



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@techttop.net.cn
www.techttop.com

Type: TAI 160L-6
TR Number: 2013030701
Test Lab: Techtop factory

Nameplate:

Type:	TAI 160L-6		Duty:	S1		IP:	55	
Serial No:	201301016007		Ins.Cl:	F		KG:	93	
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]		
400/690	50	11	23.4/13.5	0.76	970	89.4		
Brg.DE:	6309 RZ		Brg.NDE:	6209RZ				

No Load Test:

	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
No load	380	11.34	386	50	1000	0.0	0	0.05	0.0
No load	400	12.77	445	50	1000	0.0	0	0.05	0.0
No load	420	14.69	530	50	1000	0.0	0	0.05	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	13.09	3252	50	993	26.4	2750	0.36	84.6
0.5	400	15.50	6151	50	987	53.2	5500	0.57	89.4
0.75	400	18.96	9162	50	979	80.5	8250	0.70	90.0
1	400	23.27	12308	50	971	108.2	11000	0.76	89.4
1.25	400	28.23	15609	50	962	136.5	13750	0.80	88.1
1.5	400	33.63	19083	50	952	165.6	16500	0.82	86.5

Full Load At 380V & 420V

	Voltage [V]	Current [A]	Input [kW]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [kW]	Power Factor	Eff. [%]
380V	380	23.53	12.39	50	966	108.75	11	0.80	88.8
420V	420	23.46	12.29	50	974	107.85	11	0.72	89.5

Locked Rotor Test:

Un (V)	Ik (A)	Pk(kW)	Tk (Nm)	cosφ
400/690	149.1	51.68	246.5	0.50

Temperature Rise:

Amb. Temperature:	15	[°C]	Winding temperature rise:	74.9	[K]
Cold Resistance:	0.510	[Ω]	Frame:	59.8	[°C]
Hot Resistance:	0.681	[Ω]	Bearing:	62.5	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.28	Breakdown Torque/Rated Torque:	2.39
Locked Rotor Cur./Rated Cur.:	6.41	Pullup Torque/Rated Torque:	1.31

Check: Zhang Kai	Operator: Li Jian	Test Date: 07-Mar-13
------------------	-------------------	----------------------