

Type Test Report

Report No.: TTR3IC12250A1SL

Test Result Data

Nameplate data

Type:	HMC3 225M-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	75,79 A	Frequency:	50 Hz
Output:	45 kW	Efficiency.:	94,0 %
Connection:	Y	Cos ϕ :	0,91
Speed:	2971 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	1332,97 W	No load current:	19,24 A
Machine loss:	705,38 W	Core loss:	588,33 W
Sound pressure level 1m:	84,4 dB(A)	Vibration:	0,8 mm/s

Temperature rise test

Voltage:	400,0 V	Current:	75,79 A
Power:	45,00 kW	Temperature - rise:	60 K
Winding hotspot temperature:	79 °C	Bearing temperature:	37 °C
Frequency:	50 Hz	Ambient temperature:	19 °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	60,01	94,72	2963	181,28	0,91	93,72
100	400	50	47,87	75,79	2971	144,64	0,91	94,00
75	400	50	35,94	57,78	2979	108,20	0,90	93,90
50	400	50	24,22	41,39	2986	71,95	0,84	92,87
25	400	50	12,71	27,33	2993	35,89	0,67	88,51

Locked rotor test at rated voltage

Input power:	202,2 kW	Cos ϕ :	0,44
Starting current:	659,08 A	Starting torque:	470,69 Nm
Starting/Rated current:	8,70	Starting/Rated torque:	3,25

05-12-2017

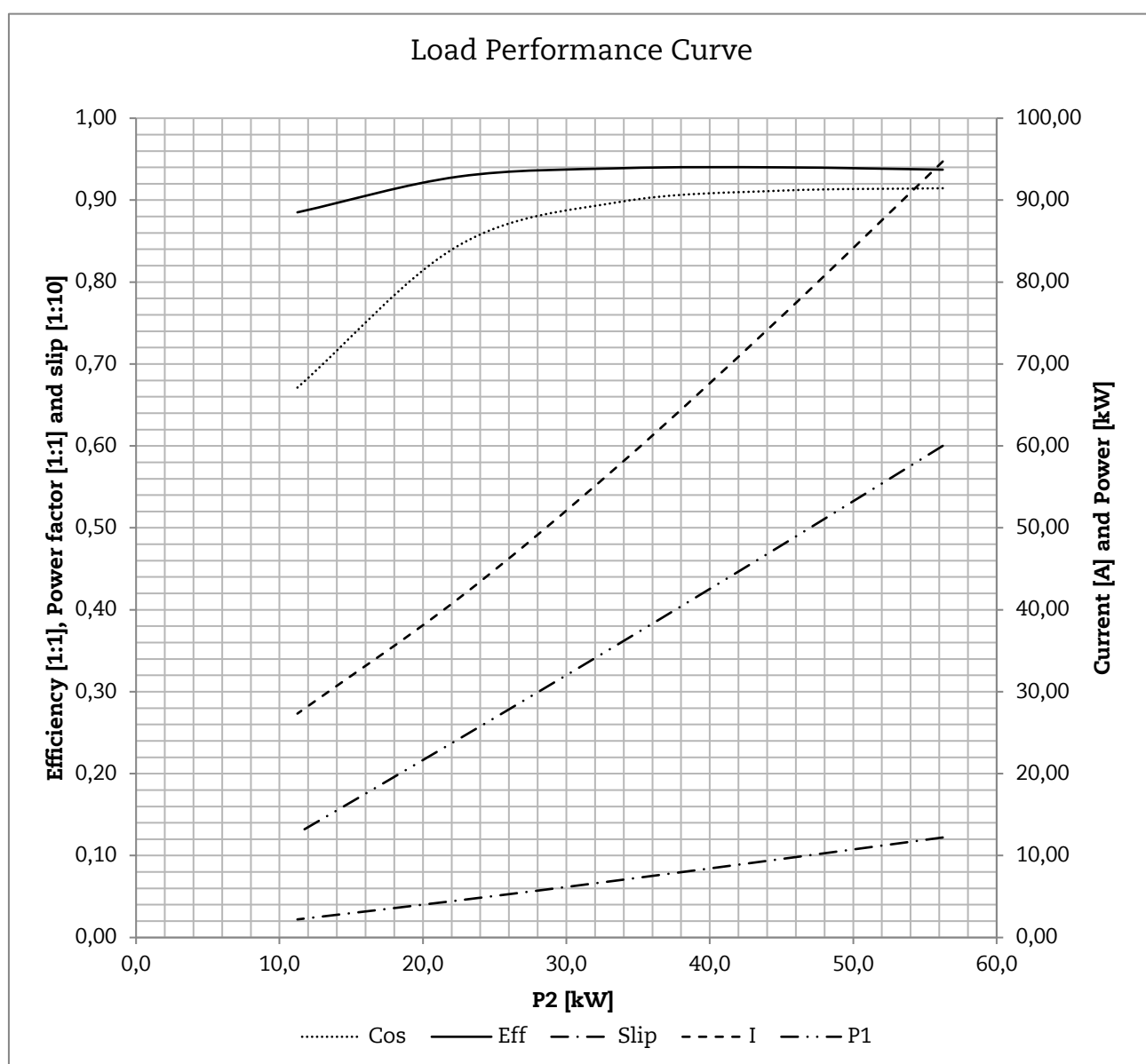
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
56,2	60,0	0,937	94,72	181,3	0,91
45,0	47,9	0,940	75,79	144,6	0,91
33,7	35,9	0,939	57,78	108,2	0,90
22,5	24,2	0,929	41,39	72,0	0,84
11,2	12,7	0,885	27,33	35,9	0,67



No-load test data at rated frequency

U ₀ V	I ₀ A	P ₀ W	P _{cul.}
499,4	39,66	2440,0	166,9
456,0	27,03	1810,0	77,5
415,8	20,75	1440,0	45,7
375,5	17,42	1210,0	32,2
335,2	14,78	1110,0	23,2
294,4	12,64	1030,0	17,0
254,4	10,77	960,0	12,3
224,1	9,33	910,0	9,2
193,7	8,22	870,0	7,2
163,6	7,25	830,0	5,6

