

# Type Test Report

Report No.: TTR3IC12500A2SL

## 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:	D	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

6/19/2017

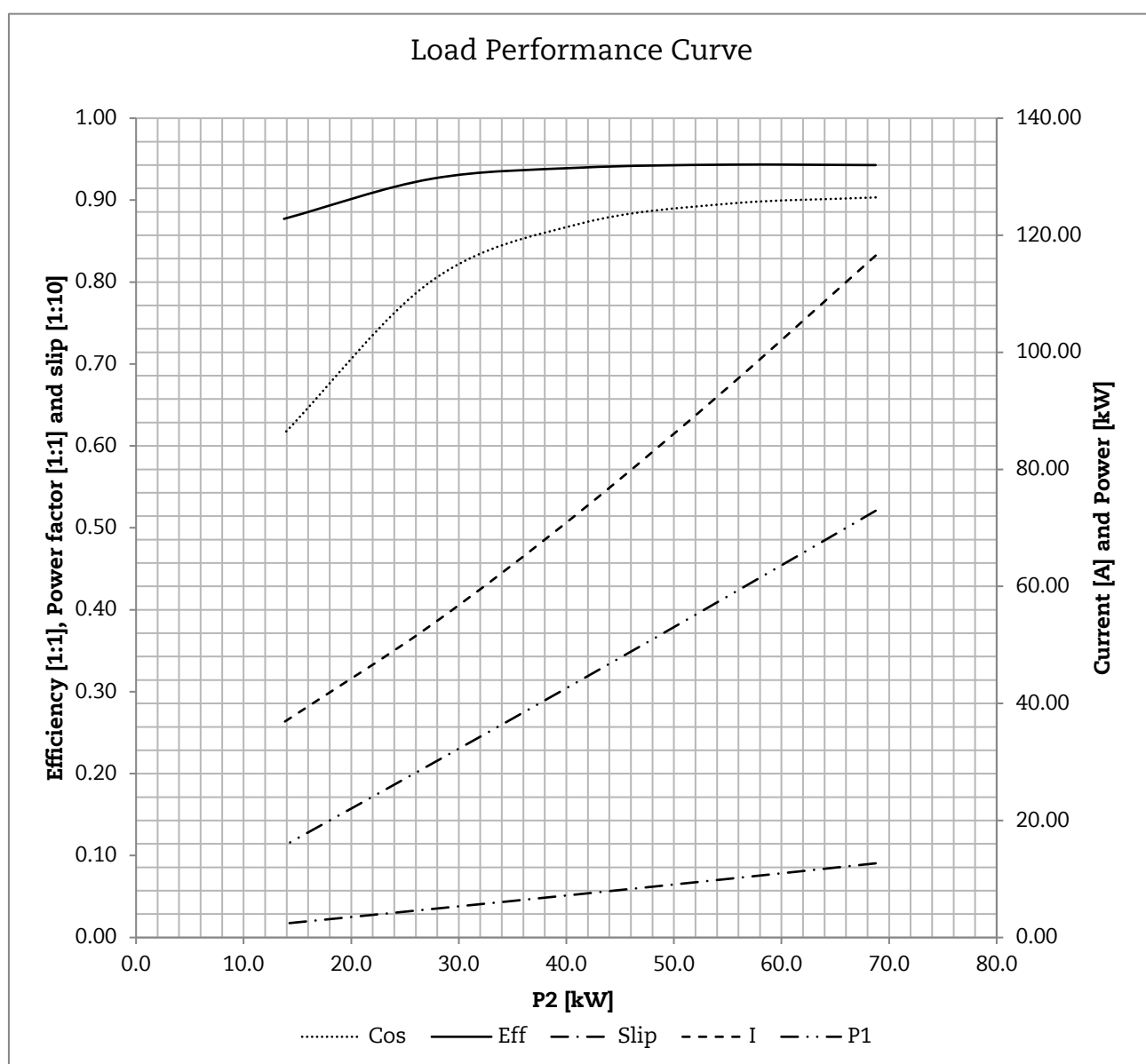
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) 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

Uo V	Io A	Po W	Pcul.
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

