



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)

SHANGHAI TOP MOTOR CO., LTD

No.303 Kangliu Road
Kang Qiao Industrial Area
Pudong, Shanghai, China

Ph: 86 15000088129

zk@techtom.net.cn

www.techtom.com

Type: TAI 712-2

TR Number: 2011070101

Test Lab: Techtop factory

Nameplate:

Type:	TAI 712-2		Duty:	S1	IP:	55
Serial No:	201103096007		Ins.Cl:	F	KG:	6
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]
230/400	50	0.55	2.45/1.41	0.79	2800	71.3
Brg.DE:	6202 RZ		Brg.NDE:	6202 RZ		

No Load Test:

	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
No load	380	0.92	101	50	3000	0.0	0	0.17	0.0
No load	400	1.12	129	50	3000	0.0	0	0.17	0.0
No load	420	1.39	171	50	3000	0.0	0	0.17	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	1.09	279	50	2950	0.445	138	0.37	49.2
0.5	400	1.13	428	50	2908	0.903	275	0.55	64.3
0.75	400	1.23	590	50	2859	1.378	413	0.69	69.9
1	400	1.40	771	50	2801	1.875	550	0.79	71.3
1.25	400	1.64	976	50	2738	2.398	688	0.86	70.5
1.5	400	1.95	1212	50	2660	2.962	825	0.90	68.1

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	1.42	773.6	50	2780	1.889	550	0.83	71.1
420V	420	1.45	780.1	50	2815	1.866	550	0.74	70.5

Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/230	7.062	4587	5.666	0.92

Temperature Rise:

Amb. Temperature:	23.5	[°C]	Winding temperature rise:	66	[K]
Cold Resistance:	27.2	[Ω]	Frame:	45	[°C]
Hot Resistance:	34.3	[Ω]	Bearing:	47	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.: 3.02	Breakdown Torque/Rated Torque: 2.69
Locked Rotor Cur./Rated Cur.: 5.04	Pullup Torque/Rated Torque: 1.81

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 01/Jul/11
------------------	---------------------------	----------------------