

Type Test Report

Report No.: TTR3IC33151A2SL

Test Result Data

Nameplate data

Type:	HMC3 315M-6	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	157.11 A	Frequency:	50 Hz
Output:	90 kW	Efficiency.:	95.0 %
Connection:	D	Cos ϕ :	0.88
Speed:	986 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	1613.43 W	No load current:	40.28 A
Machine loss:	584.22 W	Core loss:	935.01 W
Sound pressure level 1m:	76.5 dB(A)	Vibration:	0.6 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	157.11 A
Power:	90.00 kW	Temperature - rise:	58 K
Winding hotspot temperature:	90 °C	Bearing temperature:	65 °C
Frequency:	50 Hz	Ambient temperature:	32 °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	115.67	200.79	981	1095.52	0.83	93.47
100	400	50	95.60	157.11	986	871.79	0.88	94.96
75	400	50	71.86	117.88	990	651.20	0.88	95.58
50	400	50	46.92	83.45	993	432.69	0.81	94.85
25	400	50	23.71	54.41	996	215.65	0.63	91.88

Locked rotor test at rated voltage

Input power:	229.3 kW	Cos ϕ :	0.37
Starting current:	894.01 A	Starting torque:	1630.12 Nm
Starting/Rated current:	5.69	Starting/Rated torque:	1.87

6/19/2017

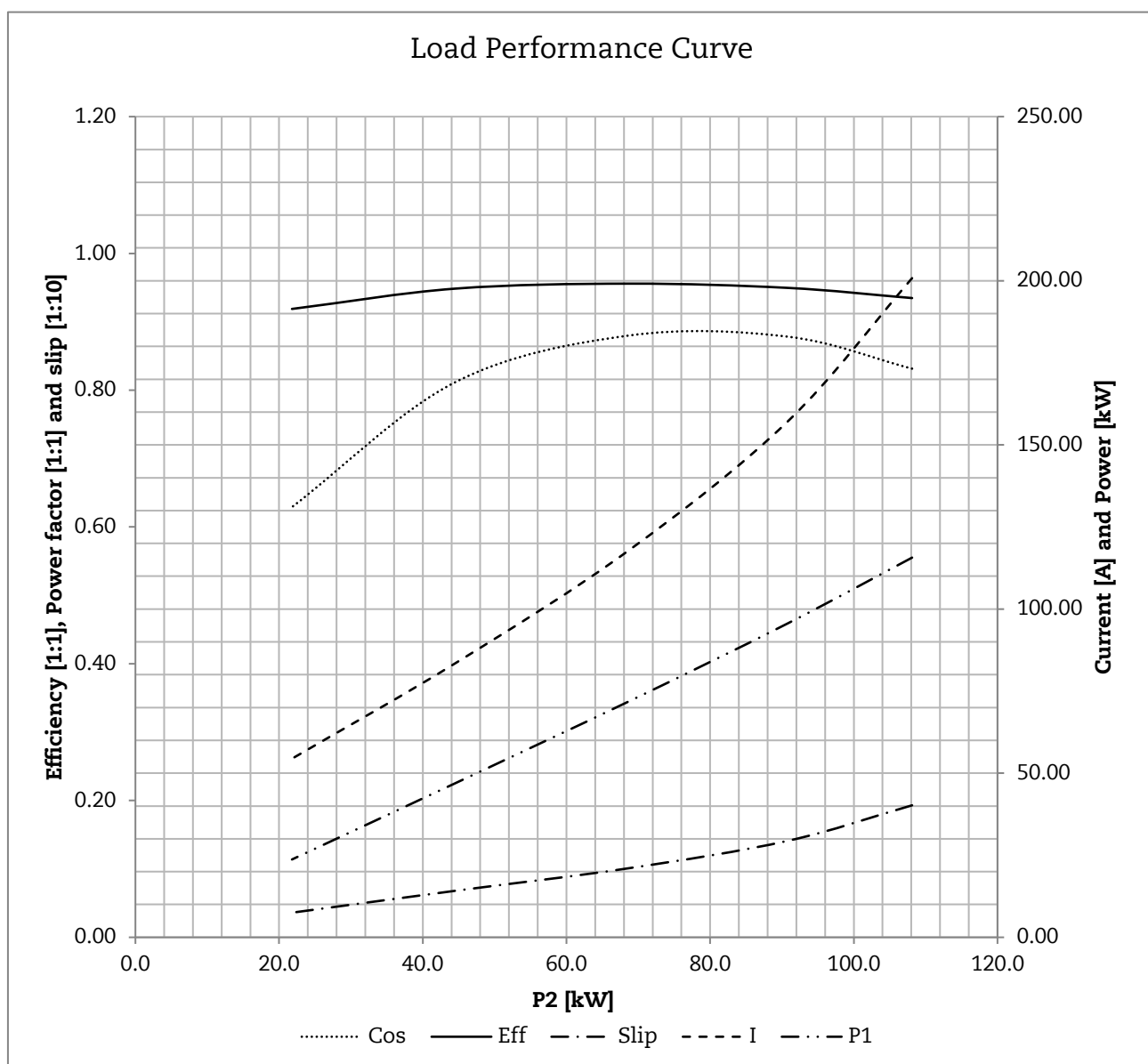
HOYER
EXCEEDING EXPECTATIONS

www.hoyermotors.com

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
108.1	115.7	0.935	200.79	1095.5	0.83
90.8	95.6	0.950	157.11	871.8	0.88
68.7	71.9	0.956	117.88	651.2	0.88
44.5	46.9	0.949	83.45	432.7	0.81
21.8	23.7	0.919	54.41	215.7	0.63



No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
501.6	71.04	3144.0	286.7
461.5	53.54	2208.0	162.9
422.5	43.56	1727.0	107.8
380.1	36.30	1463.0	74.9
341.3	31.58	1260.0	56.7
301.2	27.15	1108.0	41.9
261.0	23.11	977.0	30.3
219.4	19.38	863.0	21.3
179.0	15.85	787.0	14.3
138.7	12.36	700.0	8.7

