

Type Test Report

Report No.: TTR3IC11602A2SL

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:	D	Cos ϕ :	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 ϕ Cos ϕ	Eff (η) %
125	400	50	25.11	39.64	2944	75.01	0.91	92.08
100	400	50	19.99	31.87	2957	59.76	0.91	92.55
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 ϕ :	0.47
Starting current:	340.80 A	Starting torque:	192.30 Nm
Starting/Rated current:	10.69	Starting/Rated torque:	3.22

6/19/2017

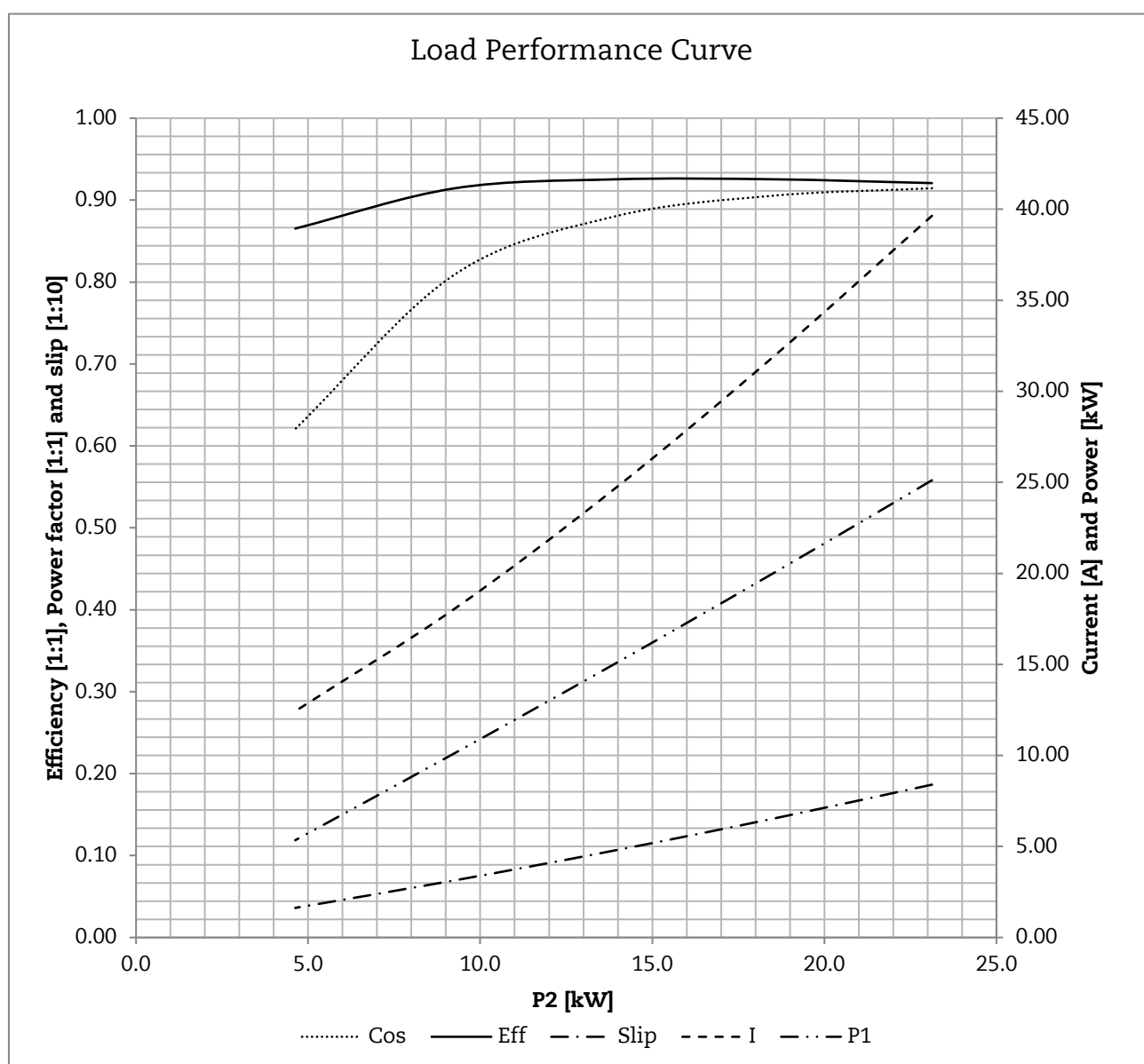
HOYER
EXCEEDING EXPECTATIONS

www.hoyermotors.com

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
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

Uo V	Io A	Po W	Pcul.
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

