



Type Test Report

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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Type: TAI 112M-6
TR Number: 2012111602
Test Lab: Techtop factory

Comments: *This test report is also applicable for TCI 112M-6 2.2kW*

Nameplate:

Type:	TAI 112M-6		Duty:	S1	IP:	55
Serial No:	2012080150122		Ins.Cl:	F	KG:	26.3
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]
230/400	50	2.2	9.32/5.36	0.72	950	82.3
Brg.DE:	6306ZZ		Brg.NDE:	6306ZZ		

No Load Test:

	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
No load	380	2.93	134	50	1000	0.0	0	0.07	0.0
No load	400	3.4	164	50	1000	0.0	0	0.07	0.0
No load	420	4.02	207	50	1000	0.0	0	0.07	0.0

Load Test:

Load [p.u]	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
0.25	400	3.41	731	50	990	5.3	550	0.31	75.2
0.5	400	3.80	1329	50	980	10.7	1100	0.51	82.8
0.75	400	4.41	1966	50	968	16.3	1650	0.64	83.9
1	400	5.26	2657	50	954	22.0	2200	0.73	82.8
1.25	400	6.35	3418	50	938	28.0	2750	0.78	80.5
1.5	400	7.69	4272	50	919	34.3	3300	0.80	77.3

Full Load At 380V & 420V

	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
380V	380	5.28	2684	50	945	22.2	2200	0.77	82.0
420V	420	5.41	2660	50	960	21.9	2200	0.68	82.7

Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/230	28.79	11399	48.25	0.57

Temperature Rise:

Amb.Temperature:	15	[°C]	Winding temperature rise:	56.2	[K]
Cold Resistance:	4.404	[Ω]	Frame:	45.8	[°C]
Hot Resistance:	5.392	[Ω]	Bearing:	48.9	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.20	Breakdown Torque/Rated Torque:	2.71
Locked Rotor Cur./Rated Cur.:	5.47	Pullup Torque/Rated Torque:	1.81

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 16-Nov-12
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