

# Type Test Report

Report No.: TTR3IA11320A2SL

## Test Result Data

### Nameplate data

Type:	HMA3 132S1-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	9.83 A	Frequency:	50 Hz
Output:	5.5 kW	Efficiency.:	89.3 %
Connection:	D	Cos $\phi$ :	0.90
Speed:	2934 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	307.5 W	No load current:	3.24 A
Machine loss:	77.3 W	Core loss:	209.8 W
Sound pressure level 1m:	70 dB(A)	Vibration:	1.2 mm/s

### Temperature rise test

Voltage:	400.0 V	Current:	9.83 A
Power:	5.50 kW	Temperature - rise:	51 K
Winding hotspot temperature:	75 °C	Bearing temperature:	73 °C
Frequency:	50 Hz	Ambient temperature:	24 °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	7.74	12.20	2915	22.53	0.92	88.77
<b>100</b>	<b>400</b>	<b>50</b>	<b>6.16</b>	<b>9.83</b>	<b>2934</b>	<b>17.90</b>	<b>0.90</b>	<b>89.32</b>
75	400	50	4.62	7.69	2952	13.35	0.87	89.23
50	400	50	3.14	5.77	2969	8.85	0.79	87.55
25	400	50	1.71	4.07	2984	4.40	0.61	80.33

### Locked rotor test at rated voltage

Input power:	31.8 kW	Cos $\phi$ :	0.52
Starting current:	88.84 A	Starting torque:	44.42 Nm
Starting/Rated current:	9.04	Starting/Rated torque:	2.48

6/19/2017

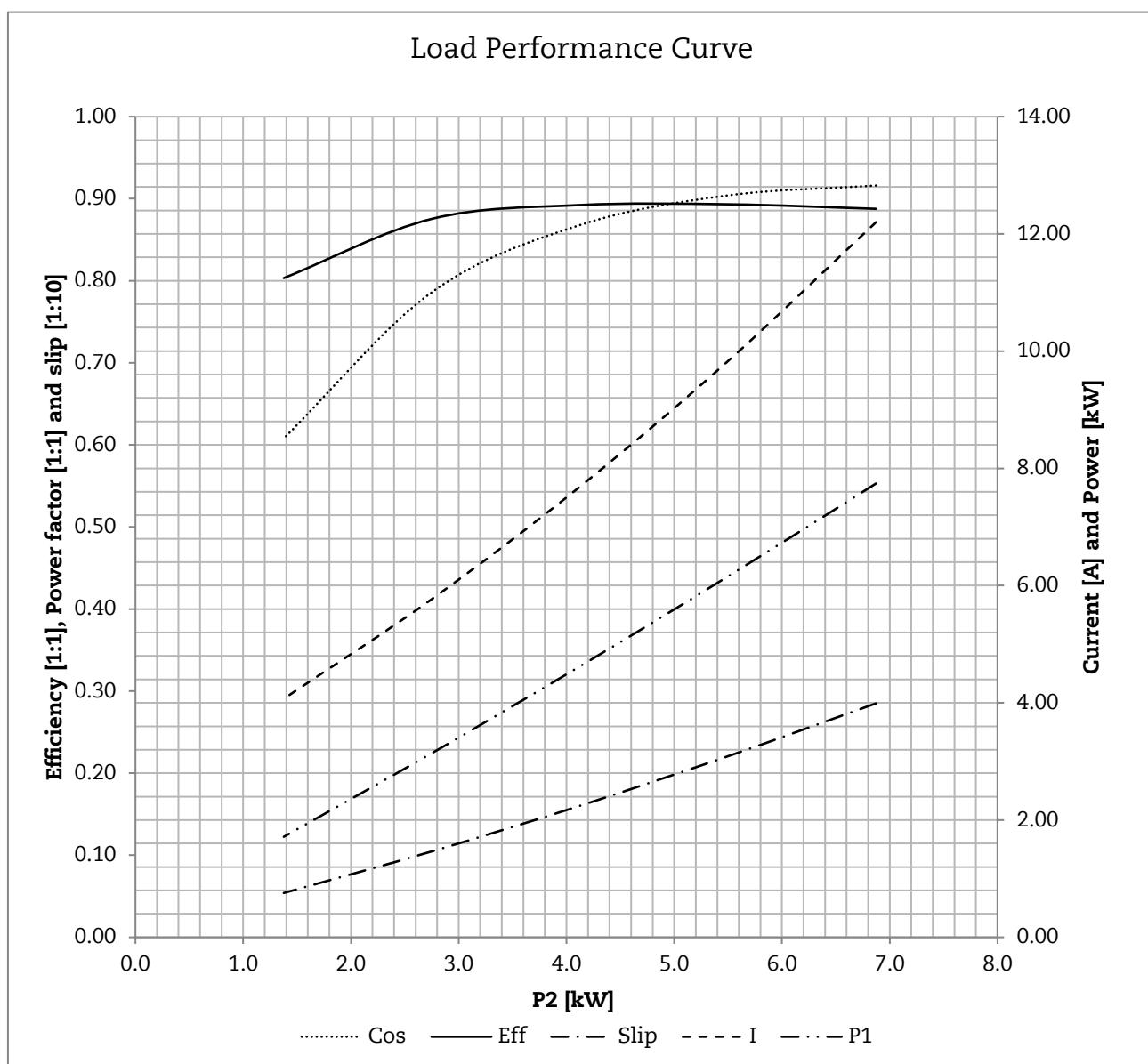
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
6.9	7.7	0.888	12.20	22.5	0.92
5.5	6.2	0.893	9.83	17.9	0.90
4.1	4.6	0.892	7.69	13.3	0.87
2.8	3.1	0.876	5.77	8.8	0.79
1.4	1.7	0.803	4.07	4.4	0.61



## No-load test data at rated frequency

U <sub>o</sub> V	I <sub>o</sub> A	P <sub>o</sub> W	P <sub>cul.</sub>
500.0	7.10	588.0	102.0
439.3	4.10	388.0	34.0
400.8	3.27	307.0	21.6
319.4	2.33	212.0	11.0
280.0	1.99	178.0	8.0
239.8	1.67	153.0	5.6
199.8	1.38	133.0	3.9
159.9	1.13	109.0	2.6
119.9	0.93	95.0	1.7
100.0	0.82	77.0	0.5

