

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13025590

Frame : 182/4TC	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 : 46.0 kg
Protection degree : IP55	Moment of inertia (J) : 0.0243 kgm ²
Design : B	

Output [HP]	1.5	1.5	1.5	1.5
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	5.68/2.84	3.10	3.13	3.11
L. R. Amperes [A]	33.5/16.8	15.5	17.2	18.7
LRC [A]	5.9x(Code L)	5.0x(Code J)	5.5x(Code K)	6.0x(Code L)
No load current [A]	4.20/2.10	2.00	2.30	2.50
Rated speed [RPM]	860	700	705	710
Slip [%]	4.44	6.67	6.00	5.33
Rated torque [kgfm]	1.25	1.52	1.51	1.51
Locked rotor torque [%]	229	210	240	260
Breakdown torque [%]	290	220	240	270
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)
Noise level ²	50.0 dB(A)	46.0 dB(A)	46.0 dB(A)	46.0 dB(A)
Efficiency (%)	25%			
	50%	76.0	74.0	73.5
	75%	78.0	76.0	76.0
	100%	78.5	77.0	76.9
Power Factor	25%			
	50%	0.43	0.51	0.44
	75%	0.54	0.62	0.55
	100%	0.62	0.70	0.64

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

Losses (%)	P1 (0,9;1,0)	25.9	28.3	28.4	28.4
	P2 (0,5;1,0)	20.5	22.4	22.5	22.5
	P3 (0,25;1,0)	18.6	20.3	20.4	20.4
	P4 (0,9;0,5)	18.4	20.1	20.2	20.2
	P5 (0,5;0,5)	13.2	14.4	14.4	14.4
	P6 (0,5;0,25)	11.6	12.7	12.8	12.8
	P7 (0,25;0,25)	8.8	9.6	9.7	9.7

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6207 ZZ	6206 ZZ	Max. traction : 63 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 109 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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Checked by				
Date	29/10/2024			

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Revision

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Customer :

Notes
USABLE @208V 5.97A SF 1.15 SFA 6.87A

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LOAD PERFORMANCE CURVE

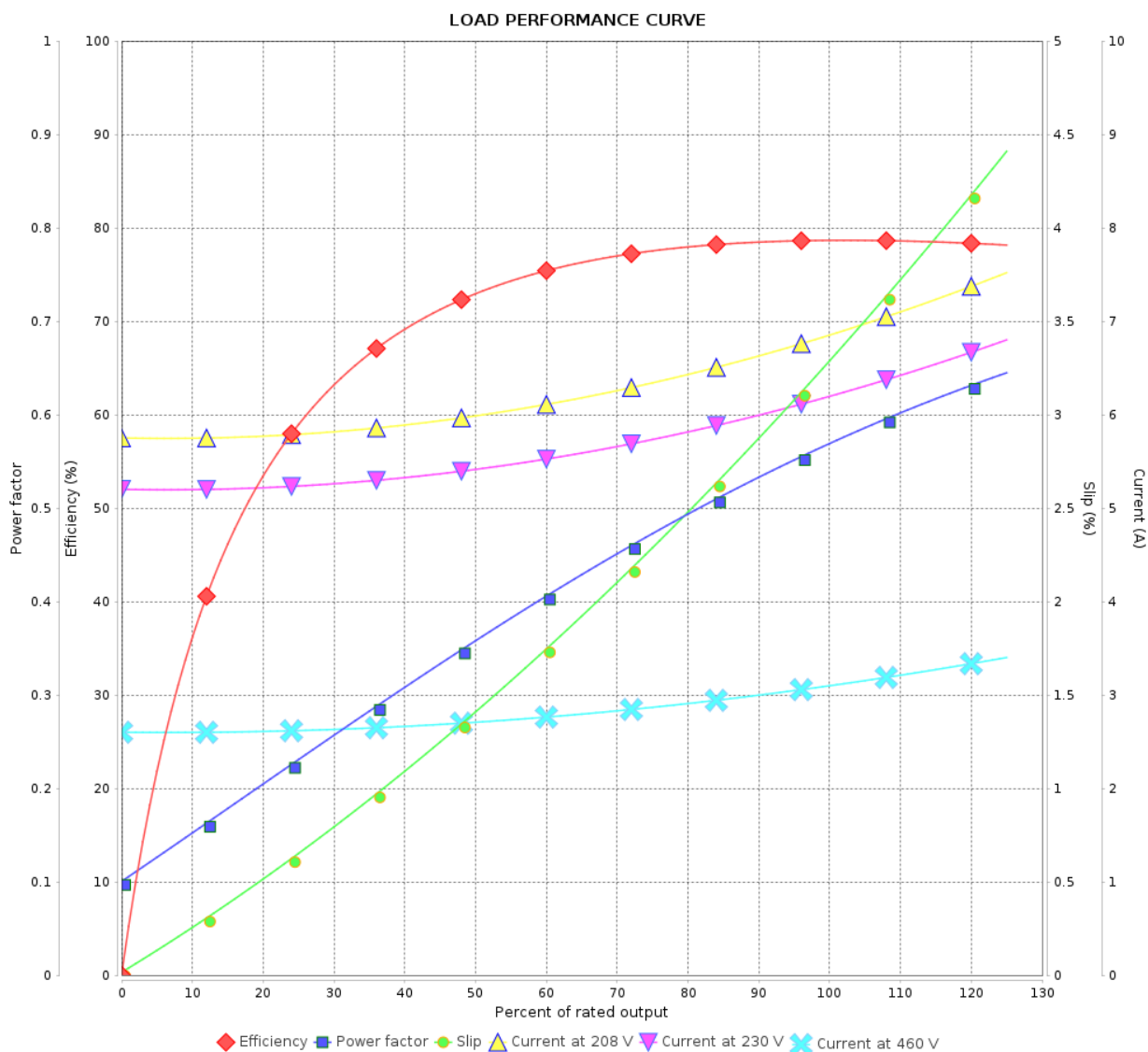
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13025590



Performance : 230/460 V 60 Hz 8P

Rated current : 5.68/2.84 A
LRC : 5.9
Rated torque : 1.25 kgfm
Locked rotor torque : 229 %
Breakdown torque : 290 %
Rated speed : 860 rpm

Moment of inertia (J) : 0.0243 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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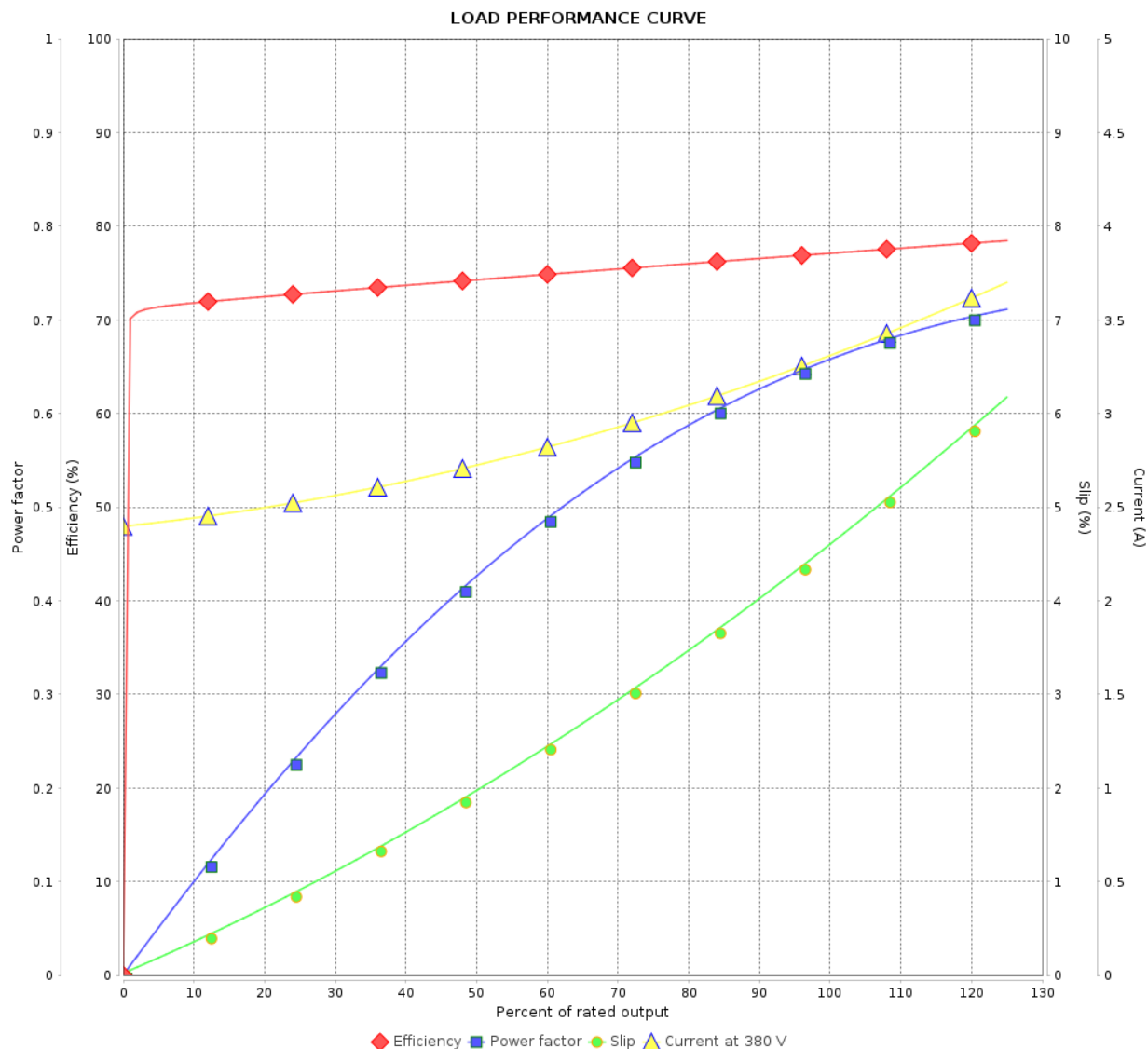
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13025590



Performance : 380 V 50 Hz 8P IE2

Rated current : 3.10 A
LRC : 5.0
Rated torque : 1.52 kgfm
Locked rotor torque : 210 %
Breakdown torque : 220 %
Rated speed : 700 rpm

Moment of inertia (J) : 0.0243 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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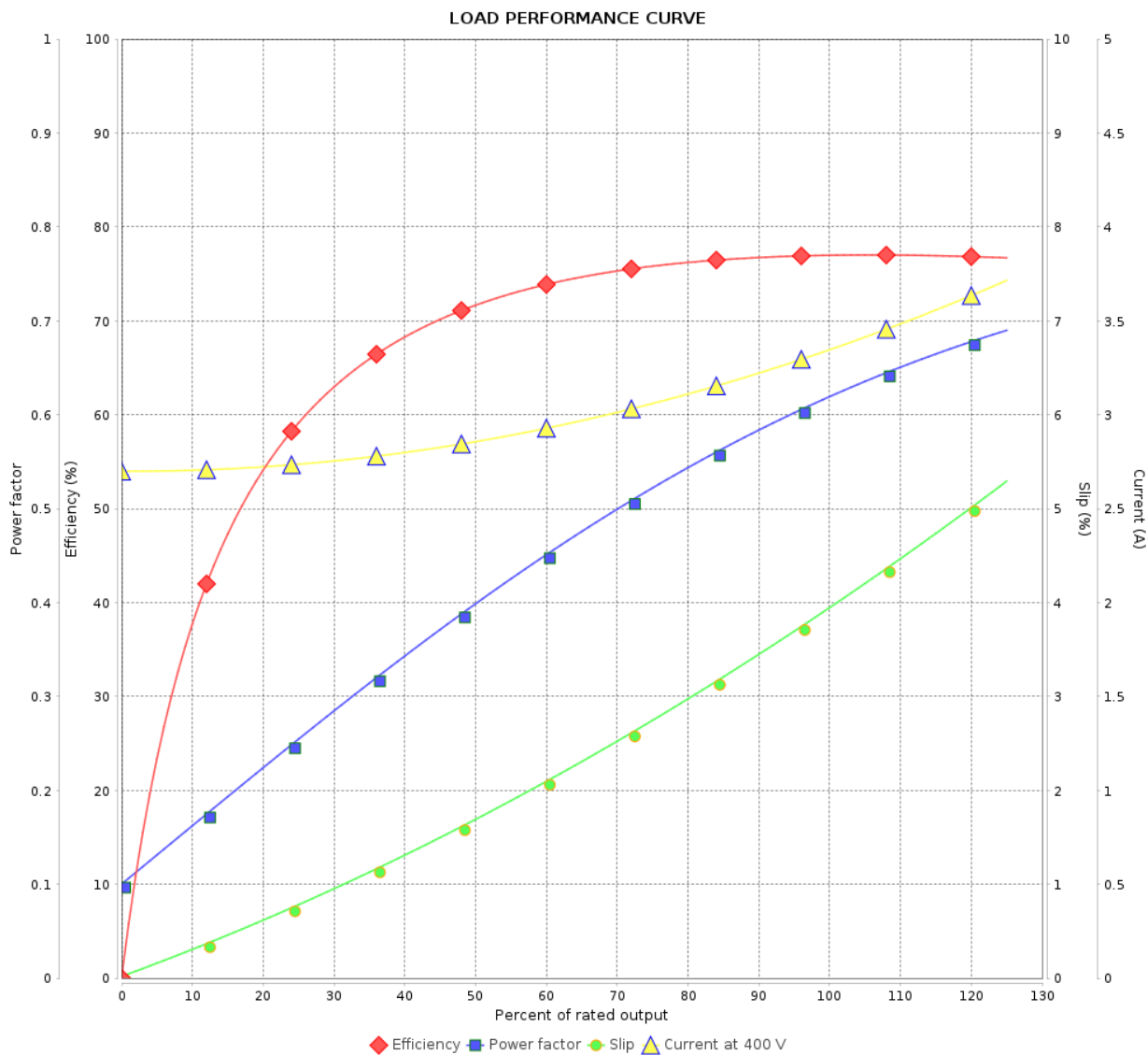
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 8P IE2

Rated current : 3.13 A
LRC : 5.5
Rated torque : 1.51 kgfm
Locked rotor torque : 240 %
Breakdown torque : 240 %
Rated speed : 705 rpm

Moment of inertia (J) : 0.0243 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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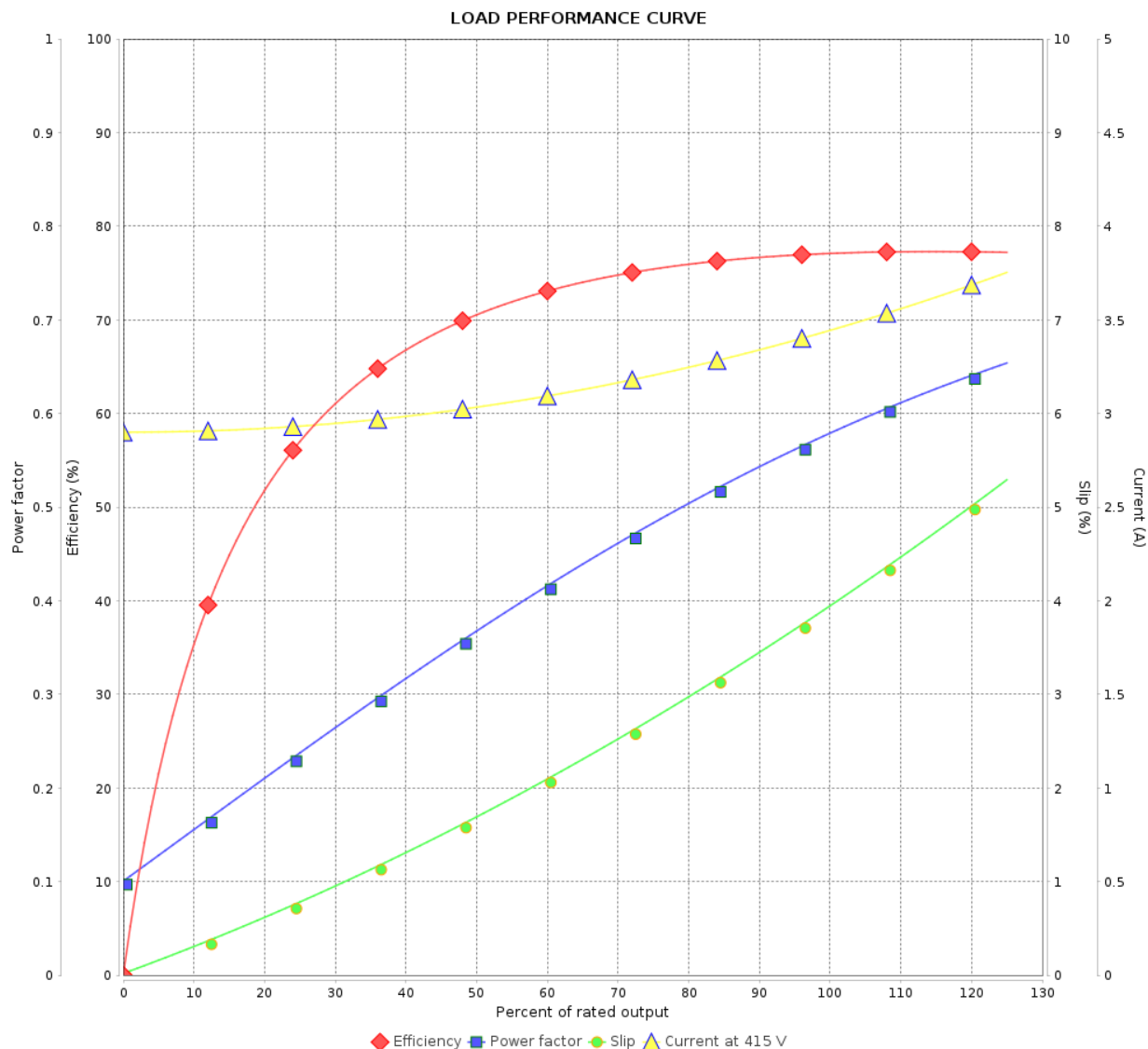
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 13025590



Performance : 415 V 50 Hz 8P IE2

Rated current : 3.11 A
LRC : 6.0
Rated torque : 1.51 kgfm
Locked rotor torque : 260 %
Breakdown torque : 270 %
Rated speed : 710 rpm

Moment of inertia (J) : 0.0243 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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