

Type Test Report

Report No.: TTR3IC22801A2SL

Test Result Data

Nameplate data

Type:	HMC3 280M-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	151.90 A	Frequency:	50 Hz
Output:	90 kW	Efficiency.:	95.5 %
Connection:	D	Cos ϕ :	0.90
Speed:	1486 rpm	Insulation Class:	F

No-Load test at rated voltage

No load loss:	1834.44 W	No load current:	43.57 A
Machine loss:	454.43 W	Core loss:	1278.75 W
Sound pressure level 1m:	78.3 dB(A)	Vibration:	0.5 mm/s

Temperature rise test

Voltage:	400.0 V	Current:	151.90 A
Power:	90.00 kW	Temperature - rise:	68 K
Winding hotspot temperature:	79 °C	Bearing temperature:	63 °C
Frequency:	50 Hz	Ambient temperature:	23 °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	114.82	190.78	1482	724.90	0.87	94.22
100	400	50	95.21	151.90	1486	578.40	0.90	95.45
75	400	50	71.77	116.25	1490	432.75	0.89	95.78
50	400	50	47.18	84.35	1493	287.82	0.81	94.73
25	400	50	23.99	57.55	1496	143.59	0.60	91.01

Locked rotor test at rated voltage

Input power:	390.6 kW	Cos ϕ :	0.43
Starting current:	1307.43 A	Starting torque:	1693.16 Nm
Starting/Rated current:	8.61	Starting/Rated torque:	2.93

6/19/2017

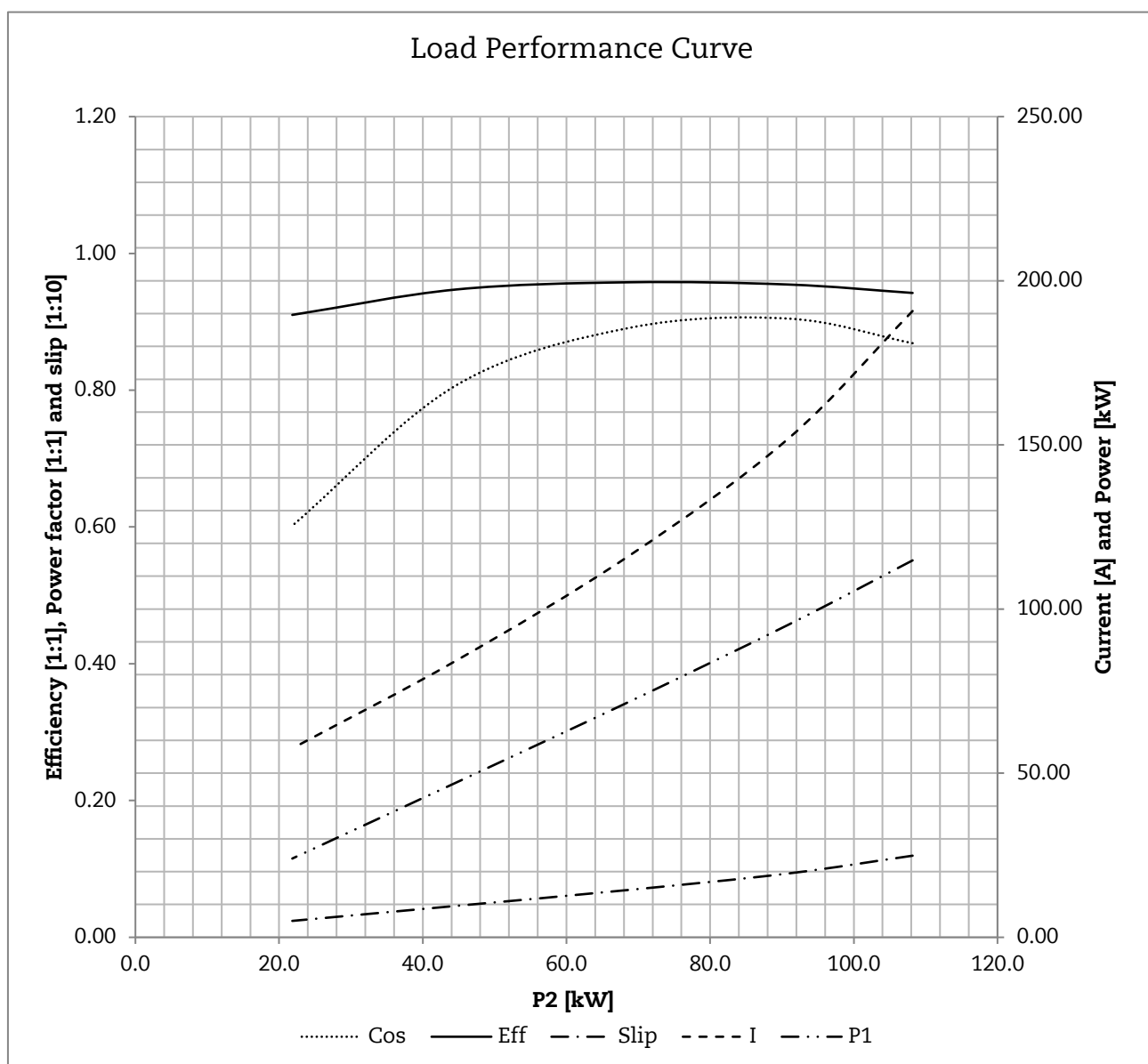
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

Load test data

P2 kW	P1 kW	Eff (η) P2/P1	I A	T Nm	Cos ϕ
108.2	114.8	0.942	190.78	724.9	0.87
90.9	95.2	0.955	151.90	578.4	0.90
68.7	71.8	0.958	116.25	432.8	0.89
44.7	47.2	0.947	84.35	287.8	0.81
21.8	24.0	0.910	57.55	143.6	0.60



No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
499.0	80.51	3952.0	352.6
451.1	56.65	2495.0	174.6
409.7	45.56	1951.0	112.9
370.9	38.89	1626.0	82.3
330.3	33.41	1374.0	60.7
291.2	28.83	1171.0	45.2
251.0	24.27	990.0	32.0
220.6	21.09	886.0	24.2
190.1	18.13	770.0	17.9
160.6	15.01	686.0	12.3

