

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11456657

Frame : 213/5T	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : F-1
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 : 82.2 kg
Protection degree : IP55	Moment of inertia (J) : 0.0888 kgm ²
Design : B	

Output [HP]	3	3	3	3
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	9.22/4.61	5.48	5.42	5.13
L. R. Amperes [A]	62.7/31.3	30.1	32.5	34.9
LRC [A]	6.8x(Code K)	5.5x(Code H)	6.0x(Code J)	6.8x(Code K)
No load current [A]	6.00/3.00	3.00	3.10	3.30
Rated speed [RPM]	870	710	715	720
Slip [%]	3.33	5.33	4.67	4.00
Rated torque [kgfm]	2.50	3.07	3.05	3.02
Locked rotor torque [%]	220	170	210	229
Breakdown torque [%]	300	220	240	300
Service factor	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	79s (cold) 44s (hot)	59s (cold) 33s (hot)	59s (cold) 33s (hot)	59s (cold) 33s (hot)
Noise level ²	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)
Efficiency (%)	25%			
	50%	84.0	82.0	82.5
	75%	85.5	82.5	84.0
	100%	85.5	82.5	84.0
Power Factor	25%			
	50%	0.49	0.55	0.50
	75%	0.62	0.68	0.63
	100%	0.70	0.74	0.71

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

Losses (%)	P1 (0,9;1,0)	19.1	24.0	24.0	21.5
	P2 (0,5;1,0)	18.2	23.0	23.0	20.6
	P3 (0,25;1,0)	17.9	22.9	22.9	20.4
	P4 (0,9;0,5)	9.5	12.1	12.1	10.7
	P5 (0,5;0,5)	7.8	10.0	10.0	8.9
	P6 (0,5;0,25)	5.8	7.6	7.6	6.6
	P7 (0,25;0,25)	4.5	5.9	5.9	5.2

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6308 ZZ	6207 ZZ	Max. traction : 126 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 209 kgf
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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Notes
USABLE @208V 10.1A SF 1.15 SFA 11.6A

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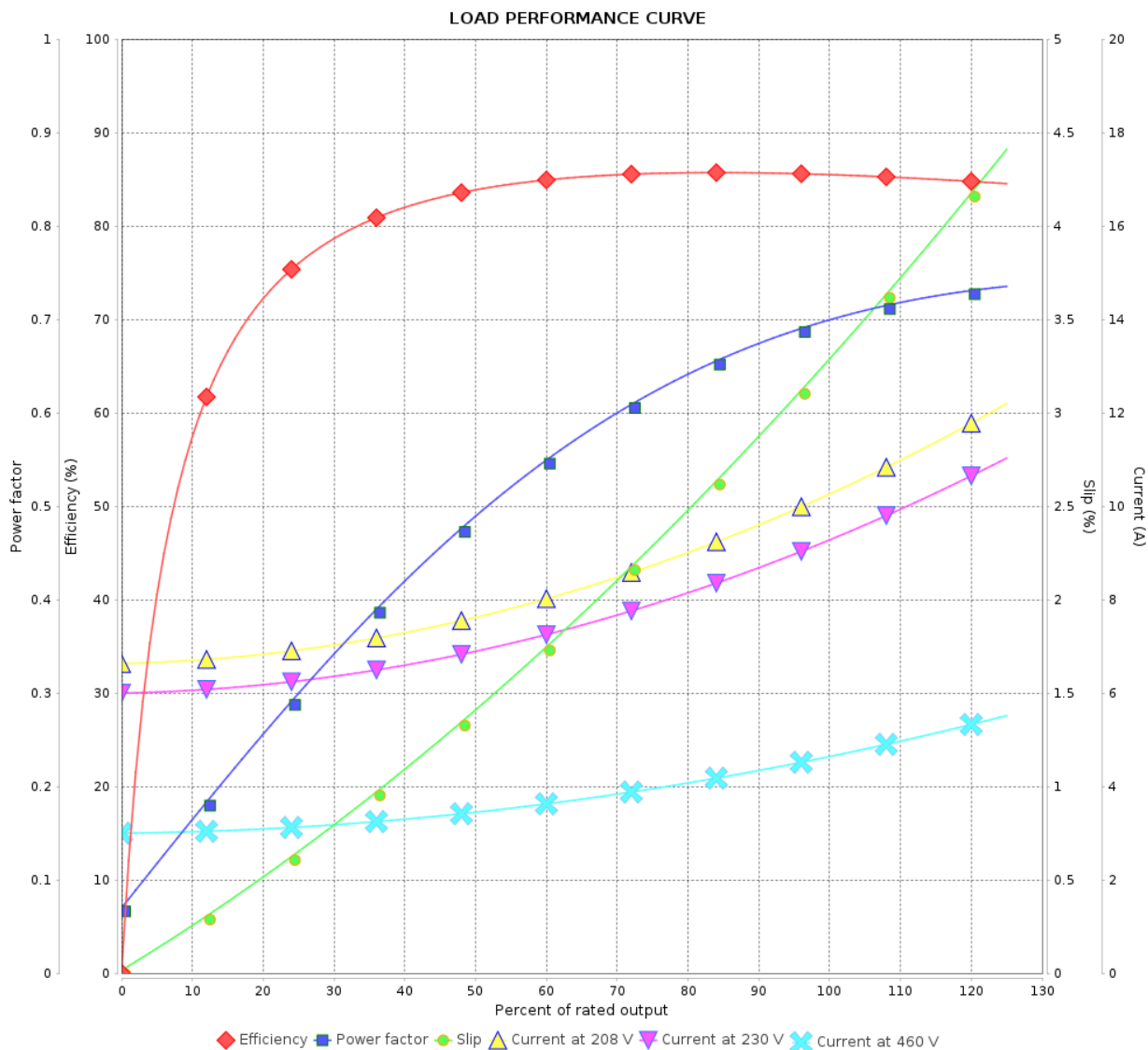
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Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11456657



Performance : 230/460 V 60 Hz 8P

Rated current : 9.22/4.61 A
LRC : 6.8
Rated torque : 2.50 kgfm
Locked rotor torque : 220 %
Breakdown torque : 300 %
Rated speed : 870 rpm

Moment of inertia (J) : 0.0888 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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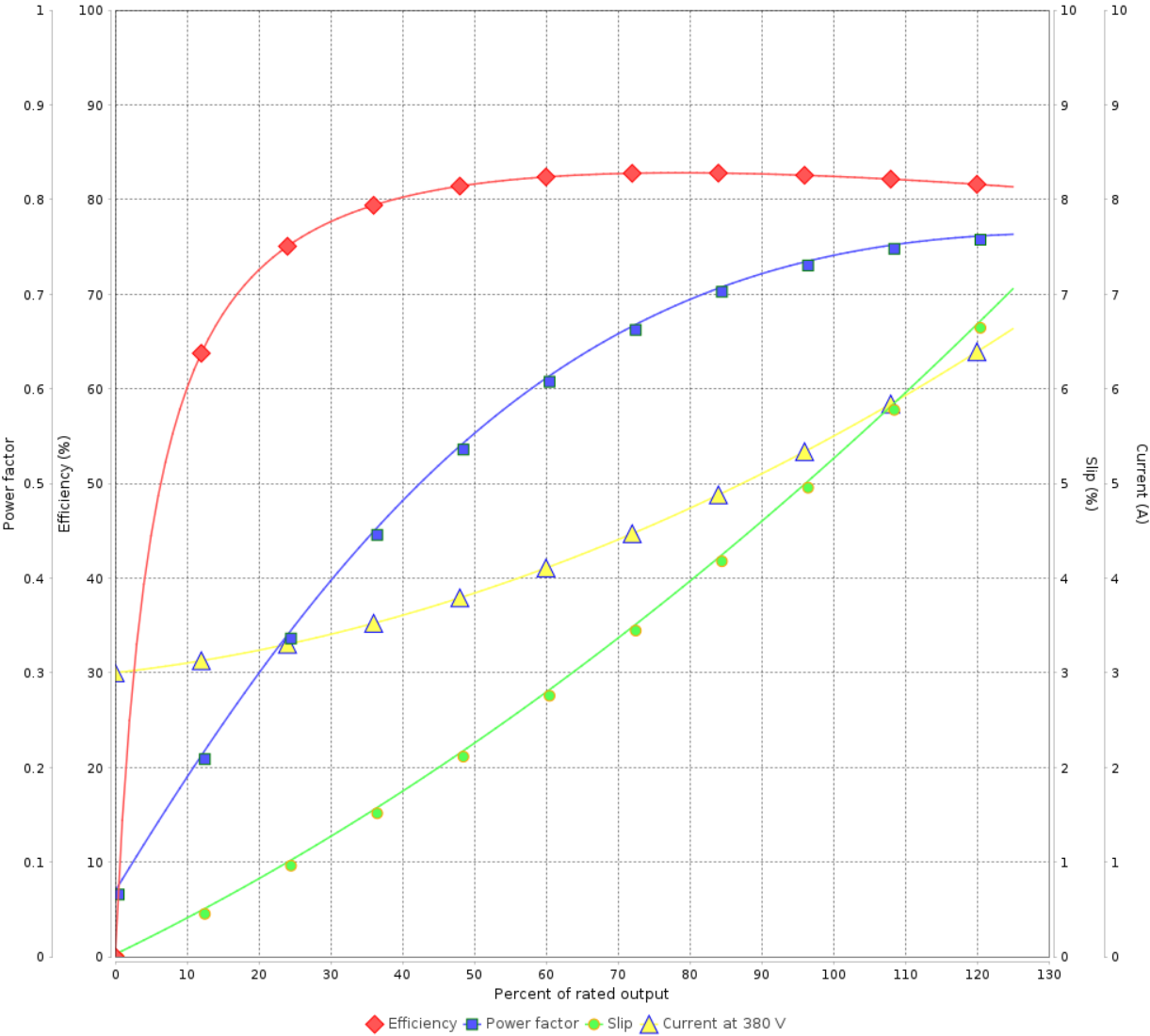
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 8P IE3			
Rated current	: 5.48 A	Moment of inertia (J)	: 0.0888 kgm²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 3.07 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.25
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 710 rpm	Design	: B

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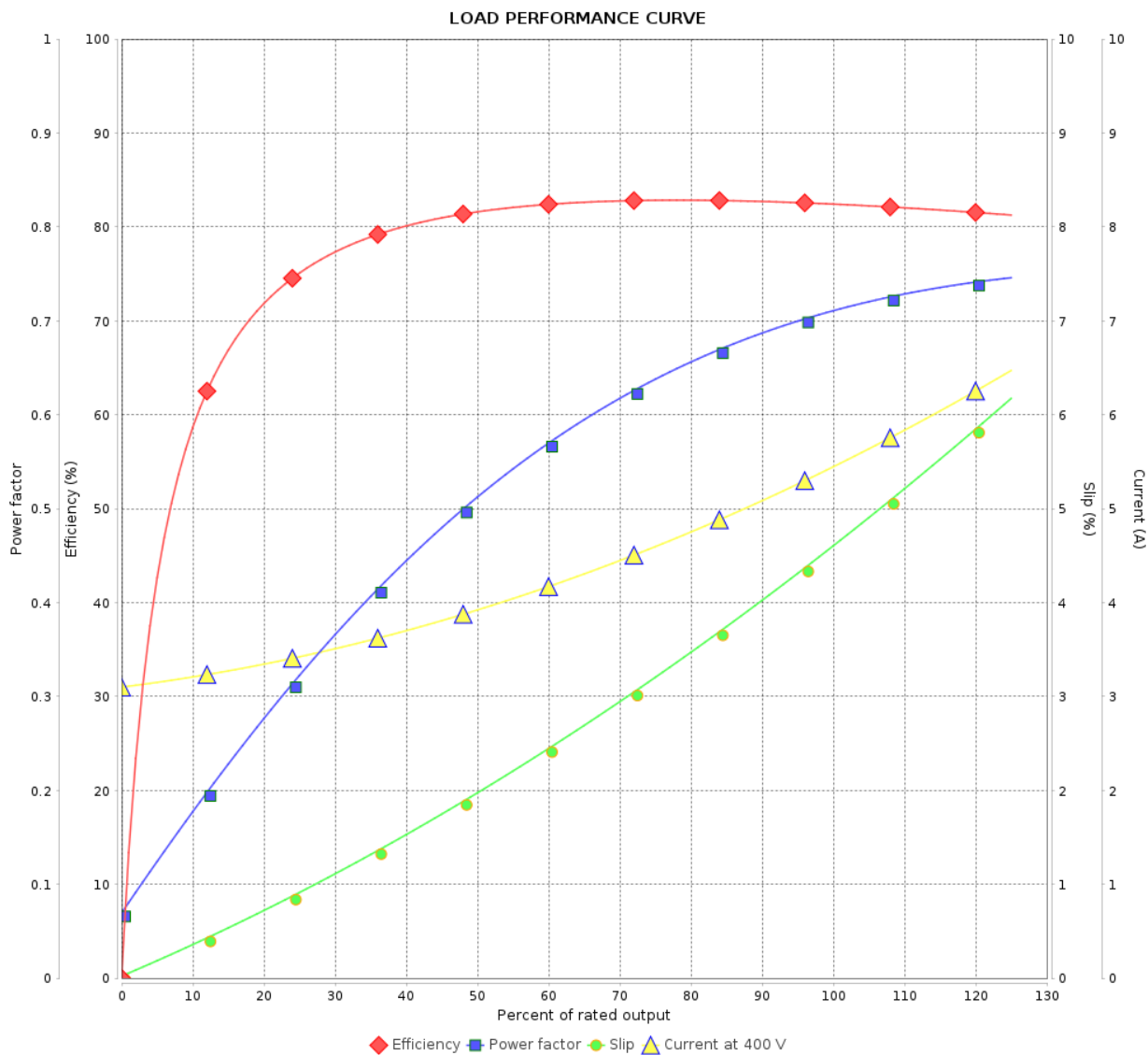
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Customer :

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Performance : 400 V 50 Hz 8P IE3

Rated current : 5.42 A
LRC : 6.0
Rated torque : 3.05 kgfm
Locked rotor torque : 210 %
Breakdown torque : 240 %
Rated speed : 715 rpm

Moment of inertia (J) : 0.0888 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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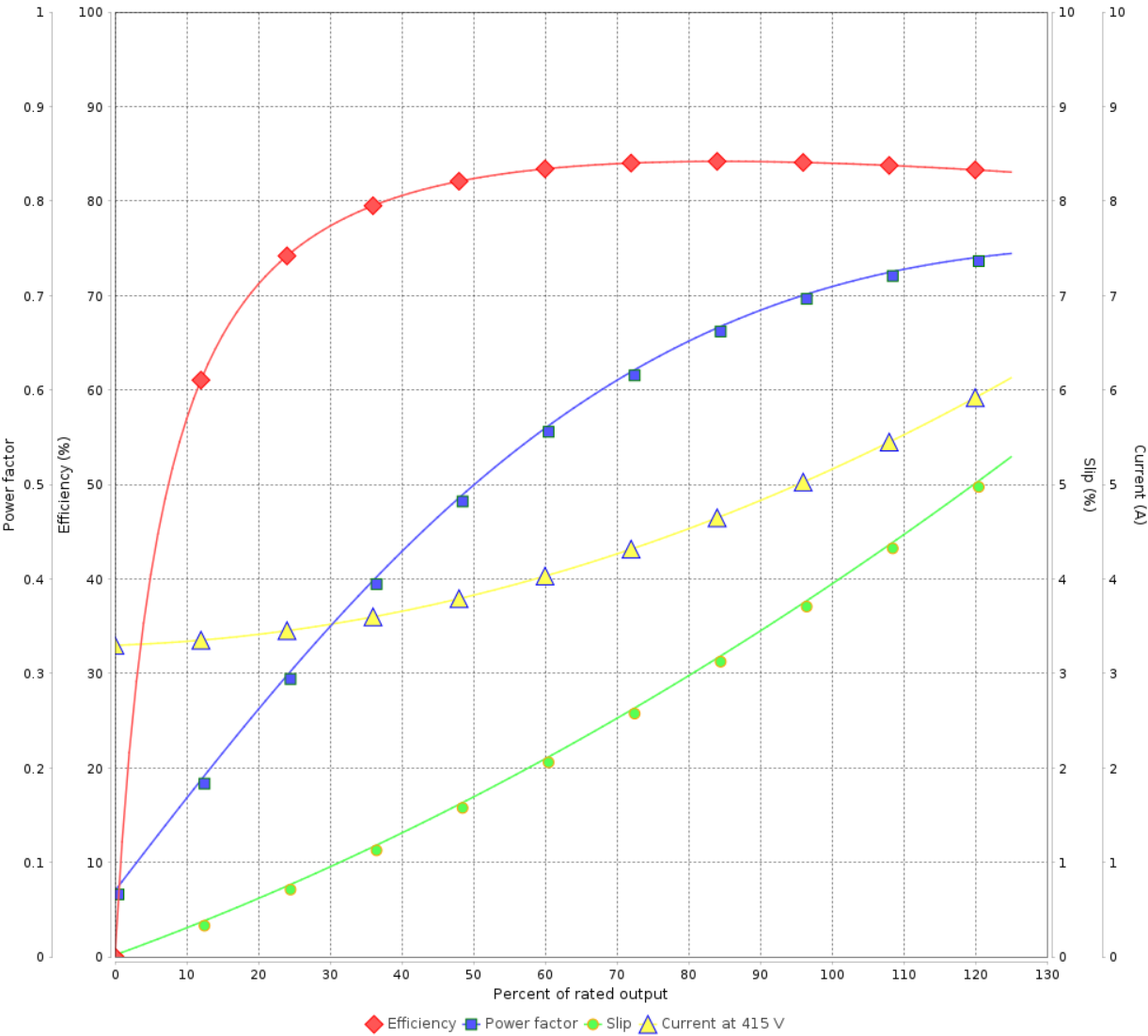
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Performance : 415 V 50 Hz 8P IE3

Rated current	: 5.13 A	Moment of inertia (J)	: 0.0888 kgm ²
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 3.02 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 720 rpm	Design	: B

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