

Type Test Report

Report No.: TTR3IC23150A2SL

Test Result Data

Nameplate data

Type:	HMC3 315S-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	186.87 A	Frequency:	50 Hz
Output:	110 kW	Efficiency.:	95.7 %
Connection:	D	Cos ϕ :	0.90
Speed:	1487 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	2513.53 W	No load current:	59.27 A
Machine loss:	898.08 W	Core loss:	1471.06 W
Sound pressure level 1m:	81.2 dB(A)	Vibration:	0.6 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	186.87 A
Power:	110.00 kW	Temperature - rise:	72 K
Winding hotspot temperature:	103 °C	Bearing temperature:	64 °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	142.93	232.64	1483	885.21	0.89	95.13
100	400	50	116.17	186.87	1487	706.50	0.90	95.71
75	400	50	87.39	144.36	1490	528.67	0.87	95.76
50	400	50	57.57	106.28	1494	351.69	0.78	94.38
25	400	50	29.75	74.08	1497	175.48	0.58	90.48

Locked rotor test at rated voltage

Input power:	395.4 kW	Cos ϕ :	0.37
Starting current:	1538.37 A	Starting torque:	1835.33 Nm
Starting/Rated current:	8.23	Starting/Rated torque:	2.60

6/19/2017

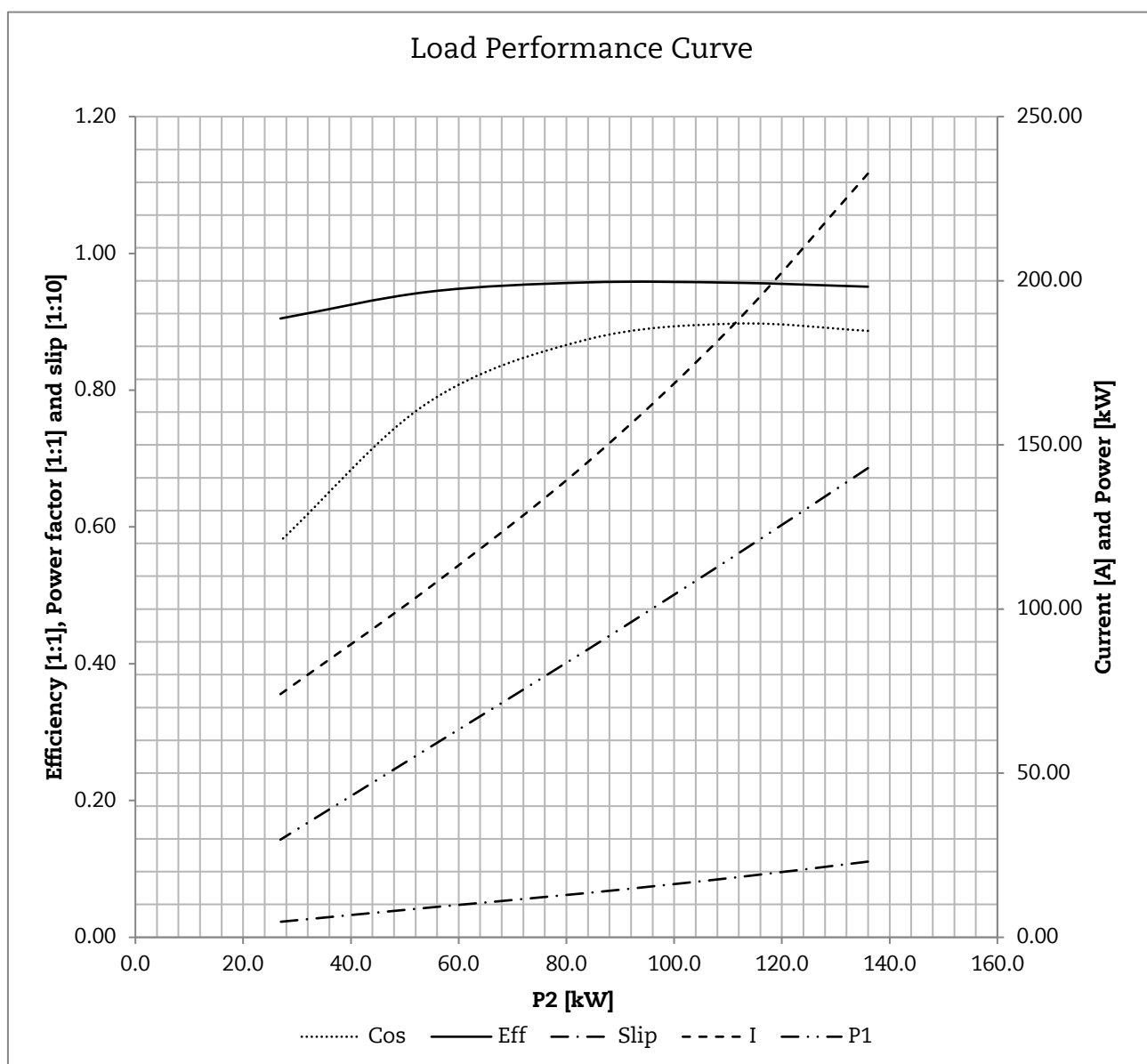
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
136.0	142.9	0.951	232.64	885.2	0.89
111.2	116.2	0.957	186.87	706.5	0.90
83.7	87.4	0.958	144.36	528.7	0.87
54.3	57.6	0.944	106.28	351.7	0.78
26.9	29.7	0.905	74.08	175.5	0.58



No-load test data at rated frequency

U _o V	I _o A	P _o W	P _{cul.}
499.7	129.81	6304.0	646.6
456.8	87.08	3766.0	291.0
422.0	65.32	2706.0	163.7
380.8	51.77	2135.0	102.8
341.2	44.08	1845.0	74.6
300.9	37.57	1597.0	54.2
259.5	35.53	1510.0	48.4
219.9	33.07	1380.0	42.0
181.1	32.16	1205.0	39.7
140.0	30.46	1041.0	35.6

