



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: TCI 315M-4
TR Number: 2013091801
Test Lab: Techtop factory

Nameplate:

Type:	TCI 315M-4		Duty:	S1	IP:	55
Serial No:	130747242		Ins.Cl:	F	KG:	1049
Voltage	Hz	kW	A	cos fi	r/min	Eff. [%]
400/690	50	132	222.8/128.6	0.9	1485	95.0
Brg.DE:	NU6319		Brg.NDE:	6319C3		

No Load Test:

	Voltage [V]	Current [A]	Input [kW]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [kW]	Power Factor	Eff. [%]
No load	380	61.80	4.76	50	1500	0.0	0	0.00	0.0
No load	400	63.88	4.89	50	1500	0.0	0	0.00	0.0
No load	420	66.83	5.01	50	1500	0.0	0	0.00	0.0

Load Test:

Load [p.u]	Voltage [V]	Current [A]	Input [kW]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [kW]	Power Factor	Eff. [%]
0.25	400	82.16	36.40	50	1495	210.8	33.00	0.64	90.7
0.5	400	125.40	71.30	50	1492	422.5	66.00	0.82	92.6
0.75	400	175.30	105.10	50	1490	634.5	99.00	0.87	94.2
1	400	222.80	138.90	50	1485	848.9	132.00	0.90	95.0
1.25	400	295.40	177.10	50	1480	1064.7	165.00	0.87	93.2
1.5	400	366.10	214.30	50	1478	1279.4	198.00	0.84	92.4

Full Load At 380V & 420V

	Voltage [V]	Current [A]	Input [kW]	Freq. [Hz]	Speed [min ⁻¹]	Torque [Nm]	Output [kW]	Power Factor	Eff. [%]
380V	380	234.50	138.90	50	1488	847.2	132.00	0.90	95.0
420V	420	212.20	138.90	50	1485	848.9	132.00	0.90	95.0

Locked Rotor Test:

Un (V)	Ik (A)	Pk(kW)	Tk (Nm)	cosφ
400/690	1559.6	622.6	2103	0.44

Temperature Rise:

Amb. Temperature:	30	[°C]	Winding temperature rise:	78	[K]
Cold Resistance:	0.025	[Ω]	Frame:	84	[°C]
Hot Resistance:	0.035	[Ω]	Bearing:	74	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.48	Breakdown Torque/Rated Torque:	3.23
Locked Rotor Cur./Rated Cur.:	7.00	Pullup Torque/Rated Torque:	1.64

Check: Zhang Kai	Operator: Li Jian	Test Date: 18-Sep-13
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