



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)

SHANGHAI TOP MOTOR CO., LTD

No.303 Kangliu Road
Kang Qiao Industrial Area
Pudong, Shanghai, China

Ph: 86 15000088129

zk@techtop.net.cn

www.techtop.com

Type: TCI 315S-4

TR Number: 2013092101

Test Lab: Techtop factory

Nameplate:

Type:	TCI 315S-4		Duty:	S1	IP:	55
Serial No:	130747241		Ins.Cl:	F	KG:	949
Voltage	Hz	kW	A	cos fi	r/min	Eff.[%]
400/690	50	110	187.2/108.1	0.89	1485	94.9
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	55.80	4.13	50	1500	0.0	0	0.00	0.0
No load	400	58.70	4.20	50	1500	0.0	0	0.00	0.0
No load	420	61.30	4.50	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	70.91	30.32	50	1495	175.7	27.50	0.62	90.7
0.5	400	106.10	59.20	50	1492	352.0	55.00	0.81	92.9
0.75	400	147.00	87.80	50	1490	528.8	82.50	0.86	94.0
1	400	187.20	115.90	50	1485	707.4	110.00	0.89	94.9
1.25	400	244.00	146.00	50	1480	887.2	137.50	0.86	94.2
1.5	400	299.70	178.90	50	1478	1066.1	165.00	0.86	92.2

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	197.10	116.00	50	1488	706.0	110.00	0.89	94.8
420V	420	178.20	116.30	50	1485	707.4	110.00	0.90	94.6

Locked Rotor Test:

Un (V)	Ik (A)	Pk(kW)	Tk (Nm)	cosφ
400/690	1347.8	517.8	1838	0.44

Temperature Rise:

Amb. Temperature:	30	[°C]	Winding temperature rise:	75	[K]
Cold Resistance:	0.036	[Ω]	Frame:	80	[°C]
Hot Resistance:	0.044	[Ω]	Bearing:	70	[°C]

Torque And Current:

Locked Rotor Tor./Rated Tor.:	2.60	Breakdown Torque/Rated Torque:	3.02
Locked Rotor Cur./Rated Cur.:	7.20	Pullup Torque/Rated Torque:	1.48

Check: Zhang Kai	Operator: Li Jian	Test Date: 21-Sep-13
------------------	-------------------	----------------------