



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 90L-6
TR Number: 2012111102
Test Lab: Techtop factory

Comments: *This test report is also applicable for TCI 90L-6 1.1kW*

Nameplate:

Type:	TAI 90L-6		Duty:	S1	IP:	55
Serial No:	201208015017		Ins.Cl:	F	KG:	16
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]
230/400	50	1.1	5.19/2.98	0.68	950	78.3
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	370	1.75	107	50	1000	0.0	0	0.10	0.0
No load	400	2.12	138	50	1000	0.0	0	0.09	0.0
No load	430	2.63	187	50	1000	0.0	0	0.10	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	2.11	424	50	989	2.7	275	0.29	64.9
0.5	400	2.27	725	50	979	5.4	550	0.46	75.9
0.75	400	2.54	1048	50	966	8.2	825	0.60	78.7
1	400	2.95	1404	50	951	11.0	1100	0.69	78.4
1.25	400	3.49	1802	50	933	14.1	1375	0.75	76.3
1.5	400	4.18	2258	50	912	17.3	1650	0.78	73.1

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	2.93	1419	50	940	11.2	1100	0.74	77.5
420V	420	3.07	1418	50	954	11.0	1100	0.63	77.6

Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/230	14.33	5906	22.93	0.59

Temperature Rise:

Amb.Temperature:	8.5	[°C]	Winding temperature rise:	36.7	[K]
Cold Resistance:	10.006	[Ω]	Frame:	37.9	[°C]
Hot Resistance:	11.787	[Ω]	Bearing:	41.3	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.07	Breakdown Torque/Rated Torque:	2.45
Locked Rotor Cur./Rated Cur.:	4.87	Pullup Torque/Rated Torque:	1.8

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