

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code :	12373466		
Frame	: 143/5T	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 26.7 kg		
Protection degree	: IP56	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>		
Design	: B				
Output [HP]	1	1	1	1	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	1.47	1.71	1.65	1.63	
L. R. Amperes [A]	12.6	10.9	11.5	12.1	
LRC [A]	8.6x(Code M)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)	
No load current [A]	0.940	0.930	1.00	1.08	
Rated speed [RPM]	1760	1450	1455	1455	
Slip [%]	2.22	3.33	3.00	3.00	
Rated torque [kgfm]	0.412	0.501	0.499	0.499	
Locked rotor torque [%]	290	220	240	260	
Breakdown torque [%]	350	250	290	310	
Service factor	1.25	1.25	1.25	1.25	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level <sup>2</sup>	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	78.4	79.6	78.4	78.4
	50%	80.0	80.0	80.0	80.0
	75%	84.0	82.5	82.5	82.5
	100%	85.5	82.5	84.0	84.0
Power Factor	25%	0.31	0.36	0.33	0.31
	50%	0.55	0.62	0.58	0.55
	75%	0.68	0.74	0.71	0.69
	100%	0.75	0.81	0.78	0.76
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	15.9	15.9	15.9	15.9
	P2 (0,5;1,0)	12.8	12.8	12.8	12.8
	P3 (0,25;1,0)	12.5	12.5	12.5	12.5
	P4 (0,9;0,5)	10.1	10.1	10.1	10.1
	P5 (0,5;0,5)	7.0	7.0	7.0	7.0
	P6 (0,5;0,25)	5.8	5.8	5.8	5.8
	P7 (0,25;0,25)	4.3	4.3	4.3	4.3
Bearing type	: Drive end : 6205 C3 Non drive end : 6204 C3	Foundation loads			
Sealing	: Inpro/Seal	Max. traction : 30 kgf			
Lubrication interval	: 20000 h	Max. compression : 57 kgf			
Lubricant amount	: 4 g				
Lubricant type	: Mobil Polyrex EM				
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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Notes

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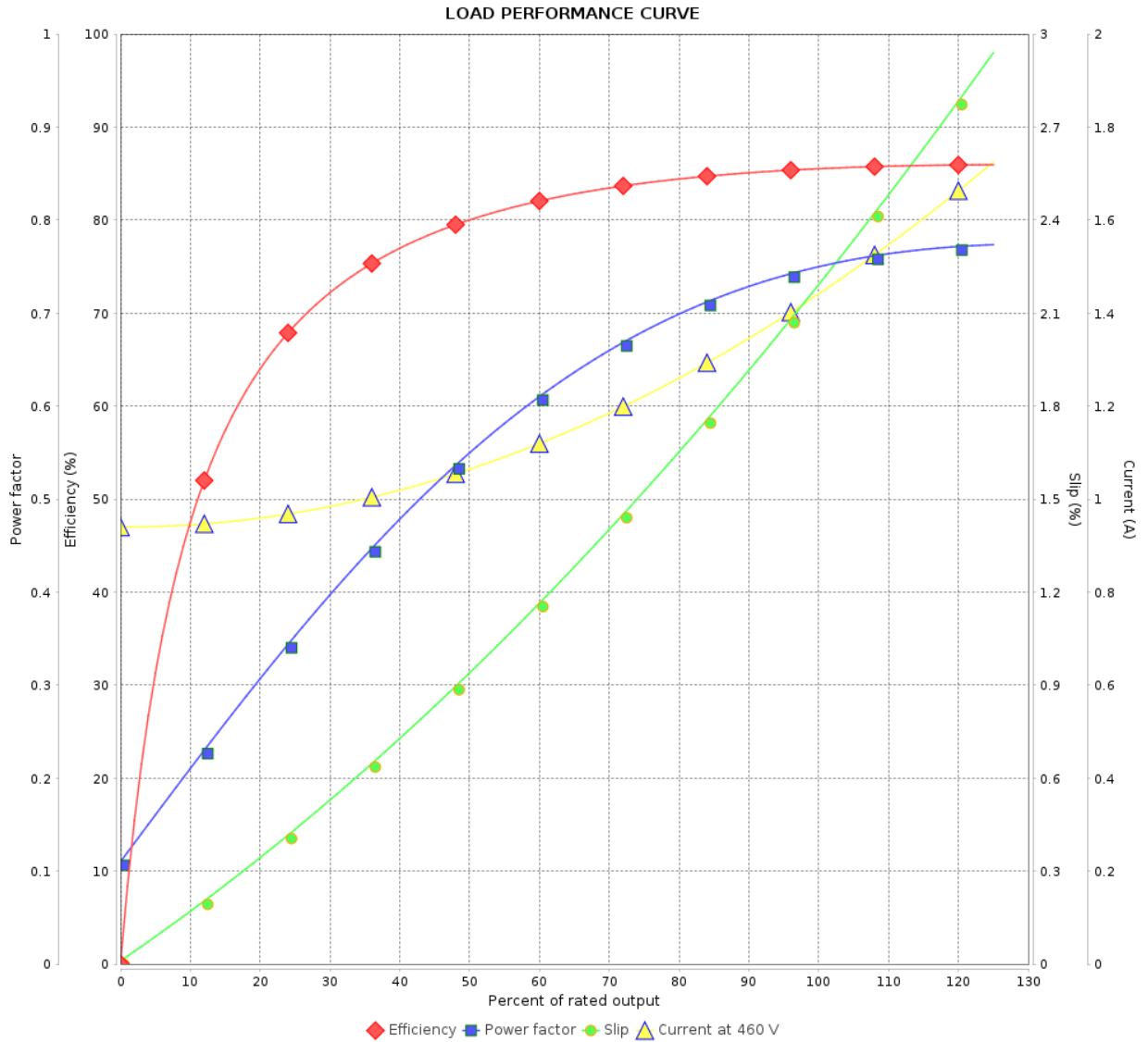
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 12373466



Performance : 460 V 60 Hz 4P

Rated current	: 1.47 A	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 0.412 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

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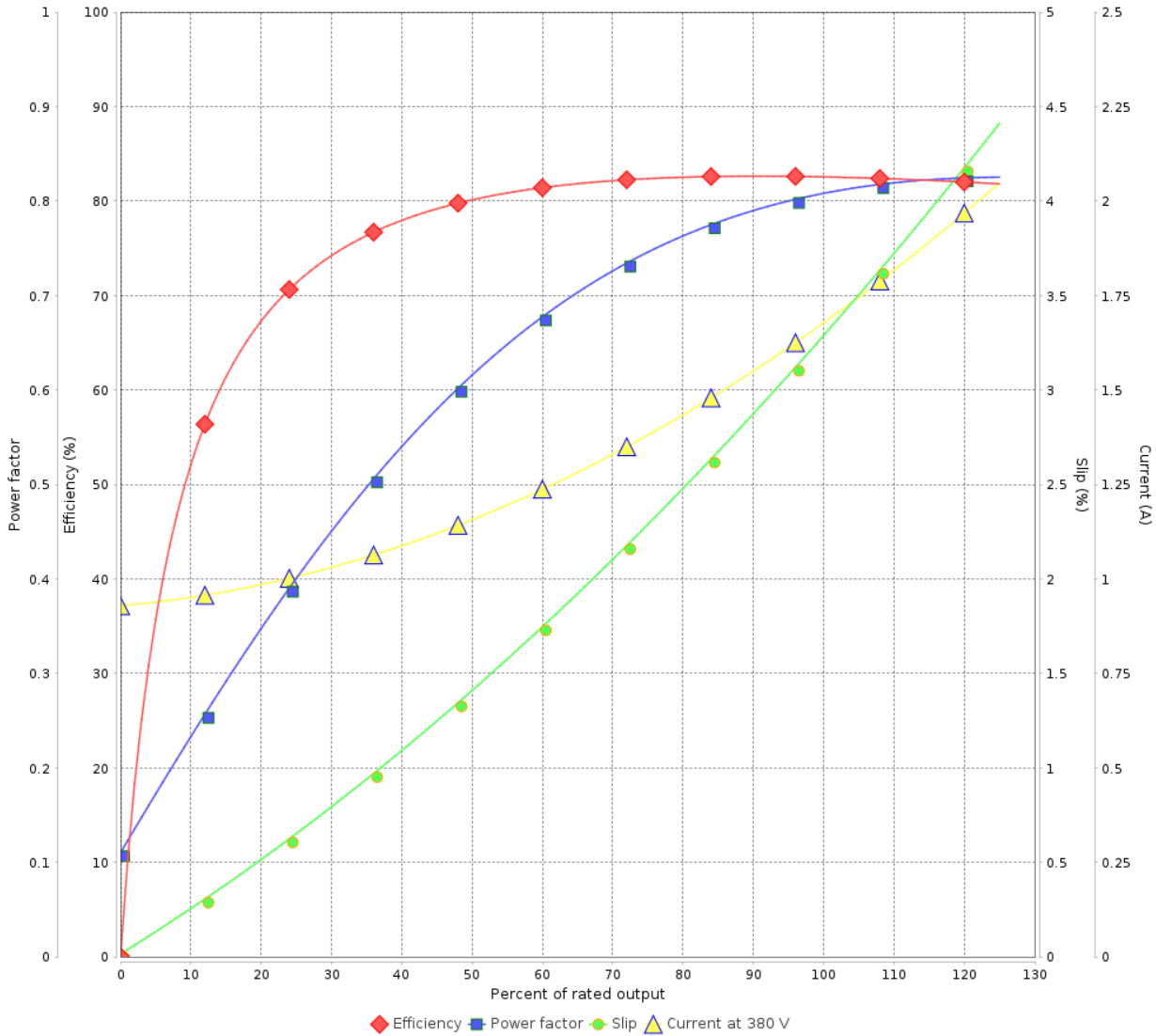
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 4P IE3

Rated current	: 1.71 A	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.501 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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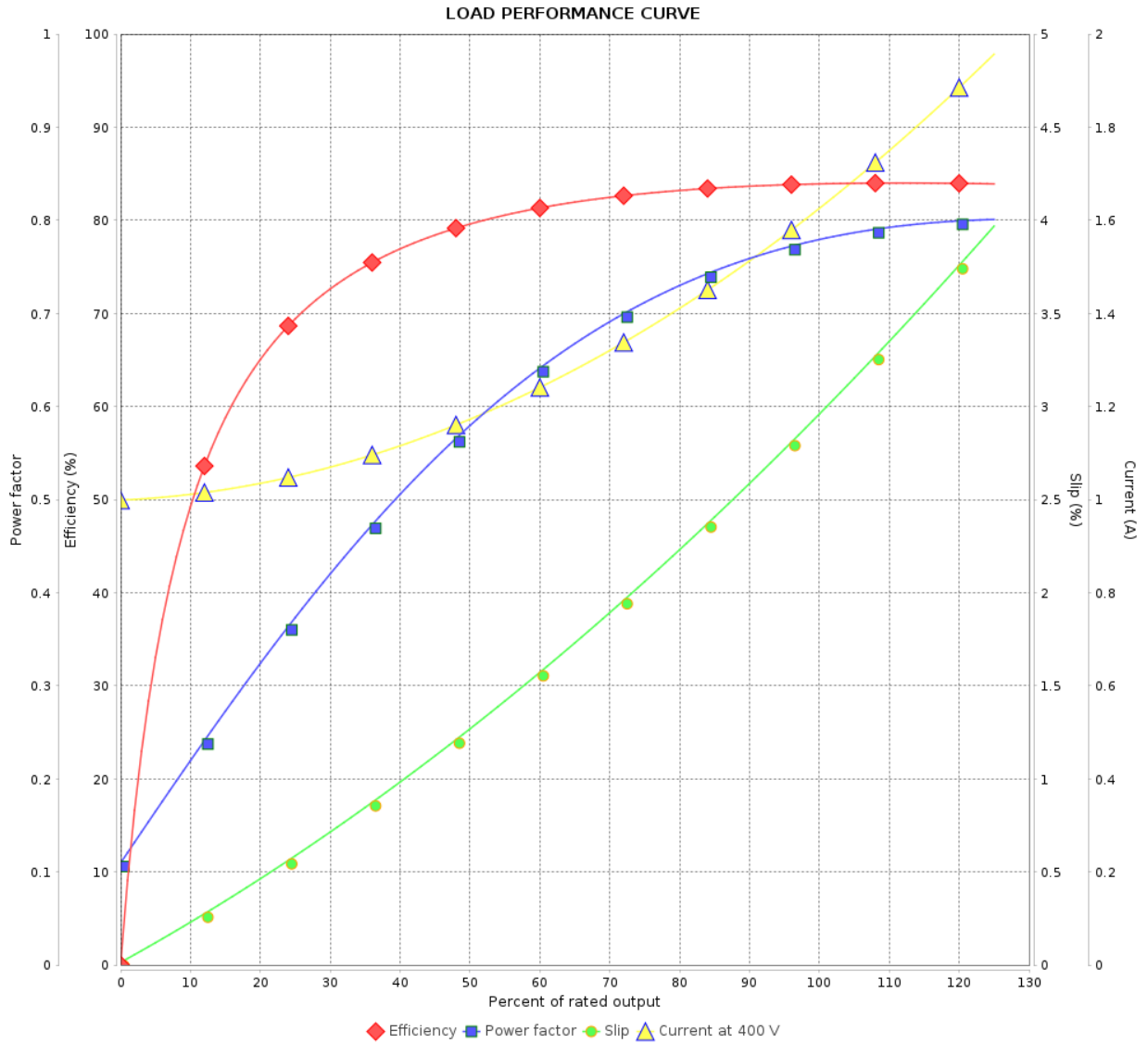
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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Performance : 400 V 50 Hz 4P IE3

Rated current : 1.65 A	Moment of inertia (J) : 0.0049 kgm <sup>2</sup>
LRC : 7.0	Duty cycle : Cont.(S1)
Rated torque : 0.499 kgfm	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.25
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 1455 rpm	Design : B

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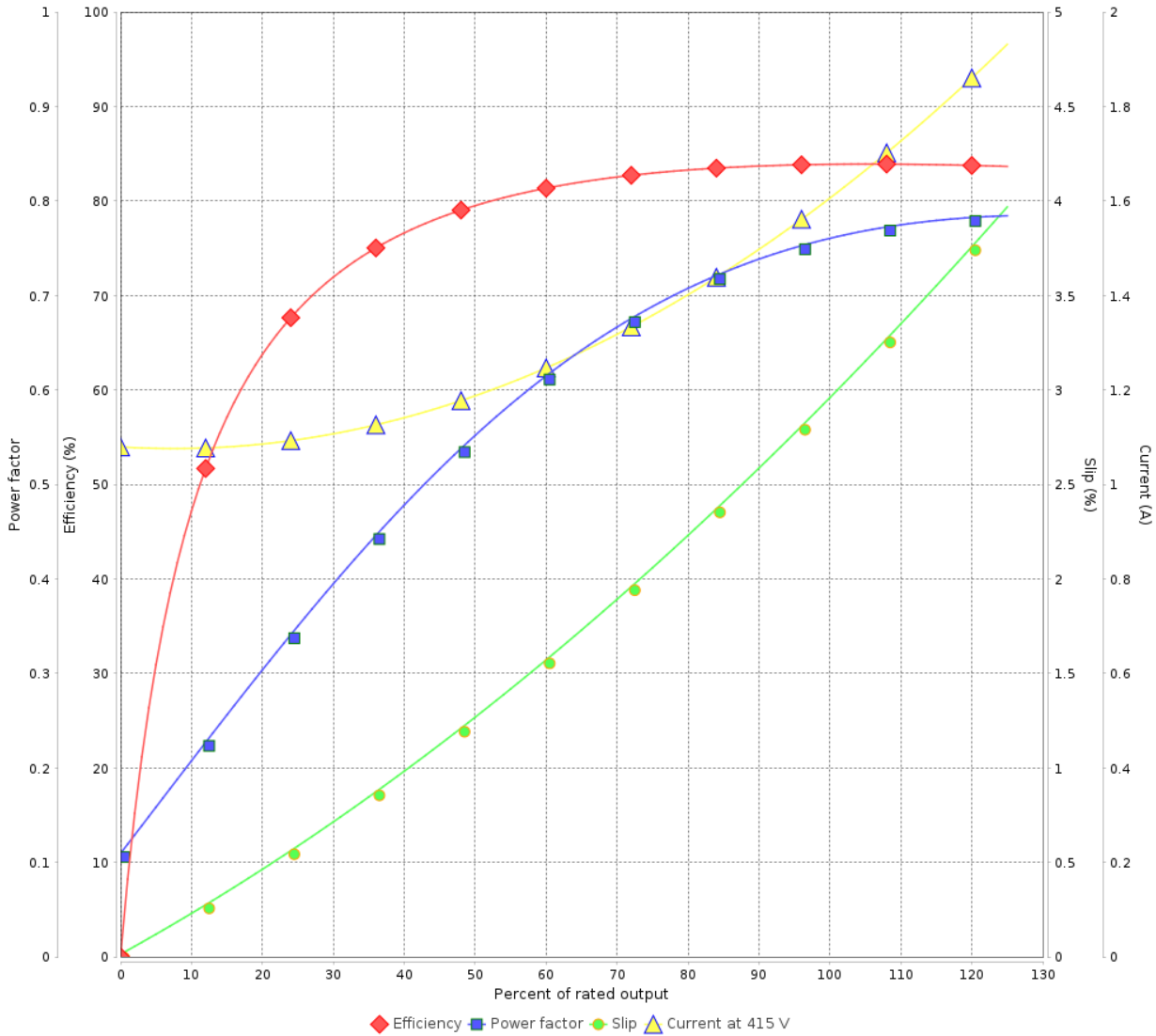
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 415 V 50 Hz 4P IE3

Rated current	: 1.63 A	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.499 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

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