

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12651247

Frame	: 213/5TC	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	: 64.8 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0451 kgm ²
Design	: B		

Output [HP]	10	7.5	7.5
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	24.4/12.2	22.4/11.2	20.8/11.0
L. R. Amperes [A]	171/85.4	170/85.1	172/91.3
LRC [A]	7.0x(Code H)	7.6x(Code J)	8.3x(Code K)
No load current [A]	11.1/5.54	10.9/5.46	11.3/5.97
Rated speed [RPM]	1760	1465	1470
Slip [%]	2.22	2.33	2.00
Rated torque [kgfm]	4.12	3.72	3.70
Locked rotor torque [%]	250	250	290
Breakdown torque [%]	300	320	360
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	60.0 dB(A)	57.0 dB(A)	57.0 dB(A)
Efficiency (%)	25%	90.2	89.3
	50%	91.0	89.4
	75%	91.0	90.5
	100%	91.7	90.3
Power Factor	25%	0.41	0.34
	50%	0.67	0.59
	75%	0.78	0.73
	100%	0.84	0.80

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6208 ZZ	6206 ZZ	Max. traction : 214 kgf
Sealing	: V'Ring	Without Bearing Seal	Max. compression : 279 kgf
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes
USABLE @208V 27.0A SF 1.00 SFA 27.0A

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.
(4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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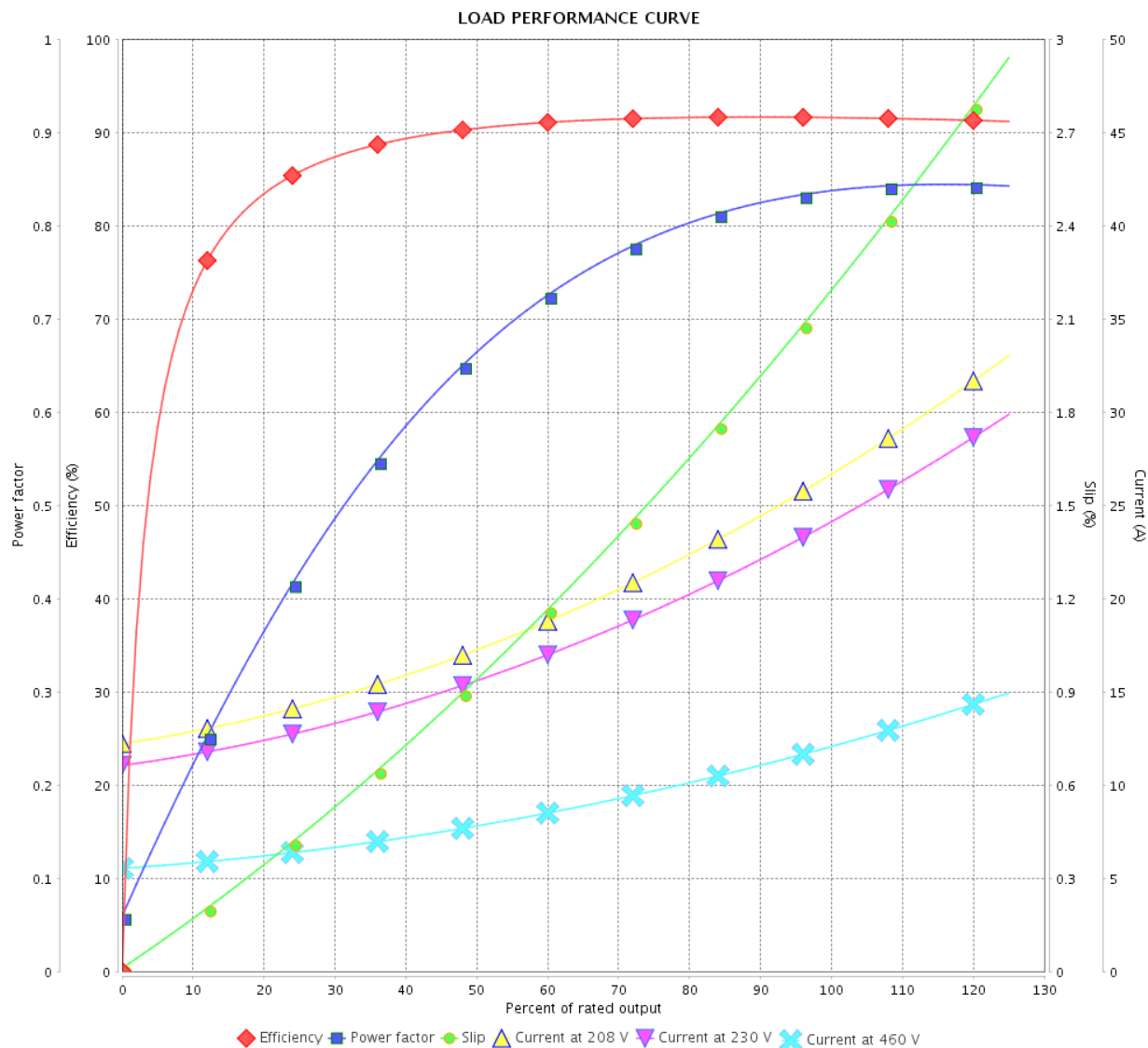
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12651247



Performance : 230/460 V 60 Hz 4P

Rated current : 24.4/12.2 A
 LRC : 7.0
 Rated torque : 4.12 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0451 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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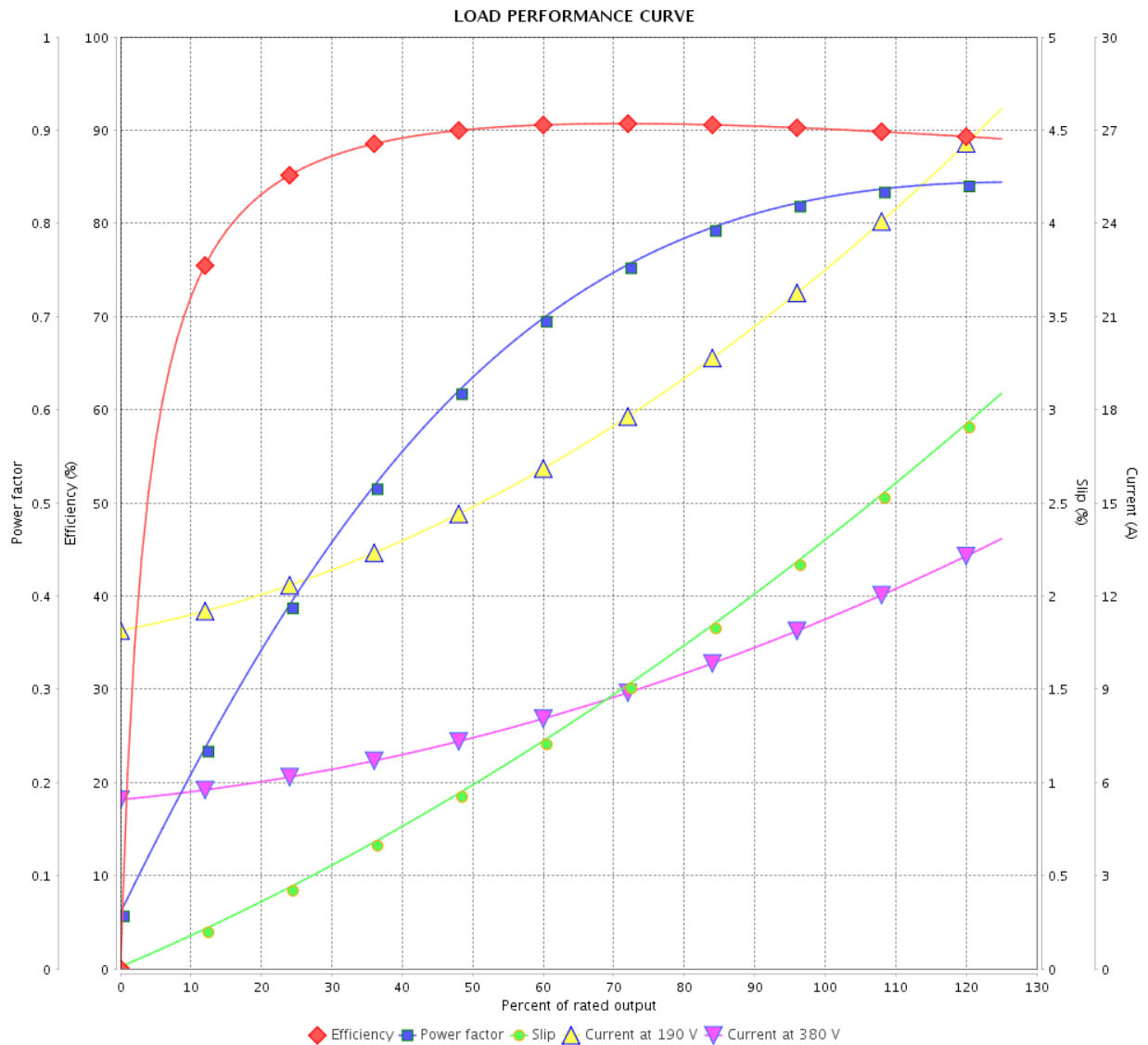
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12651247



Performance : 190/380 V 50 Hz 4P

Rated current : 22.4/11.2 A
 LRC : 7.6
 Rated torque : 3.72 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 320 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.0451 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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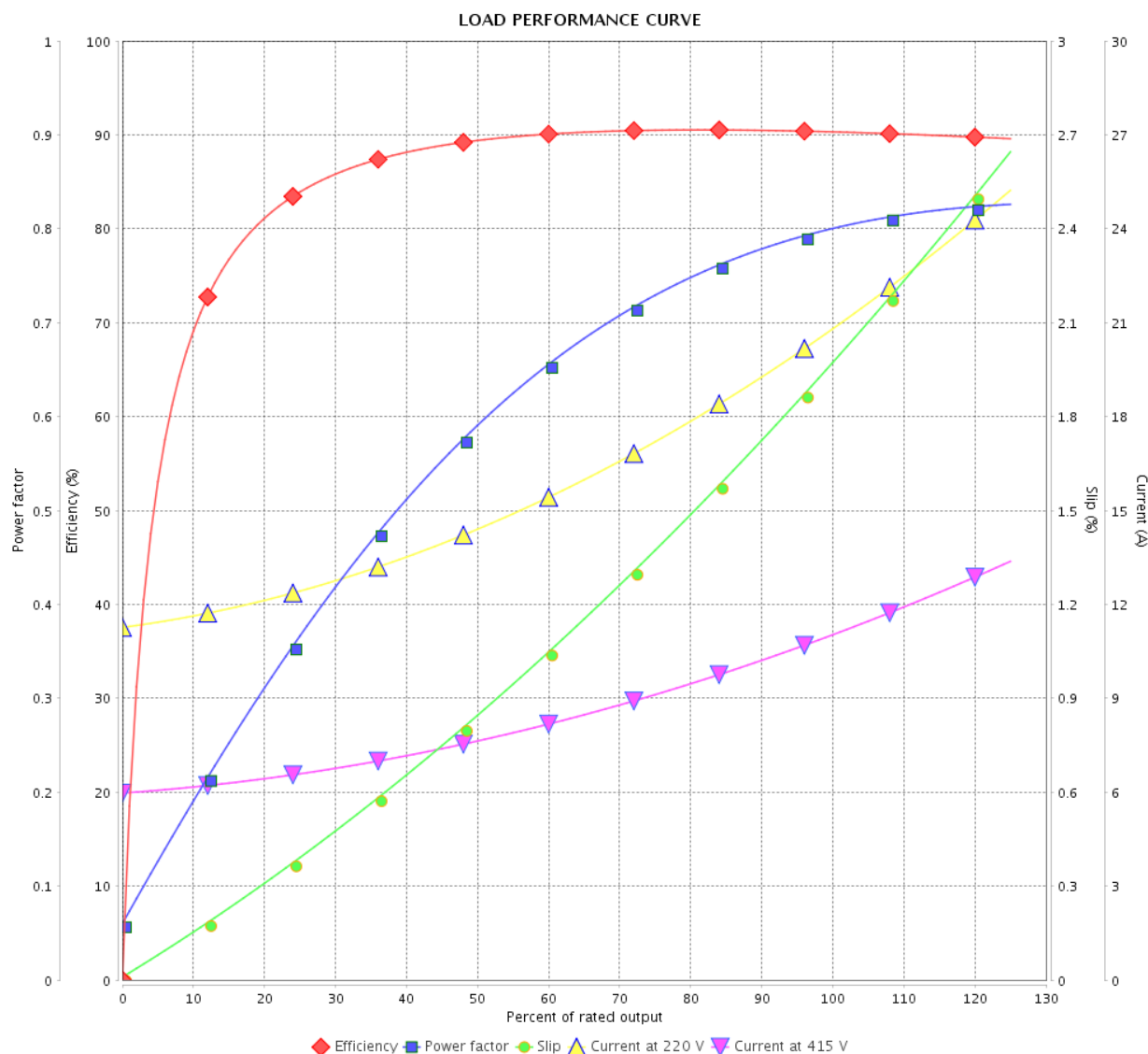
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12651247



Performance : 220/415 V 50 Hz 4P

Rated current : 20.8/11.0 A
 LRC : 8.3
 Rated torque : 3.70 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0451 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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