

Type Test Report

Report No.: TTR3IC31601A1SL

Test Result Data

Nameplate data

Type:	HMC3 160L-6	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	21,24 A	Frequency:	50 Hz
Output:	11 kW	Efficiency.:	90,4 %
Connection:	Y	Cos ϕ :	0,83
Speed:	970 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	340,69 W	No load current:	8,33 A
Machine loss:	15,48 W	Core loss:	258,21 W
Sound pressure level 1m:	65 dB(A)	Vibration:	0,7 mm/s

Temperature rise test

Voltage:	400,0 V	Current:	21,24 A
Power:	11,00 kW	Temperature - rise:	67 K
Winding hotspot temperature:	92 °C	Bearing temperature:	66 °C
Frequency:	50 Hz	Ambient temperature:	25 °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	15,48	26,63	960	136,77	0,84	88,82
100	400	50	12,17	21,24	970	108,29	0,83	90,37
75	400	50	9,03	16,45	979	80,50	0,79	91,34
50	400	50	6,03	12,47	986	53,25	0,70	91,17
25	400	50	3,14	9,54	993	26,44	0,48	87,45

Locked rotor test at rated voltage

Input power:	37,7 kW	Cos ϕ :	0,42
Starting current:	129,19 A	Starting torque:	216,77 Nm
Starting/Rated current:	6,08	Starting/Rated torque:	2,00

05-12-2017

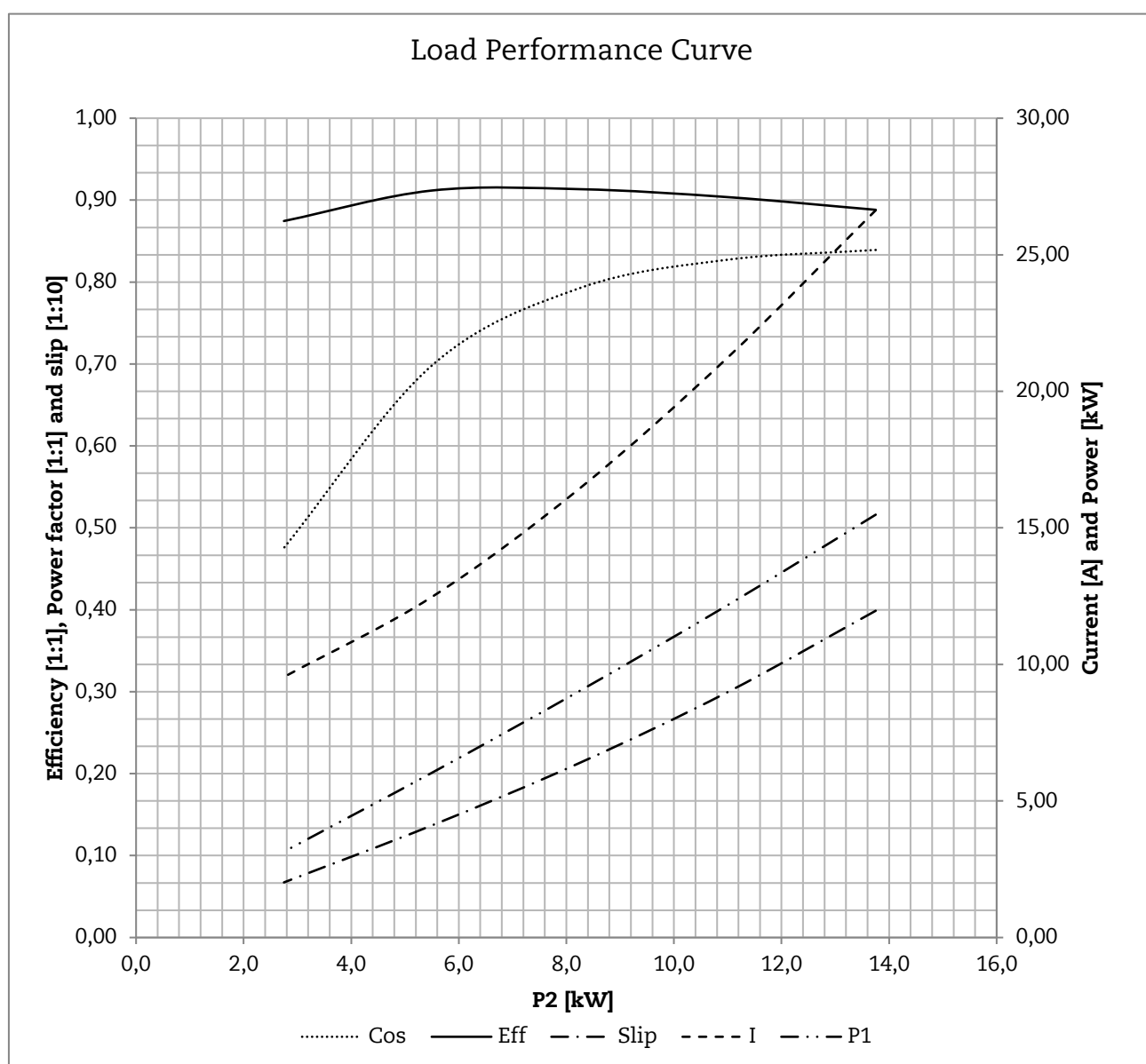
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
13,8	15,5	0,888	26,63	136,8	0,84
11,0	12,2	0,904	21,24	108,3	0,83
8,3	9,0	0,913	16,45	80,5	0,79
5,5	6,0	0,912	12,47	53,3	0,70
2,7	3,1	0,875	9,54	26,4	0,48



No-load test data at rated frequency

U ₀ V	I ₀ A	P ₀ W	P _{cul.}
503,3	17,38	973,0	291,6
463,8	12,65	612,0	154,5
423,8	9,58	414,0	88,6
381,2	7,56	297,0	55,2
339,3	6,30	225,0	38,3
298,3	5,34	175,0	27,5
260,5	4,50	137,9	19,5
219,9	3,67	102,7	13,0
180,6	2,95	76,0	8,4
141,3	2,27	53,0	5,0

