

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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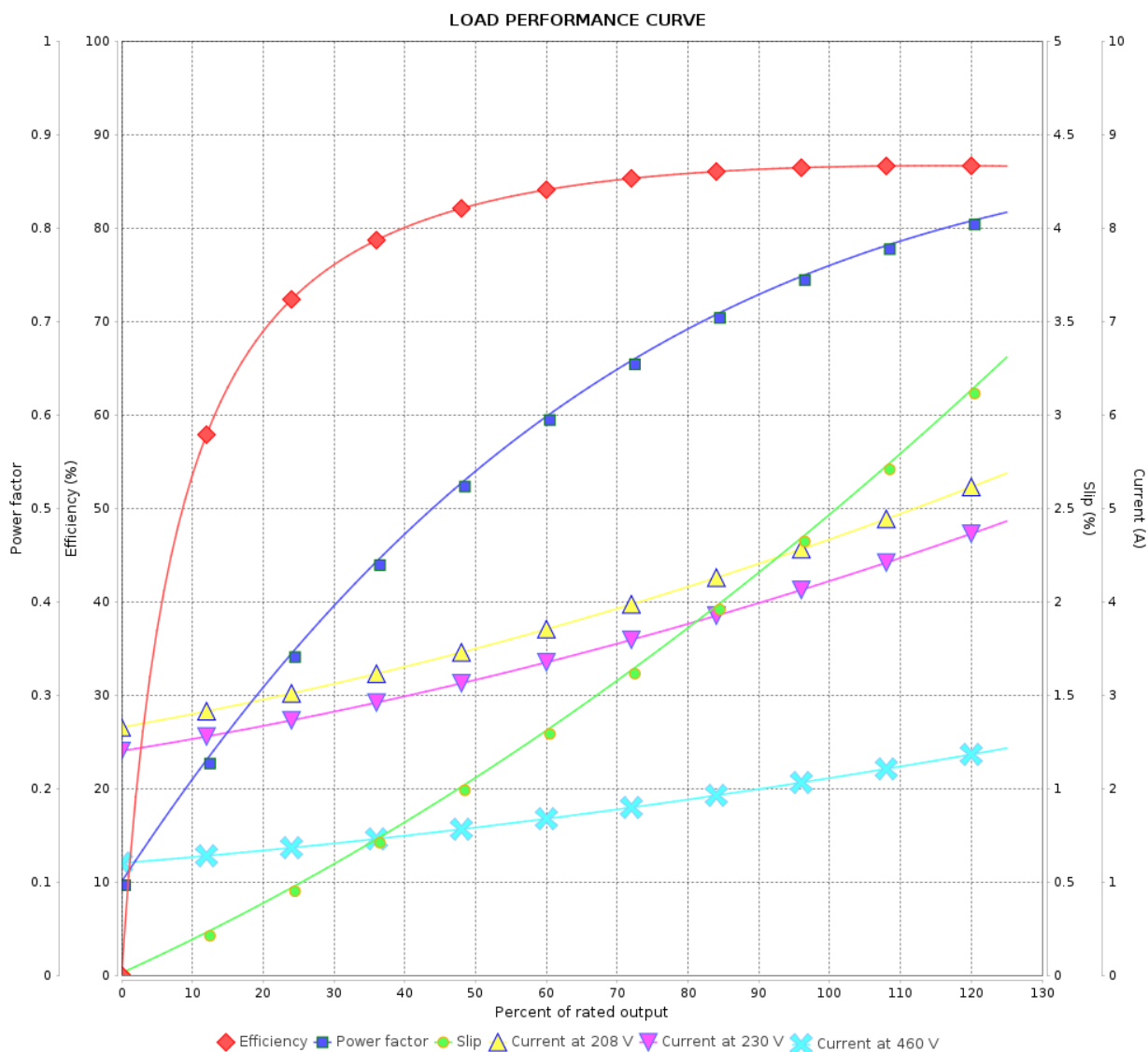
Three Phase Induction Motor - Squirrel Cage



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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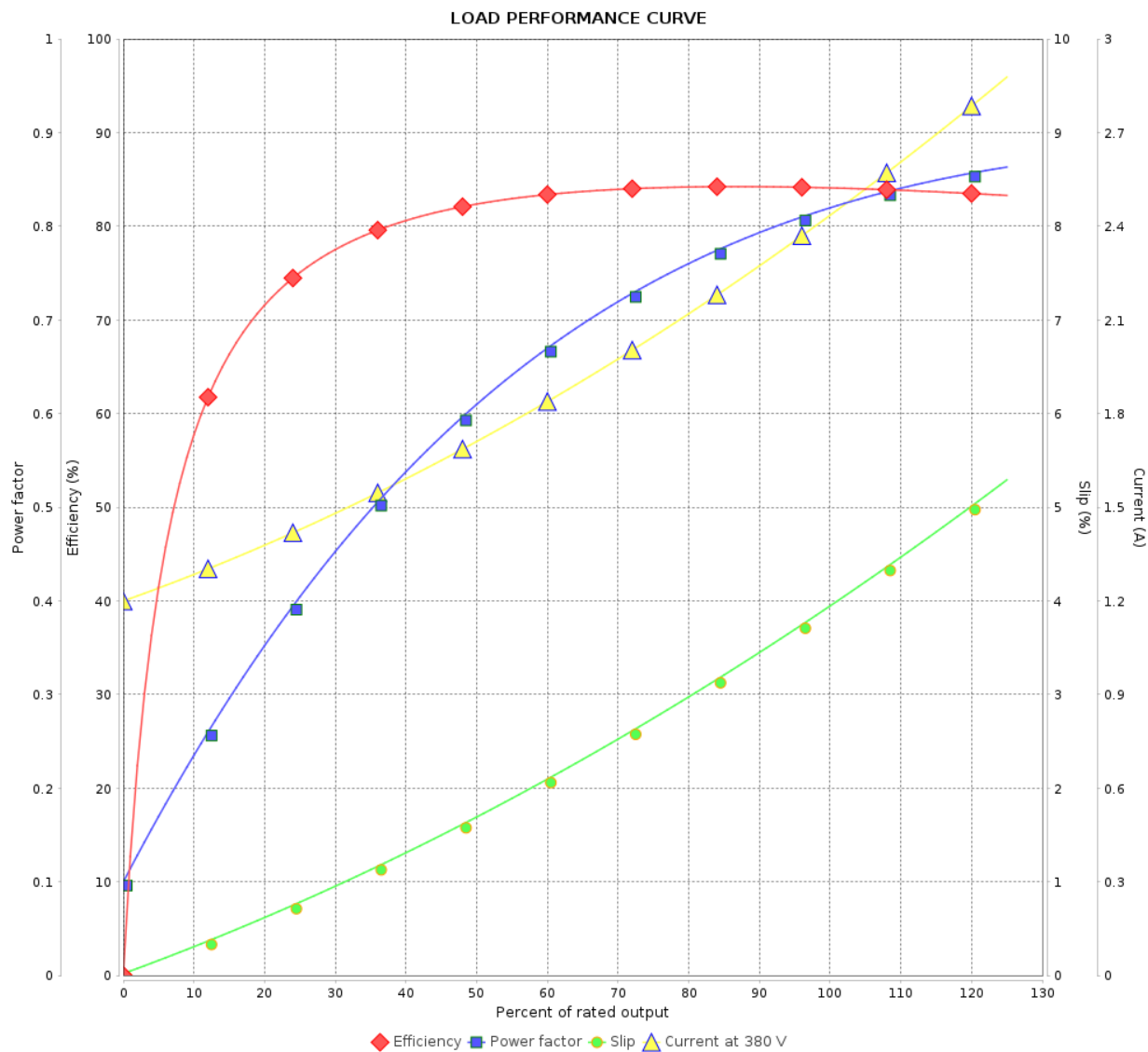
Three Phase Induction Motor - Squirrel Cage



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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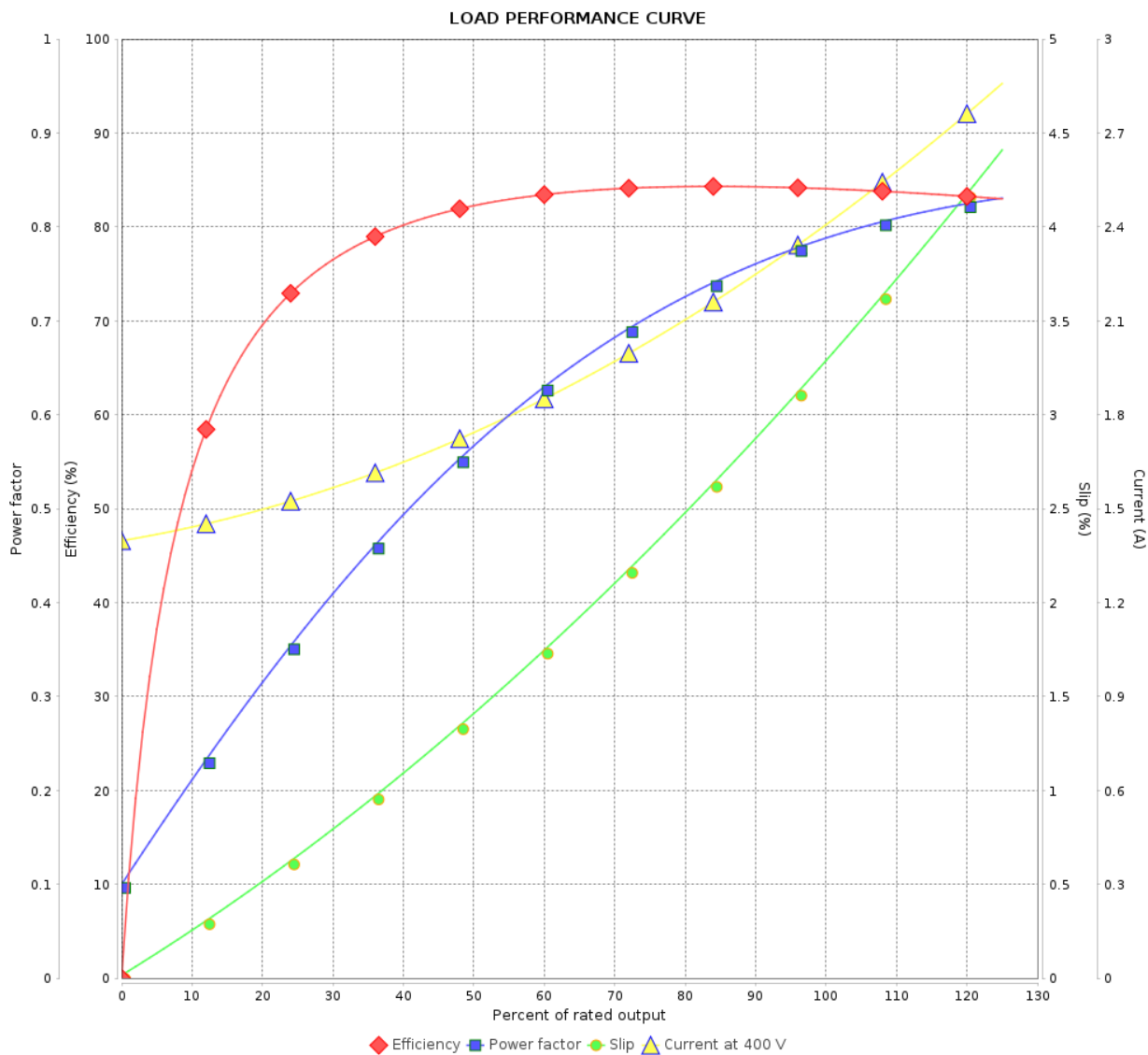
Three Phase Induction Motor - Squirrel Cage



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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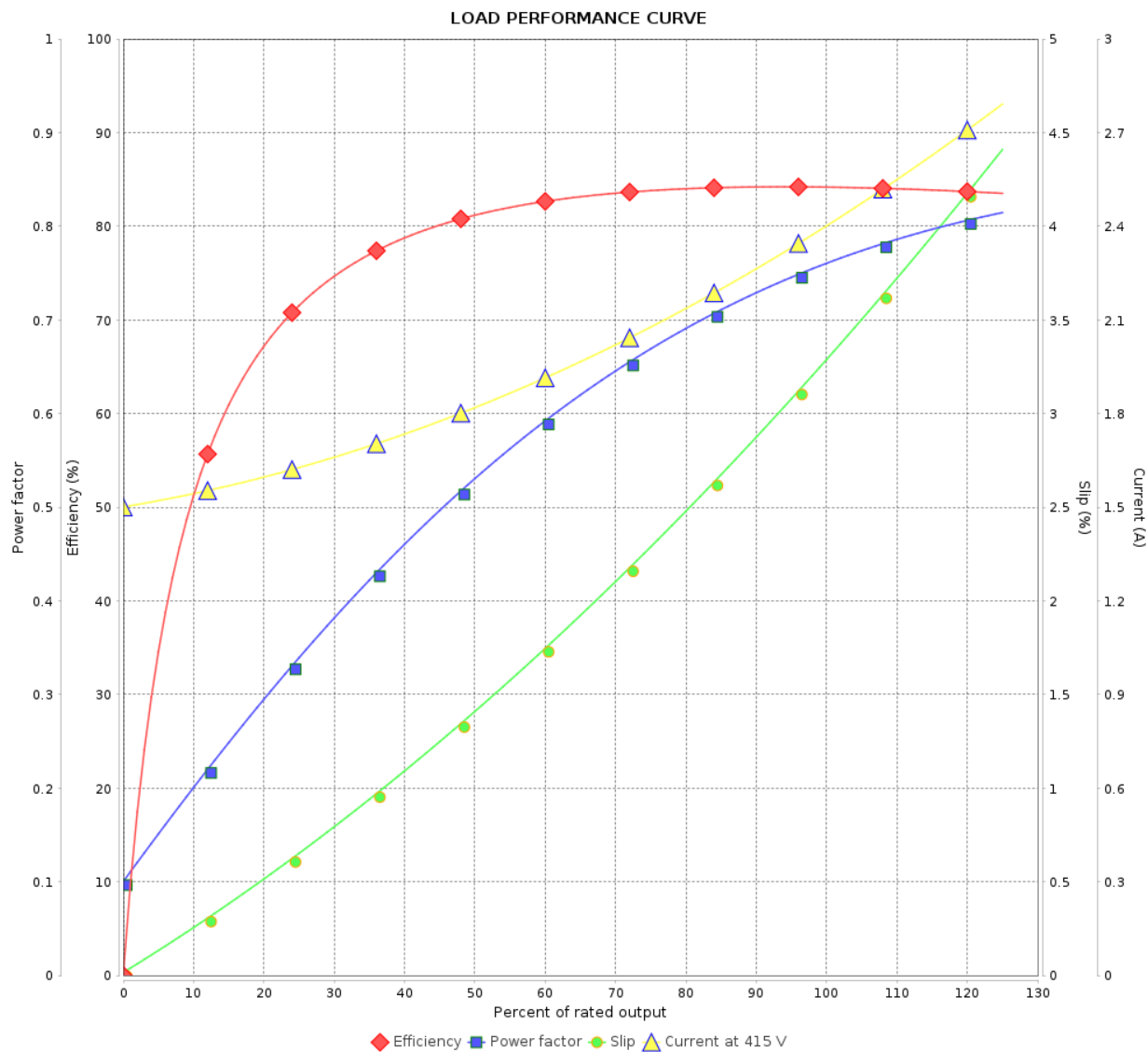
Three Phase Induction Motor - Squirrel Cage



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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