

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase Product code : 13128967

Frame : 213HP	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : W-6
Duty cycle : Cont.(S1)	Rotation ¹ : Both (CW and CCW)
Ambient temperature : -20°C to +40°C	Starting method : Direct On Line
Altitude : 1000 m.a.s.l.	Approx. weight ³ : 78.2 kg
Protection degree : IP55	Moment of inertia (J) : 0.0566 kgm ²
Design : B	

Output [HP]	7.5	7.5	7.5	7.5
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	18.4/9.18	11.0	10.6	10.3
L. R. Amperes [A]	130/65.2	61.6	65.7	69.0
LRC [A]	7.1x(Code H)	5.6x(Code F)	6.2x(Code G)	6.7x(Code H)
No load current [A]	8.40/4.20	4.10	4.40	4.70
Rated speed [RPM]	1765	1455	1460	1465
Slip [%]	1.94	3.00	2.67	2.33
Rated torque [kgfm]	3.08	3.74	3.73	3.72
Locked rotor torque [%]	220	170	190	210
Breakdown torque [%]	310	240	270	290
Service factor	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	36s (cold) 20s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	58.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%			
	50%	89.5	89.5	89.5
	75%	91.0	89.5	90.2
	100%	91.7	89.6	90.2
Power Factor	25%			
	50%	0.66	0.72	0.69
	75%	0.76	0.81	0.78
	100%	0.82	0.85	0.83

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	8.8	8.8	8.8	8.8
	P2 (0,5;1,0)	7.0	7.0	7.0	7.0
	P3 (0,25;1,0)	6.5	6.5	6.5	6.5
	P4 (0,9;0,5)	4.9	4.9	4.9	4.9
	P5 (0,5;0,5)	3.3	3.3	3.3	3.3
	P6 (0,5;0,25)	2.4	2.4	2.4	2.4
	P7 (0,25;0,25)	1.6	1.6	1.6	1.6

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6309 ZZ	6207 ZZ	Max. traction
Sealing :	V'Ring	V'Ring	Max. compression
Lubrication interval :	-	-	
Lubricant amount :	-	-	
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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Revision

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Customer :

Notes
USABLE @208V 19.9A SF 1.15 SFA 22.9A

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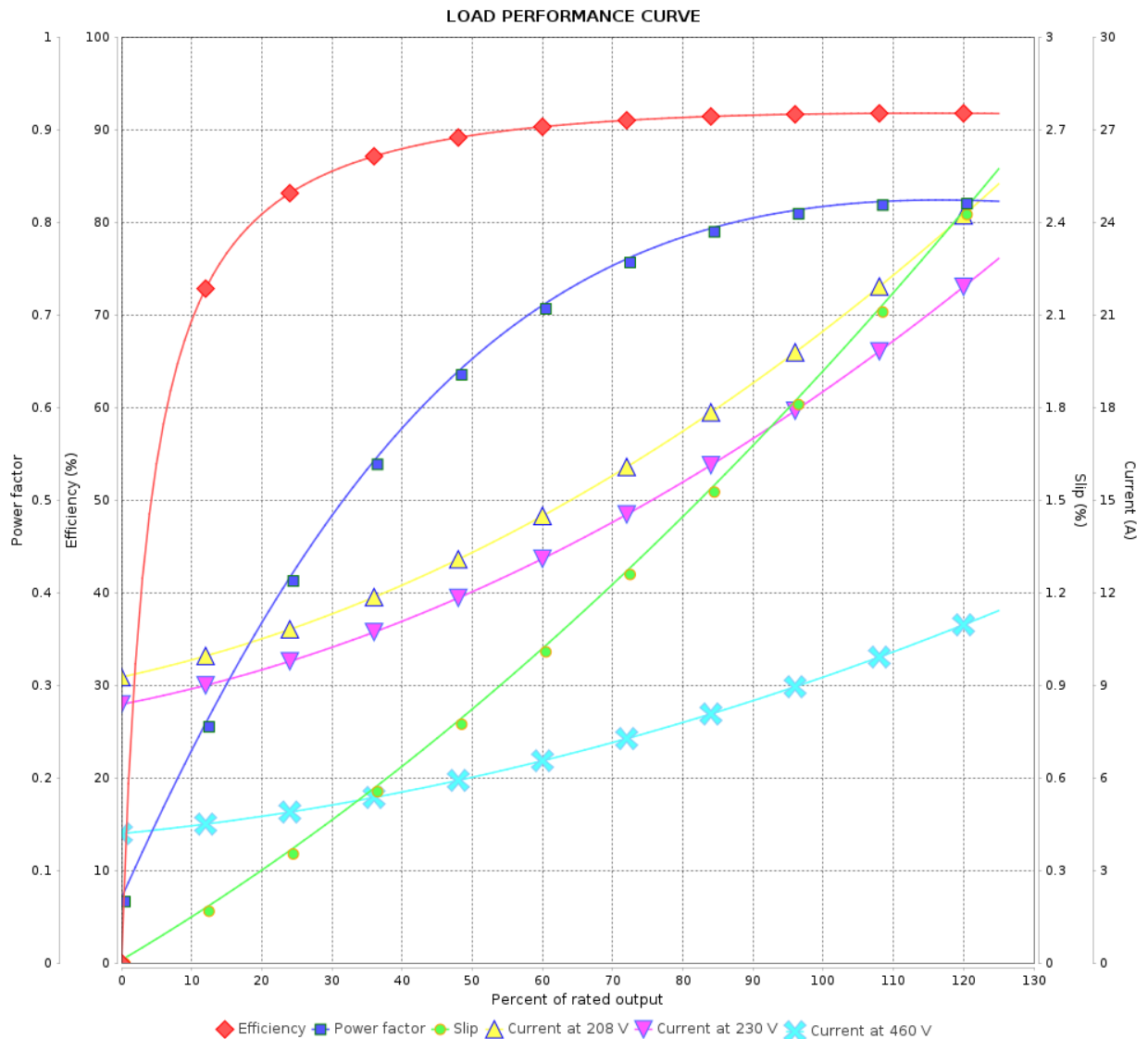
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Customer :

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Efficiency Three-Phase

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Performance : 230/460 V 60 Hz 4P

Rated current : 18.4/9.18 A
LRC : 7.1
Rated torque : 3.08 kgfm
Locked rotor torque : 220 %
Breakdown torque : 310 %
Rated speed : 1765 rpm

Moment of inertia (J) : 0.0566 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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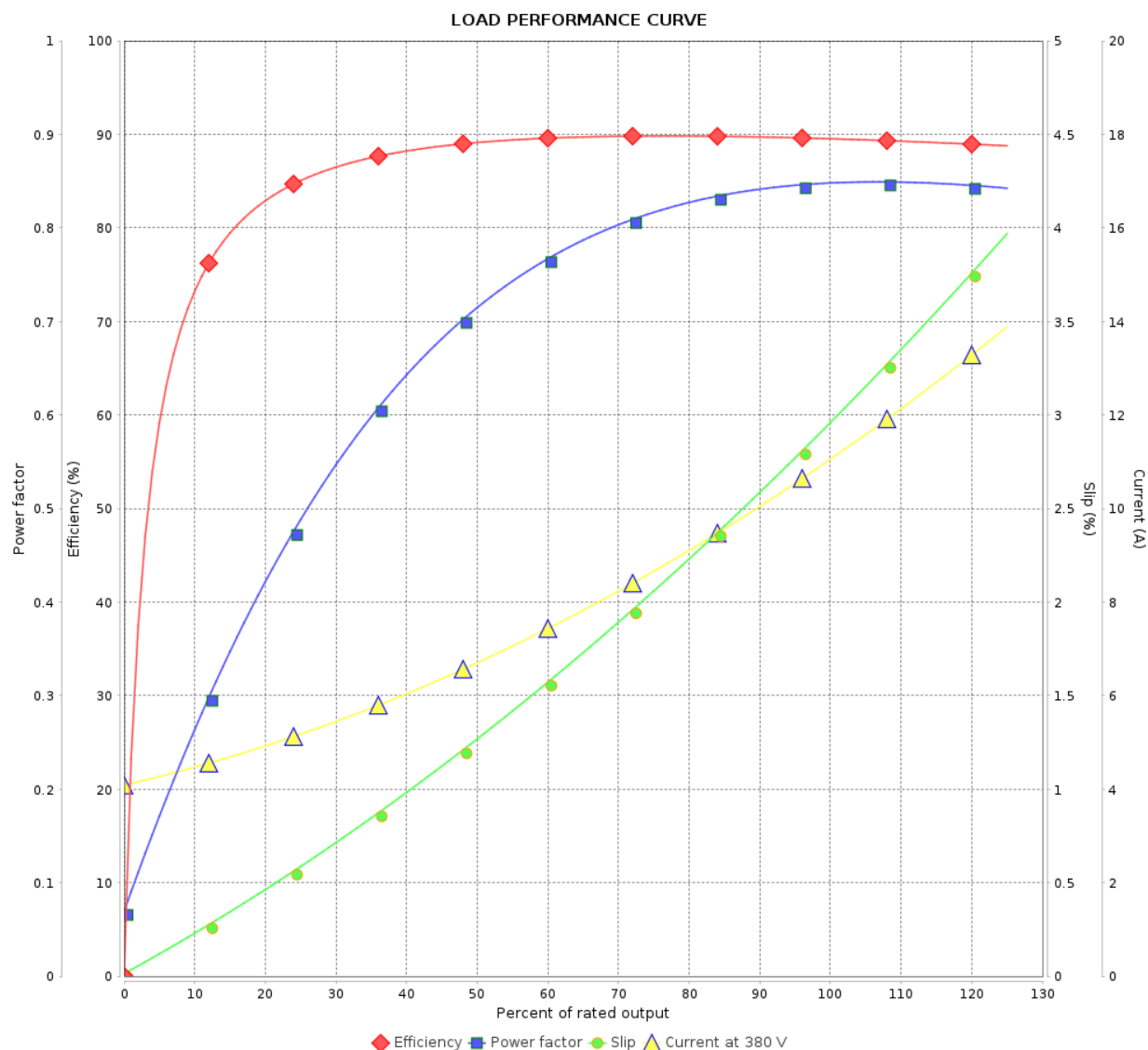
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 4P IE3

Rated current : 11.0 A
LRC : 5.6
Rated torque : 3.74 kgfm
Locked rotor torque : 170 %
Breakdown torque : 240 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.0566 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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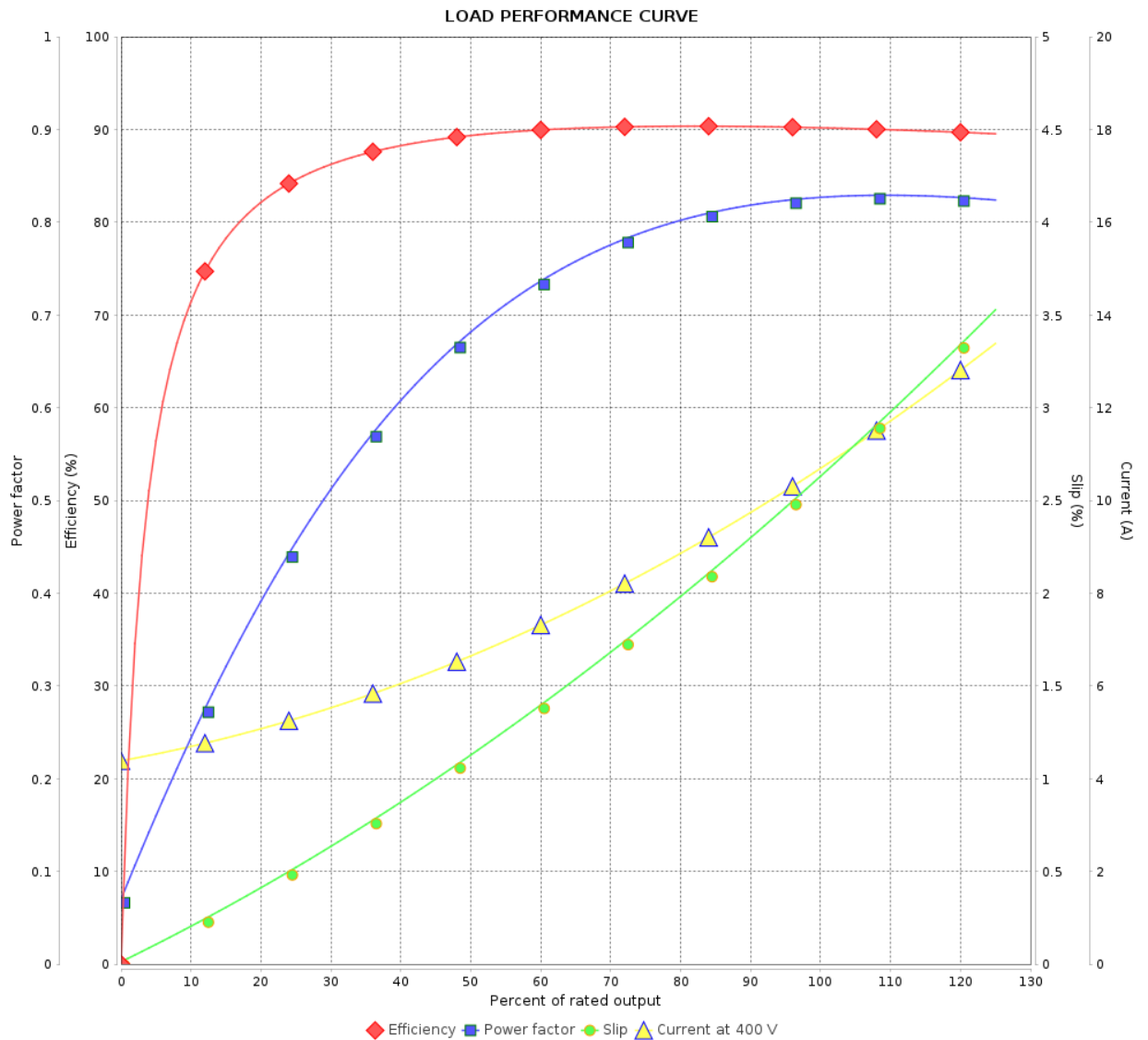
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 4P IE3

Rated current : 10.6 A
LRC : 6.2
Rated torque : 3.73 kgfm
Locked rotor torque : 190 %
Breakdown torque : 270 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.0566 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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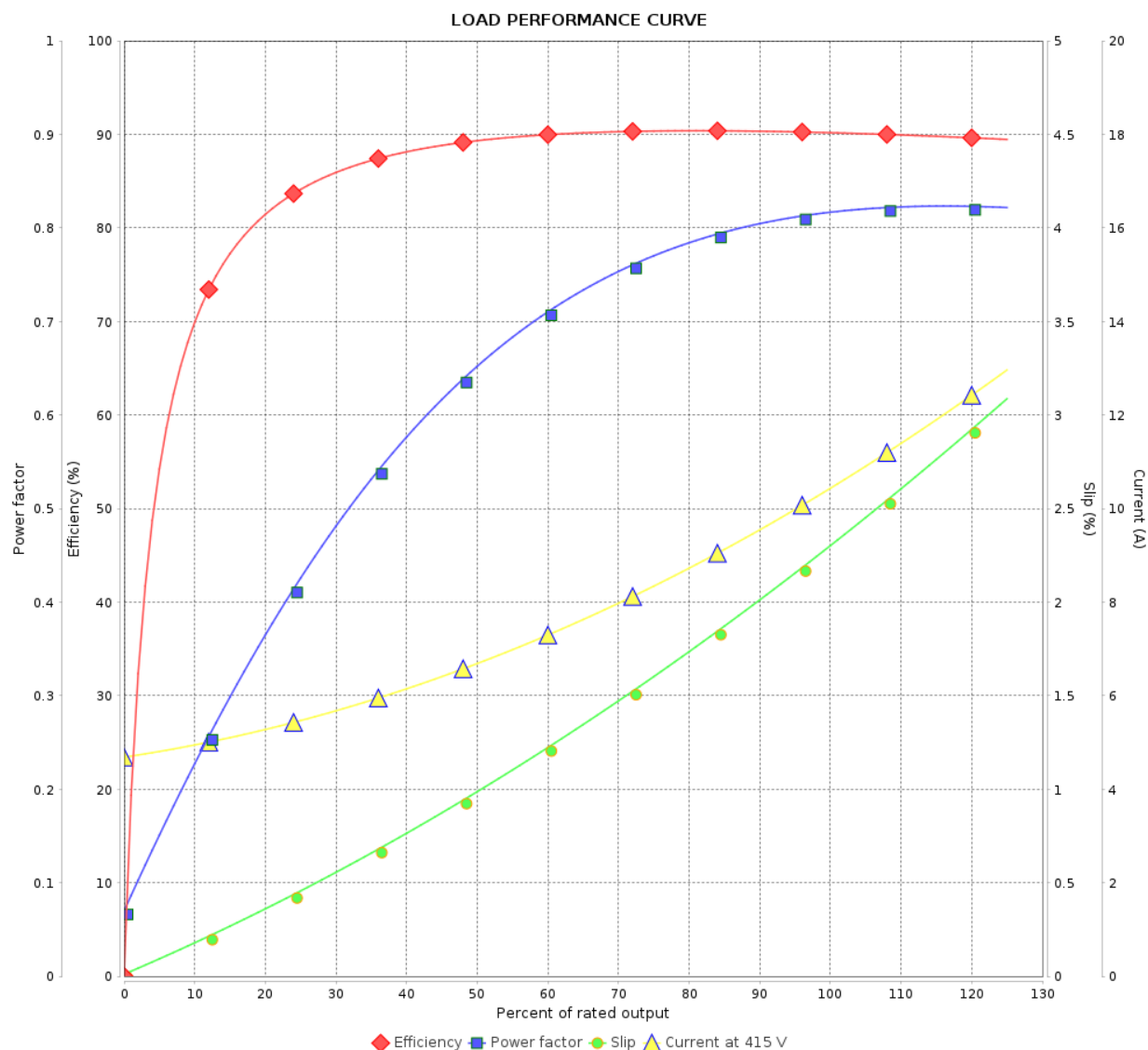
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Performance : 415 V 50 Hz 4P IE3

Rated current : 10.3 A
LRC : 6.7
Rated torque : 3.72 kgfm
Locked rotor torque : 210 %
Breakdown torque : 290 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.0566 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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