

# Type Test Report

Report No.: TTR3IC23153A2SL

## Test Result Data

### Nameplate data

Type:	HMC3 315L2-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	327.32 A	Frequency:	50 Hz
Output:	200 kW	Efficiency.:	96.3 %
Connection:	D	Cos $\phi$ :	0.93
Speed:	1487 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	3246.48 W	No load current:	76.23 A
Machine loss:	1743.39 W	Core loss:	1379.83 W
Sound pressure level 1m:	89.6 dB(A)	Vibration:	0.4 mm/s

### Temperature rise test

Voltage:	400.0 V	Current:	327.32 A
Power:	200.00 kW	Temperature - rise:	74 K
Winding hotspot temperature:	116 °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 $\phi$ Cos $\phi$	Eff ( $\eta$ ) %
125	400	50	258.40	411.36	1483	1609.91	0.91	95.69
<b>100</b>	<b>400</b>	<b>50</b>	<b>209.96</b>	<b>327.32</b>	<b>1487</b>	<b>1284.64</b>	<b>0.93</b>	<b>96.33</b>
75	400	50	158.36	248.03	1490	961.28	0.92	96.57
50	400	50	103.96	175.15	1494	639.44	0.86	95.71
25	400	50	52.40	110.91	1497	319.06	0.68	92.79

### Locked rotor test at rated voltage

Input power:	548.6 kW	Cos $\phi$ :	0.33
Starting current:	2372.05 A	Starting torque:	2671.62 Nm
Starting/Rated current:	7.25	Starting/Rated torque:	2.08

6/19/2017

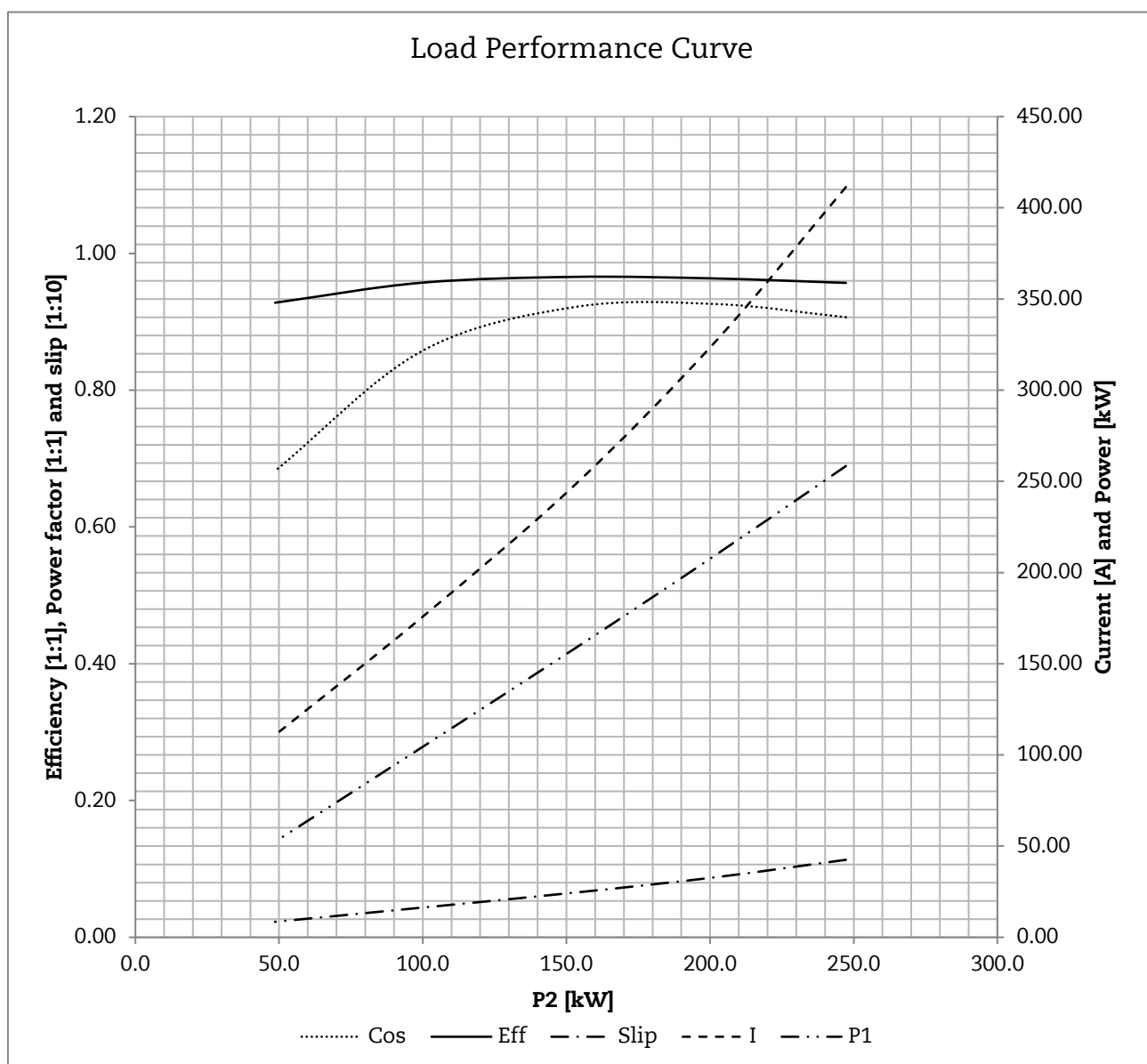
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
247.3	258.4	0.957	411.36	1609.9	0.91
202.3	210.0	0.963	327.32	1284.6	0.93
152.9	158.4	0.966	248.03	961.3	0.92
99.5	104.0	0.957	175.15	639.4	0.86
48.6	52.4	0.928	110.91	319.1	0.68



## No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
499.8	147.92	6644.0	444.7
462.3	107.25	4538.0	233.8
420.8	81.93	3545.0	136.4
381.5	69.49	2954.0	98.2
340.0	59.61	2582.0	72.2
297.5	51.42	2027.0	53.7
262.4	50.04	2001.0	50.9
219.5	48.16	1987.0	47.1
179.2	46.12	1900.0	43.2
139.4	44.18	1850.0	39.7

