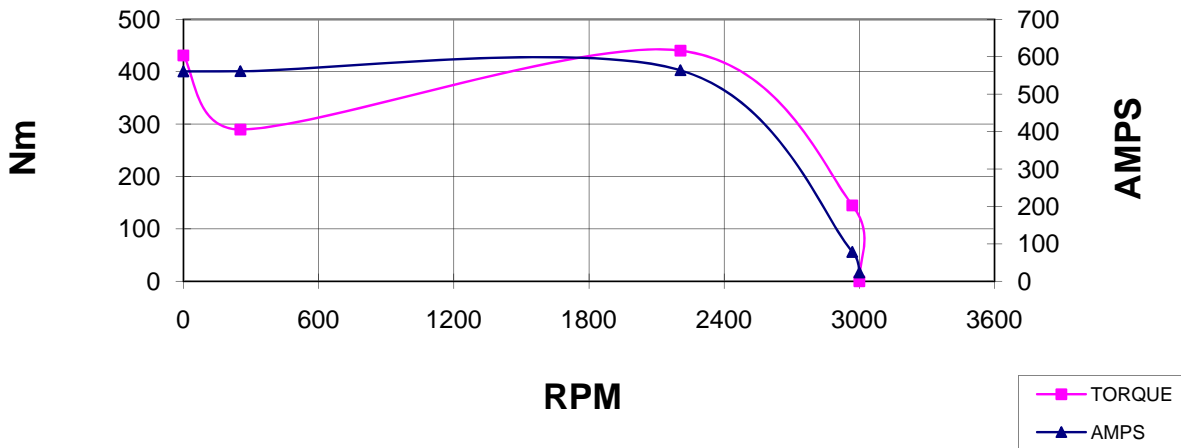
2969 RPM

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

LOAD



TORQUE & AMPS VS SLIP



VALIADIS S.A. K225M-2 45 kW 400 VOLTS 50 Hz	SCALE	N/A	
	DATE		REV
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	CHECKED		

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ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA

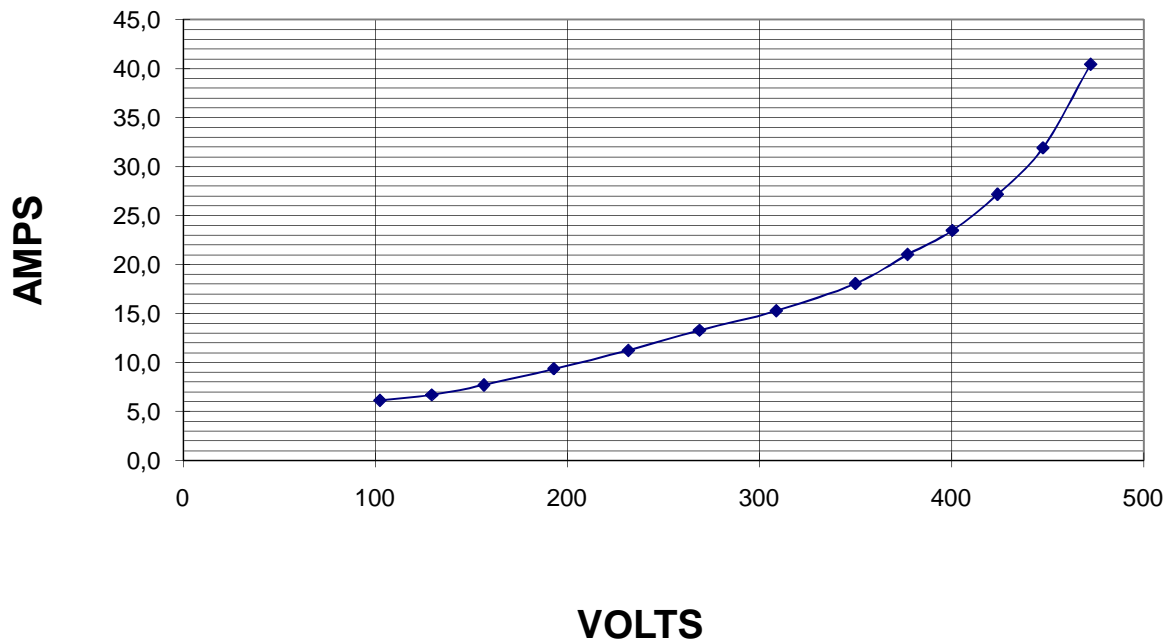
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2969 RPM
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 IC411 IC
 N/A EFF2
 DELTA CONNECTION

MAGNETIZATION CURVE - NO LOAD



VALIADIS S.A. K225M-2 45 kW 400 VOLTS 50 Hz	SCALE	N/A	
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