

Type Test Report

Report No.: TTR3IC11601A2SL

Test Result Data

Nameplate data

Type:	HMC3 160M2-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	25.93 A	Frequency:	50 Hz
Output:	15 kW	Efficiency.:	92.0 %
Connection:	D	Cos ϕ :	0.91
Speed:	2953 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	559.54 W	No load current:	7.62 A
Machine loss:	152.23 W	Core loss:	378.85 W
Sound pressure level 1m:	79.4 dB(A)	Vibration:	0.9 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	25.93 A
Power:	15.00 kW	Temperature - rise:	60 K
Winding hotspot temperature:	75 °C	Bearing temperature:	48 °C
Frequency:	50 Hz	Ambient temperature:	14 °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	20.50	32.30	2939	60.92	0.92	91.44
100	400	50	16.30	25.93	2953	48.51	0.91	91.98
75	400	50	12.23	20.00	2966	36.23	0.88	92.01
50	400	50	8.25	14.65	2977	24.06	0.81	90.90
25	400	50	4.37	10.01	2989	11.98	0.63	85.84

Locked rotor test at rated voltage

Input power:	82.5 kW	Cos ϕ :	0.46
Starting current:	257.89 A	Starting torque:	143.10 Nm
Starting/Rated current:	9.95	Starting/Rated torque:	2.95

6/19/2017

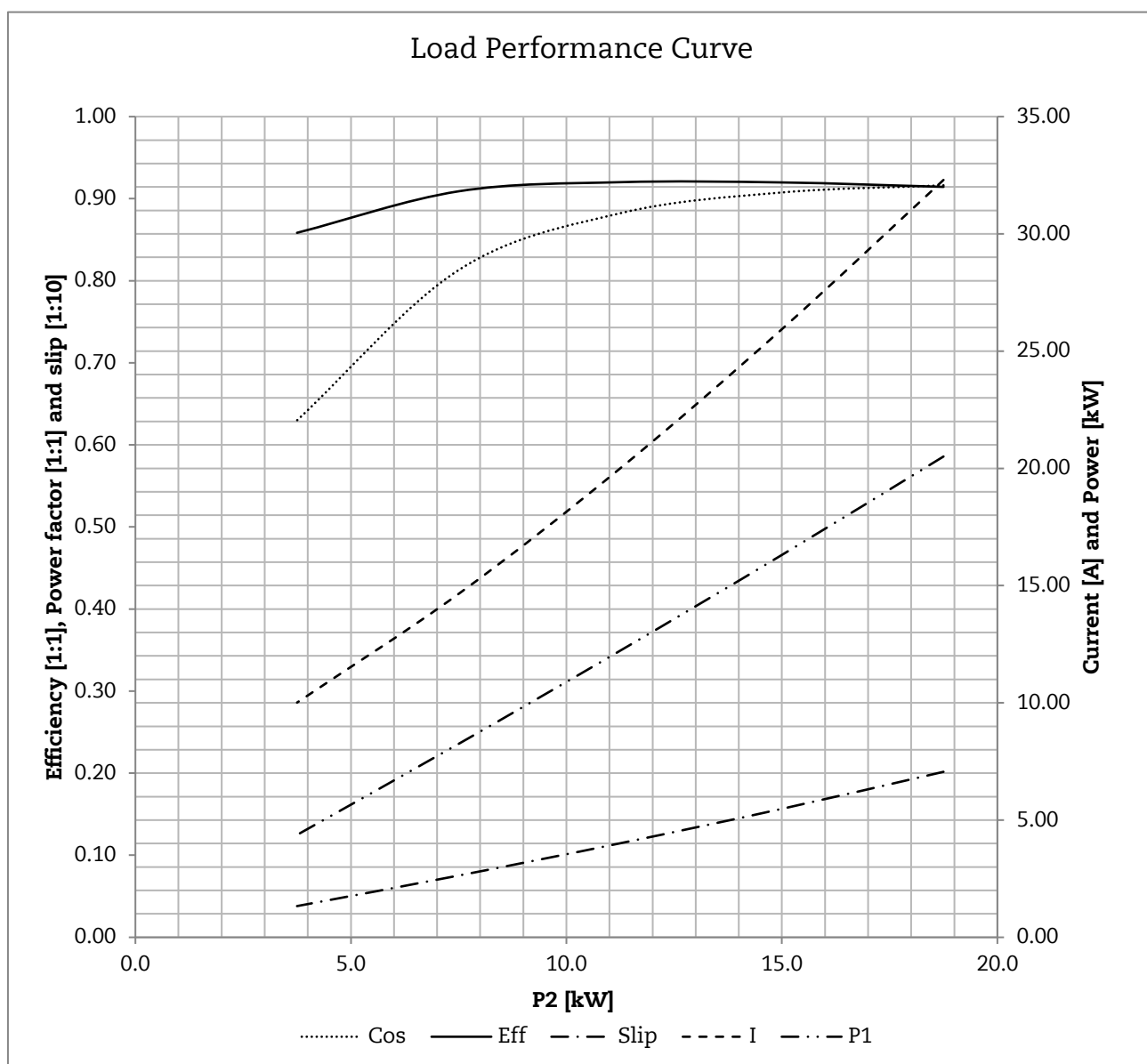
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
18.7	20.5	0.914	32.30	60.9	0.92
15.0	16.3	0.920	25.93	48.5	0.91
11.2	12.2	0.920	20.00	36.2	0.88
7.5	8.3	0.909	14.65	24.1	0.81
3.7	4.4	0.858	10.01	12.0	0.63



No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
499.9	15.25	1250.0	114.0
454.5	10.50	790.0	54.0
414.6	8.18	610.0	32.8
374.1	6.82	490.0	22.8
335.3	5.84	420.0	16.7
294.1	4.97	370.0	12.1
254.1	4.21	310.0	8.7
223.1	3.66	270.0	6.6
193.0	3.15	240.0	4.9
163.6	2.67	210.0	3.5

