

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA	IEC	TYPE	0.75	KW	930	RPM	
AK90S - 6	FRAME	3	PHASE	400	VOLTS	50	HZ/CYCLES
69.0	EFFICIENCY	2.18	AMPS	55	IP	IC01	IC
6	POLE	S1	DUTY	0.72	PF	N/A	EFF2
VALIADIS	MANUFACTURER	SERIAL NO.	F	INS. CLASS	Y	CONNECTION	

MAJOR CONTENTS	UNIT	TESE VALUE
STATOR RESISTANCE OF PHASE TO PHASE	75 DEG.C	OHM 24.1791
NO LOAD CURRENT		AMP 1.67
NO LOAD INPUT		kW 0.2061
CORE LOSS (Pfe)		kW 0.091
WINDAGE FRICTION LOSS (Pfw)		kW 0.015
STATOR WINDING LOSS(Pcu1)		kW 0.1787
ROTOR WINDING LOSS(Pcu2)		kW 0.0554
STRAY LOAD LOSS (Ps)		kW 0.0055
FULL LOAD CURRENT		AMP 2.22
LOCKED ROTOR CURRENT		AMP 9.26
LOCKED ROTOR CURRENT/FULL LOAD CURRENT		P.U. 4.2
LOCKED ROTOR INPUT @ 100% VOLT		kW 4.303
FULL LOAD TORQUE		N.m. 7.69
LOCKED ROTOR TORQUE		N.m. 16.51
LOCKED ROTOR TORQUE/FULL LOAD TORQUE		P.U. 2.15
PULL OUT TORQUE		N.m. 21.32
PULL OUT TORQUE/FULL LOAD TORQUE		P.U. 2.77
PULL UP TORQUE		N.m. 10.44
PULL UP TORQUE/FULL LOAD TORQUE		P.U. 1.36
EFFICIENCY @ FULL LOAD		% 68.48
POWER FACTOR @ FULL LOAD		0.713
FULL LOAD SLIP		6.70%
FULL LOAD SPEED		r/min 933
STATOR WINDING TEMPERATURE RISE	30 SECS	K 37.7
DE BEARING TEMPERATURE BY PT100		Deg. C 30.0
NDE BEARING TEMPERATURE BY PT100		Deg. C 30.0
TEMPERATURE ON LEADS BY PT100		Deg. C
TEMPERATURE IN TERMINAL BOX BY PT100		Deg. C
AMBIENT TEMPERATURE BY PT100		Deg. C
SOUND PRESSURE LEVEL		dB (A) 44.6
VIBRATION		mm/s 0.6
MOMENT OF INERTIA		kgm ² 0.0029
WEIGHT		kg 13

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

VALIADIS S.A.	SCALE	N/A		
	DATE		REV	
AK90S - 6	DRAWN		DOCUMENT NO.	
0.75 kW	APPRVD			
400 VOLTS 50 Hz	CHECKED			

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TEST DATA	NO LOAD	25% LOAD	50% LOAD	75% LOAD	100% LOAD	125% LOAD	LOCKED ROTOR
	EFFICIENCY	0	49.2	62.2	67.2	68.5	66.5
PF	0.178	0.362	0.507	0.625	0.713	0.762	0.671
RPM	1000	987	971	954	933	906	0
SLIP	0.00%	1.30%	2.90%	4.60%	6.70%	9.40%	100.00%
AMPS	1.67	1.6	1.77	1.95	2.22	2.68	9.26
VOLTS	400	400	400	400	400	400	400
TORQUE NM	0	1.91	3.80	5.68	7.69	9.92	16.51
KW INPUT	0.2061	0.401	0.6217	0.844	1.0967	1.4143	4.303
KW OUTPUT	0	0.197	0.387	0.568	0.751	0.941	

LOSSES (kW)	25% LOAD	50% LOAD	75% LOAD	100% LOAD	125% LOAD
STATOR LOSS Pcu1	0.093	0.114	0.138	0.179	0.260
STATOR LOSS %	23.15%	18.28%	16.34%	16.30%	6.05%
ROTOR LOSS Pcu2	0.003	0.012	0.028	0.055	0.100
ROTOR LOSS %	0.70%	1.95%	3.35%	5.05%	2.32%
CORE LOSS Pfe	0.091	0.091	0.091	0.091	0.091
CORE LOSS %	22.69%	14.64%	10.78%	8.30%	2.11%
WINDGE/FRICTION Pfw	0.015	0.015	0.015	0.015	0.015
WINDGE/FRICTION %	3.74%	2.41%	1.78%	1.37%	0.35%
STRAY LOAD LOSS Ps	0.002	0.003	0.004	0.005	0.007
STRAY LOAD LOSS %	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	18.64133 OHMS @	4.0	DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	24.1791 OHMS @	75	DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	21.7008 OHMS	after test of temp rise		BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	37.7 DEG.C.	at full load steady state at		30 SECS
WINDING TEMPERATURE RISE	DEG.C.	at full load steady state at		0 SECS
PT100 TEMPERATURE OF DE WINDING	DEG.C.	at full load steady state at ambient		DEG.C.
PT100 TEMPERATURE OF NDE WINDING	DEG.C.	at full load steady state at ambient		DEG.C.
PT100 TEMPERATURE OF DE BEARING	30.0 DEG.C.	at full load steady state at ambient		5.5 DEG.C.
PT100 TEMPERATURE OF NDE BEARING	30.0 DEG.C.	at full load steady state at ambient		5.5 DEG.C.
PT100 TEMPERATURE OF IN TERMINAL BOX	DEG.C.	at full load steady state at ambient		DEG.C.
PT100 TEMPERATURE OF ON STATOR LEAD	DEG.C.	at full load steady state at ambient		DEG.C.

OTHER

NOISE LEVEL (Lp)	44.6	dB(A) 1meter	INSULATION RESISTANCE	500	MEG.OHMS
VIBRATION LEVEL	0.6	mm/sec on no load	D.E. BEARING		
WEIGHT	13	kg	N.D.E. BEARING		
H-POT TEST VOLTS	1800	VOLTS			

VALIADIS S.A.				SCALE	N/A		
				DATE		REV	
AK90S - 6				DRAWN		DOCUMENT NO.	
0.75	kW		APPRVD				
400	VOLTS	50	CHECKED				

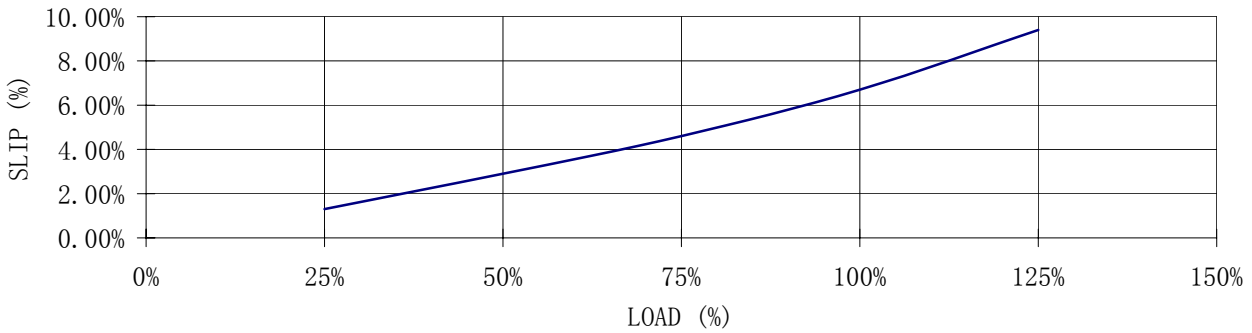
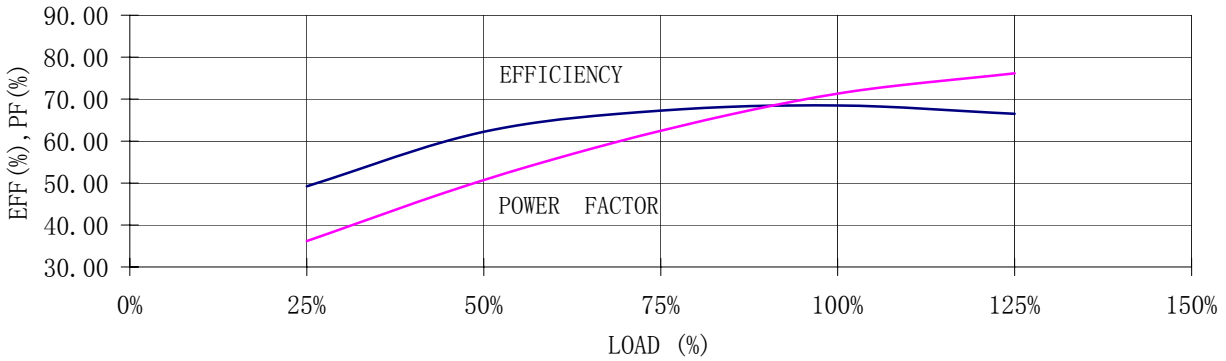
RESULT SUMMARY

VALIADIS S.A.

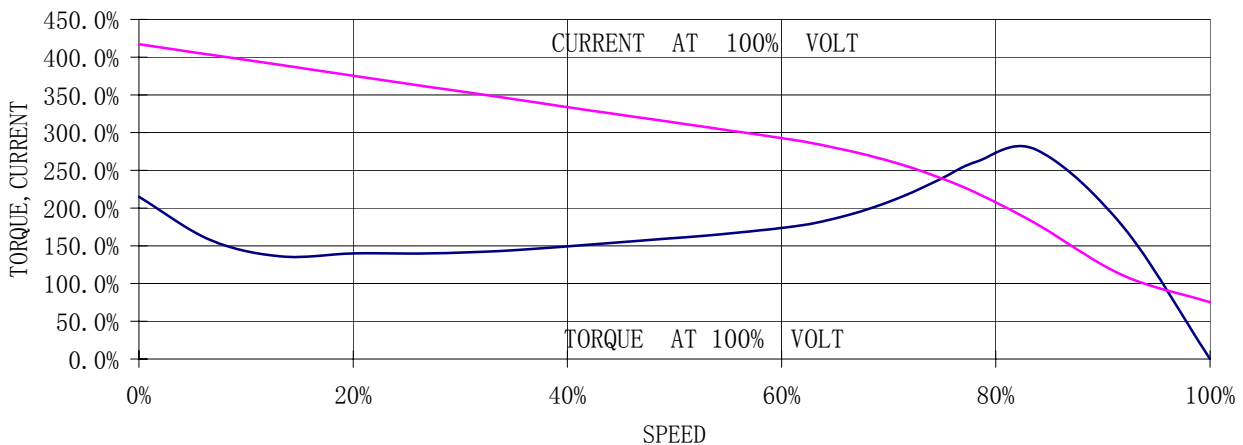
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LOAD TEST



SPEED VS TORQUE, CURRENT



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		DATE		REV
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		APPRVD		
		CHECKED		

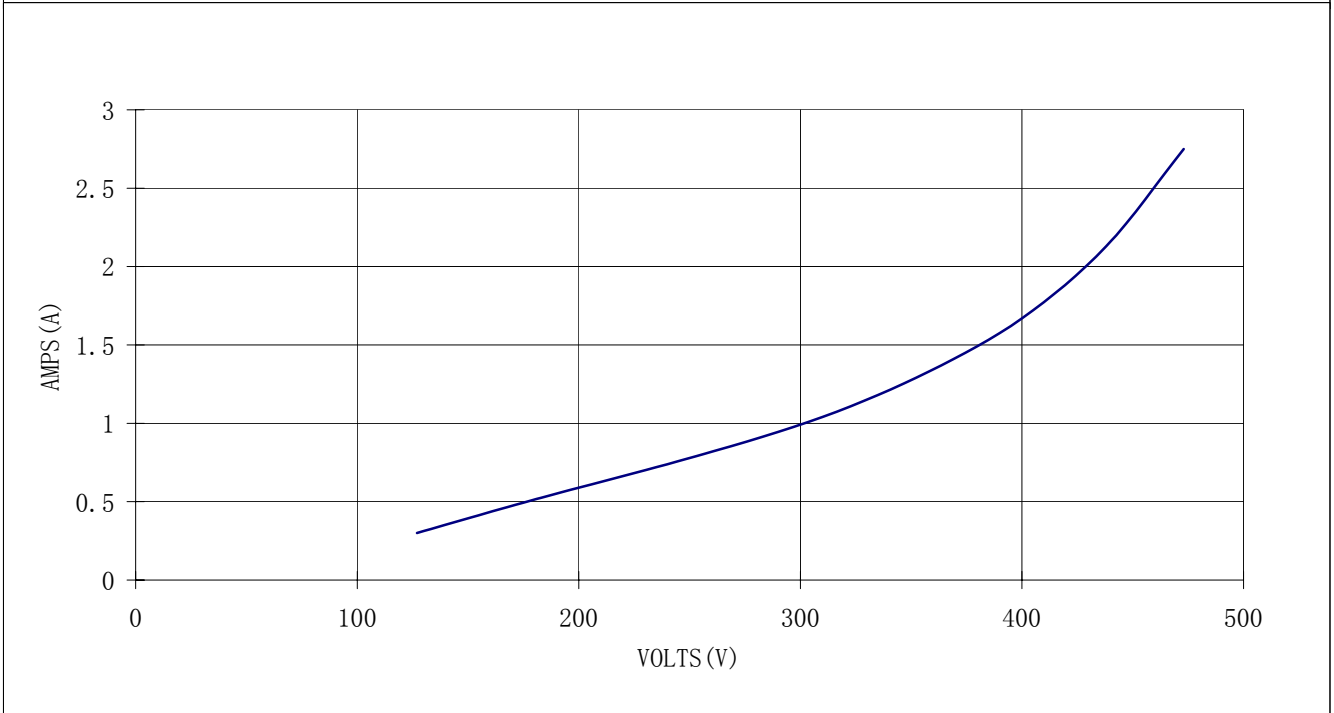
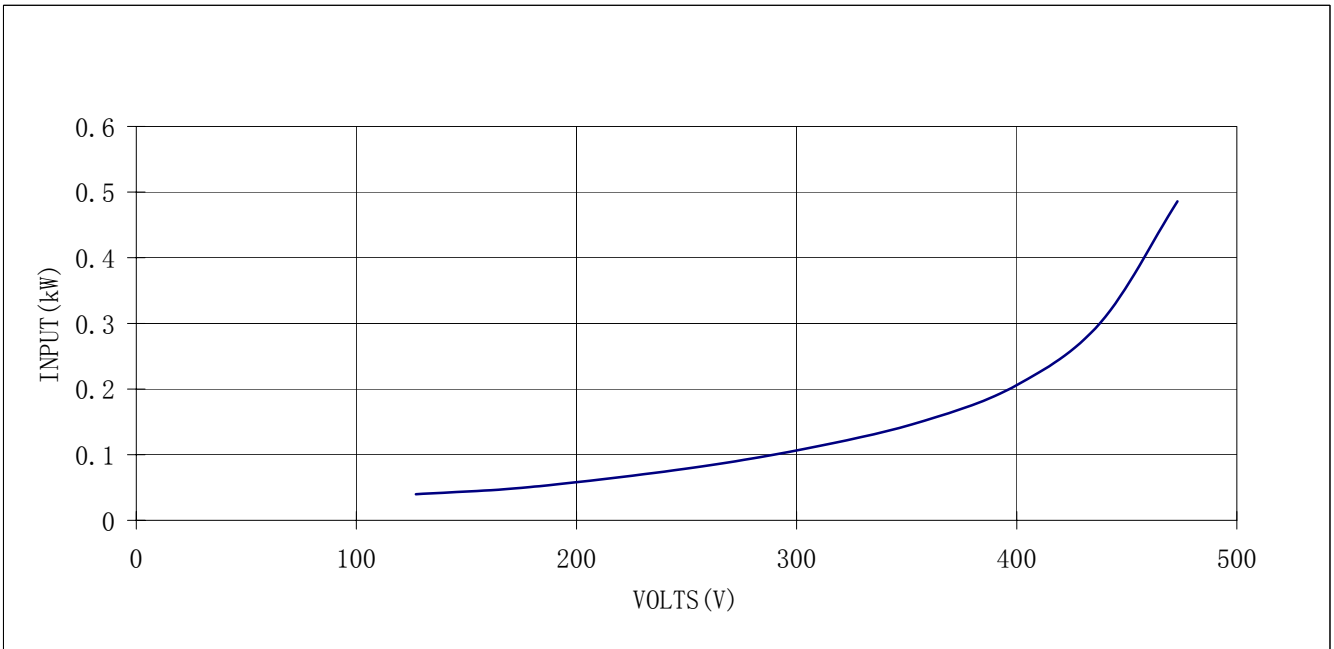
CURVE

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	0.75 kW	DRAWN		DOCUMENT NO.
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CURVE