

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11442104

Frame : 145TC	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 : 23.4 kg
Protection degree : IP55	Moment of inertia (J) : 0.0060 kgm ²
Design : B	

Output [HP]	1.5	1.5	1.5	1.5
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	4.20/2.10	2.42	2.39	2.39
L. R. Amperes [A]	35.3/17.6	16.2	17.4	17.9
LRC [A]	8.4x(Code L)	6.7x(Code J)	7.3x(Code K)	7.5x(Code K)
No load current [A]	2.40/1.20	1.20	1.40	1.50
Rated speed [RPM]	1755	1440	1450	1450
Slip [%]	2.50	4.00	3.33	3.33
Rated torque [kgfm]	0.620	0.756	0.751	0.751
Locked rotor torque [%]	290	250	250	280
Breakdown torque [%]	350	280	290	320
Service factor	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%			
	50%	82.5	82.5	81.0
	75%	85.5	84.0	84.0
	100%	86.5	84.1	84.1
Power Factor	25%			
	50%	0.54	0.61	0.53
	75%	0.67	0.74	0.67
	100%	0.76	0.82	0.76

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

Losses (%)	P1 (0,9;1,0)	14.7	17.8	17.8	17.8
	P2 (0,5;1,0)	12.1	14.6	14.6	14.6
	P3 (0,25;1,0)	12.0	14.5	14.5	14.5
	P4 (0,9;0,5)	8.7	10.6	10.6	10.6
	P5 (0,5;0,5)	6.1	7.4	7.4	7.4
	P6 (0,5;0,25)	4.9	5.9	5.9	5.9
	P7 (0,25;0,25)	3.6	4.4	4.4	4.4

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6205 ZZ	6204 ZZ	Max. traction : 57 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 80 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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Customer :

Notes
USABLE @208V 4.36A SF 1.15 SFA 5.01A

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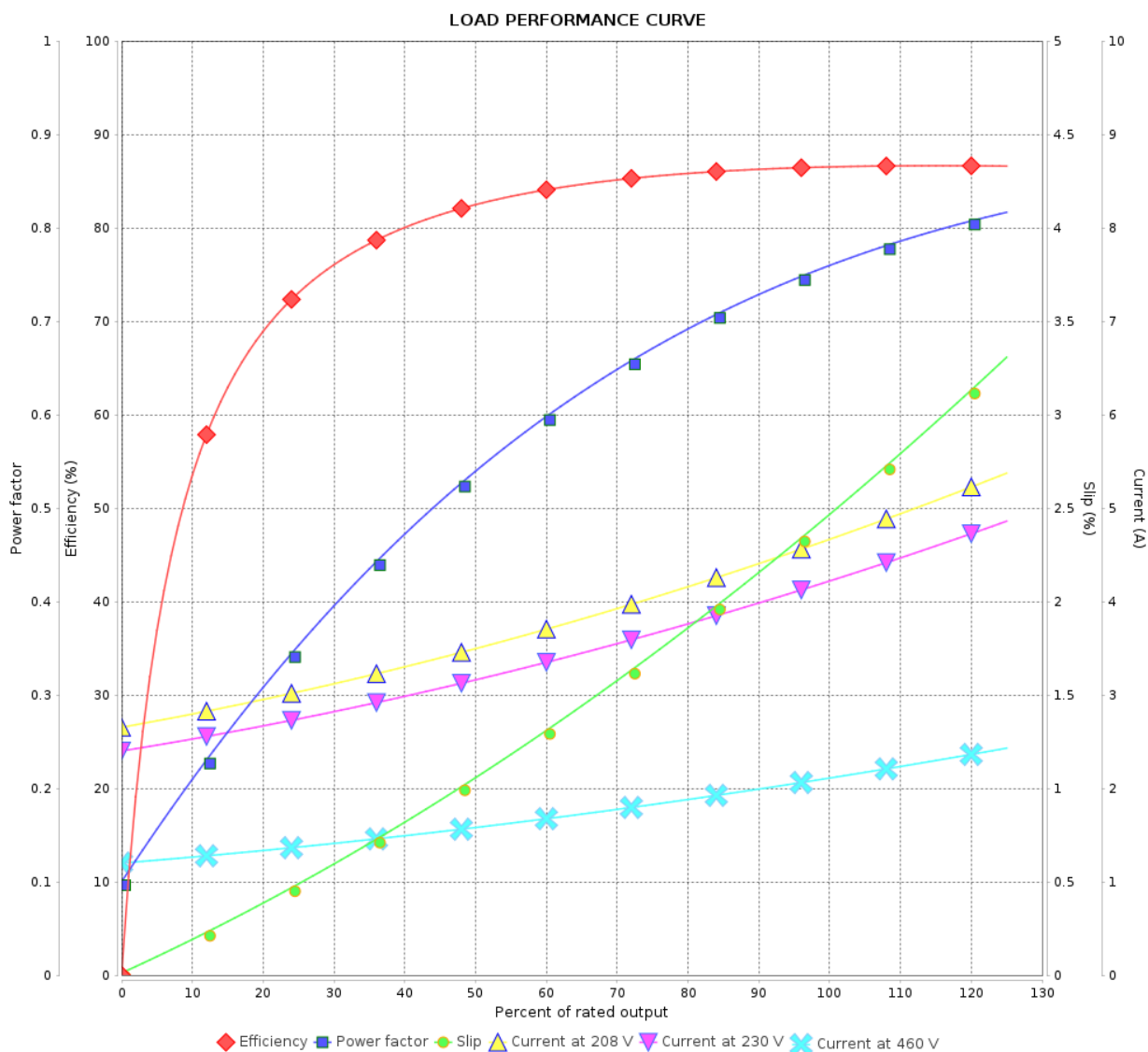
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11442104



Performance : 230/460 V 60 Hz 4P

Rated current : 4.20/2.10 A
LRC : 8.4
Rated torque : 0.620 kgfm
Locked rotor torque : 290 %
Breakdown torque : 350 %
Rated speed : 1755 rpm

Moment of inertia (J) : 0.0060 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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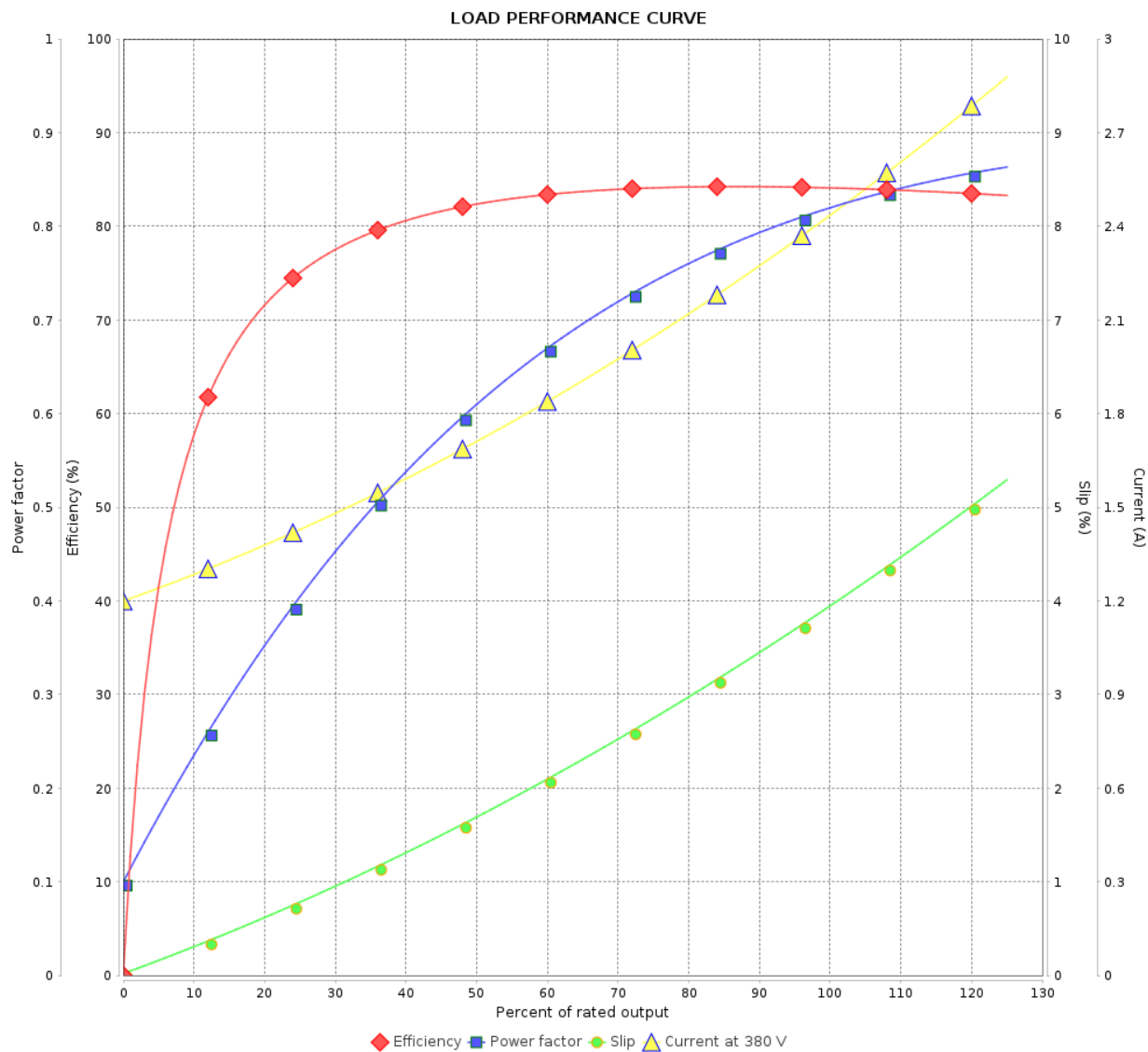
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11442104



Performance : 380 V 50 Hz 4P IE3

Rated current : 2.42 A
LRC : 6.7
Rated torque : 0.756 kgfm
Locked rotor torque : 250 %
Breakdown torque : 280 %
Rated speed : 1440 rpm

Moment of inertia (J) : 0.0060 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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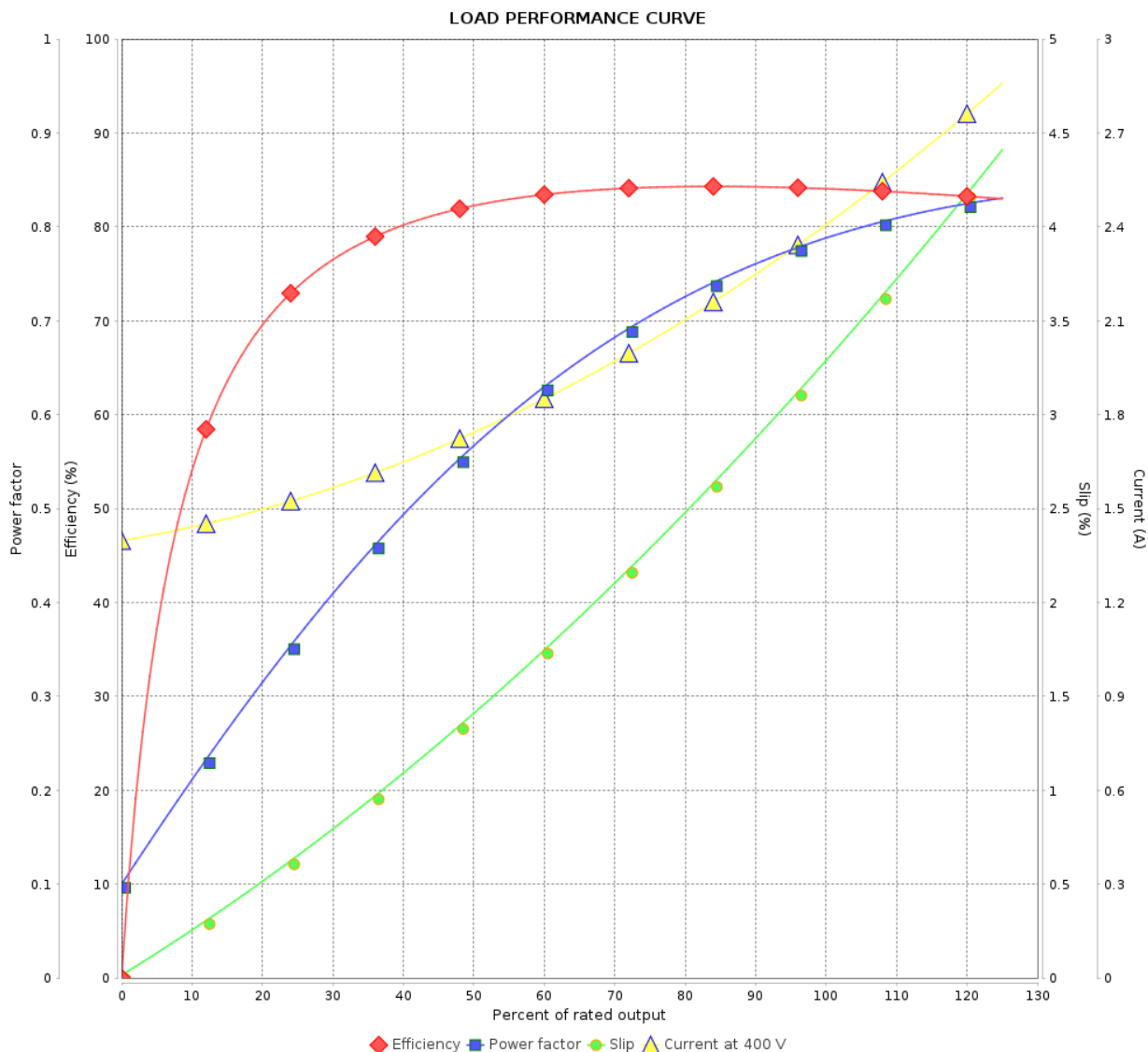
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11442104



Performance : 400 V 50 Hz 4P IE3

Rated current : 2.39 A
LRC : 7.3
Rated torque : 0.751 kgfm
Locked rotor torque : 250 %
Breakdown torque : 290 %
Rated speed : 1450 rpm

Moment of inertia (J) : 0.0060 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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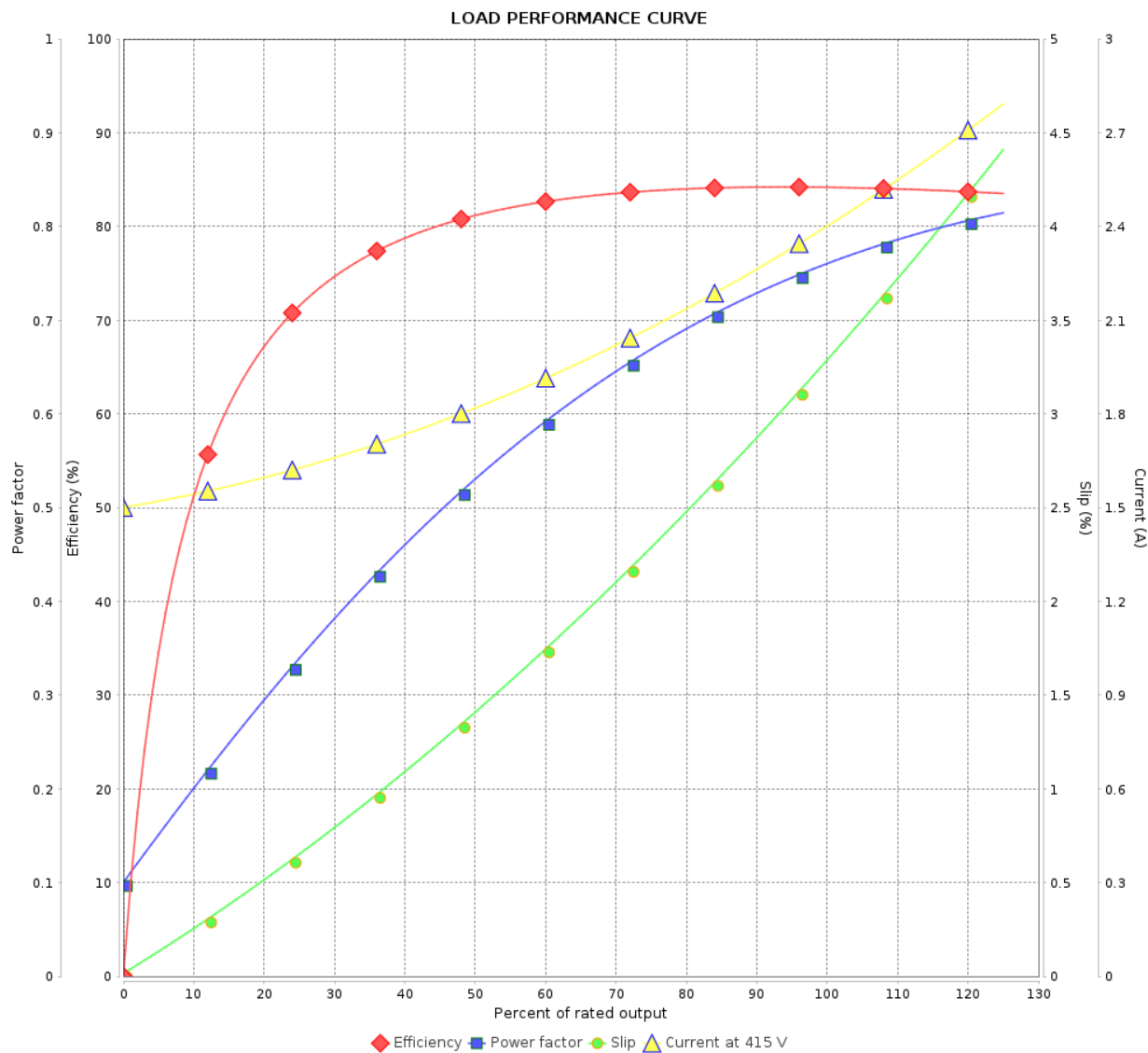
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11442104



Performance : 415 V 50 Hz 4P IE3

Rated current : 2.39 A
LRC : 7.5
Rated torque : 0.751 kgfm
Locked rotor torque : 280 %
Breakdown torque : 320 %
Rated speed : 1450 rpm

Moment of inertia (J) : 0.0060 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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