

# Type Test Report

Report No.: TTR3IC11602A1SL

## Test Result Data

### Nameplate data

Type:	HMC3 160L-2	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	31,87 A	Frequency:	50 Hz
Output:	18,5 kW	Efficiency.:	92,5 %
Connection:	Y	Cos $\phi$ :	0,91
Speed:	2957 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	649,48 W	No load current:	9,47 A
Machine loss:	163,03 W	Core loss:	452,89 W
Sound pressure level 1m:	78,9 dB(A)	Vibration:	0,9 mm/s

### Temperature rise test

Voltage:	400,0 V	Current:	31,87 A
Power:	18,50 kW	Temperature - rise:	59 K
Winding hotspot temperature:	75 °C	Bearing temperature:	58 °C
Frequency:	50 Hz	Ambient temperature:	16 °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	25,11	39,64	2944	75,01	0,91	92,08
<b>100</b>	<b>400</b>	<b>50</b>	<b>19,99</b>	<b>31,87</b>	<b>2957</b>	<b>59,76</b>	<b>0,91</b>	<b>92,55</b>
75	400	50	14,99	24,60	2968	44,64	0,88	92,54
50	400	50	10,12	18,05	2979	29,65	0,81	91,44
25	400	50	5,35	12,43	2989	14,78	0,62	86,53

### Locked rotor test at rated voltage

Input power:	111,2 kW	Cos $\phi$ :	0,47
Starting current:	340,80 A	Starting torque:	192,30 Nm
Starting/Rated current:	10,69	Starting/Rated torque:	3,22

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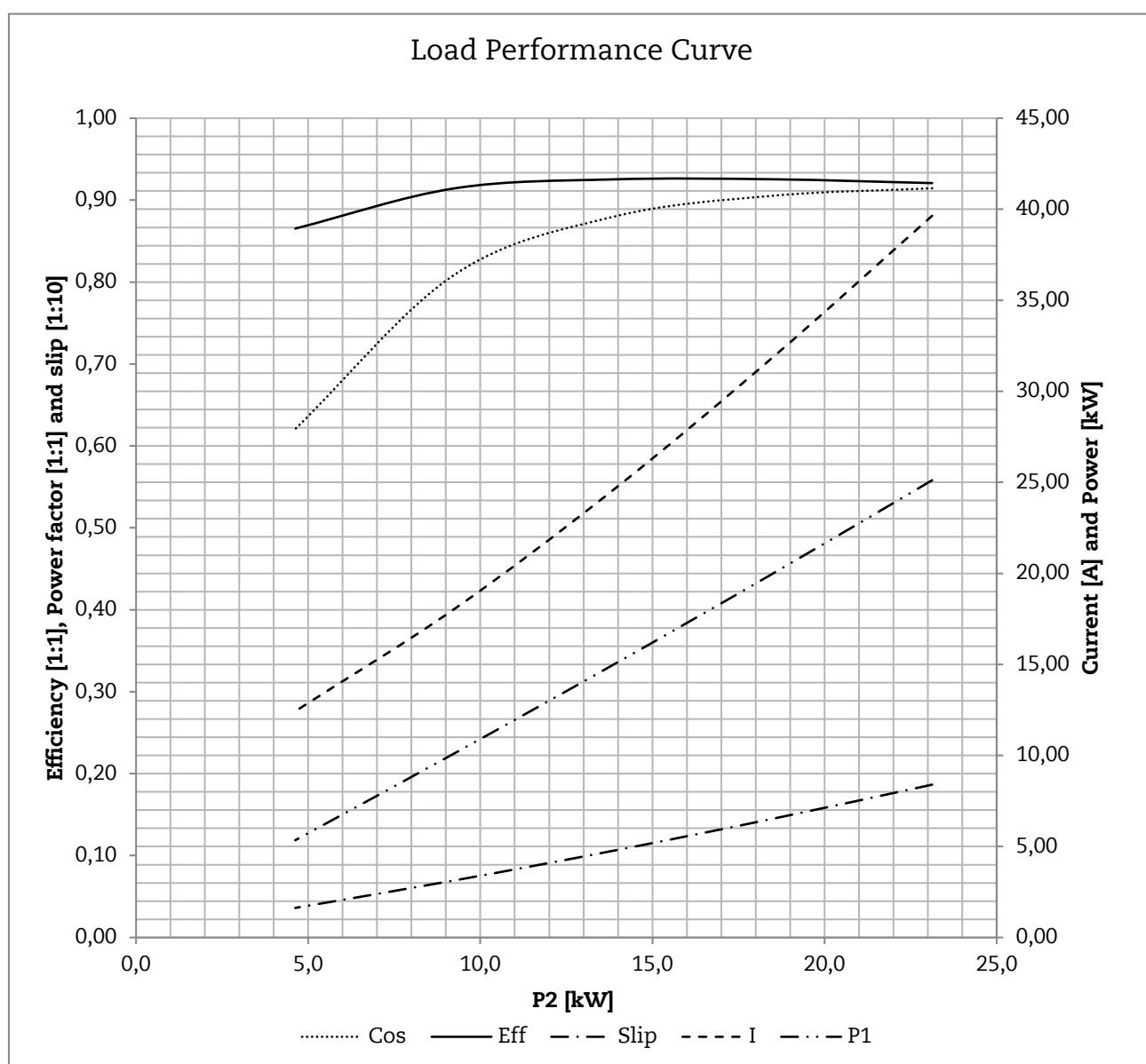
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
23,1	25,1	0,921	39,64	75,0	0,91
18,5	20,0	0,925	31,87	59,8	0,91
13,9	15,0	0,925	24,60	44,6	0,88
9,3	10,1	0,914	18,05	29,7	0,81
4,6	5,3	0,865	12,43	14,8	0,62



## No-load test data at rated frequency

U <sub>0</sub> V	I <sub>0</sub> A	P <sub>0</sub> W	P <sub>cul.</sub>
499,5	20,32	1570,0	154,4
456,2	13,71	980,0	70,3
414,9	10,33	710,0	39,9
375,5	8,36	570,0	26,1
333,9	7,14	480,0	19,1
294,2	6,06	400,0	13,7
253,8	5,10	350,0	9,7
223,3	4,40	310,0	7,2
192,9	3,78	270,0	5,3
162,7	3,16	240,0	3,7

