

Type Test Report

Report No.: TTR3IC22251A2SL

Test Result Data

Nameplate data

Type:	HMC3 225M-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	78.20 A	Frequency:	50 Hz
Output:	45 kW	Efficiency.:	94.2 %
Connection:	D	Cos ϕ :	0.89
Speed:	1479 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	1093.17 W	No load current:	23.22 A
Machine loss:	235.44 W	Core loss:	780.36 W
Sound pressure level 1m:	77.5 dB(A)	Vibration:	0.6 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	78.20 A
Power:	45.00 kW	Temperature - rise:	70 K
Winding hotspot temperature:	89 °C	Bearing temperature:	54 °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	59.54	98.13	1473	364.59	0.88	93.20
100	400	50	48.33	78.20	1479	290.51	0.89	94.22
75	400	50	36.31	59.85	1485	217.07	0.88	94.68
50	400	50	23.85	43.59	1490	144.22	0.79	93.53
25	400	50	12.22	30.08	1495	71.87	0.59	89.40

Locked rotor test at rated voltage

Input power:	196.7 kW	Cos ϕ :	0.43
Starting current:	657.82 A	Starting torque:	765.14 Nm
Starting/Rated current:	8.41	Starting/Rated torque:	2.63

6/19/2017

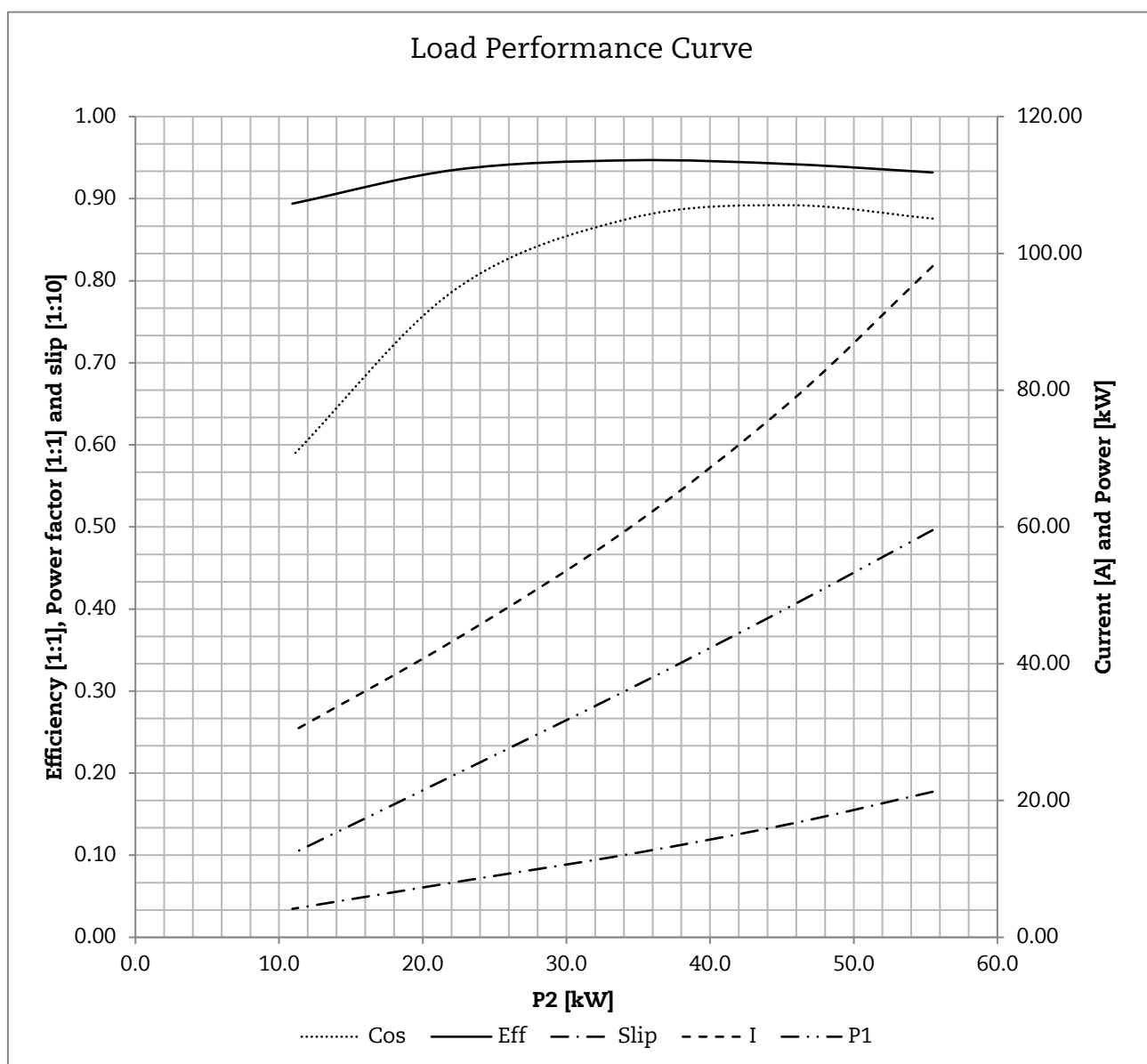
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
55.5	59.5	0.932	98.13	364.6	0.88
45.5	48.3	0.942	78.20	290.5	0.89
34.4	36.3	0.947	59.85	217.1	0.88
22.3	23.9	0.935	43.59	144.2	0.79
10.9	12.2	0.894	30.08	71.9	0.59



No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
503.1	48.84	2980.0	352.3
451.9	32.00	1650.0	151.2
409.3	24.13	1170.0	86.0
370.6	20.41	940.0	61.5
329.8	17.51	780.0	45.3
289.4	14.93	660.0	32.9
249.7	12.57	560.0	23.3
219.8	10.88	490.0	17.5
190.6	9.39	430.0	13.0
159.9	7.66	370.0	8.7

