

Type Test Report

Report No.: TTR3IC31800A1SL

Test Result Data

Nameplate data

Type:	HMC3 180L-6	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	28,82 A	Frequency:	50 Hz
Output:	15 kW	Efficiency.:	91,2 %
Connection:	Y	Cos ϕ :	0,82
Speed:	982 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	527,1 W	No load current:	12,35 A
Machine loss:	77,79 W	Core loss:	349,72 W
Sound pressure level 1m:	70 dB(A)	Vibration:	0,3 mm/s

Temperature rise test

Voltage:	400,0 V	Current:	28,82 A
Power:	15,00 kW	Temperature - rise:	60 K
Winding hotspot temperature:	74 °C	Bearing temperature:	54 °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	20,76	35,56	977	183,26	0,84	90,29
100	400	50	16,44	28,82	982	145,81	0,82	91,24
75	400	50	12,28	22,83	987	108,82	0,78	91,63
50	400	50	8,25	17,81	992	72,22	0,67	90,88
25	400	50	4,35	13,97	996	35,96	0,45	86,31

Locked rotor test at rated voltage

Input power:	64,8 kW	Cos ϕ :	0,42
Starting current:	224,01 A	Starting torque:	307,08 Nm
Starting/Rated current:	7,77	Starting/Rated torque:	2,11

05-12-2017

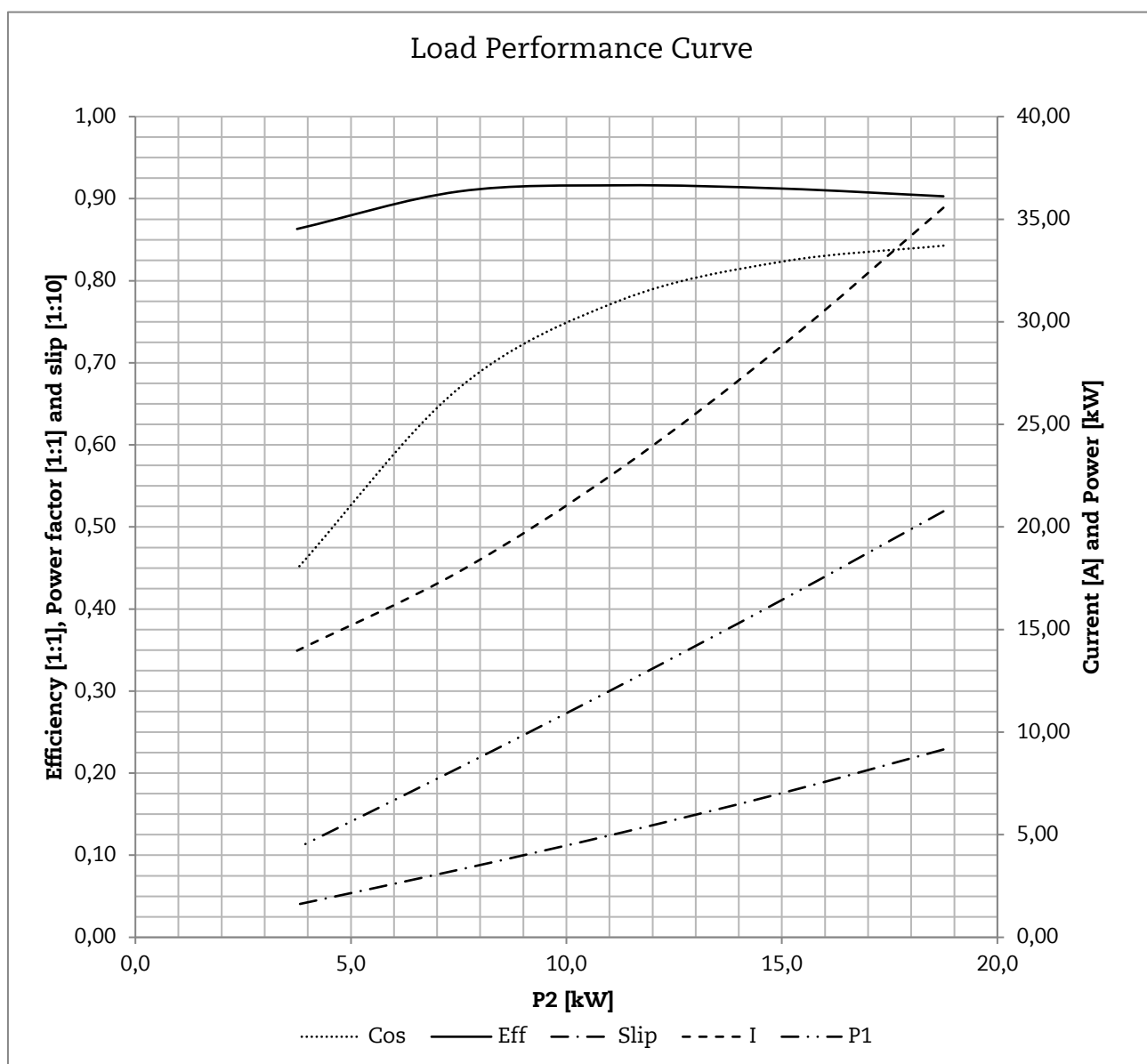
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
18,7	20,8	0,903	35,56	183,3	0,84
15,0	16,4	0,912	28,82	145,8	0,82
11,2	12,3	0,916	22,83	108,8	0,78
7,5	8,3	0,909	17,81	72,2	0,67
3,8	4,3	0,863	13,97	36,0	0,45



No-load test data at rated frequency

U ₀ V	I ₀ A	P ₀ W	P _{cul.}
500,3	27,57	1650,0	496,0
454,4	18,38	880,0	220,5
414,5	13,59	580,0	120,5
375,6	10,71	460,0	74,9
334,9	8,79	340,0	50,4
294,2	7,33	280,0	35,1
253,4	6,05	240,0	23,9
223,8	5,23	210,0	17,8
193,1	4,39	180,0	12,6
163,4	3,65	150,0	8,7

