



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@techtopy.com

www.techtopy.com

Type: TAI 712-8

TR Number: 2011102102

Test Lab: Techtop factory

Nameplate:

Type:	TAI 712-8	Duty:	S1	IP:	55	
Serial No:	201107053006	Ins.Cl:	F	KG:	6	
Voltage	Hz	kW	A	cos fi	r/min	Eff. [%]
230/400	50	0.12	1.07/0.62	0.59	650	47.7
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	360	0.49	68	50	750	0.0	0	0.22	0.0
No load	400	0.56	84	50	750	0.0	0	0.22	0.0
No load	440	0.64	105	50	750	0.0	0	0.21	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	0.56	128	50	724	0.395	30	0.33	23.5
0.5	400	0.56	162	50	709	0.808	60	0.42	37.0
0.75	400	0.58	202	50	686	1.252	90	0.50	44.5
1	400	0.62	251	50	657	1.744	120	0.59	47.7
1.25	400	0.68	316	50	621	2.307	150	0.67	47.5
1.5	400	0.78	405	50	578	2.974	180	0.75	44.5

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	0.63	266.1	50	642	1.785	120	0.64	45.1
420V	420	0.61	250.0	50	663	1.728	120	0.56	48.0

Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/230	1.597	814.4	4.402	0.74

Temperature Rise:

Amb. Temperature:	13.2	[°C]	Winding temperature rise:	39.7	[K]
Cold Resistance:	115.9	[Ω]	Frame:	14.7	[°C]
Hot Resistance:	134.0	[Ω]	Bearing:	16.9	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.52	Breakdown Torque/Rated Torque:	2.62
Locked Rotor Cur./Rated Cur.:	2.59	Pullup Torque/Rated Torque:	2.47

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 21/Oct/11
------------------	---------------------------	----------------------