

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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Customer :

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

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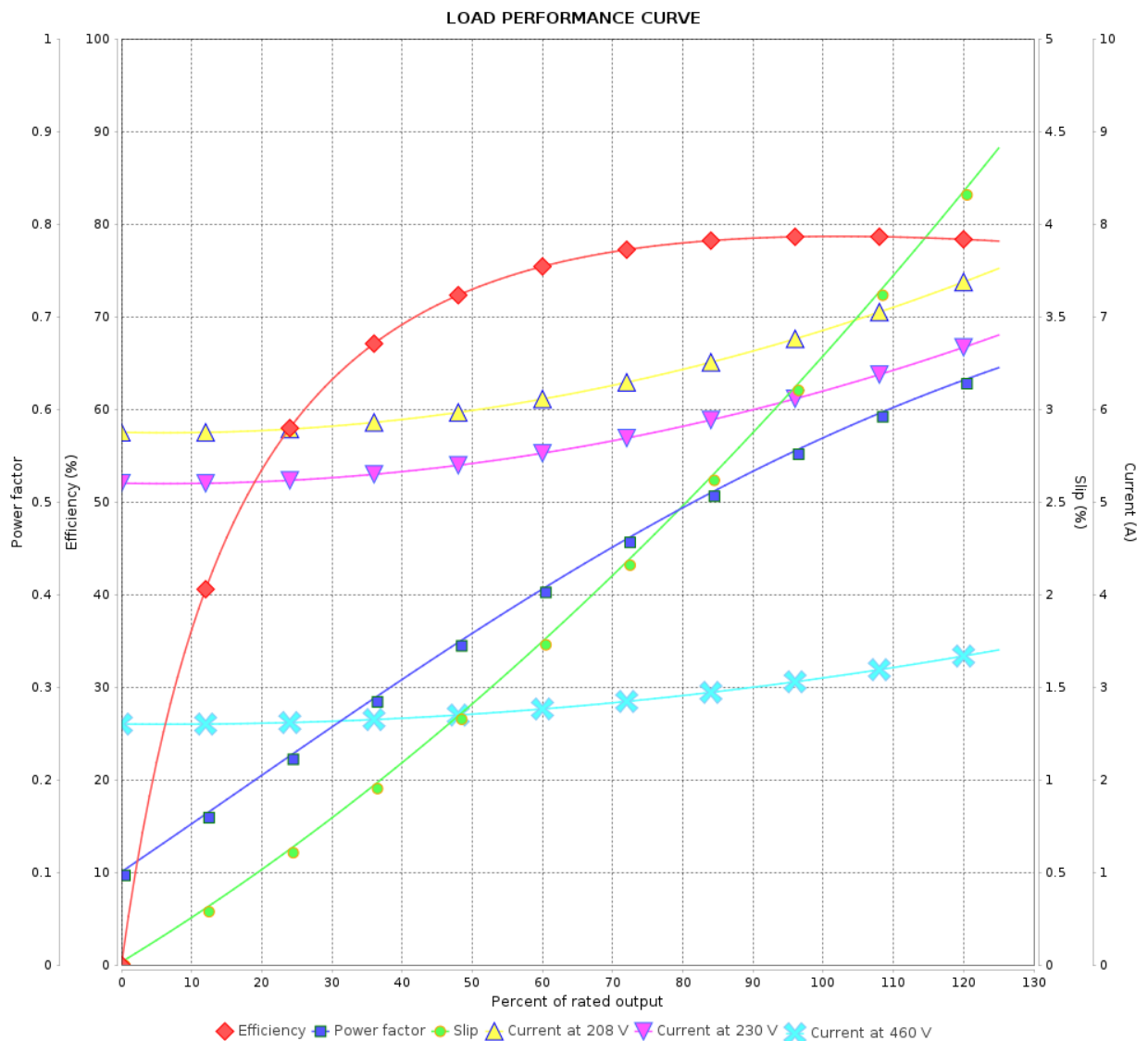
Three Phase Induction Motor - Squirrel Cage



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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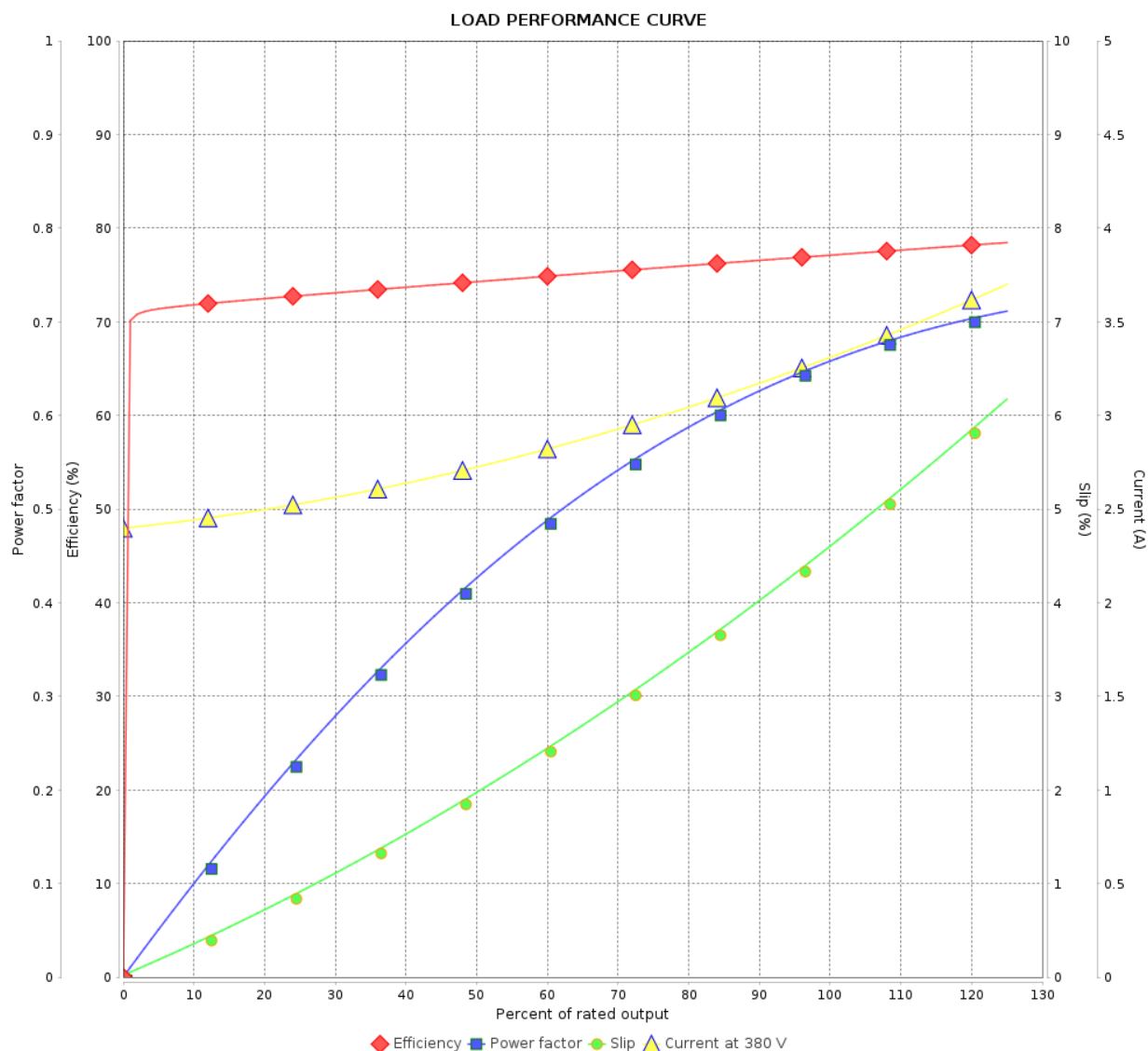
Three Phase Induction Motor - Squirrel Cage



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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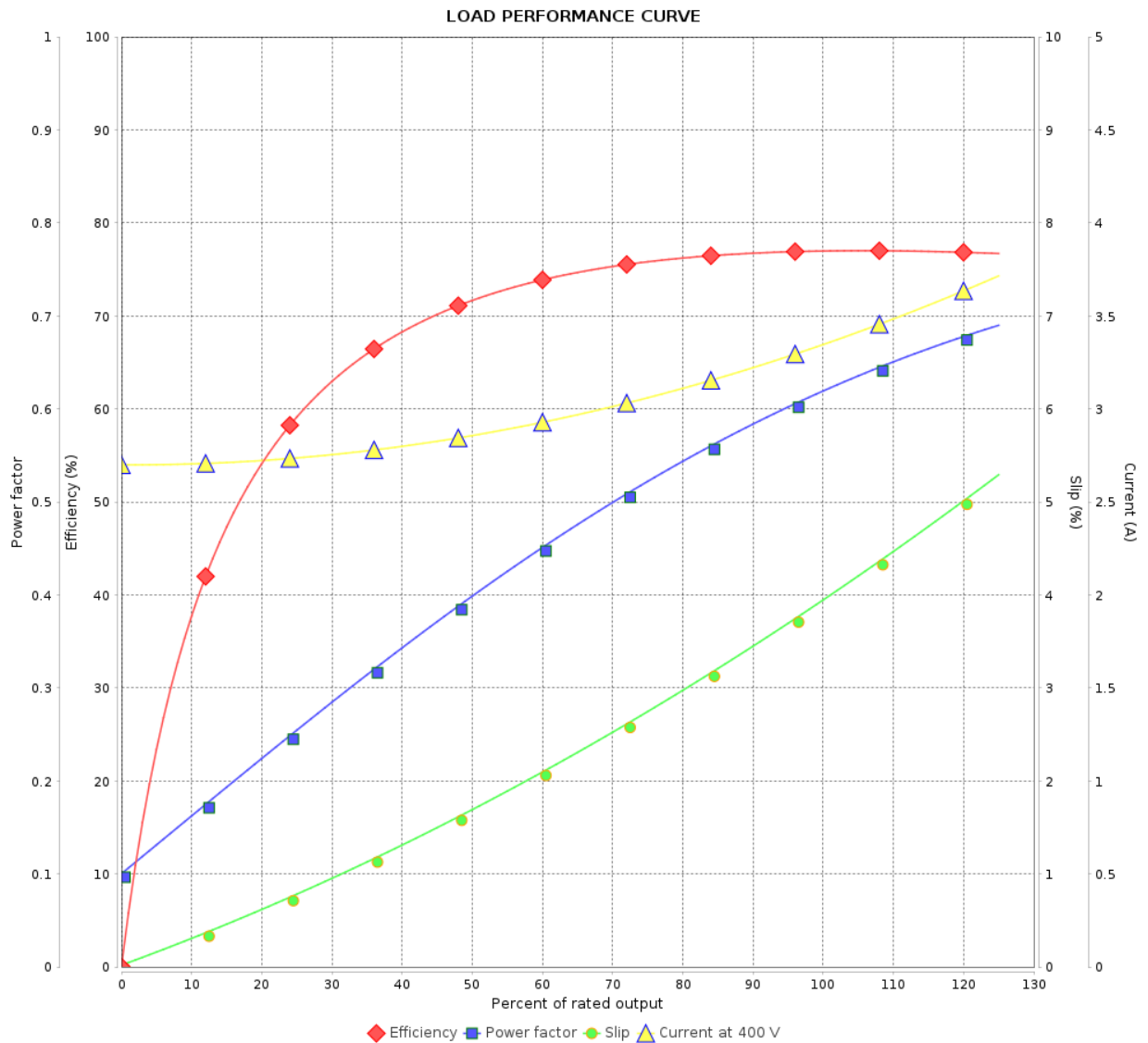
Three Phase Induction Motor - Squirrel Cage



Customer :

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Three-Phase

Product code : 13025590



Performance : 400 V 50 Hz 8P IE2

Rated current	: 3.13 A	Moment of inertia (J)	: 0.0243 kgm ²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.51 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 705 rpm	Design	: B

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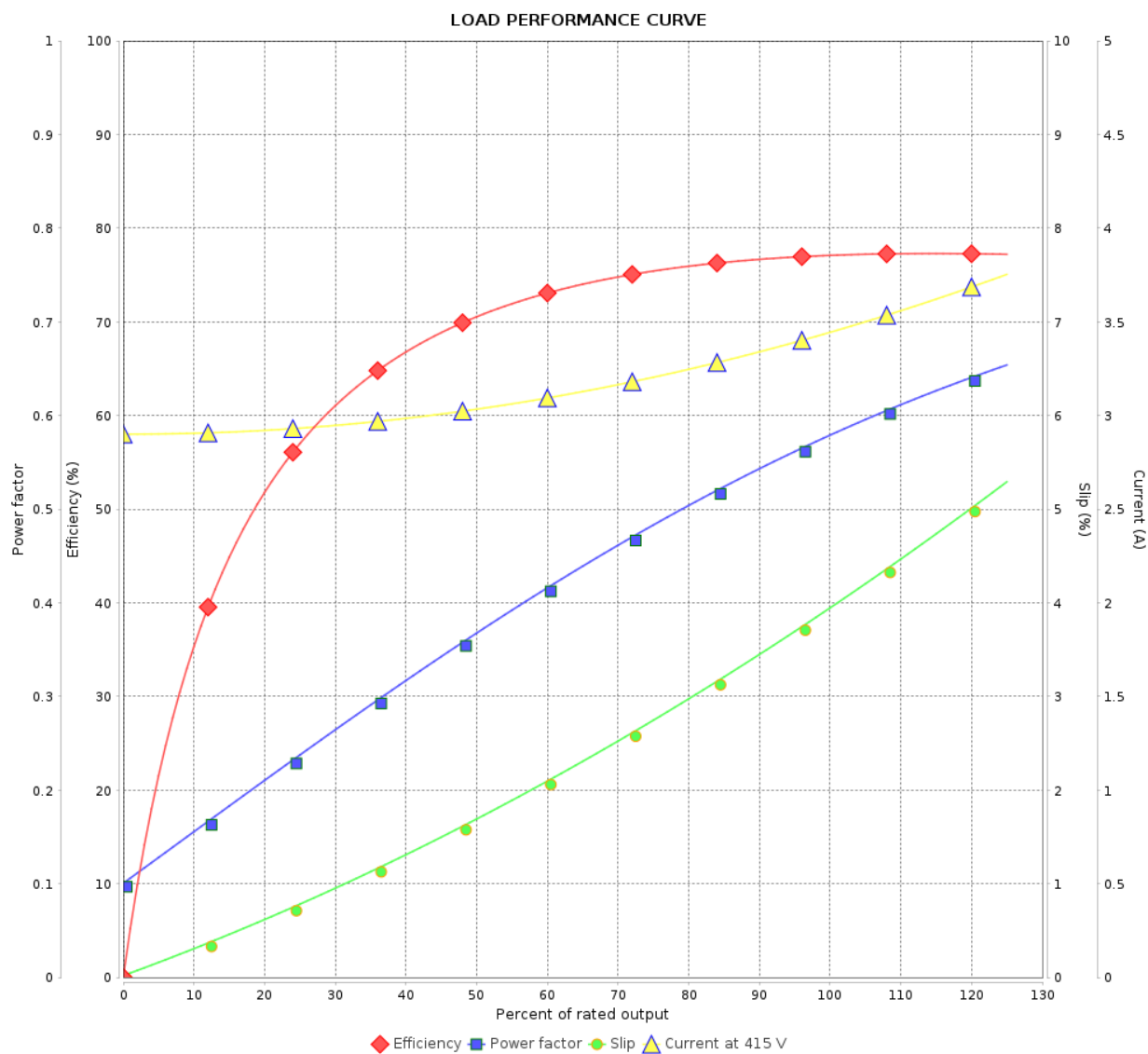
Three Phase Induction Motor - Squirrel Cage



Customer :

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Three-Phase

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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