

Type Test Report

Report No.: TTR3IA11000A1SL

Test Result Data

Nameplate data

Type:	HMA3 100L-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	5.68 A	Frequency:	50 Hz
Output:	3 kW	Efficiency.:	87.4 %
Connection:	Y	Cos ϕ :	0.87
Speed:	2913 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	165.4 W	No load current:	2.40 A
Machine loss:	55 W	Core loss:	88.3 W
Sound pressure level 1m:	65 dB(A)	Vibration:	1.1 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	5.68 A
Power:	3.00 kW	Temperature - rise:	59 K
Winding hotspot temperature:	85 °C	Bearing temperature:	70 °C
Frequency:	50 Hz	Ambient temperature:	25 °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	4.35	7.06	2884	12.42	0.89	86.27
100	400	50	3.43	5.68	2913	9.84	0.87	87.38
75	400	50	2.56	4.49	2937	7.32	0.82	87.88
50	400	50	1.73	3.49	2958	4.84	0.72	86.78
25	400	50	0.94	2.67	2978	2.40	0.51	79.99

Locked rotor test at rated voltage

Input power:	23.8 kW	Cos ϕ :	0.65
Starting current:	52.59 A	Starting torque:	33.71 Nm
Starting/Rated current:	9.26	Starting/Rated torque:	3.43

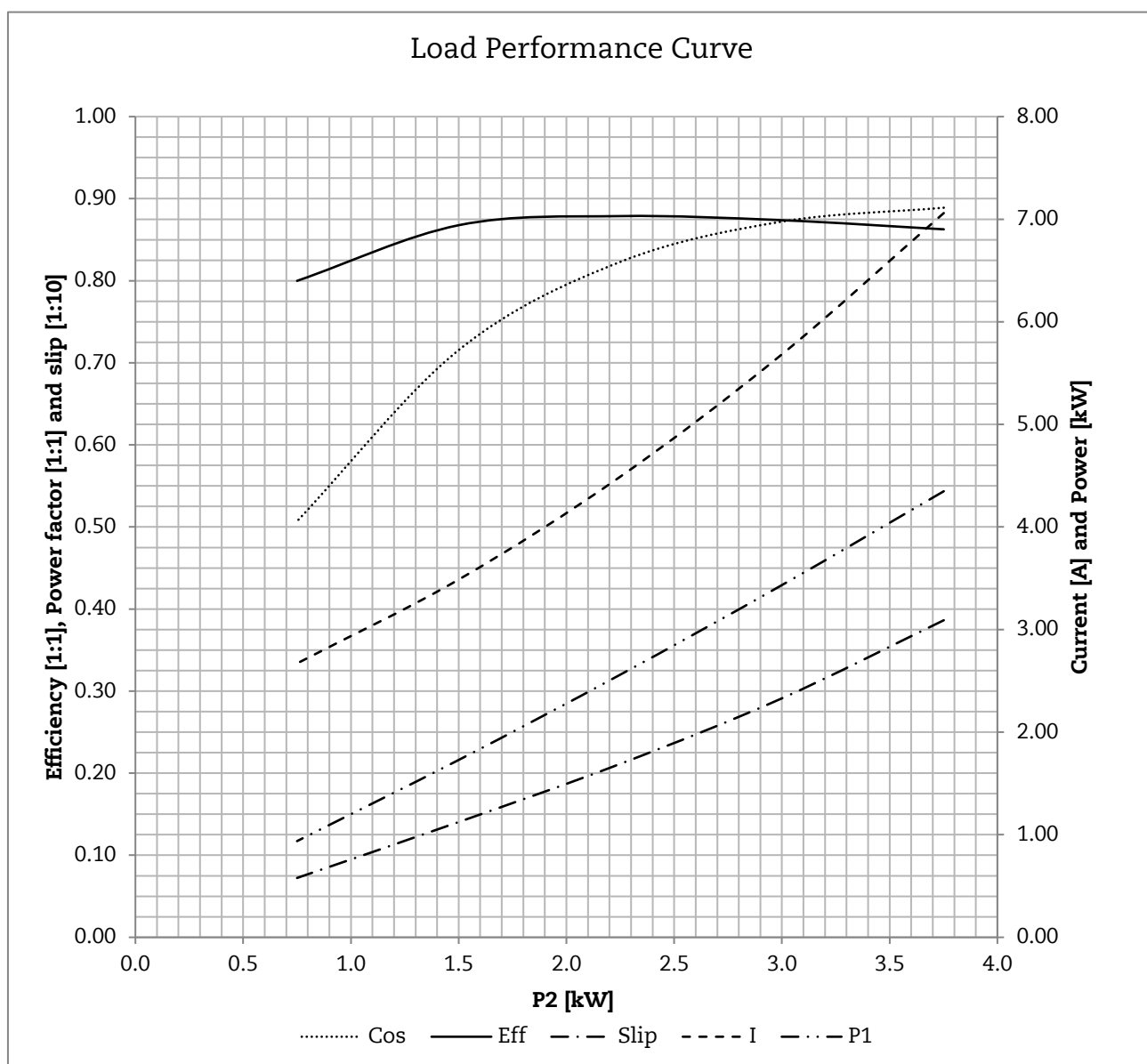
7/3/2017

HOYER
EXCEEDING EXPECTATIONS

www.hoyermotors.com

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
3.8	4.3	0.863	7.06	12.4	0.89
3.0	3.4	0.874	5.68	9.8	0.87
2.2	2.6	0.879	4.49	7.3	0.82
1.5	1.7	0.868	3.49	4.8	0.72
0.8	0.9	0.800	2.67	2.4	0.51



No-load test data at rated frequency

U _o V	I _o A	P _o W	P _{cul.}
500.1	7.39	546.0	228.8
440.7	3.73	240.0	58.3
399.0	2.34	168.0	22.9
319.6	1.35	113.0	7.6
280.0	1.09	101.0	5.5
239.9	0.94	92.0	3.7
200.1	0.79	79.0	2.6
159.8	0.69	72.0	2.0
120.0	0.67	67.0	1.9
100.0	0.62	61.0	0.9

