



# 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 711-8

TR Number: 2011070302

Test Lab: Techtop factory

## Nameplate:

Type:	TAI 711-8	Duty:	S1	IP:	55	
Serial No:	201103096012	Ins.Cl:	F	KG:	5.6	
Voltage	Hz	kW	A	cos fi	r/min	Eff. [%]
230/400	50	0.09	0.92/0.53	0.57	665	43.1
Brg.DE:	6202 RZ	Brg.NDE:	6202 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	360	0.44	70	50	750	0.0	0	0.25	0.0
<b>No load</b>	<b>400</b>	<b>0.51</b>	<b>92</b>	<b>50</b>	<b>750</b>	<b>0.0</b>	<b>0</b>	<b>0.26</b>	<b>0.0</b>
No load	440	0.6	124	50	750	0.0	0	0.27	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	0.499	122	50	729	0.295	23	0.35	18.5
0.5	400	0.500	147	50	713	0.602	45	0.42	30.7
0.75	400	0.507	175	50	693	0.930	68	0.50	38.7
<b>1</b>	<b>400</b>	<b>0.525</b>	<b>209</b>	<b>50</b>	<b>668</b>	<b>1.287</b>	<b>90</b>	<b>0.57</b>	<b>43.1</b>
1.25	400	0.558	252	50	638	1.684	113	0.65	44.6
1.5	400	0.614	310	50	603	2.138	135	0.73	43.6

## 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	0.54	213.2	50	646	1.330	90	0.60	42.2
420V	420	0.54	207.4	50	677	1.270	90	0.53	43.4

## Locked Rotor Test:

Un (V)	Ik (A)	Pk(W)	Tk (Nm)	cosφ
400/230	1.223	647.6	3.102	0.76

## Temperature Rise:

Amb. Temperature:	23.6	[°C]	Winding temperature rise:	45.1	[K]
Cold Resistance:	172.3	[Ω]	Frame:	25.3	[°C]
Hot Resistance:	202.5	[Ω]	Bearing:	27.3	[°C]

## Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.41	Breakdown Torque/Rated Torque:	2.57
Locked Rotor Cur./Rated Cur.:	2.33	Pullup Torque/Rated Torque:	2.35

Check: Zhang Kai	Operator: Chen Zhongliang	Test Date: 03/Jul/11
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