

Type Test Report

Report No.: TTR3IC13152A2SL

Test Result Data

Nameplate data

Type:	HMC3 315L1-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	259.98 A	Frequency:	50 Hz
Output:	160 kW	Efficiency.:	95.7 %
Connection:	D	Cos ϕ :	0.93
Speed:	2972 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	2681.99 W	No load current:	68.10 A
Machine loss:	1139.55 W	Core loss:	1416.25 W
Sound pressure level 1m:	88.5 dB(A)	Vibration:	0.8 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	259.98 A
Power:	160.00 kW	Temperature - rise:	79 K
Winding hotspot temperature:	108 °C	Bearing temperature:	50 °C
Frequency:	50 Hz	Ambient temperature:	29 °C

Load performance test

Load %	Un V	f Hz	P1 KW	I1 A	N rpm	T Nm	Cos ϕ Cos ϕ	Eff (η) %
125	400	50	210.09	327.84	2964	644.46	0.93	95.20
100	400	50	167.27	259.98	2972	514.16	0.93	95.65
75	400	50	125.18	195.14	2979	384.64	0.93	95.86
50	400	50	83.74	134.58	2987	255.81	0.90	95.53
25	400	50	42.90	79.58	2993	127.62	0.78	93.24

Locked rotor test at rated voltage

Input power:	386.6 kW	Cos ϕ :	0.33
Starting current:	1687.14 A	Starting torque:	962.66 Nm
Starting/Rated current:	6.49	Starting/Rated torque:	1.87

6/19/2017

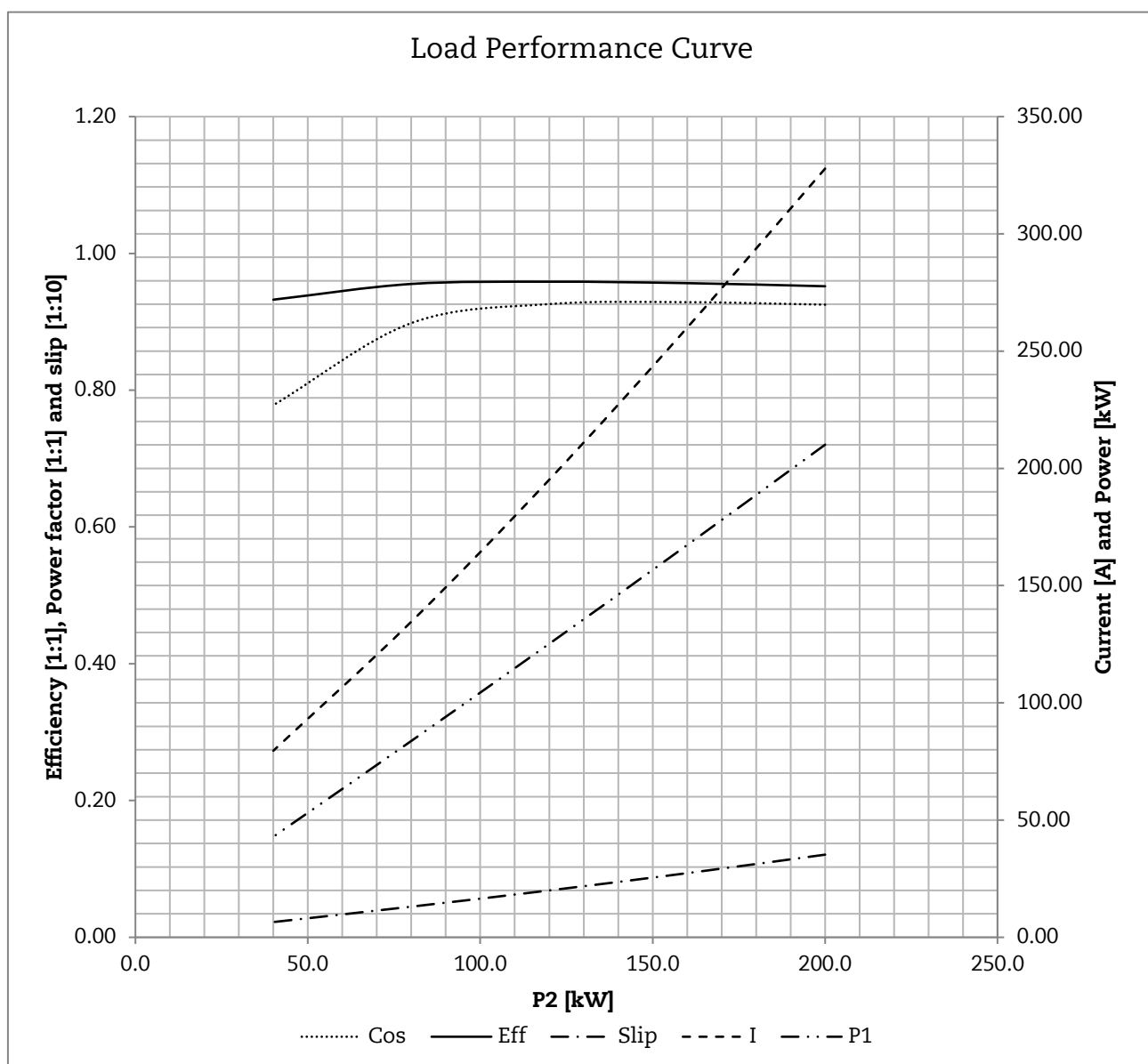
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
200.0	210.1	0.952	327.84	644.5	0.93
160.0	167.3	0.957	259.98	514.2	0.93
120.0	125.2	0.959	195.14	384.6	0.93
80.0	83.7	0.955	134.58	255.8	0.90
40.0	42.9	0.932	79.58	127.6	0.78



No-load test data at rated frequency

U _o V	I _o A	P _o W	P _{cul.}
498.6	80.60	3764.0	176.7
460.1	75.74	3261.0	156.1
420.3	70.90	2820.0	136.8
381.1	65.42	2585.0	116.4
342.1	59.86	2229.0	97.5
298.2	53.89	1963.0	79.0
257.9	47.94	1706.0	62.5
221.2	42.02	1554.0	48.0
180.6	35.46	1476.0	34.2
140.4	29.47	1362.0	23.6

