



# 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 802-8

TR Number: 2011070502

Test Lab: Techtop factory

## Nameplate:

Type:	TAI 802-8	Duty:	S1	IP:	55	
Serial No:	201103096016	Ins.Cl:	F	KG:	9.3	
Voltage	Hz	kW	A	cos fi	r/min	Eff. [%]
230/400	50	0.25	1.83/1.05	0.58	680	58.7
Brg.DE:	6204 RZ	Brg.NDE:	6204 RZ			

## 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	365	0.82	86	50	750	0.0	0	0.17	0.0
<b>No load</b>	<b>400</b>	<b>0.96</b>	<b>114</b>	<b>50</b>	<b>750</b>	<b>0.0</b>	<b>0</b>	<b>0.17</b>	<b>0.0</b>
No load	440	1.16	162	50	750	0.0	0	0.18	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	0.94	192	50	735	0.812	63	0.29	32.5
0.5	400	0.95	261	50	724	1.649	125	0.39	48.0
0.75	400	0.99	337	50	709	2.526	188	0.49	55.6
<b>1</b>	<b>400</b>	<b>1.05</b>	<b>426</b>	<b>50</b>	<b>689</b>	<b>3.463</b>	<b>250</b>	<b>0.58</b>	<b>58.7</b>
1.25	400	1.16	535	50	666	4.483	313	0.66	58.4
1.5	400	1.33	672	50	638	5.613	375	0.73	55.8

## 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	1.08	433.2	50	671	3.558	250	0.61	57.7
420V	420	1.07	427.4	50	688	3.470	250	0.55	58.5

## Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/230	3.236	1561	7.981	0.70

## Temperature Rise:

Amb. Temperature:	13.8	[°C]	Winding temperature rise:	50.8	[K]
Cold Resistance:	57.2	[Ω]	Frame:	13.7	[°C]
Hot Resistance:	68.4	[Ω]	Bearing:	15.9	[°C]

## Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.30	Breakdown Torque/Rated Torque:	2.48
Locked Rotor Cur./Rated Cur.:	3.07	Pullup Torque/Rated Torque:	2.07

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 05/Jul/11
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