



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 315L1-4
TR Number: 2013091901
Test Lab: Techtop factory

Nameplate:

Type:	TCI 315L1-4		Duty:	S1	IP:	55
Serial No:	130747243		Ins.Cl:	F	KG:	1108
Voltage	Hz	kW	A	cos fi	r/min	Eff. [%]
400/690	50	160	269.5/155.6	0.9	1485	95.2
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	72.80	5.11	50	1500	0.0	0	0.00	0.0
No load	400	76.50	5.36	50	1500	0.0	0	0.00	0.0
No load	420	79.50	5.63	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	111.60	44.10	50	1495	255.5	40.00	0.57	90.7
0.5	400	156.30	85.60	50	1492	512.1	80.00	0.79	93.5
0.75	400	211.00	126.50	50	1490	769.1	120.00	0.87	94.9
1	400	269.50	168.10	50	1485	1029.0	160.00	0.90	95.2
1.25	400	335.20	208.90	50	1480	1290.5	200.00	0.90	95.7
1.5	400	402.30	252.30	50	1478	1550.7	240.00	0.91	95.1

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	283.70	168.10	50	1488	1026.9	160.00	0.90	95.2
420V	420	256.70	168.20	50	1485	1029.0	160.00	0.90	95.1

Locked Rotor Test:

Un (V)	Ik (A)	Pk(kW)	Tk (Nm)	cosφ
400/690	1886.5	732	2706	0.44

Temperature Rise:

Amb. Temperature:	30	[°C]	Winding temperature rise:	80	[K]
Cold Resistance:	0.023	[Ω]	Frame:	86	[°C]
Hot Resistance:	0.035	[Ω]	Bearing:	76	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.63	Breakdown Torque/Rated Torque:	2.84
Locked Rotor Cur./Rated Cur.:	7.00	Pullup Torque/Rated Torque:	1.42

Check: Zhang Kai	Operator: Li Jian	Test Date: 19-Sep-13
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