



TEST INFORMATION:IHP9201307111121

DATE & TIME : Sat, Jul 20, 2013 4:15 PM

Motor Make & Model:	SAMPLE	Power Factor:	0.00
Motor Serial No:	ihp10	Motor Type:	Air-cooled
Motor Rating [kW/HP]:	2.2	Supply:	3 Phase
Motor Frequency [Hz]:	50 Hz	Connection Type:	DOL
Motor Rated Load :[Nm]	14.00	Number of Poles:	4 Poles
Motor Rated Voltage [V]:	415.00	Motor Marked Efficiency [%]:	79.00
Motor Rated Current [A]:	5.00	Motor Insulation Class:	F
Motor Rated Speed [rpm]:	1430.00	Customer info:	IHP
		Initial Load[Nm]:	0.00

TEMPERATURE & RESISTANCE DETAILS

	Cold condition test	After No load Test
Temperature [deg]	28.20	29.53
Winding Resistance [Ohm]	6.40	6.60

NO LOAD TEST RESULT

% of Rated V	Line Volt U0 [V]	U0(sq)	LINE CURRENT [A]	PHASE CURRENT [A]	I/P POWER Pin-NL[W]	STATOR CU LOSS Pst-NL [W]	CONSTANT LOSS Pk-NL [W]	FRICITION & WINDAGE LOSS Pfw-NL[W]	CORE/IRON LOSSES Pfe-NL[W]
115%	454.90	206934.01	2.20	1.27	430.00	31.95	398.05	229.81	168.24
100%	414.00	171396.00	1.70	0.98	380.00	19.08	360.92	229.81	131.11
75%	308.80	95357.44	1.13	0.65	310.00	8.43	301.57	229.81	71.76
50%	205.99	42431.88	1.02	0.59	280.00	6.87	273.13	229.81	43.32
40%	166.23	27632.41	1.14	0.66	285.00	8.58	276.42	229.81	46.61
30%	123.32	15207.82	1.61	0.93	304.00	17.11	286.89	229.81	57.08
20%	83.66	6999.00	2.99	1.73	226.00	59.01	166.99	229.81	-62.82

LOAD TEST RESULT

% of Rated Load	Load	Voltage UL[V]	Temp Tr[deg]	Current IL[A]	Speed NL[RPM]	Rphl Rph-L[ohm]	I/P Power Pin-L[W]	Frequency [Hz]	Torque [Nm]
150 %	21.00	413.31	29.88	8.78	1290.00	6.44	6040.00	50.10	29.15
125 %	17.50	412.22	30.06	7.20	1350.00	6.45	4930.00	50.09	24.98
100 %	14.00	414.24	30.34	5.80	1387.50	6.45	3960.00	50.10	20.99
75 %	10.50	413.18	30.72	4.50	1425.00	6.46	3040.00	50.12	16.51
50 %	7.00	412.26	31.13	3.29	1451.25	6.47	2150.00	50.15	11.67
25 %	3.50	412.49	31.55	2.22	1470.00	6.48	1290.00	50.14	6.97

SLIP DETAILS

150%	125%	100%	75%	50%	25%
0.14	0.10	0.08	0.05	0.04	0.02

LOSSES CALCULATION

% of Rated Load	Friction & Windage Loss Pfw-NL [W]	Core/Iron Loss Pfe [W]	Stator Copper Loss Pcu-st-L [W]	Rotor Copper Loss Pcu-rt-L [W]	Residual Losses PLr [W]	Stray Load Loss PLL [W]	Total Loss PT[W]	Efficiency [%]
150 %	229.81	117.86	496.56	768.71	489.80	488.93	2101.87	65.20
125 %	229.81	121.22	334.14	454.46	259.04	359.13	1498.76	69.60
100 %	229.81	125.64	217.06	278.11	59.45	253.60	1104.23	72.12
75 %	229.81	128.37	130.85	145.57	-58.01	156.85	791.46	73.97
50 %	229.81	131.10	70.05	68.86	-122.28	78.29	578.12	73.11
25 %	229.81	134.28	31.94	25.46	-203.58	27.92	449.42	65.16
	229.81							