

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency Three-Phase Product code : 12792146

Frame : 182/4T	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 : 44.9 kg
Protection degree : IP55	Moment of inertia (J) : 0.0167 kgm ²
Design : A	

Output [HP]	3	3	3	3
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	7.88/3.94	4.61	4.49	4.41
L. R. Amperes [A]	74.9/37.4	36.9	39.1	41.9
LRC [A]	9.5x(Code L)	8.0x(Code K)	8.7x(Code L)	9.5x(Code M)
No load current [A]	4.60/2.30	2.20	2.40	2.50
Rated speed [RPM]	1770	1460	1465	1465
Slip [%]	1.67	2.67	2.33	2.33
Rated torque [kgfm]	1.23	1.49	1.49	1.49
Locked rotor torque [%]	250	220	250	280
Breakdown torque [%]	360	250	300	350
Service factor	1.25	1.25	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	64s (cold) 36s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	52s (cold) 29s (hot)
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%			
	50%	87.5	88.5	89.5
	75%	88.5	89.5	90.2
	100%	91.0	89.5	90.2
Power Factor	25%			
	50%	0.59	0.65	0.59
	75%	0.70	0.76	0.70
	100%	0.77	0.81	0.79

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

Losses (%)	P1 (0,9;1,0)	9.4	11.1	11.1	10.3
	P2 (0,5;1,0)	7.3	8.6	8.6	8.0
	P3 (0,25;1,0)	6.6	7.8	7.8	7.2
	P4 (0,9;0,5)	5.6	6.7	6.7	6.2
	P5 (0,5;0,5)	3.7	4.4	4.4	4.1
	P6 (0,5;0,25)	2.9	3.4	3.4	3.2
	P7 (0,25;0,25)	2.0	2.4	2.4	2.2

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6207 ZZ	6206 ZZ	Max. traction : 86 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 131 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 :

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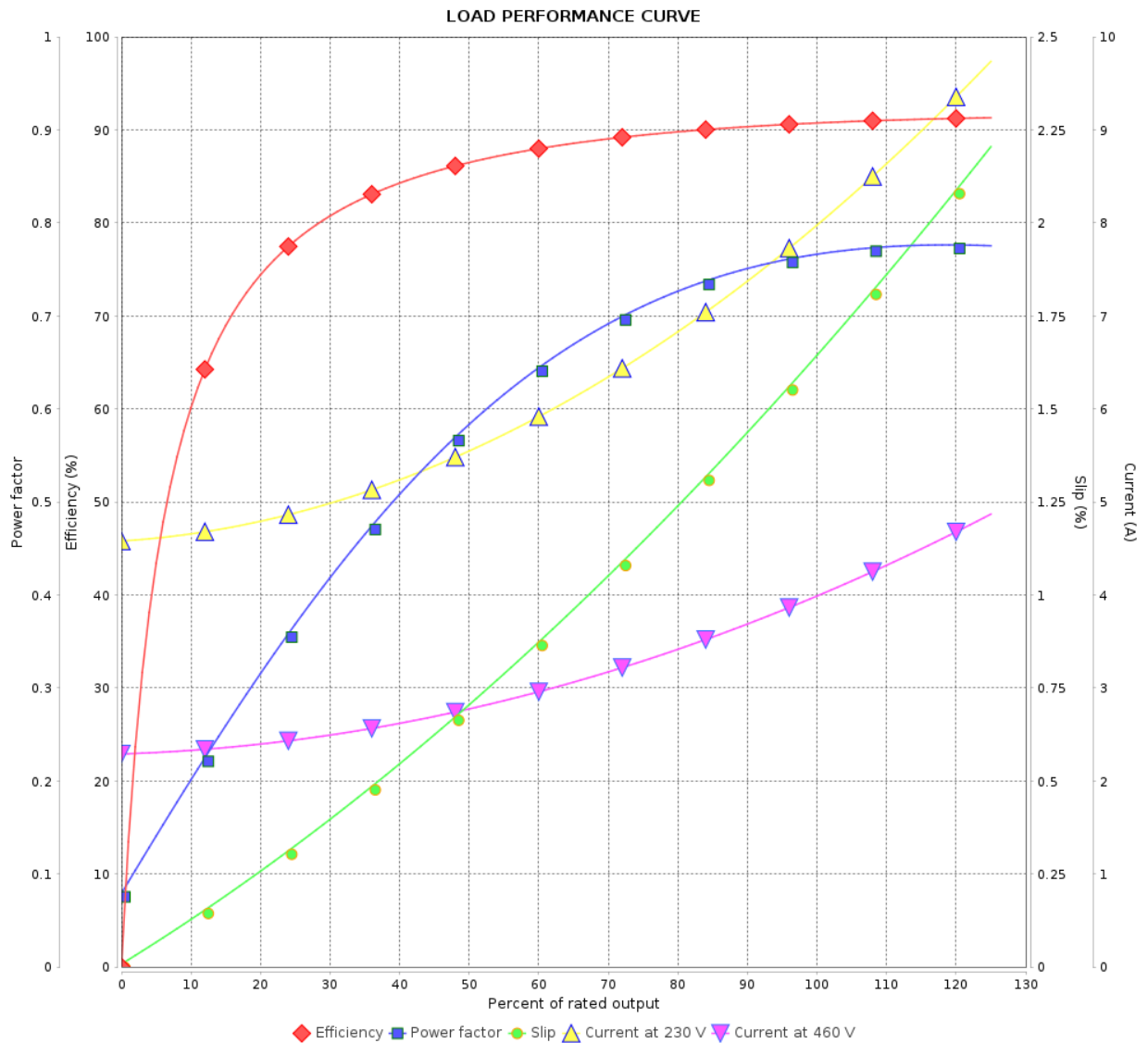
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency
Three-Phase

Product code : 12792146



Performance : 230/460 V 60 Hz 4P

Rated current : 7.88/3.94 A
LRC : 9.5
Rated torque : 1.23 kgfm
Locked rotor torque : 250 %
Breakdown torque : 360 %
Rated speed : 1770 rpm

Moment of inertia (J) : 0.0167 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : A

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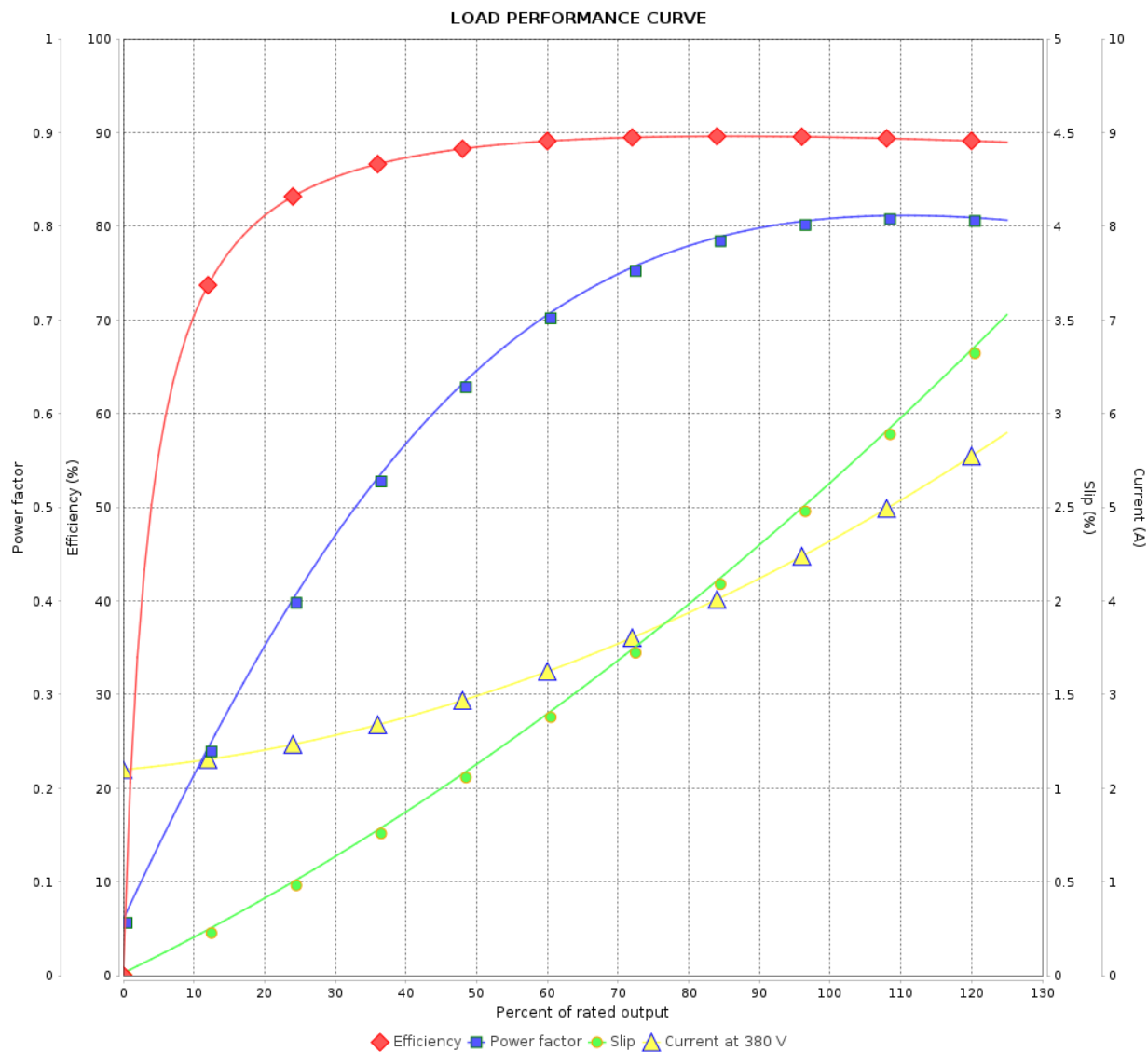
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency
Three-Phase

Product code : 12792146



Performance : 380 V 50 Hz 4P IE4

Rated current : 4.61 A
LRC : 8.0
Rated torque : 1.49 kgfm
Locked rotor torque : 220 %
Breakdown torque : 250 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.0167 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : A

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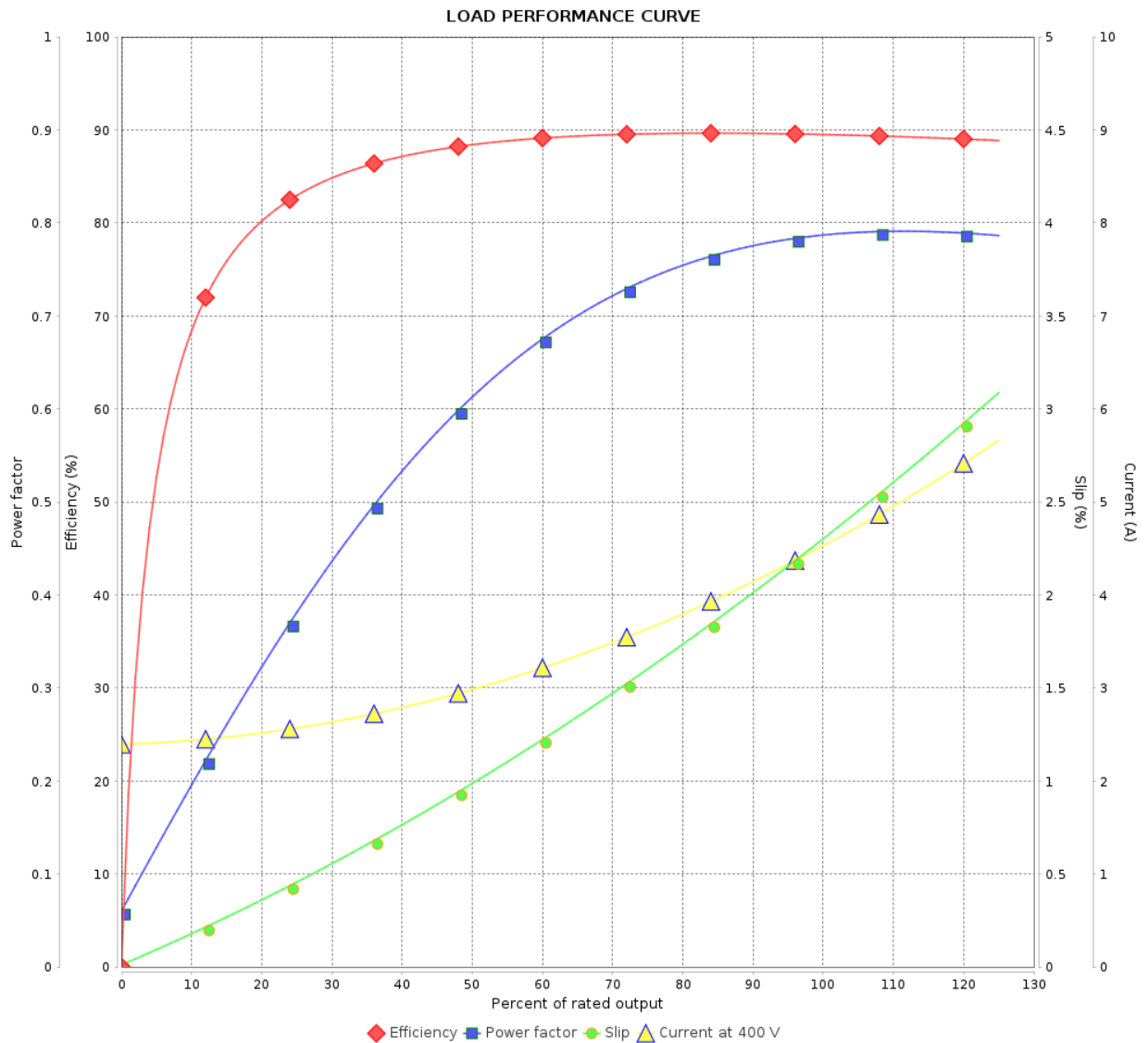
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency
Three-Phase

Product code : 12792146



Performance : 400 V 50 Hz 4P IE4

Rated current : 4.49 A
LRC : 8.7
Rated torque : 1.49 kgfm
Locked rotor torque : 250 %
Breakdown torque : 300 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.0167 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : A

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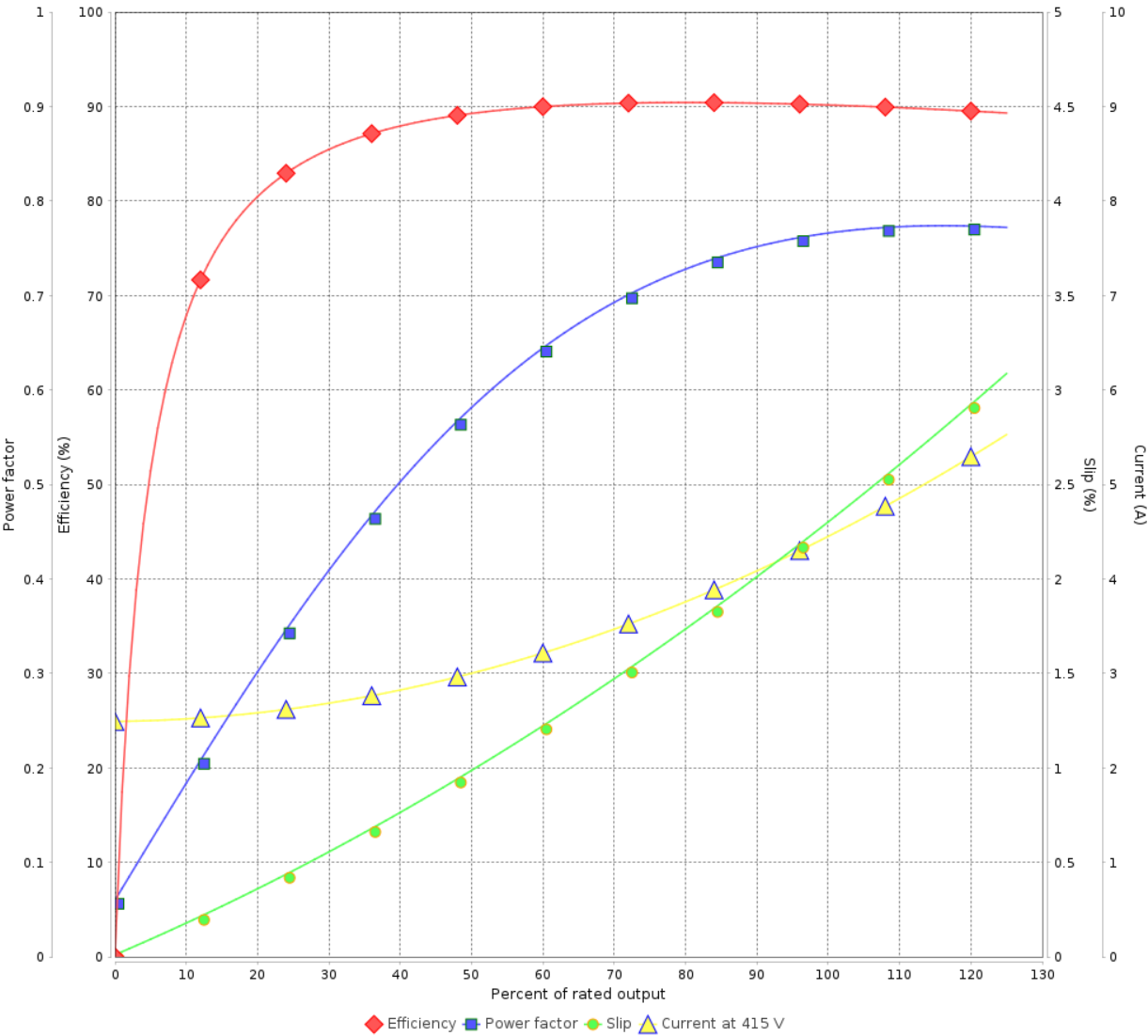
Three Phase Induction Motor - Squirrel Cage



Customer :

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LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P IE4

Rated current	: 4.41 A	Moment of inertia (J)	: 0.0167 kgm ²
LRC	: 9.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.49 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: A

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