

Type Test Report

Report No.: TTR3IC32000A2SL

Test Result Data

Nameplate data

Type:	HMC3 200L1-6	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	37.32 A	Frequency:	50 Hz
Output:	18.5 kW	Efficiency.:	92.2 %
Connection:	D	Cos ϕ :	0.78
Speed:	985 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	848.2 W	No load current:	20.23 A
Machine loss:	160.1 W	Core loss:	508.97 W
Sound pressure level 1m:	68.5 dB(A)	Vibration:	0.6 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	37.32 A
Power:	18.50 kW	Temperature - rise:	63 K
Winding hotspot temperature:	79 °C	Bearing temperature:	68 °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	25.20	45.15	980	225.26	0.81	91.22
100	400	50	20.27	37.32	985	179.40	0.78	92.21
75	400	50	15.17	30.53	989	134.01	0.72	92.20
50	400	50	10.18	24.99	993	89.00	0.59	89.59
25	400	50	5.49	20.97	996	44.34	0.38	82.64

Locked rotor test at rated voltage

Input power:	71.7 kW	Cos ϕ :	0.43
Starting current:	242.45 A	Starting torque:	371.40 Nm
Starting/Rated current:	6.50	Starting/Rated torque:	2.07

6/19/2017

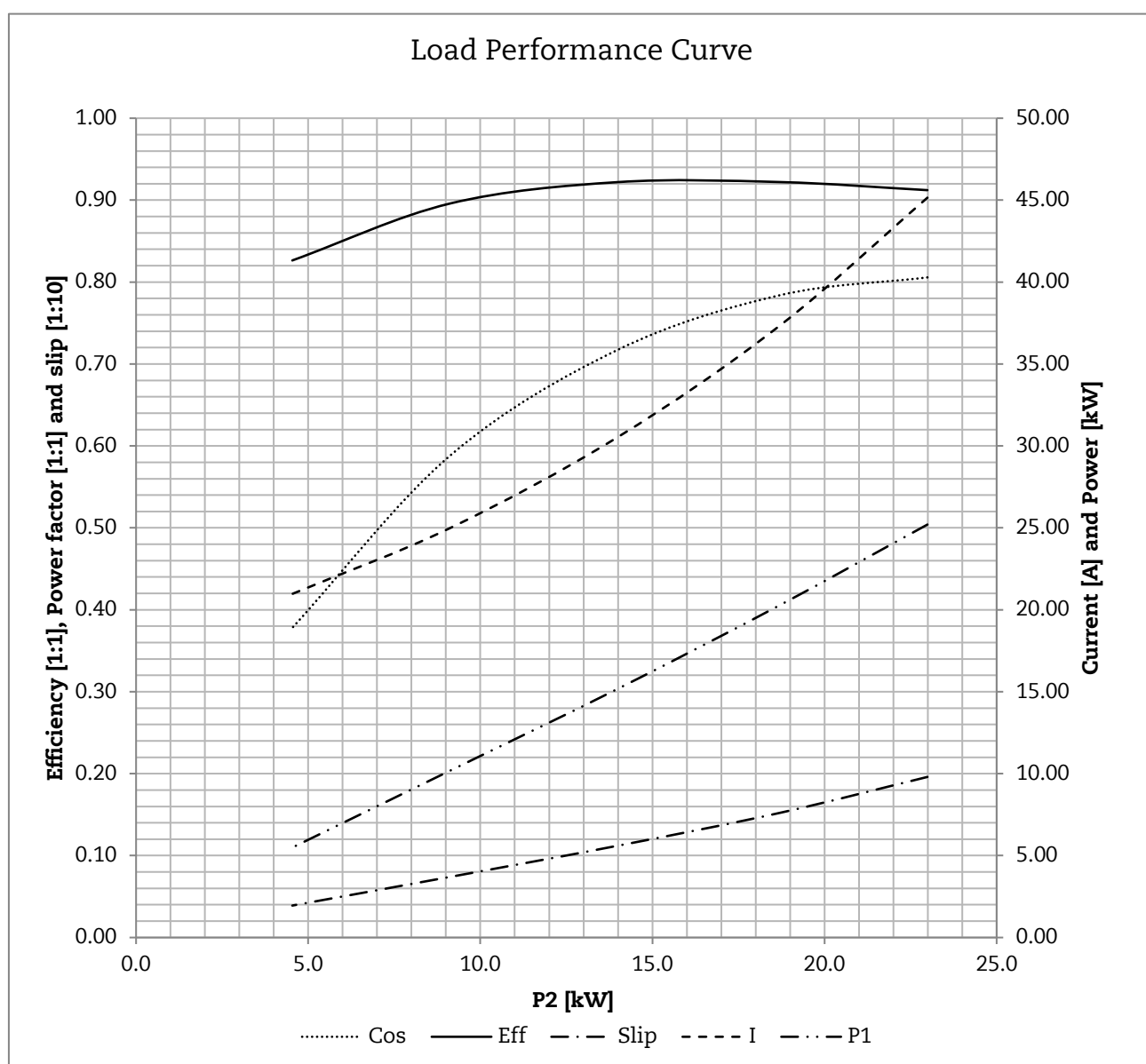
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
23.0	25.2	0.912	45.15	225.3	0.81
18.7	20.3	0.922	37.32	179.4	0.78
14.0	15.2	0.922	30.53	134.0	0.72
9.1	10.2	0.896	24.99	89.0	0.59
4.5	5.5	0.826	20.97	44.3	0.38



No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
504.3	44.98	2900.0	833.0
464.4	31.73	1610.0	414.5
423.5	22.84	970.0	214.8
383.7	17.44	680.0	125.2
343.3	14.20	520.0	83.0
302.5	11.85	410.0	57.8
262.2	9.93	340.0	40.6
222.2	8.19	270.0	27.6
181.7	6.51	240.0	17.4
141.2	4.97	210.0	10.2

