



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 90S-6
TR Number: 2012111101
Test Lab: Techtop factory

Comments: *This test report is also applicable for TCI 90S-6 0.75kW*

Nameplate:

Type:	TAI 90S-6		Duty:	S1	IP:	55
Serial No:	201208015016		Ins.Cl:	F	KG:	13
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]
230/400	50	0.75	3.87/2.22	0.64	940	76.1
Brg.DE:	6205ZZ		Brg.NDE:	6205ZZ		

No Load Test:

	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
No load	365	1.39	85	50	1000	0.0	0	0.10	0.0
No load	400	1.81	128	50	1000	0.0	0	0.10	0.0
No load	435	2.47	214	50	1000	0.0	0	0.11	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	1.79	323	50	988	1.8	188	0.26	58.1
0.5	400	1.84	525	50	976	3.7	375	0.41	71.5
0.75	400	1.98	743	50	962	5.6	563	0.54	75.7
1	400	2.20	983	50	945	7.6	750	0.65	76.3
1.25	400	2.52	1254	50	924	9.7	938	0.72	74.7
1.5	400	2.96	1567	50	901	11.9	1125	0.76	71.8

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	2.12	978	50	936	7.7	750	0.70	76.7
420V	420	2.38	1012	50	949	7.5	750	0.59	74.1

Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/230	9.758	4182	17.11	0.62

Temperature Rise:

Amb.Temperature:	14.8	[°C]	Winding temperature rise:	45.3	[K]
Cold Resistance:	16.097	[Ω]	Frame:	41.5	[°C]
Hot Resistance:	19.008	[Ω]	Bearing:	44.8	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.25	Breakdown Torque/Rated Torque:	2.52
Locked Rotor Cur./Rated Cur.:	4.44	Pullup Torque/Rated Torque:	1.96

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 11/Nov/12
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