

# Type Test Report

Report No.: TTR3IC23151A2SL

## Test Result Data

### Nameplate data

Type:	HMC3 315M-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	220.74 A	Frequency:	50 Hz
Output:	132 kW	Efficiency.:	95.8 %
Connection:	D	Cos $\phi$ :	0.91
Speed:	1488 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	3104.95 W	No load current:	61.48 A
Machine loss:	1127.77 W	Core loss:	1847.63 W
Sound pressure level 1m:	85.3 dB(A)	Vibration:	0.6 mm/s

### Temperature rise test

Voltage:	400.0 V	Current:	220.74 A
Power:	132.00 kW	Temperature - rise:	73 K
Winding hotspot temperature:	104 °C	Bearing temperature:	70 °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	168.23	276.48	1484	1061.54	0.88	94.85
<b>100</b>	<b>400</b>	<b>50</b>	<b>138.98</b>	<b>220.74</b>	<b>1488</b>	<b>847.35</b>	<b>0.91</b>	<b>95.81</b>
75	400	50	105.01	168.96	1491	634.19	0.90	95.87
50	400	50	69.32	122.03	1494	421.94	0.82	94.44
25	400	50	35.55	81.89	1497	210.56	0.63	90.17

### Locked rotor test at rated voltage

Input power:	457.0 kW	Cos $\phi$ :	0.37
Starting current:	1787.01 A	Starting torque:	2126.82 Nm
Starting/Rated current:	8.10	Starting/Rated torque:	2.51

6/19/2017

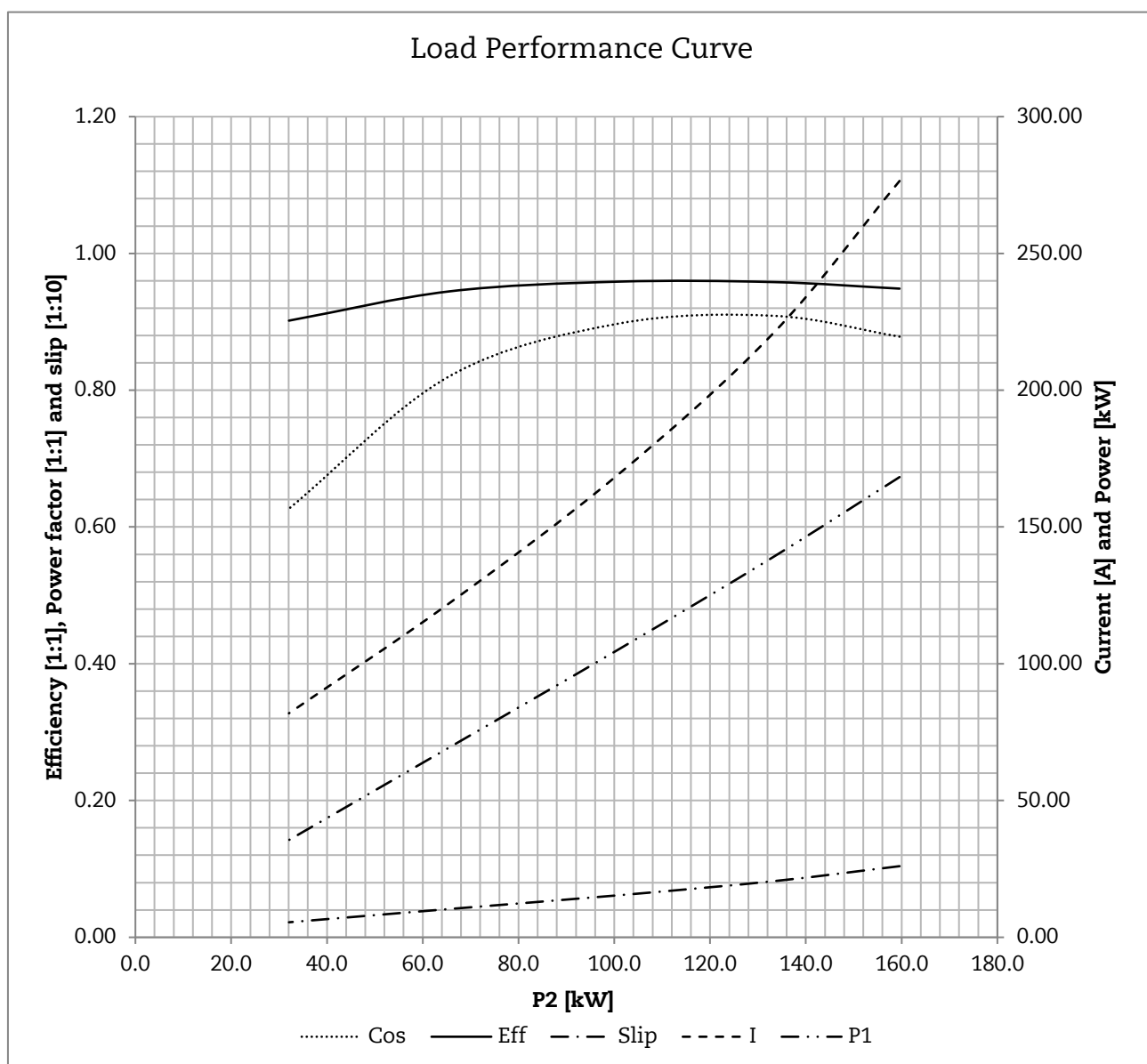
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
159.6	168.2	0.949	276.48	1061.5	0.88
133.2	139.0	0.958	220.74	847.3	0.91
100.7	105.0	0.959	168.96	634.2	0.90
65.5	69.3	0.944	122.03	421.9	0.82
32.1	35.6	0.902	81.89	210.6	0.63



## No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
499.5	128.55	6470.0	532.4
461.0	90.98	4231.0	266.7
418.8	66.09	3310.0	140.7
381.3	54.35	2797.0	95.2
339.7	46.14	2389.0	68.6
300.4	40.05	2158.0	51.7
257.8	38.63	2120.0	48.1
217.8	37.17	1653.0	44.5
181.5	36.51	1642.0	42.9
139.6	34.67	1450.0	38.7

