

# VALIADIS S.A.

## ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

<b>NAMEPLATE DATA</b>	IEC	TYPE	0.18	KW	695	RPM
AK80 - 8 <b>FRAME</b>	3	<b>PHASE</b>	400	<b>VOLTS</b>	50	<b>HZ/CYCLES</b>
52.0 <b>EFFICIENCY</b>	0.86	<b>AMPS</b>	55	<b>IP</b>	IC01	<b>IC</b>
8 <b>POLE</b>	S1	<b>DUTY</b>	0.58	<b>PF</b>	N/A	<b>EFF2</b>
VALIADIS <b>MANUFACTURER</b>		<b>SERIAL NO.</b>	F	<b>INS. CLASS</b>	Y	<b>CONNECTION</b>

MAJOR CONTENTS	UNIT	TESE VALUE
STATOR RESISTANCE OF PHASE TO PHASE	75 DEG.C	OHM 87.4514
NO LOAD CURRENT		AMP 0.79
NO LOAD INPUT		kW 0.1316
CORE LOSS (Pfe)		kW 0.048
WINDAGE FRICTION LOSS (Pfw)		kW 0.006
STATOR WINDING LOSS(Pcu1)		kW 0.0970
ROTOR WINDING LOSS(Pcu2)		kW 0.0131
STRAY LOAD LOSS (Ps)		kW 0.0017
FULL LOAD CURRENT		AMP 0.86
LOCKED ROTOR CURRENT		AMP 2.55
LOCKED ROTOR CURRENT/FULL LOAD CURRENT		P.U. 3.0
LOCKED ROTOR INPUT @ 100% VOLT		kW 1.215
FULL LOAD TORQUE		N.m. 2.46
LOCKED ROTOR TORQUE		N.m. 6.10
LOCKED ROTOR TORQUE/FULL LOAD TORQUE		P.U. 2.48
PULL OUT TORQUE		N.m. 7.89
PULL OUT TORQUE/FULL LOAD TORQUE		P.U. 3.21
PULL UP TORQUE		N.m. 4.26
PULL UP TORQUE/FULL LOAD TORQUE		P.U. 1.73
EFFICIENCY @ FULL LOAD		% 52.08
POWER FACTOR @ FULL LOAD		0.581
FULL LOAD SLIP		6.53%
FULL LOAD SPEED		r/min 701
STATOR WINDING TEMPERATURE RISE	30 SECS	K 34.6
DE BEARING TEMPERATURE BY PT100		Deg. C 40.0
NDE BEARING TEMPERATURE BY PT100		Deg. C 40.0
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) 37.1
VIBRATION		mm/s 0.2
MOMENT OF INERTIA		kgm <sup>2</sup> 0.00158
WEIGHT		kg 10

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

<b>VALIADIS S.A.</b>	SCALE	N/A		
	DATE		REV	
AK80 - 8	DRAWN		DOCUMENT NO.	
0.18 kW	APPRVD			
400 VOLTS 50 Hz	CHECKED			

# VALIADIS S.A.

## ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

<b>NAMEPLATE DATA</b>	IEC	<b>TYPE</b>	0.18	<b>KW</b>	695	<b>RPM</b>
AK80 - 8	<b>FRAME</b>	3	<b>PHASE</b>	400	<b>VOLTS</b>	50
52.0	<b>EFFICIENCY</b>	0.86	<b>AMPS</b>	55	<b>IP</b>	IC01
8	<b>POLE</b>	S1	<b>DUTY</b>	0.58	<b>PF</b>	N/A
VALIADIS	<b>MANUFACTURER</b>	<b>SERIAL NO.</b>	F	<b>INS. CLASS</b>	Y	<b>CONNECTION</b>

<b>TEST DATA</b>	NO LOAD	25% LOAD	50% LOAD	75% LOAD	100% LOAD	125% LOAD	LOCKED ROTOR
EFFICIENCY	0	24.7	38.6	47.4	52.1	53.6	
PF	0.240	0.334	0.418	0.503	0.581	0.645	0.688
RPM	750	740	728	716	701	683	0
SLIP	0.00%	1.33%	2.93%	4.53%	6.53%	8.93%	100.00%
AMPS	0.79	0.79	0.8	0.82	0.86	0.94	2.55
VOLTS	400	400	400	400	400	400	400
TORQUE NM	0	0.58	1.17	1.81	2.46	3.15	6.10
KW INPUT	0.1316	0.1826	0.2314	0.2858	0.3462	0.4202	1.215
KW OUTPUT	0	0.045	0.089	0.135	0.180	0.225	

<b>LOSSES (kW)</b>	25% LOAD	50% LOAD	75% LOAD	100% LOAD	125% LOAD
STATOR LOSS Pcu1	0.082	0.084	0.088	0.097	0.116
STATOR LOSS %	44.83%	36.28%	30.86%	28.02%	9.54%
ROTOR LOSS Pcu2	0.001	0.003	0.007	0.013	0.023
ROTOR LOSS %	0.39%	1.26%	2.37%	3.80%	1.88%
CORE LOSS Pfe	0.048	0.048	0.048	0.048	0.048
CORE LOSS %	26.29%	20.74%	16.79%	13.86%	3.95%
WINDGE/FRICTION Pfw	0.006	0.006	0.006	0.006	0.006
WINDGE/FRICTION %	3.29%	2.59%	2.10%	1.73%	0.49%
STRAY LOAD LOSS Ps	0.001	0.001	0.001	0.002	0.002
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	72.5 OHMS @	22.0	DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE ADJUSTED	87.4514 OHMS @	75	DEG.C.	BETWEEN STATOR LEADS
STATOR RESISTANCE HOT	82.536 OHMS	after test of temp rise		BETWEEN STATOR LEADS
WINDING TEMPERATURE RISE	34.6 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	40.0 DEG.C.	at full load steady state at ambient		23.0 DEG.C.
PT100 TEMPERATURE OF NDE BEARING	40.0 DEG.C.	at full load steady state at ambient		23.0 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)	37.1	dB(A) 1meter	INSULATION RESISTANCE	500	MEG.OHMS
VIBRATION LEVEL	0.2	mm/sec on no load	D.E. BEARING		
WEIGHT	10	kg	N.D.E. BEARING		
H-POT TEST VOLTS	1800	VOLTS			

<b>VALIADIS S.A.</b>			<b>SCALE</b>	N/A	
			<b>DATE</b>		<b>REV</b>
<b>AK80- 8</b> <b>0.18 kW</b> <b>400 VOLTS 50 Hz</b>			<b>DRAWN</b>		<b>DOCUMENT NO.</b>
			<b>APPRVD</b>		
			<b>CHECKED</b>		

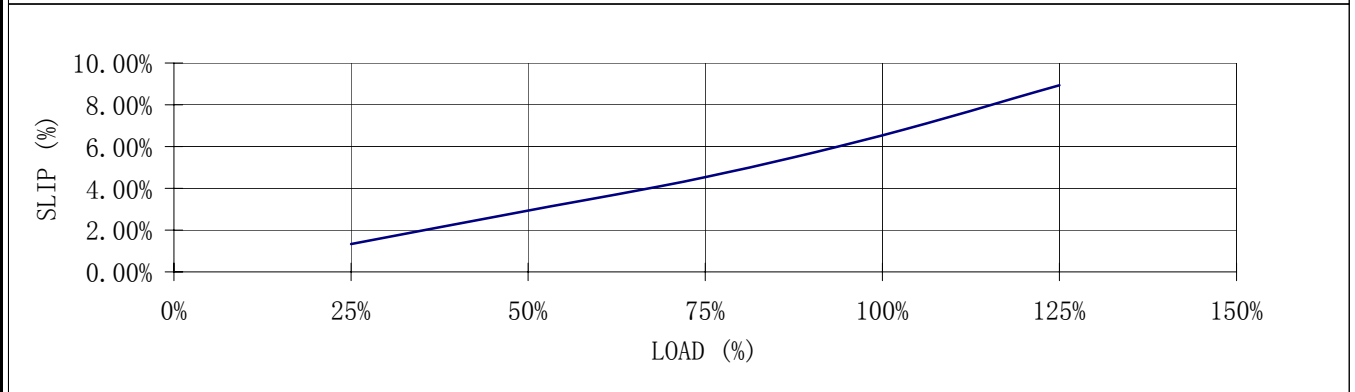
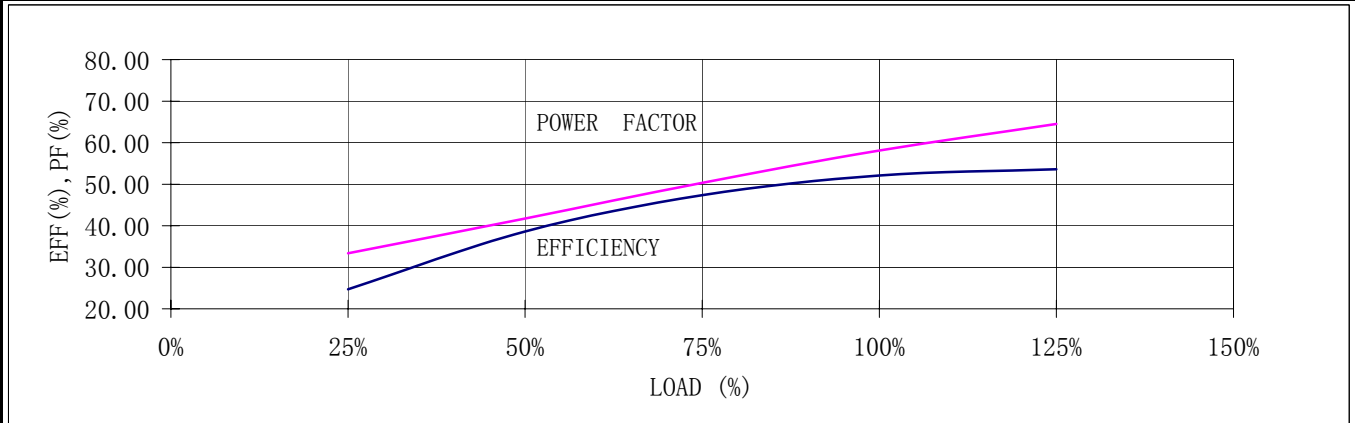
RESULT SUMMARY

# VALIADIS S.A.

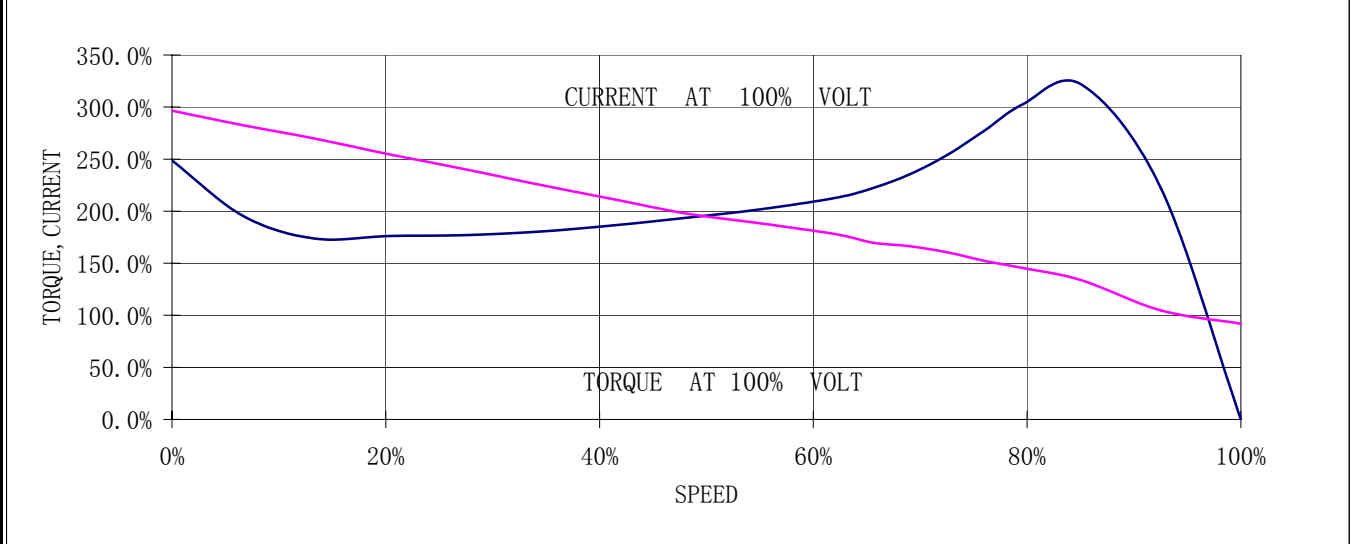
## ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

<b>NAMEPLATE DATA</b>	IEC	<b>TYPE</b>	0.18	<b>KW</b>	695	<b>RPM</b>
AK80 -8	<b>FRAME</b>	3	<b>PHASE</b>	400	<b>VOLTS</b>	50
52.0	<b>EFFICIENCY</b>	0.86	<b>AMPS</b>	55	<b>IP</b>	IC01
8	<b>POLE</b>	S1	<b>DUTY</b>	0.58	<b>PF</b>	N/A
VALIADIS	<b>MANUFACTURER</b>	<b>SERIAL NO.</b>	F	<b>INS. CLASS</b>	Y	<b>CONNECTION</b>

### LOAD TEST



### SPEED VS TORQUE, CURRENT



	<b>VALIADIS S.A.</b>	<b>SCALE</b>	N/A	
		<b>DATE</b>		<b>REV</b>
	<b>AK80 - 8</b>	<b>DRAWN</b>		<b>DOCUMENT NO.</b>
	<b>0.18 kW</b>	<b>APPRVD</b>		
<b>400 VOLTS 50 Hz</b>	<b>CHECKED</b>			

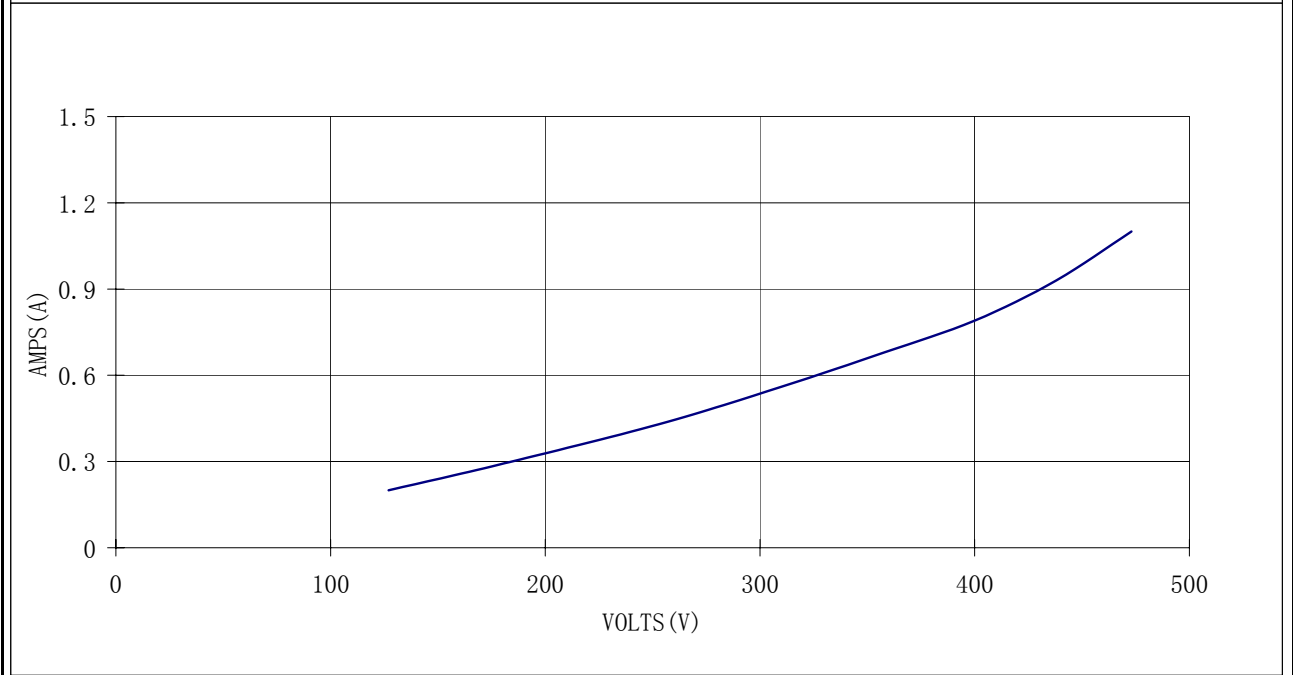
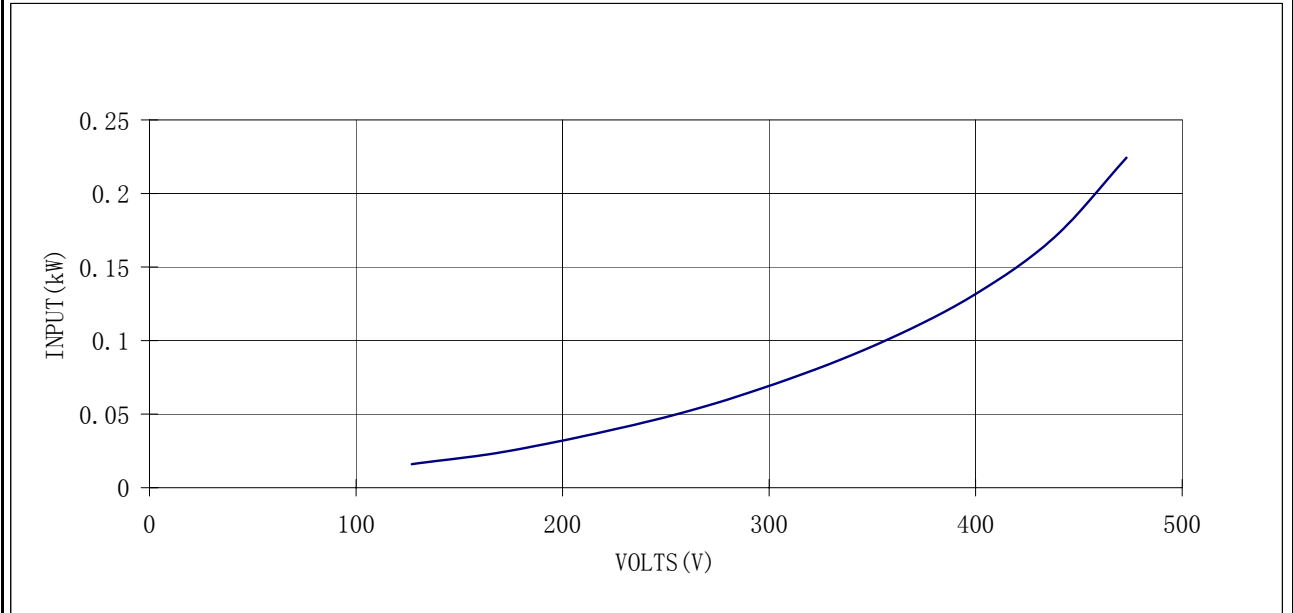
CURVE

# VALIADIS S.A.

## ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

<b>NAMEPLATE DATA</b>	IEC	<b>TYPE</b>	0.18	<b>KW</b>	695	<b>RPM</b>
AK80 - 8	<b>FRAME</b>	3	<b>PHASE</b>	400	<b>VOLTS</b>	50
52.0	<b>EFFICIENCY</b>	0.86	<b>AMPS</b>	55	<b>IP</b>	IC01
8	<b>POLE</b>	S1	<b>DUTY</b>	0.58	<b>PF</b>	N/A
VALIADIS	<b>MANUFACTURER</b>	<b>SERIAL NO.</b>	F	<b>INS. CLASS</b>	Y	<b>CONNECTION</b>

### NO LOAD TEST



<b>VALIADIS S.A.</b>  AK80 - 8 0.18 kW 400 VOLTS 50 Hz	<b>SCALE</b>	N/A	
	<b>DATE</b>		<b>REV</b>
	<b>DRAWN</b>		<b>DOCUMENT NO.</b>
	<b>APPRVD</b>		
<b>CHECKED</b>			

CURVE