

VALIADIS S.A.

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

NAMEPLATE DATA			
K355LX-4 FRAME	IEC TYPE	450 kW	1488 r/min
4 POLE	3 PHASE	400 VOLTS	50 Hz
VALIADIS MANUFACTURER	753,0 AMPS	IP55 IP	
	S1 DUTY	F INS.CLASS	Δ CONNECTION

MAJOR CONTENTS	UNIT	TEST VALUE
STATOR RESISTANCE OF PHASE	OHM	0,00645
NO LOAD CURRENT	AMP	172,21
NO LOAD INPUT	W	9179,74
CORE LOSS(Pfe)	W	7371,13
WINDAGE FRICTION LOSS(Pfw)	W	1649,62
STATOR WINDING LOSS(Pcu1)	W	3889,48
ROTOR WINDING LOSS(Pcu2)	W	4803,67
STRAY LOAD LOSS(Ps)	W	2364,14
FULL LOAD CURRENT	AMP	754,30
LOCKED ROTOR CURRENT	AMP	4451,10
LOCKED ROTOR CURRENT/FULL LOAD CURRENT	P.U.	5,91
FULL LOAD TORQUE	N.m	2895,01
LOCKED ROTOR TORQUE	N.m	5848,20
LOCKED ROTOR TORQUE/FULL LOAD TORQUE	P.U.	2,03
PULL OUT TORQUE	N.m	7401,40
PULL OUT TORQUE/FULL LOAD TORQUE	P.U.	2,56
INPUT @ FULL LOAD	kW	470,09
EFFICIENCY @ FULL LOAD	%	95,73
POWER FACTOR @ FULL LOAD		0,900
FULL LOAD SLIP	%	1,047
FULL LOAD SPEED	r/min	1484,3
STATOR WINDING TEMPERATURE RISE	K	68
D.E. BEARINGS TEMPERATURE BY PT100	Deg. C	65,8
AMBIENT TEMPERATURE OF TESTING	Deg. C	21,0
NOISE	dB(A)	99
VIBRATION	mm/s	1,3

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

VALIADIS S.A. K355LX-4 450 kW 400 VOLTS 50 Hz	SERIAL NO.			
	DATE		REV	
	DRAWN		DOCUMENT NO.	
	APPRVD			
	CHECKED			

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

VALIADIS S.A.

Type	K355LX-4	Poles	4	Power	450,0 kW
Voltage	400 V	Current	753 A	Frequency	50,0 Hz
Speed	1488 r/min	Duty	S1	Connection	Δ
Ins.class	F	Weight	0 kg		IP55

NO LOAD TEST

VOL	mul.	HZ	I01	I02	I03	mul.	W1	W2	mul.	Ω
475,7	1	50	3,048	2,954	3,137	100	-607,8	790,0	100	0,003569
442,4	1	50	2,269	2,221	2,380	100	-415,1	543,3	100	0,003569
398,0	1	50	1,664	1,652	1,782	100	-268,5	358,9	100	0,003569
354,5	1	50	2,684	2,728	2,926	50	-385,5	521,6	50	0,003569
301,2	1	50	2,157	2,232	2,360	50	-260,0	370,6	50	0,003569
247,1	1	50	1,718	1,801	1,884	50	-166,5	251,7	50	0,003569
211,1	1	50	1,457	1,542	1,602	50	-117,2	189,1	50	0,003569
171,8	1	50	1,165	1,242	1,281	50	-71,3	130,4	50	0,003569
133,1	1	50	2,298	2,455	2,515	20	-94,5	216,7	20	0,003569
94,7	1	50	1,723	1,830	1,872	20	-30,1	134,4	20	0,003569
60,4	1	50	1,338	1,396	1,444	20	7,8	81,3	20,0	0,003569

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Type	K355LX-4	Poles	4	Power	450,0	kW
Voltage	400 V	Current	753 A	Frequency	50,0	Hz
Speed	1488 r/min	Duty	S1	Connection	Δ	
Ins.class	F	Weight	0 kg		IP55	

LOCKED ROTOR TEST

VOL	mul.	Ik1	Ik2	Ik3	mul.	W1	W2	mul.	Torqur (N.m)
139,4	1,0	3,277	3,339	3,364	400	346,2	-98,4	400	522,6
118,3	1,0	2,749	2,800	2,821	400	245,8	-71,1	400	368,2
108,5	1,0	2,491	2,539	2,557	400	203,7	-59,6	400	303,6
97,9	1,0	2,237	2,279	2,294	400	164,7	-49,0	400	243,3
90,8	1,0	2,066	2,105	2,117	400	141,1	-42,0	400	208,5
79,8	1,0	1,806	1,842	1,851	400	108,3	-32,6	400	159,2
72,0	1,0	1,623	1,655	1,664	400	87,9	-26,6	400	128,7
62,9	1,0	2,825	2,881	2,896	200	133,3	-40,5	200	97,5

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		0
		0

ELECTRIC MOTOR TEST REPORT - THREE PHASE INDUCTION MOTOR

Type	K355LX-4	Poles	4	output Power	450,0	kW
Voltage	400 V	Current	753 A	Frequency	50,0	Hz
Speed	1488 r/min	Duty	S1	Connection	Δ	
Ins.class	F	Weight	0 kg	IP55		

LOAD TEST

V	HZ	A1 (unit)	A2 (unit)	A3 (unit)	mul.	W1 (unit)	W2 (unit)	mul.	r/min
399,80	49,99	2,057	2,039	2,063	400	449,6	825,8	400	1483,8
400,10	50,00	1,907	1,887	1,910	400	420,0	764,4	400	1485,0
399,90	49,99	1,778	1,756	1,781	400	395,5	712,4	400	1486,8
399,87	50,00	1,619	1,599	1,621	400	360,0	648,3	400	1488,0
400,09	50,00	1,441	1,388	1,441	400	316,7	576,1	400	1489,2
400,29	49,99	2,533	2,482	2,529	200	547,0	1008,1	200	1490,4
400,12	49,99	1,976	1,926	1,978	200	389,4	781,6	200	1493,4
400,22	50,00	1,679	1,629	1,686	200	295,8	659,2	200	1494,6
400,16	50,000	2,372	2,278	2,414	100	234,3	879,4	100	1497,0

% LOAD	OUTPUT W	INPUT W	AMPS A	Pcu1 W	SLIP %	Pcu2 W	Ps W	EFF %	P.F.
150	675000	706530,4	1148,874	9023,0	1,475	10178,3	5484,5	95,54	0,888
125	562500	588328,8	951,674	6191,3	1,267	7280,2	3763,3	95,61	0,892
100	450000	470085,9	754,296	3889,5	1,047	4803,7	2364,1	95,73	0,900
75	337500	352606,9	562,932	2166,3	0,756	2594,5	1316,7	95,72	0,904
50	225000	236789,5	395,728	1070,5	0,454	1037,8	650,7	95,02	0,864
25	112500	122503,1	249,095	424,2	0,237	271,6	257,8	91,83	0,710

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Type	K355LX-4		Poles	4	output Power	450,0	kW	
Voltage	400	V	Current	753	A	Frequency	50,0	Hz
Speed	1488	r/min	Duty	S1	Connection	Δ		
Ins.class	F		Weight	0	kg	IP55		

Load Curve

