

# Type Test Report

Report No.: TTR3IC21601A1SL

## Test Result Data

### Nameplate data

Type:	HMC3 160L-4	Protection Class.:	IP55
Voltage:	400 V	Duty:	S1
Current:	28,32 A	Frequency:	50 Hz
Output:	15 kW	Efficiency.:	92,1 %
Connection:	Y	Cos $\phi$ :	0,83
Speed:	1474 rpm	Insulation Class:	F

### No-Load test at rated voltage

No load loss:	469,88 W	No load current:	11,92 A
Machine loss:	78,39 W	Core loss:	312,95 W
Sound pressure level 1m:	70,5 dB(A)	Vibration:	0,8 mm/s

### Temperature rise test

Voltage:	400,0 V	Current:	28,32 A
Power:	15,00 kW	Temperature - rise:	67 K
Winding hotspot temperature:	82 °C	Bearing temperature:	45 °C
Frequency:	50 Hz	Ambient temperature:	15 °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	20,53	34,75	1467	122,07	0,85	91,33
<b>100</b>	<b>400</b>	<b>50</b>	<b>16,28</b>	<b>28,32</b>	<b>1474</b>	<b>97,16</b>	<b>0,83</b>	<b>92,12</b>
75	400	50	12,17	22,38	1481	72,52	0,78	92,45
50	400	50	8,17	17,33	1488	48,13	0,68	91,77
25	400	50	4,28	13,54	1494	23,97	0,46	87,60

### Locked rotor test at rated voltage

Input power:	87,5 kW	Cos $\phi$ :	0,49
Starting current:	256,96 A	Starting torque:	308,28 Nm
Starting/Rated current:	9,07	Starting/Rated torque:	3,17

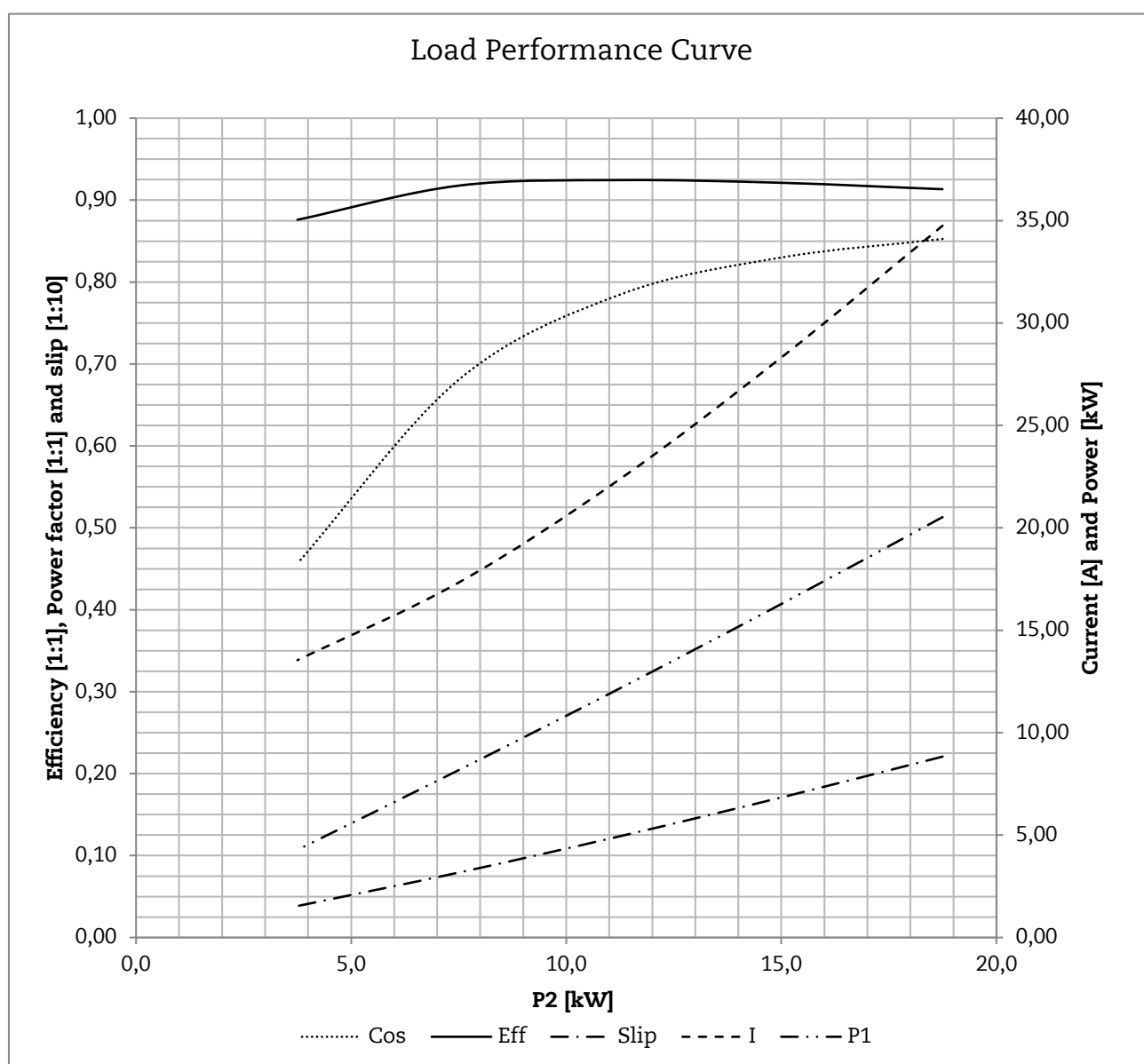
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## Load test data

P2 kW	P1 kW	Eff ( $\eta$ ) P2/P1	I A	T Nm	Cos $\phi$
18,7	20,5	0,913	34,75	122,1	0,85
15,0	16,3	0,921	28,32	97,2	0,83
11,2	12,2	0,924	22,38	72,5	0,78
7,5	8,2	0,918	17,33	48,1	0,68
3,8	4,3	0,876	13,54	24,0	0,46



## No-load test data at rated frequency

Uo V	Io A	Po W	Pcul.
495,8	26,70	1080,0	394,1
453,3	17,73	690,0	173,8
413,9	12,99	510,0	93,3
373,4	10,39	410,0	59,7
333,2	8,78	340,0	42,6
292,7	7,49	290,0	31,0
252,2	6,29	250,0	21,9
221,7	5,46	220,0	16,5
191,4	4,66	190,0	12,0
161,0	3,89	160,0	8,4

