

Type Test Report

Report No.: TTR3IC11800A1SL

Test Result Data

Nameplate data

Type:	HMC3 180M-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	38,07 A	Frequency:	50 Hz
Output:	22 kW	Efficiency.:	92,8 %
Connection:	Y	Cos ϕ :	0,90
Speed:	2965 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	869,24 W	No load current:	12,13 A
Machine loss:	355,97 W	Core loss:	472,15 W
Sound pressure level 1m:	79,2 dB(A)	Vibration:	1,0 mm/s

Temperature rise test

Voltage:	400,0 V	Current:	38,07 A
Power:	22,00 kW	Temperature - rise:	53 K
Winding hotspot temperature:	70 °C	Bearing temperature:	46 °C
Frequency:	50 Hz	Ambient temperature:	17 °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	29,70	47,14	2955	88,87	0,91	92,60
100	400	50	23,71	38,07	2965	70,86	0,90	92,79
75	400	50	17,84	29,61	2974	52,98	0,87	92,48
50	400	50	12,09	22,01	2983	35,21	0,79	91,00
25	400	50	6,44	15,51	2991	17,56	0,60	85,43

Locked rotor test at rated voltage

Input power:	133,4 kW	Cos ϕ :	0,51
Starting current:	380,04 A	Starting torque:	290,36 Nm
Starting/Rated current:	9,98	Starting/Rated torque:	4,10

05-12-2017

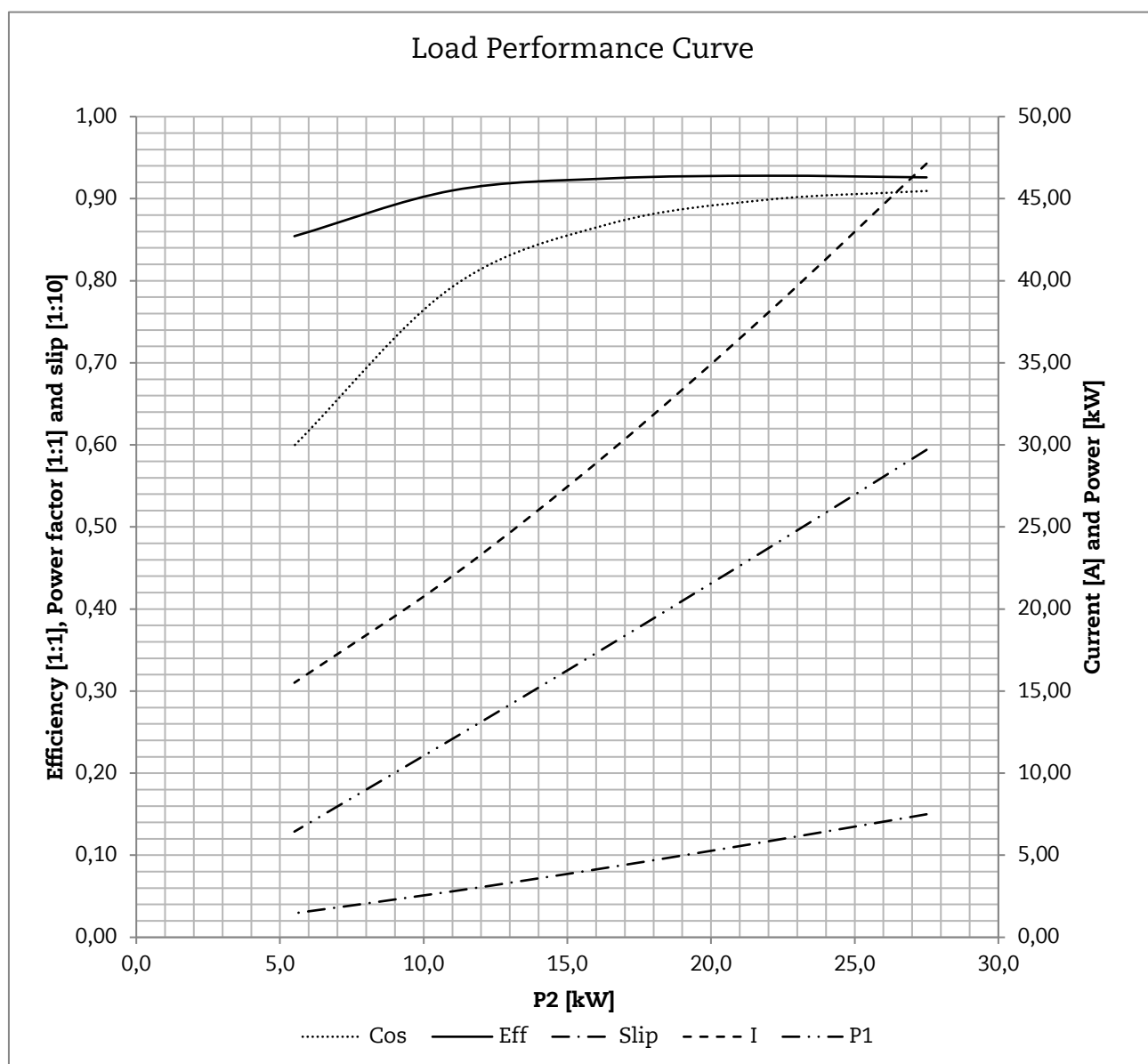
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
27,5	29,7	0,926	47,14	88,9	0,91
22,0	23,7	0,928	38,07	70,9	0,90
16,5	17,8	0,925	29,61	53,0	0,87
11,0	12,1	0,910	22,01	35,2	0,79
5,5	6,4	0,854	15,51	17,6	0,60



No-load test data at rated frequency

U ₀ V	I ₀ A	P ₀ W	P _{cul.}
499,0	22,69	1630,0	143,9
456,5	16,16	1150,0	73,0
415,9	13,02	920,0	47,4
375,6	10,97	810,0	33,6
335,1	9,46	710,0	25,0
294,8	8,16	650,0	18,6
254,4	6,91	580,0	13,3
223,9	6,10	550,0	10,4
193,7	5,25	510,0	7,7
163,4	4,48	470,0	5,6

