

Type Test Report

Test Details

TR Number:
Test Date: 24-SEP-23

Name Plate Data

Three phase cage induction motor		
Type : E3ABL-132M-4	Prod.Code: E3ABL0132M7P54B5T001	
7.5 kW	1465 r/m	50 Hz
Duty: S1	cos fi: 0.84	14.3 A
380-420 V	Conn: Delta	Eff.[%] 90.4
IP: 55	Ins.Cl: F	80 kg
Brg.DE: 6208	Brg.NDE: 6208	

Test Data

	Voltage [V]	Current [A]	Input Power [Watts]	Frequency [Hz]	Speed [r/m]	Torque [Nm]	Output Power [Watts]	Power Factor	Effic. [%]
No Load	380	5.48	190	50	1500	0.0	0	0.05	0.0
No Load	400	6.29	230	50	1500	0.0	0	0.05	0.0
No Load	416	7.51	299	50	1500	0.0	0	0.06	0.0
25% F.L.	400	6.46	700	50	1497	3.0	464	0.16	66.3
50% F.L.	400	8.00	3130	50	1487	18.2	2826	0.56	90.3
75% F.L.	400	10.88	5580	50	1476	33.0	5108	0.74	91.5
100% F.L.	400	14.30	7950	50	1463	47.0	7201	0.80	90.6
125% F.L.	400	17.86	10300	50	1451	60.5	9193	0.83	89.2
150% F.L.	400	21.44	12500	50	1439	72.7	10959	0.84	87.7
Locked Rt.T.	400	91.30	366568	50	0	107.8	-	5.80	-
Break D.T.	400	-	-	50	1465	118	-	-	-
F.L. at 380V	380	15.02	8029.5	50	1462	47.0	7196	0.81	89.6
F.L. at 415V	415	13.78	7910.25	50	1464	46.3	7098	0.80	89.7

Legend: F.L. = Full Load; Locked Rt.T. = Locked Rotor Torque Test; Break D.T. = Break Down Torque Test

Resistance between terminals [Ohms]	U1 - V1	0.7652	Heat Run Test After continuous test at 400 V 14.30 A 1462 r/m 8000 W Input 7286 W Output	Part of motor	Temperature rise in [K] at amb. temp.		
	U1 - W1	0.7543			15 [°C] measured by:		
	V1 - W1 Conn. Delta @Temp[°C]	0.7650 10.0			thermometer	resistance	temp.detector
Insulation resistance to frame	Instrument voltage	Megger 1000	Noise pressure[dBA]@1m	Over rate tests	Value	%incr.	Duration
	@Temp[°C]	1000			Excess Torque [Nm]	73	149
H.V. test winding to frame	Voltage	2440	DE: 61	Excess Current [A]	21.45	150	2min.
	Minutes	1	NDE: 61	Overspeed [r/m]	1800	120	2min.
	Result:	Passed	RHS: 62	Vib. velocity [mm/s]	DE Brg:	0.8[H]	0.7[V]
		LHS: 61	NDE Brg:		0.7[H]	0.8[V]	68[A]
			Ambient: 45				

Measurement Uncertainty

Measurement uncertainties at the 95% confidence level using a k factor of 2 are:	
Current, Voltage, Power:	+/-0.2%
Speed, Frequency:	+/-0.1%
Resistance, Torque:	+/-0.2%
Temperature by-	
thermometer/detector:	+/-10°C
resistance:	+/- 2°C

Exclusions/Deviations

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Compliance to Standard

Motor tested in accordance with IEC60034-2-1 & AS/NZS1359.102.3. Efficiency as per IEC60034-2-1 (PLL determined from residual loss)
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Comments

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