



# 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 132S2-2  
**TR Number:** 2012111802  
**Test Lab:** Techtop factory

**Comments:** *This test report is also applicable for TCI 132S2-2 7.5kW*

### Nameplate:

Type:	TAI 132S2-2		Duty:	S1	IP:	55
Serial No:	2012080150125		Ins.Cl:	F	KG:	50
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]
400/690	50	7.5	13.9/8.06	0.88	2920	88.5
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	380	4.26	318	50	3000	0.0	0	0.11	0.0
<b>No load</b>	<b>400</b>	<b>4.82</b>	<b>342</b>	<b>50</b>	<b>3000</b>	<b>0.0</b>	<b>0</b>	<b>0.10</b>	<b>0.0</b>
No load	420	5.62	375	50	3000	0.0	0	0.09	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	5.74	2256	50	2982	6.0	1875	0.57	83.1
0.5	400	7.94	4233	50	2964	12.1	3750	0.77	88.6
0.75	400	10.59	6279	50	2944	18.2	5625	0.86	89.6
<b>1</b>	<b>400</b>	<b>13.62</b>	<b>8410</b>	<b>50</b>	<b>2923</b>	<b>24.5</b>	<b>7500</b>	<b>0.89</b>	<b>89.2</b>
1.25	400	16.94	10636	50	2899	30.9	9375	0.91	88.1
1.5	400	20.45	12966	50	2874	37.4	11250	0.92	86.8

### 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	14.13	8444	50	2912	24.6	7500	0.91	88.8
420V	420	13.28	8366	50	2933	24.4	7500	0.87	89.6

### Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/690	140.1	55577	78.02	0.57

### Temperature Rise:

Amb.Temperature:	17.2	[°C]	Winding temperature rise:	67.1	[K]
Cold Resistance:	0.850	[Ω]	Frame:	50.5	[°C]
Hot Resistance:	1.097	[Ω]	Bearing:	53.9	[°C]

### Torque And Current:

Locked Rotor Tor./Rated Tor.:	3.14	Breakdown Torque/Rated Torque:	3.66
Locked Rotor Cur./Rated Cur.:	10.29	Pullup Torque/Rated Torque:	2.02

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 18-Nov-12
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