

# Type Test Report

Report No.: TTR3IA11321A2SL

## Test Result Data

### Nameplate data

Type:	HMA3 132S2-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	13.68 A	Frequency:	50 Hz
Output:	7.5 kW	Efficiency.:	90.2 %
Connection:	D	Cos $\phi$ :	0.88
Speed:	2932 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	349.96 W	No load current:	5.25 A
Machine loss:	58.32 W	Core loss:	255.92 W
Sound pressure level 1m:	70 dB(A)	Vibration:	1.0 mm/s

### Temperature rise test

Voltage:	400.0 V	Current:	13.68 A
Power:	7.50 kW	Temperature - rise:	57 K
Winding hotspot temperature:	73 °C	Bearing temperature:	67 °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 $\phi$ Cos $\phi$	Eff ( $\eta$ ) %
125	400	50	10.48	16.89	2913	30.74	0.90	89.47
<b>100</b>	<b>400</b>	<b>50</b>	<b>8.31</b>	<b>13.68</b>	<b>2932</b>	<b>24.42</b>	<b>0.88</b>	<b>90.21</b>
75	400	50	6.23	10.75	2951	18.21	0.84	90.32
50	400	50	4.21	8.20	2968	12.07	0.74	89.08
25	400	50	2.25	6.13	2983	6.00	0.53	83.29

### Locked rotor test at rated voltage

Input power:	45.0 kW	Cos $\phi$ :	0.51
Starting current:	126.46 A	Starting torque:	67.91 Nm
Starting/Rated current:	9.24	Starting/Rated torque:	2.78

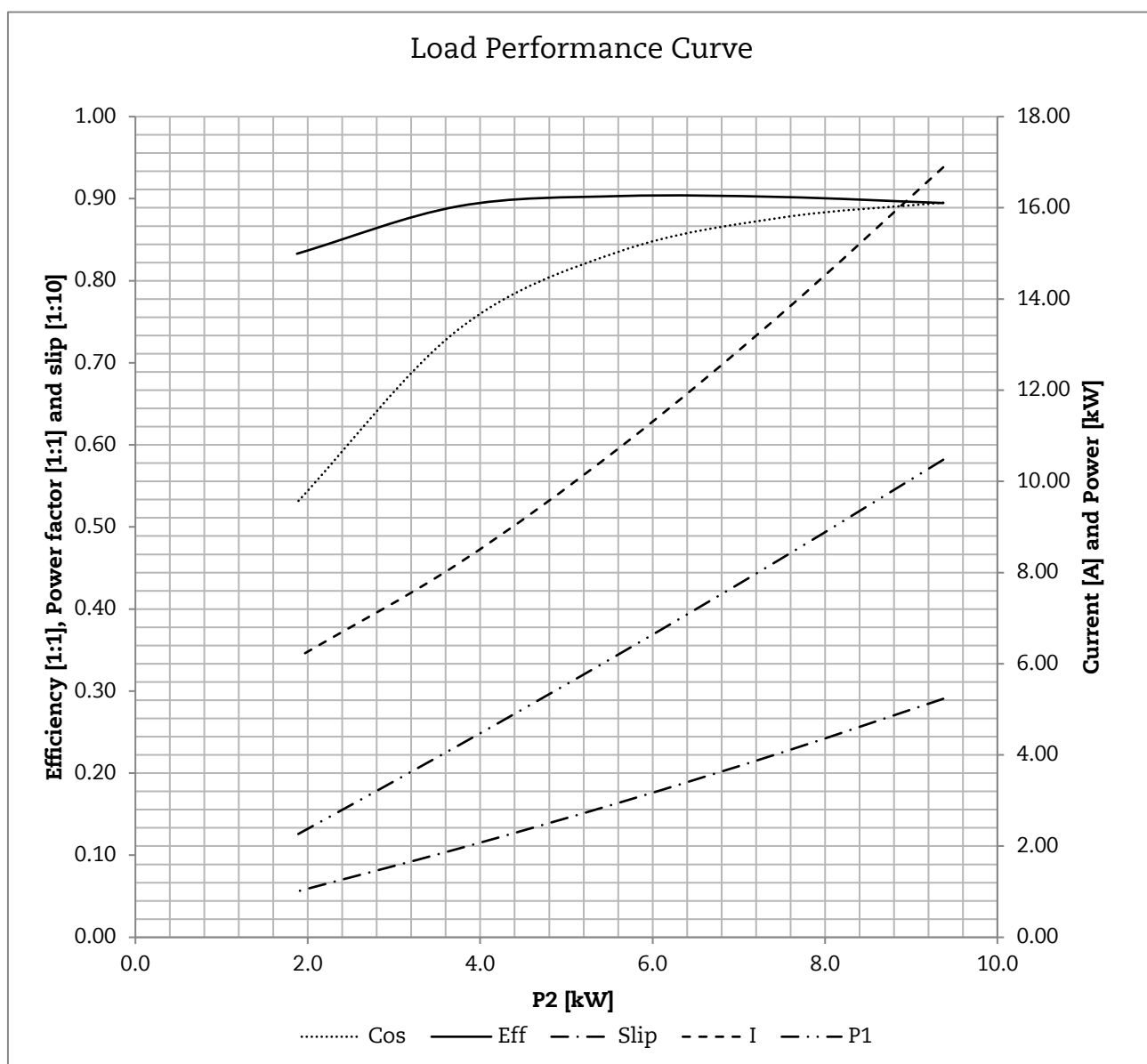
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## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
9.4	10.5	0.895	16.89	30.7	0.90
7.5	8.3	0.902	13.68	24.4	0.88
5.6	6.2	0.903	10.75	18.2	0.84
3.7	4.2	0.891	8.20	12.1	0.74
1.9	2.2	0.833	6.13	6.0	0.53



## 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>
499.5	11.37	690.0	167.8
455.9	7.54	480.0	73.8
415.9	5.35	380.0	42.6
375.4	4.66	310.0	28.2
334.9	3.90	240.0	19.7
294.8	3.34	210.0	14.5
254.2	2.79	180.0	10.1
223.9	2.43	150.0	7.7
193.7	2.07	130.0	5.6
163.6	1.76	110.0	4.0

