

Type Test Report

Report No.: TTR3IC32500A2SL

Test Result Data

Nameplate data

Type:	HMC3 250M-6	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	66.25 A	Frequency:	50 Hz
Output:	37 kW	Efficiency.:	93.4 %
Connection:	D	Cos ϕ :	0.87
Speed:	985 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	1184.58 W	No load current:	23.76 A
Machine loss:	359.87 W	Core loss:	708.07 W
Sound pressure level 1m:	72 dB(A)	Vibration:	0.5 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	66.25 A
Power:	37.00 kW	Temperature - rise:	60 K
Winding hotspot temperature:	91 °C	Bearing temperature:	53 °C
Frequency:	50 Hz	Ambient temperature:	31 °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	49.41	82.62	980	450.61	0.86	92.34
100	400	50	40.10	66.25	985	358.88	0.87	93.39
75	400	50	30.12	51.36	989	268.04	0.85	93.79
50	400	50	19.89	38.45	993	178.01	0.75	92.13
25	400	50	10.37	28.06	996	88.68	0.53	86.84

Locked rotor test at rated voltage

Input power:	136.2 kW	Cos ϕ :	0.43
Starting current:	461.55 A	Starting torque:	842.58 Nm
Starting/Rated current:	6.97	Starting/Rated torque:	2.35

6/19/2017

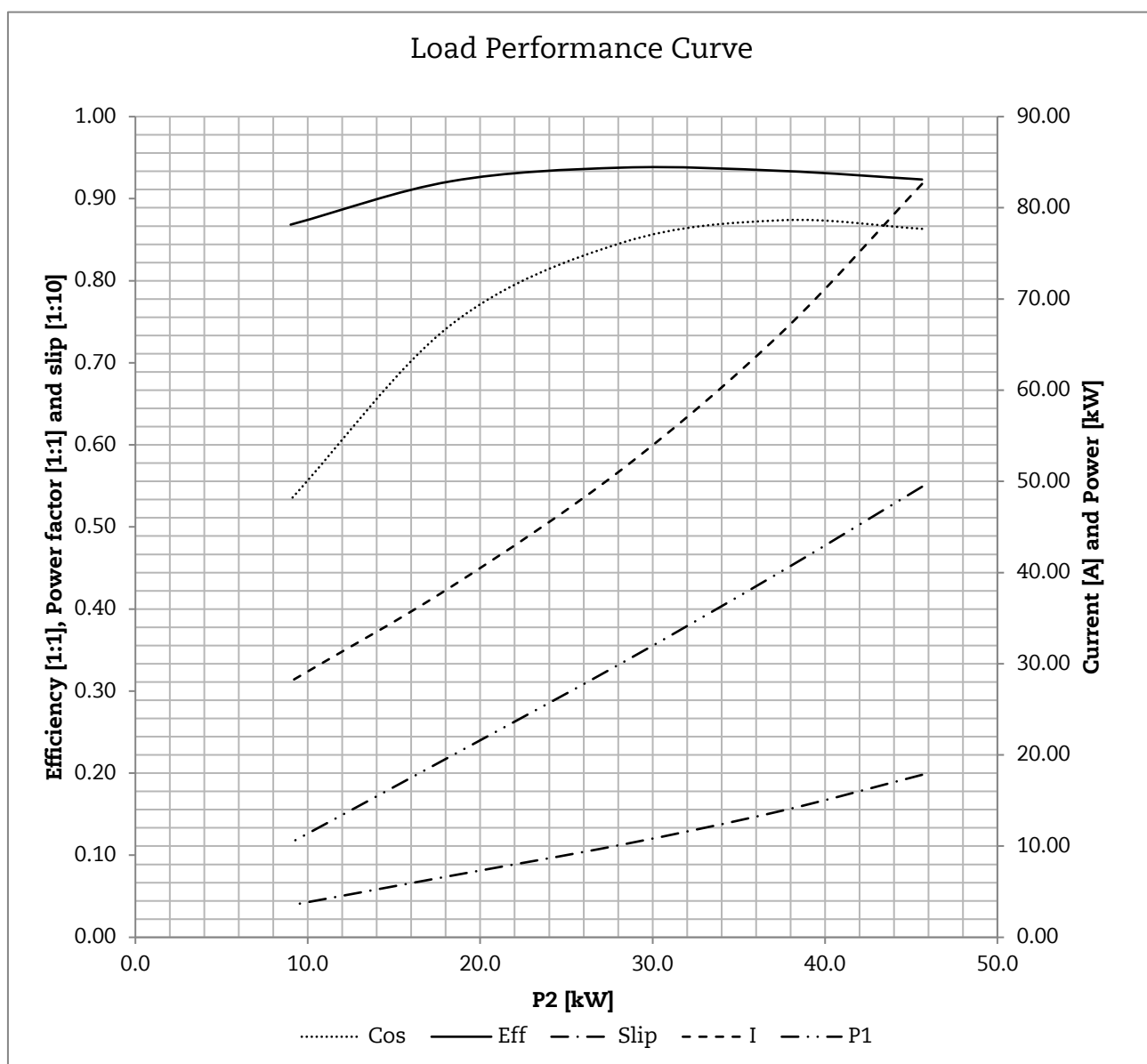
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
45.6	49.4	0.923	82.62	450.6	0.86
37.5	40.1	0.934	66.25	358.9	0.87
28.2	30.1	0.938	51.36	268.0	0.85
18.3	19.9	0.921	38.45	178.0	0.75
9.0	10.4	0.868	28.06	88.7	0.53



No-load test data at rated frequency

U ₀ V	I ₀ A	P ₀ W	P _{cul.}
498.3	43.26	2530.0	374.0
459.8	32.14	1720.0	206.5
421.1	25.91	1280.0	134.2
383.2	21.93	1060.0	96.1
338.8	17.17	860.0	58.9
302.3	16.22	750.0	52.6
257.5	12.22	610.0	29.8
221.1	11.50	580.0	26.4
181.2	9.50	510.0	18.0
140.4	6.92	440.0	9.6

