

# Type Test Report

Report No.: TTR3IC22800A1SL

## Test Result Data

### Nameplate data

Type:	HMC3 280S-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	130,90 A	Frequency:	50 Hz
Output:	75 kW	Efficiency.:	95,1 %
Connection:	Y	Cos $\phi$ :	0,92
Speed:	1489 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	1726,25 W	No load current:	36,77 A
Machine loss:	307,4 W	Core loss:	1342,48 W
Sound pressure level 1m:	78,9 dB(A)	Vibration:	0,4 mm/s

### Temperature rise test

Voltage:	400,0 V	Current:	130,90 A
Power:	75,00 kW	Temperature - rise:	56 K
Winding hotspot temperature:	88 °C	Bearing temperature:	81 °C
Frequency:	50 Hz	Ambient temperature:	32 °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	98,78	162,17	1486	602,39	0,93	94,91
<b>100</b>	<b>400</b>	<b>50</b>	<b>78,87</b>	<b>130,90</b>	<b>1489</b>	<b>480,91</b>	<b>0,92</b>	<b>95,08</b>
75	400	50	59,27	101,11	1492	359,99	0,89	94,90
50	400	50	39,94	74,56	1495	239,56	0,81	93,89
25	400	50	20,85	53,04	1497	119,59	0,60	89,93

### Locked rotor test at rated voltage

Input power:	259,4 kW	Cos $\phi$ :	0,43
Starting current:	880,37 A	Starting torque:	1158,87 Nm
Starting/Rated current:	6,73	Starting/Rated torque:	2,41

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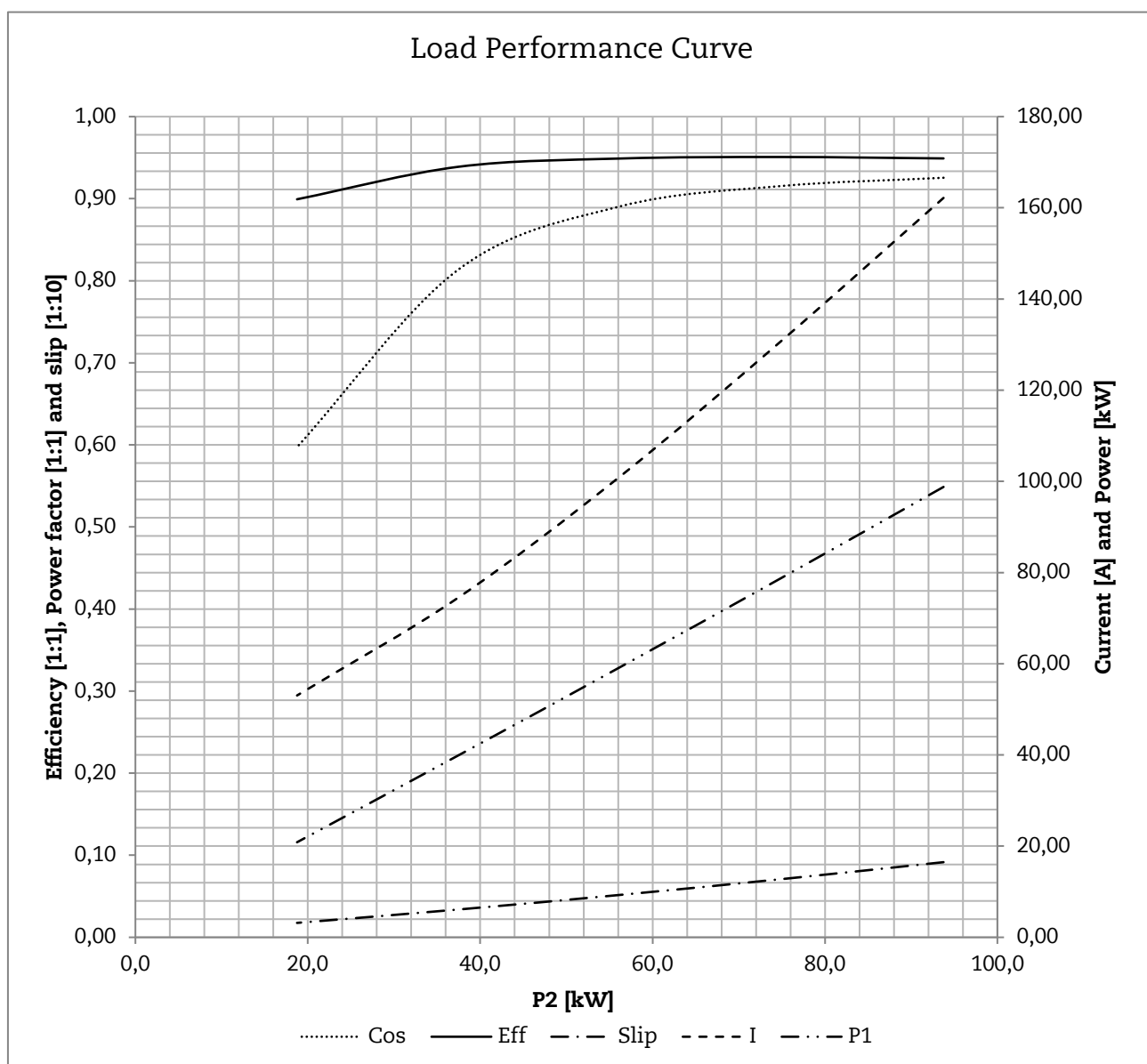
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Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.

## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
93,8	98,8	0,949	162,17	602,4	0,93
75,0	78,9	0,951	130,90	480,9	0,92
56,2	59,3	0,949	101,11	360,0	0,89
37,5	39,9	0,939	74,56	239,6	0,81
18,8	20,9	0,899	53,04	119,6	0,60



## No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
498,4	100,37	4974,0	568,9
459,1	69,12	3154,0	269,8
419,2	48,52	2184,0	132,9
378,8	36,34	1727,0	74,6
339,5	29,80	1450,0	50,1
299,3	24,91	1254,0	35,0
259,6	21,01	1111,0	24,9
180,6	16,42	837,0	15,2
140,6	14,15	647,0	11,3
99,7	12,99	468,0	9,5

