

# Type Test Report

Report No.: TTR3IC13153A2SL

## Test Result Data

### Nameplate data

Type:	HMC3 315L2-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	331.22 A	Frequency:	50 Hz
Output:	200 kW	Efficiency.:	95.8 %
Connection:	D	Cos $\phi$ :	0.91
Speed:	2981 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	4576.92 W	No load current:	86.80 A
Machine loss:	1379.21 W	Core loss:	3079.94 W
Sound pressure level 1m:	90.2 dB(A)	Vibration:	0.7 mm/s

### Temperature rise test

Voltage:	400.0 V	Current:	331.22 A
Power:	200.00 kW	Temperature - rise:	79 K
Winding hotspot temperature:	110 °C	Bearing temperature:	59 °C
Frequency:	50 Hz	Ambient temperature:	30 °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	261.01	410.54	2975	802.39	0.92	95.78
<b>100</b>	<b>400</b>	<b>50</b>	<b>208.66</b>	<b>331.22</b>	<b>2981</b>	<b>640.81</b>	<b>0.91</b>	<b>95.84</b>
75	400	50	156.89	254.34	2986	479.80	0.89	95.60
50	400	50	105.66	183.15	2991	319.34	0.83	94.64
25	400	50	54.93	120.90	2995	159.42	0.66	91.03

### Locked rotor test at rated voltage

Input power:	650.8 kW	Cos $\phi$ :	0.33
Starting current:	2851.03 A	Starting torque:	1354.46 Nm
Starting/Rated current:	8.61	Starting/Rated torque:	2.11

6/19/2017

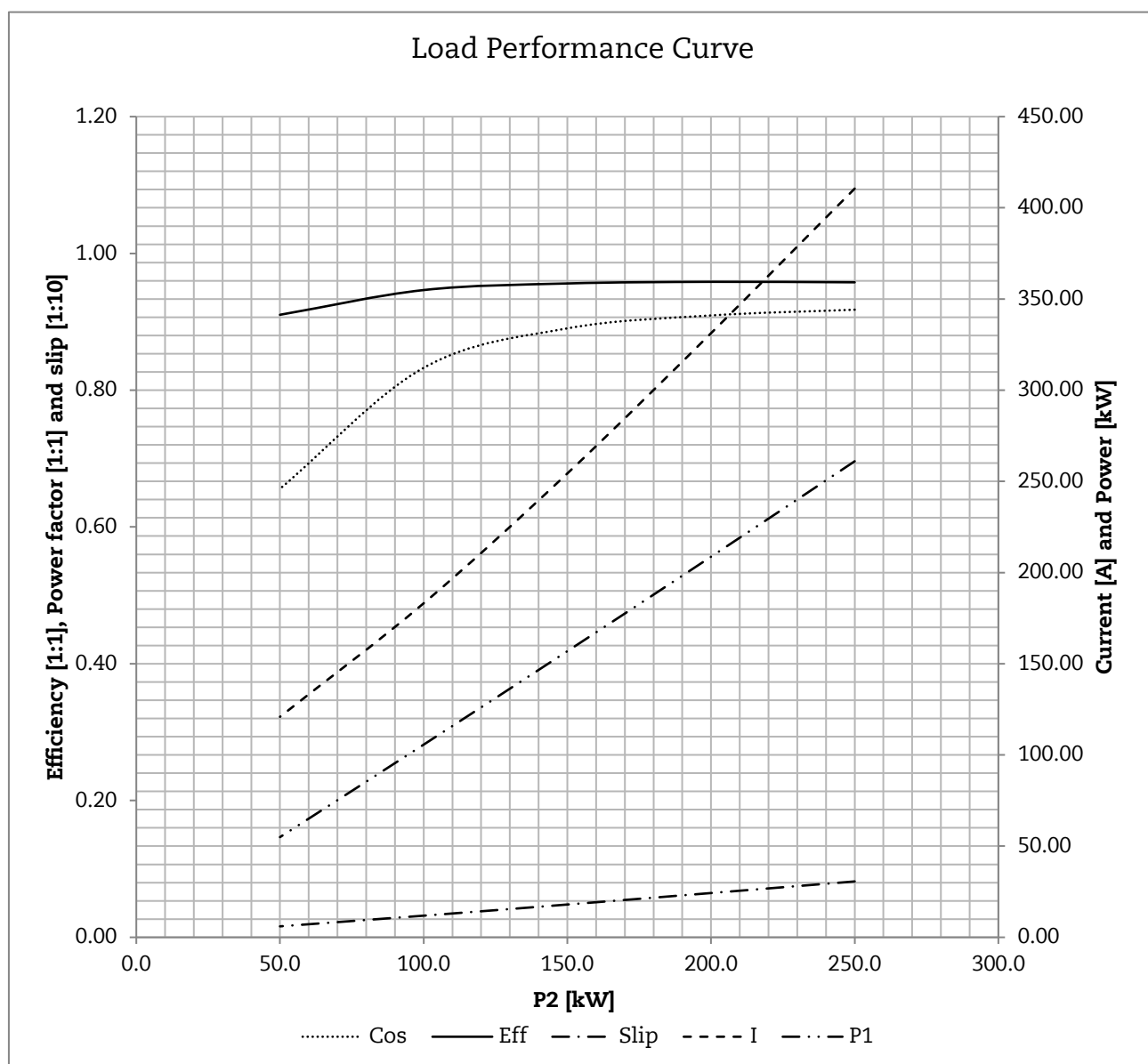
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
250.0	261.0	0.958	410.54	802.4	0.92
200.0	208.7	0.958	331.22	640.8	0.91
150.0	156.9	0.956	254.34	479.8	0.89
100.0	105.7	0.946	183.15	319.3	0.83
50.0	54.9	0.910	120.90	159.4	0.66



## No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
500.5	235.68	10700.0	868.1
457.9	149.58	6584.0	349.7
419.0	101.14	4993.0	159.9
379.0	76.11	4231.0	90.5
338.8	67.53	3789.0	71.3
300.6	59.68	3301.0	55.7
262.2	52.29	2950.0	42.7
220.0	46.34	2607.0	33.6
181.6	41.56	2276.0	27.0
138.6	37.10	1955.0	21.5

