

# Type Test Report

Report No.: TTR3IC12500A1SL

## Test Result Data

### Nameplate data

Type:	HMC3 250M-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	93,97 A	Frequency:	50 Hz
Output:	55 kW	Efficiency.:	94,3 %
Connection:	Y	Cos $\phi$ :	0,90
Speed:	2979 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	1785,5 W	No load current:	27,65 A
Machine loss:	1038,22 W	Core loss:	691,5 W
Sound pressure level 1m:	86,4 dB(A)	Vibration:	0,8 mm/s

### Temperature rise test

Voltage:	400,0 V	Current:	93,97 A
Power:	55,00 kW	Temperature - rise:	57 K
Winding hotspot temperature:	79 °C	Bearing temperature:	60 °C
Frequency:	50 Hz	Ambient temperature:	22 °C

### Load performance test

Load %	Un V	f Hz	P1 KW	I1 A	N rpm	T Nm	Cos $\phi$ Cos $\phi$	Eff ( $\eta$ ) %
125	400	50	72,93	116,53	2973	220,85	0,90	94,28
<b>100</b>	<b>400</b>	<b>50</b>	<b>58,31</b>	<b>93,97</b>	<b>2979</b>	<b>176,34</b>	<b>0,90</b>	<b>94,33</b>
75	400	50	43,90	72,73	2984	132,01	0,87	93,96
50	400	50	29,69	53,47	2990	87,85	0,80	92,61
25	400	50	15,67	36,80	2995	43,85	0,61	87,71

### Locked rotor test at rated voltage

Input power:	278,1 kW	Cos $\phi$ :	0,40
Starting current:	1013,06 A	Starting torque:	601,95 Nm
Starting/Rated current:	10,78	Starting/Rated torque:	3,41

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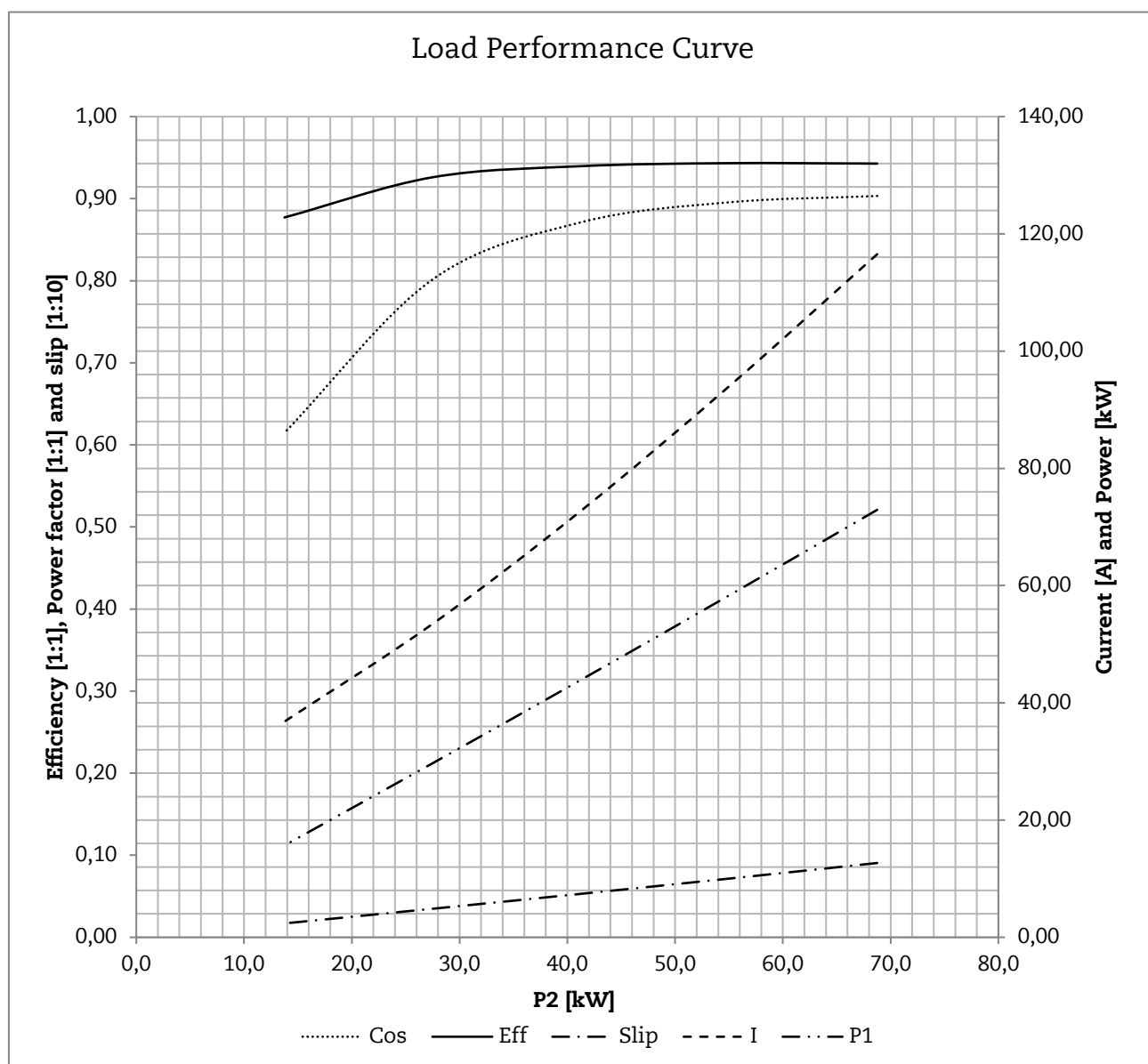
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
68,8	72,9	0,943	116,53	220,9	0,90
55,0	58,3	0,943	93,97	176,3	0,90
41,2	43,9	0,940	72,73	132,0	0,87
27,5	29,7	0,926	53,47	87,8	0,80
13,7	15,7	0,877	36,80	43,8	0,61



## No-load test data at rated frequency

U <sub>0</sub> V	I <sub>0</sub> A	P <sub>0</sub> W	P <sub>cul.</sub>
499,3	63,27	3200,0	292,0
455,1	40,68	2340,0	120,7
415,8	30,37	1900,0	67,3
374,4	24,33	1650,0	43,2
333,8	20,86	1520,0	31,7
294,1	17,86	1420,0	23,3
253,5	15,21	1340,0	16,9
223,1	13,22	1270,0	12,7
193,2	11,56	1210,0	9,7
163,5	10,15	1160,0	7,5

