

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase Product code : 12675351

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	: 28.4 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0066 kgm ²
Design	: B		

Output [HP]	3	2	2
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	7.52/3.76	6.56-5.67/3.28	3.19
L. R. Amperes [A]	66.2/33.1	60.4-52.1/30.2	33.2
LRC [A]	8.8x(Code K)	9.2x(Code L)	10.4x(Code N)
No load current [A]	3.40/1.70	3.40-2.94/1.70	2.00
Rated speed [RPM]	3515	2920	2940
Slip [%]	2.36	2.67	2.00
Rated torque [kgfm]	0.619	0.497	0.494
Locked rotor torque [%]	240	300	350
Breakdown torque [%]	350	400	480
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	45s (cold) 25s (hot)	55s (cold) 31s (hot)	46s (cold) 26s (hot)
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%		
	50%	84.0	81.6
	75%	86.5	85.1
	100%	86.5	86.2
Power Factor	25%		
	50%	0.70	0.56
	75%	0.80	0.67
	100%	0.85	0.76

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

Losses (%)	P1 (0,9;1,0)	14.2	14.9	14.5
	P2 (0,5;1,0)	10.4	11.0	10.7
	P3 (0,25;1,0)	10.2	10.8	10.5
	P4 (0,9;0,5)	8.6	9.0	8.8
	P5 (0,5;0,5)	4.8	5.1	4.9
	P6 (0,5;0,25)	3.5	3.7	3.6
	P7 (0,25;0,25)	2.2	2.3	2.3

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6206 ZZ	6205 ZZ	Max. traction	: 35 kgf
Sealing	: V'Ring	Without	Max. compression	: 63 kgf
		Bearing Seal		
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).

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

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Notes
USABLE @208V 8.12A SF 1.00 SFA 8.12A

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LOAD PERFORMANCE CURVE

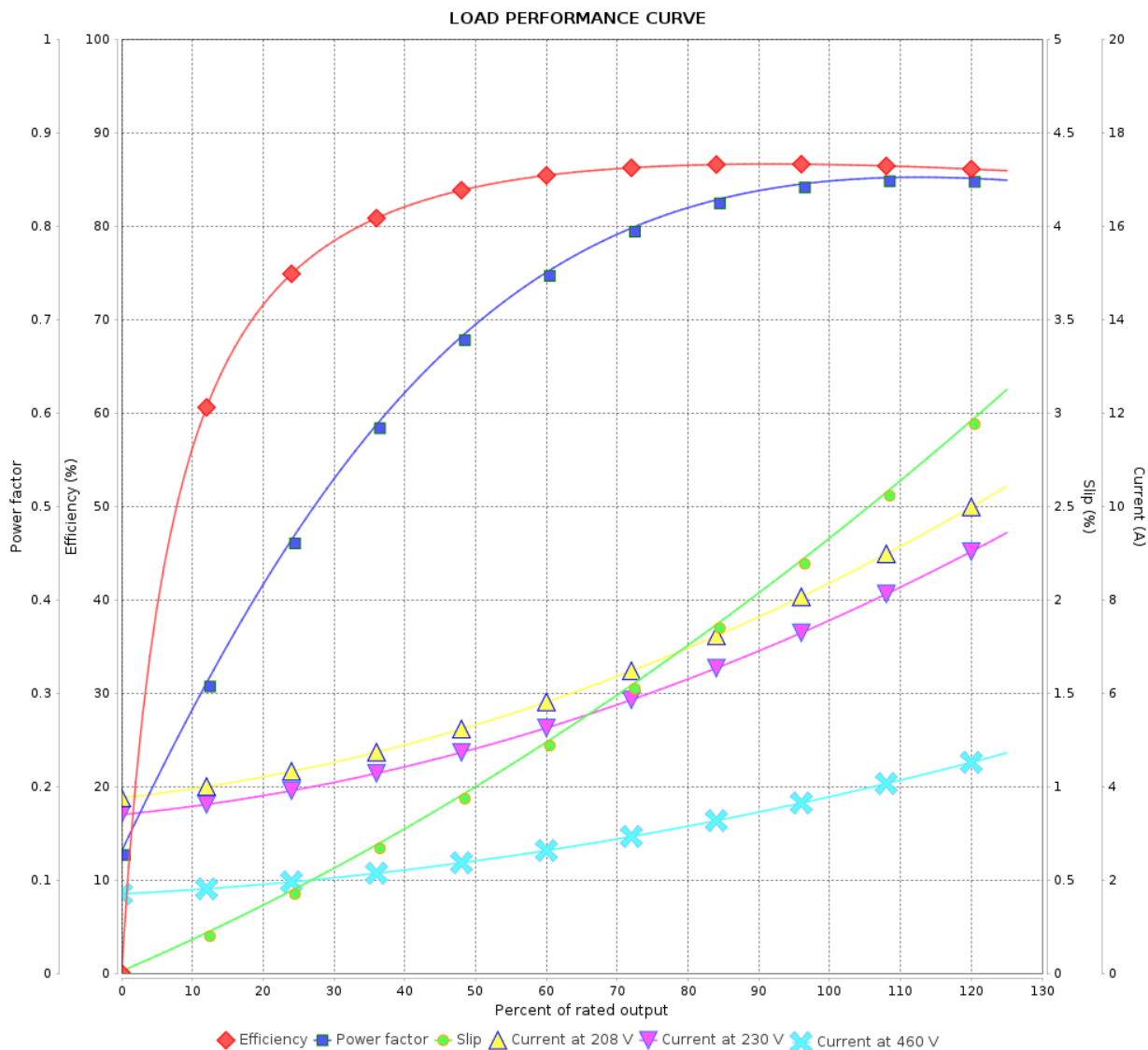
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Performance : 230/460 V 60 Hz 2P

Rated current : 7.52/3.76 A
 LRC : 8.8
 Rated torque : 0.619 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 350 %
 Rated speed : 3515 rpm

Moment of inertia (J) : 0.0066 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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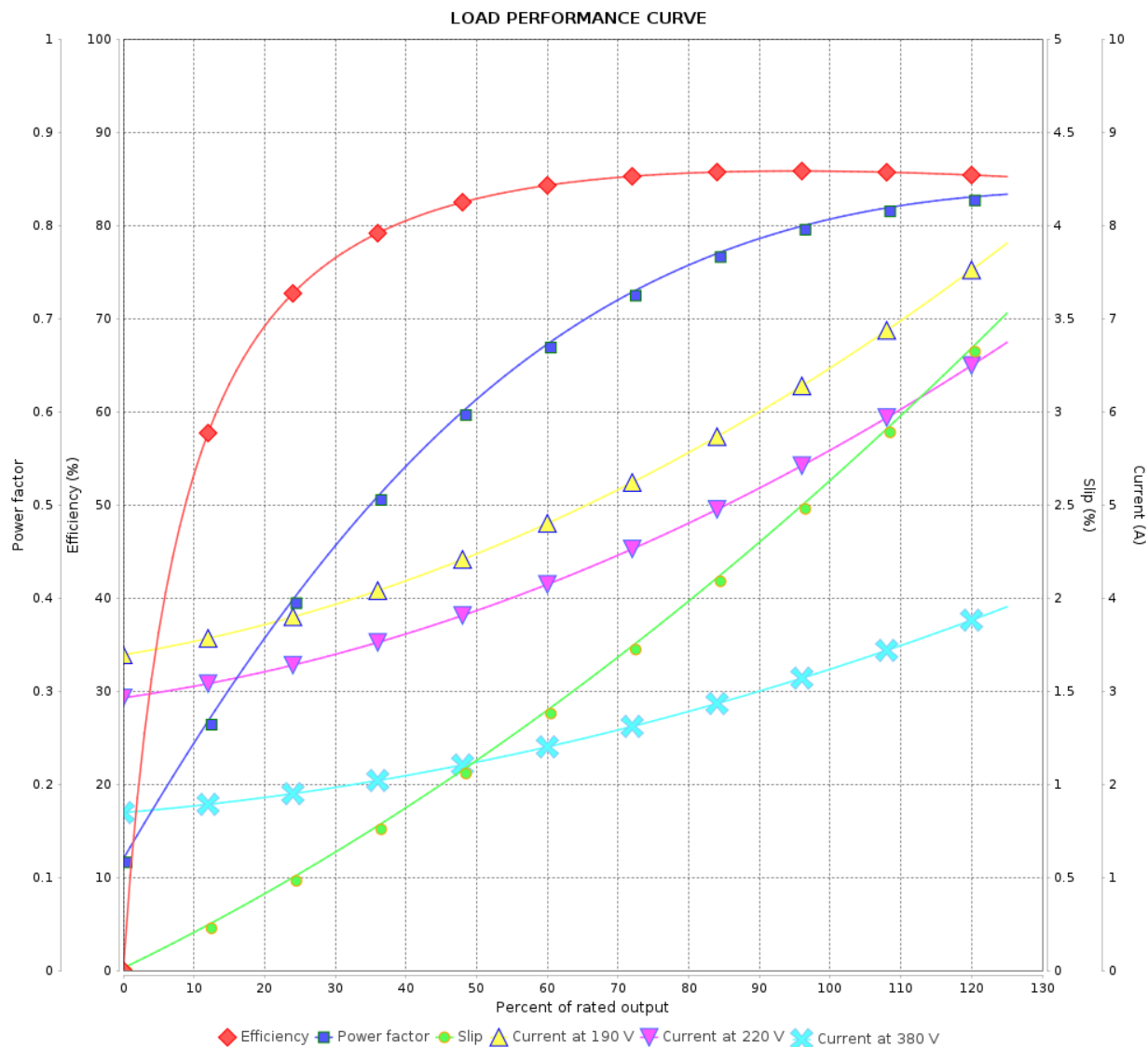
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium
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Product code : 12675351



Performance : 190-220/380 V 50 Hz 2P

Rated current : 6.56-5.67/3.28 A
LRC : 9.2
Rated torque : 0.497 kgfm
Locked rotor torque : 300 %
Breakdown torque : 400 %
Rated speed : 2920 rpm

Moment of inertia (J) : 0.0066 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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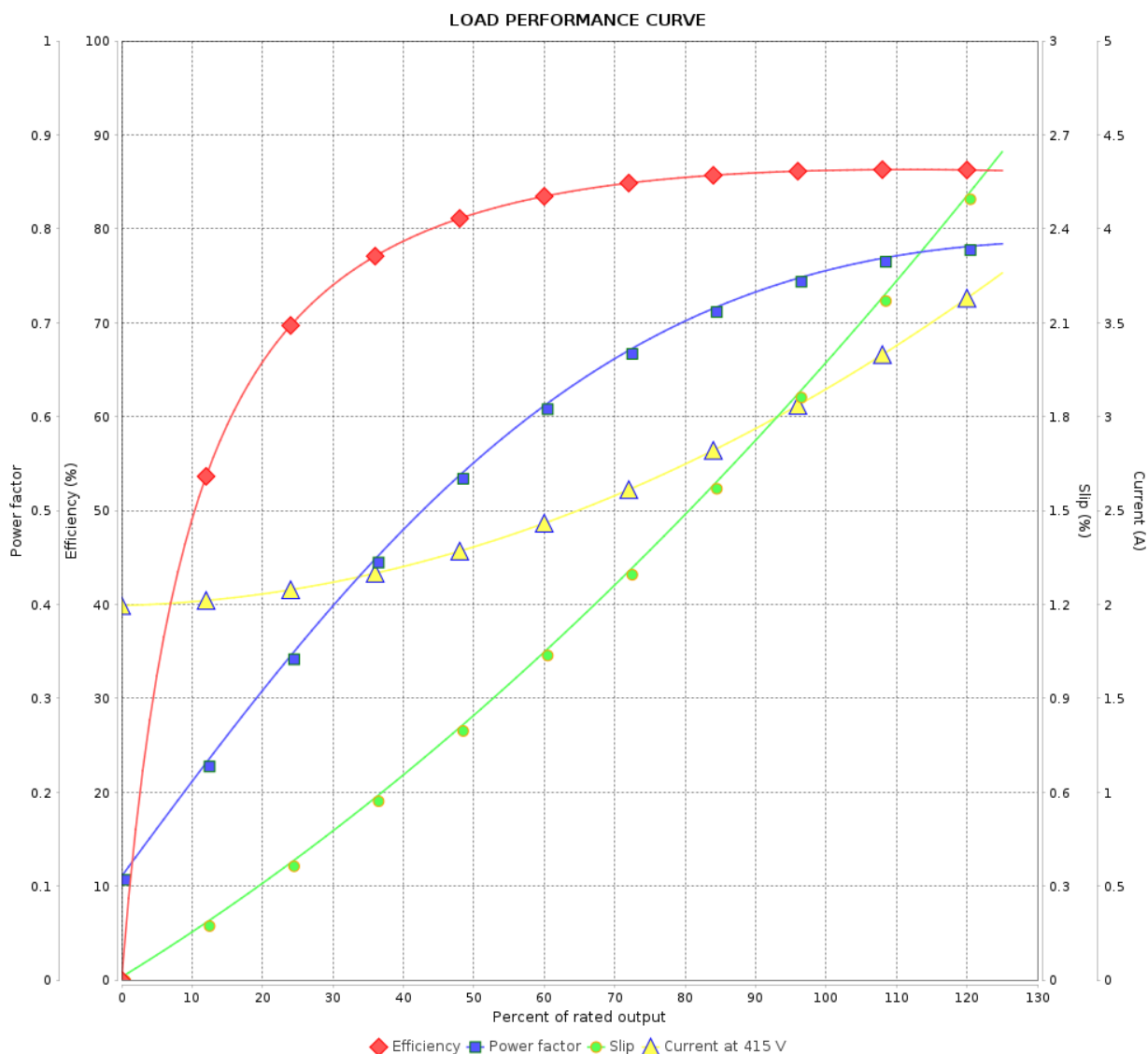
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium
Efficiency Three-Phase

Product code : 12675351



Performance : 415 V 50 Hz 2P

Rated current : 3.19 A
LRC : 10.4
Rated torque : 0.494 kgfm
Locked rotor torque : 350 %
Breakdown torque : 480 %
Rated speed : 2940 rpm

Moment of inertia (J) : 0.0066 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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