



# 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.net.cn](mailto:zk@techtopy.net.cn)  
[www.techtopy.com](http://www.techtopy.com)

**Type:** TAI 132M2-6  
**TR Number:** 2012112101  
**Test Lab:** Techtop factory

**Comments:** *This test report is also applicable for TCI 132M2-6 5.5kW*

### Nameplate:

Type:	TAI 132M2-6		Duty:	S1	IP:	55
Serial No:	2012080150129		Ins.Cl:	F	KG:	58.5
Voltage	Hz	kW	A	cos φ	r/min	Eff.[%]
400/690	50	5.5	12.44/7.21	0.74	960	86.2
Brg.DE:	6308ZZ		Brg.NDE:	6308ZZ		

### No Load Test:

	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min <sup>-1</sup> ]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
No load	360	4.87	194	50	1000	0.0	0	0.06	0.0
<b>No load</b>	<b>400</b>	<b>6.16</b>	<b>257</b>	<b>50</b>	<b>1000</b>	<b>0.0</b>	<b>0</b>	<b>0.06</b>	<b>0.0</b>
No load	440	8.51	386	50	1000	0.0	0	0.06	0.0

### Load Test:

Load [p.u]	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min <sup>-1</sup> ]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
0.25	400	6.49	1676	50	992	13.2	1375	0.37	82.0
0.5	400	7.95	3157	50	984	26.7	2750	0.57	87.1
0.75	400	9.90	4715	50	975	40.4	4125	0.69	87.5
<b>1</b>	<b>400</b>	<b>12.32</b>	<b>6375</b>	<b>50</b>	<b>964</b>	<b>54.5</b>	<b>5500</b>	<b>0.75</b>	<b>86.3</b>
1.25	400	15.17	8163	50	951	69.0	6878	0.78	84.3
1.5	400	18.42	10107	50	937	84.1	8250	0.79	81.6

### Full Load At 380V & 420V

	Voltage [V]	Current [A]	Input [W]	Freq. [Hz]	Speed [min <sup>-1</sup> ]	Torque [Nm]	Output [W]	Power Factor	Eff. [%]
380V	380	12.65	6472	50	956	54.9	5500	0.78	85.0
420V	420	12.31	6353	50	968	54.3	5500	0.71	86.6

### Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/690	80.62	28933	131.2	0.52

### Temperature Rise:

Amb.Temperature:	14	[°C]	Winding temperature rise:	73.2	[K]
Cold Resistance:	1.332	[Ω]	Frame:	53.9	[°C]
Hot Resistance:	1.722	[Ω]	Bearing:	57.2	[°C]

### Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.40	Breakdown Torque/Rated Torque:	2.61
Locked Rotor Cur./Rated Cur.:	6.54	Pullup Torque/Rated Torque:	1.84

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 21-Nov-12
------------------	---------------------------	----------------------