

# ELMA MOTORS



Data Sheet				No.	
Three Phase Induction Motor				Drawing No.	
Customer					
Client reference					
Type:		EM2-160L-4 15KW 400 690V 50HZ			
Brand		Elma		Date 20-11-2013	
Identification					
Frame:	160	mm	Insulation Class:	F	
Output:	15	kW	Temperature Rise:	75.9K	
Frequency:	50	Hz	Service Factor:	1.00	
Poles:	4	P	Duty:	S1	
Rated Speed:	1460	rpm	Ambient Temperature:	-20~+40°C	
Slip:	2.7	%	Altitude:	1000m	
Rated Voltage:	400	V	Protection Degree:	IP55	
Connection:	Δ		Cooling:	IC411	
Rated Current:	27,9	A	Mounting:	IM B3	
Rotor Voltage:			Vibration:	2.2 mm/s	
Connection:			Approx. Weight:	146	kg
Rotor Current:			Moment of Inertia:	0,0929	kg/m <sup>2</sup>
Locked Rotor Current:	790	%	Noise Level (Lp) :	62,9	dB(A)
No Load Current:			Direction of Rotation:	Both	
Rated Torque:	98,1	Nm	Starting Method:	DOL Y/D VFD soft -st	
Locked Rotor Torque:	240	%	Coupling:	DIRECT	
Breakdown Torque:	280	%	Colour	RAL 7031	
			Load Type:	Constant torque / Quadratical torque	
Performance			efficiency class IE2		
Output:	50%	75%	100%	Bearing Information	
Efficiency(%) :	91,4	91,5	90,68	DE	NDE
Power Factor:	0,74	0,82	0,855	Bearing:	6309ZZ/C3 6309ZZ/C3
				Regreasing int.(h):	
				Grease amount(g)	
				Grease-PolyrexEM	Caltex SRI-2 Caltex SRI-2
Notes / Accessories			Classification		
Winding : 3XPTC150°C			attest 3.1 3.2		
Heaters, 230V 50Hz			Bureau Veritas n.a. n.a.		
			Germanischer Lloyd n.a. n.a.		
			Lloyds register of shipping n.a. n.a.		
			RINA n.a. n.a.		
			DNV n.a. n.a.		
			Other n.a. n.a.		
Standards			<b>PRELIMINARY DOCUMENT</b>		
Specification:	IEC60034-1 / GB755				
Test:	IEC60034-2-1 / GB/T1032				
Noise:	IEC60034-9 / GB10069.3				
Vibration:	IEC60034-14 / GB10068				
Edition					
Performed	Checked	Date			
Item	Changes		Performed	Checked	Date