

Type Test Report

Report No.: TTR3IC21601A2SL

Test Result Data

Nameplate data

Type:	HMC3 160L-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	28.32 A	Frequency:	50 Hz
Output:	15 kW	Efficiency.:	92.1 %
Connection:	D	Cos ϕ :	0.83
Speed:	1474 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	469.88 W	No load current:	11.92 A
Machine loss:	78.39 W	Core loss:	312.95 W
Sound pressure level 1m:	70.5 dB(A)	Vibration:	0.8 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	28.32 A
Power:	15.00 kW	Temperature - rise:	67 K
Winding hotspot temperature:	82 °C	Bearing temperature:	45 °C
Frequency:	50 Hz	Ambient temperature:	15 °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	20.53	34.75	1467	122.07	0.85	91.33
100	400	50	16.28	28.32	1474	97.16	0.83	92.12
75	400	50	12.17	22.38	1481	72.52	0.78	92.45
50	400	50	8.17	17.33	1488	48.13	0.68	91.77
25	400	50	4.28	13.54	1494	23.97	0.46	87.60

Locked rotor test at rated voltage

Input power:	87.5 kW	Cos ϕ :	0.49
Starting current:	256.96 A	Starting torque:	308.28 Nm
Starting/Rated current:	9.07	Starting/Rated torque:	3.17

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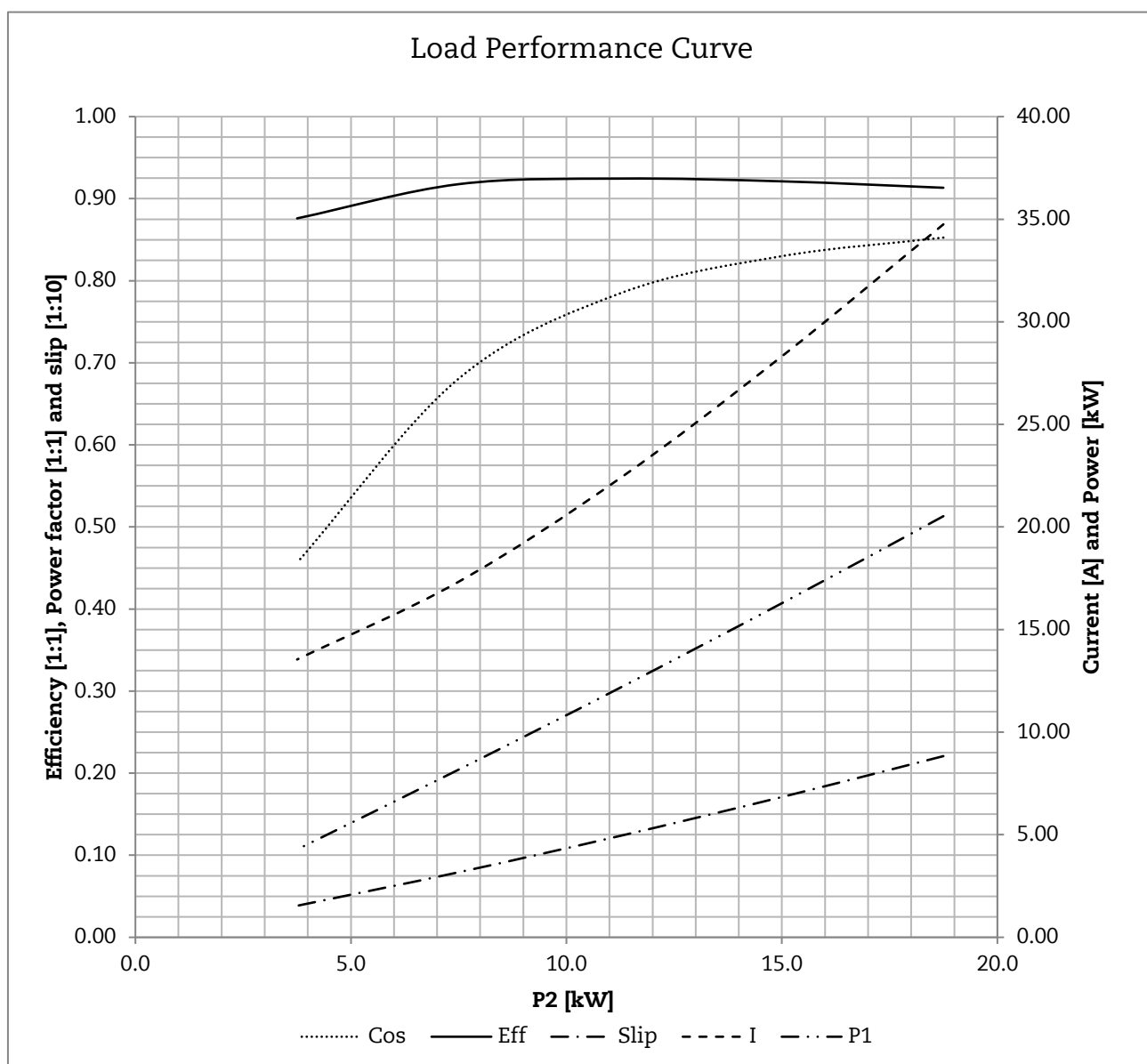
Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

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P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
18.7	20.5	0.913	34.75	122.1	0.85
15.0	16.3	0.921	28.32	97.2	0.83
11.2	12.2	0.924	22.38	72.5	0.78
7.5	8.2	0.918	17.33	48.1	0.68
3.8	4.3	0.876	13.54	24.0	0.46



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No-load test data at rated frequency

U _o V	I _o A	P _o W	P _{cul.}
495.8	26.70	1080.0	394.1
453.3	17.73	690.0	173.8
413.9	12.99	510.0	93.3
373.4	10.39	410.0	59.7
333.2	8.78	340.0	42.6
292.7	7.49	290.0	31.0
252.2	6.29	250.0	21.9
221.7	5.46	220.0	16.5
191.4	4.66	190.0	12.0
161.0	3.89	160.0	8.4

