



# 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 132S-4  
**TR Number:** 2012111901  
**Test Lab:** Techtop factory

**Comments:** *This test report is also applicable for TCI 132S-4 5.5kW*

### Nameplate:

Type:	TAI 132S-4		Duty:	S1	IP:	55
Serial No:	2012080150126		Ins.Cl:	F	KG:	49.4
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]
400/690	50	5.5	11.0/6.38	0.82	1460	88.0
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	4.52	251	50	1500	0.0	0	0.08	0.0
<b>No load</b>	<b>400</b>	<b>5.24</b>	<b>285</b>	<b>50</b>	<b>1500</b>	<b>0.0</b>	<b>0</b>	<b>0.08</b>	<b>0.0</b>
No load	420	6.32	337	50	1500	0.0	0	0.07	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	5.65	1690	50	1491	8.8	1375	0.43	81.3
0.5	400	6.94	3146	50	1482	17.7	2750	0.65	87.4
0.75	400	8.70	4659	50	1473	26.8	4125	0.77	88.5
<b>1</b>	<b>400</b>	<b>10.84</b>	<b>6244</b>	<b>50</b>	<b>1462</b>	<b>35.9</b>	<b>5500</b>	<b>0.83</b>	<b>88.1</b>
1.25	400	13.31	7913	50	1449	45.3	6875	0.86	86.9
1.5	400	16.00	9676	50	1436	54.9	8250	0.87	85.3

### 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	11.12	6282	50	1455	36.1	5500	0.86	87.6
420V	420	10.89	6229	50	1465	35.9	5500	0.79	88.3

### Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/690	92.82	35340	78.19	0.55

### Temperature Rise:

Amb.Temperature:	15.3	[°C]	Winding temperature rise:	59.9	[K]
Cold Resistance:	1.340	[Ω]	Frame:	47.7	[°C]
Hot Resistance:	1.680	[Ω]	Bearing:	51.1	[°C]

### Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.17	Breakdown Torque/Rated Torque:	3.5
Locked Rotor Cur./Rated Cur.:	8.56	Pullup Torque/Rated Torque:	1.93

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 19-Nov-12
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