

Type Test Report

Report No.: TTR3IC13150A2SL

Test Result Data

Nameplate data

Type:	HMC3 315S-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	179.28 A	Frequency:	50 Hz
Output:	110 kW	Efficiency.:	95.8 %
Connection:	D	Cos ϕ :	0.92
Speed:	2976 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	2281.37 W	No load current:	41.33 A
Machine loss:	805.04 W	Core loss:	1416.85 W
Sound pressure level 1m:	85.3 dB(A)	Vibration:	0.8 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	179.28 A
Power:	110.00 kW	Temperature - rise:	62 K
Winding hotspot temperature:	91 °C	Bearing temperature:	57 °C
Frequency:	50 Hz	Ambient temperature:	31 °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	143.81	224.45	2969	442.30	0.92	95.61
100	400	50	114.80	179.28	2976	353.02	0.92	95.81
75	400	50	86.18	135.38	2982	264.20	0.92	95.72
50	400	50	57.91	94.37	2988	175.77	0.89	94.97
25	400	50	29.96	57.90	2994	87.72	0.75	91.79

Locked rotor test at rated voltage

Input power:	302.0 kW	Cos ϕ :	0.33
Starting current:	1338.39 A	Starting torque:	754.37 Nm
Starting/Rated current:	7.47	Starting/Rated torque:	2.14

6/19/2017

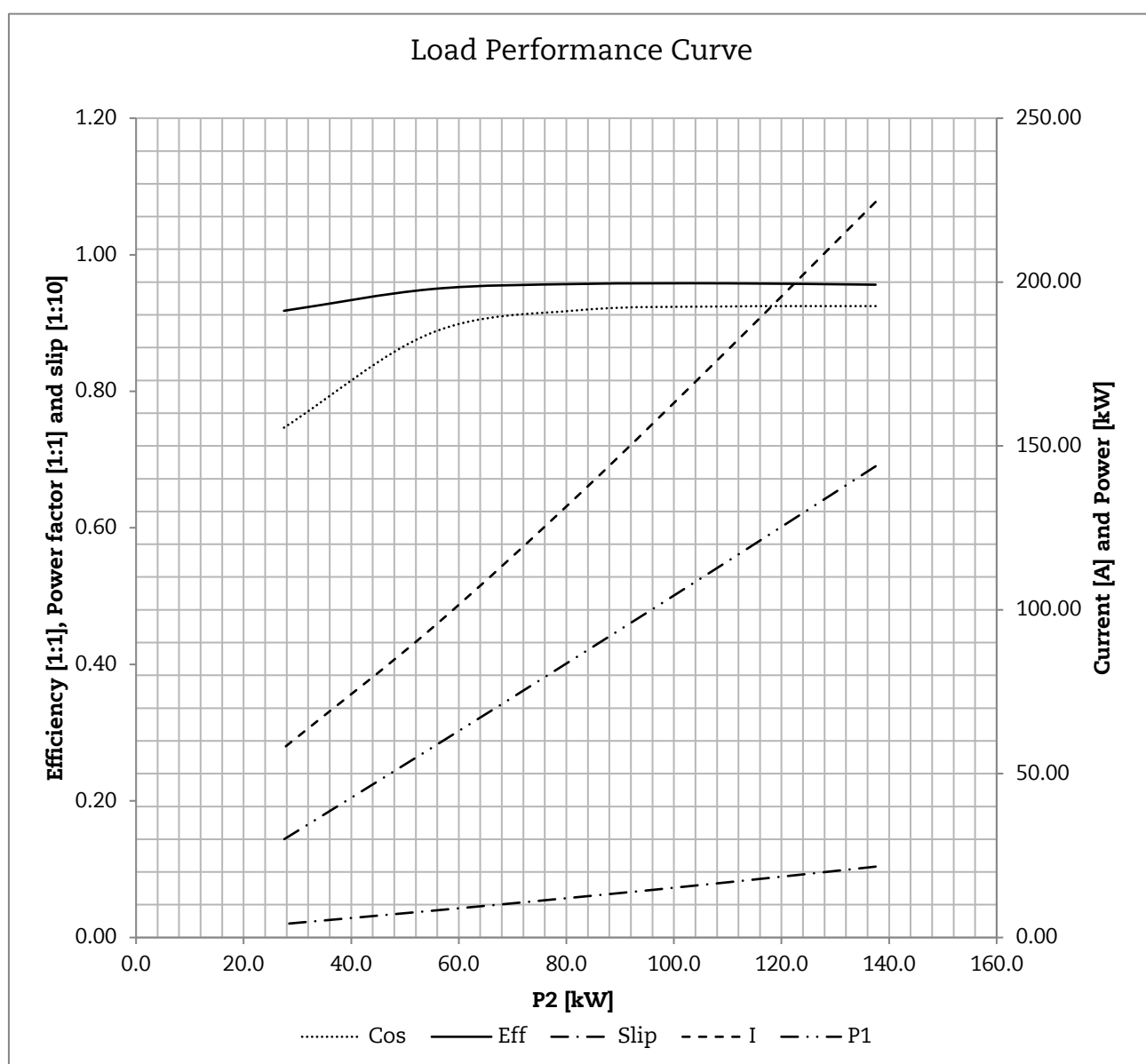
HOYER
EXCEEDING EXPECTATIONS

www.hoyermotors.com

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 (η) P2/P1	I A	T Nm	Cos ϕ
137.5	143.8	0.956	224.45	442.3	0.92
110.0	114.8	0.958	179.28	353.0	0.92
82.5	86.2	0.957	135.38	264.2	0.92
55.0	57.9	0.950	94.37	175.8	0.89
27.5	30.0	0.918	57.90	87.7	0.75



No-load test data at rated frequency

U _o V	I _o A	P _o W	P _{cul.}
500.5	59.61	3530.0	123.8
461.7	53.04	2860.0	98.0
423.0	44.64	2450.0	69.4
383.3	39.04	2180.0	53.1
340.3	33.95	1970.0	40.1
299.6	28.55	1770.0	28.4
257.6	23.19	1570.0	18.7
220.3	18.05	1380.0	11.3
178.4	14.34	1210.0	7.2
140.6	11.80	1060.0	4.9

