

Type Test Report

Report No.: TTR3IC31600A2SL

Test Result Data

Nameplate data

Type:	HMC3 160M-6	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	14.96 A	Frequency:	50 Hz
Output:	7.5 kW	Efficiency.:	89.5 %
Connection:	D	Cos ϕ :	0.82
Speed:	972 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	345.77 W	No load current:	6.70 A
Machine loss:	43.97 W	Core loss:	234.32 W
Sound pressure level 1m:	64.9 dB(A)	Vibration:	0.7 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	14.96 A
Power:	7.50 kW	Temperature - rise:	53 K
Winding hotspot temperature:	76 °C	Bearing temperature:	57 °C
Frequency:	50 Hz	Ambient temperature:	23 °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	10.53	18.54	963	92.93	0.82	87.64
100	400	50	8.46	14.96	972	73.69	0.82	89.53
75	400	50	6.31	11.83	980	54.83	0.77	90.46
50	400	50	4.19	9.25	987	36.29	0.65	88.57
25	400	50	2.24	7.32	993	18.03	0.44	81.75

Locked rotor test at rated voltage

Input power:	27.2 kW	Cos ϕ :	0.45
Starting current:	87.67 A	Starting torque:	145.18 Nm
Starting/Rated current:	5.86	Starting/Rated torque:	1.97

6/19/2017

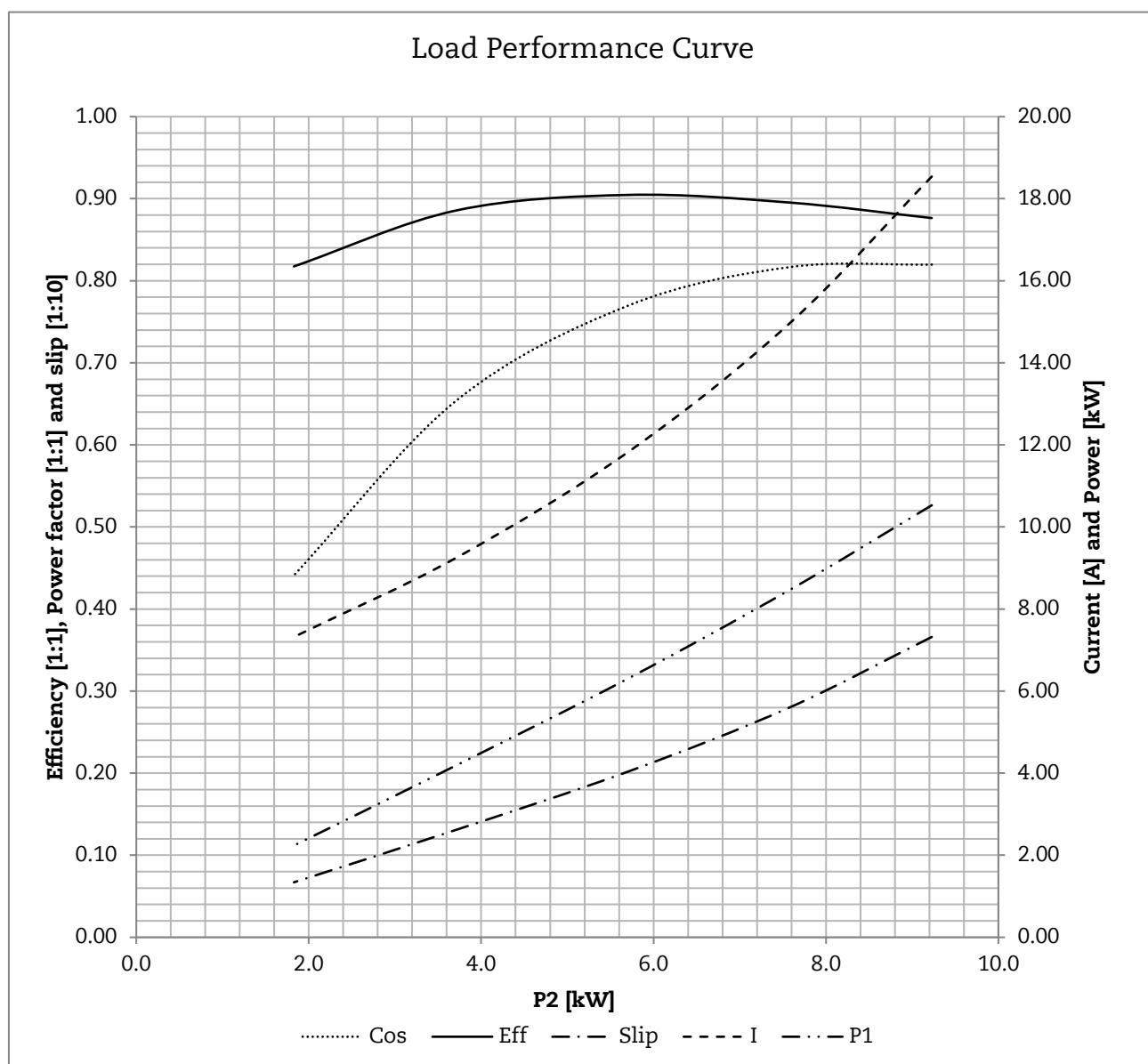
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
9.2	10.5	0.876	18.54	92.9	0.82
7.6	8.5	0.895	14.96	73.7	0.82
5.7	6.3	0.905	11.83	54.8	0.77
3.7	4.2	0.886	9.25	36.3	0.65
1.8	2.2	0.818	7.32	18.0	0.44



No-load test data at rated frequency

U _o V	I _o A	P _o W	P _{cul.}
496.0	11.77	770.0	200.9
463.4	9.43	550.0	129.0
421.4	7.25	380.0	76.2
377.7	5.82	280.0	49.1
336.6	4.96	230.0	35.7
300.8	4.28	190.0	26.6
261.3	3.60	150.0	18.8
220.6	2.96	120.0	12.7
181.2	2.38	90.0	8.2
138.8	1.69	70.0	4.1

