

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 kgm²
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 Bearing Seal	Max. compression : 63 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).

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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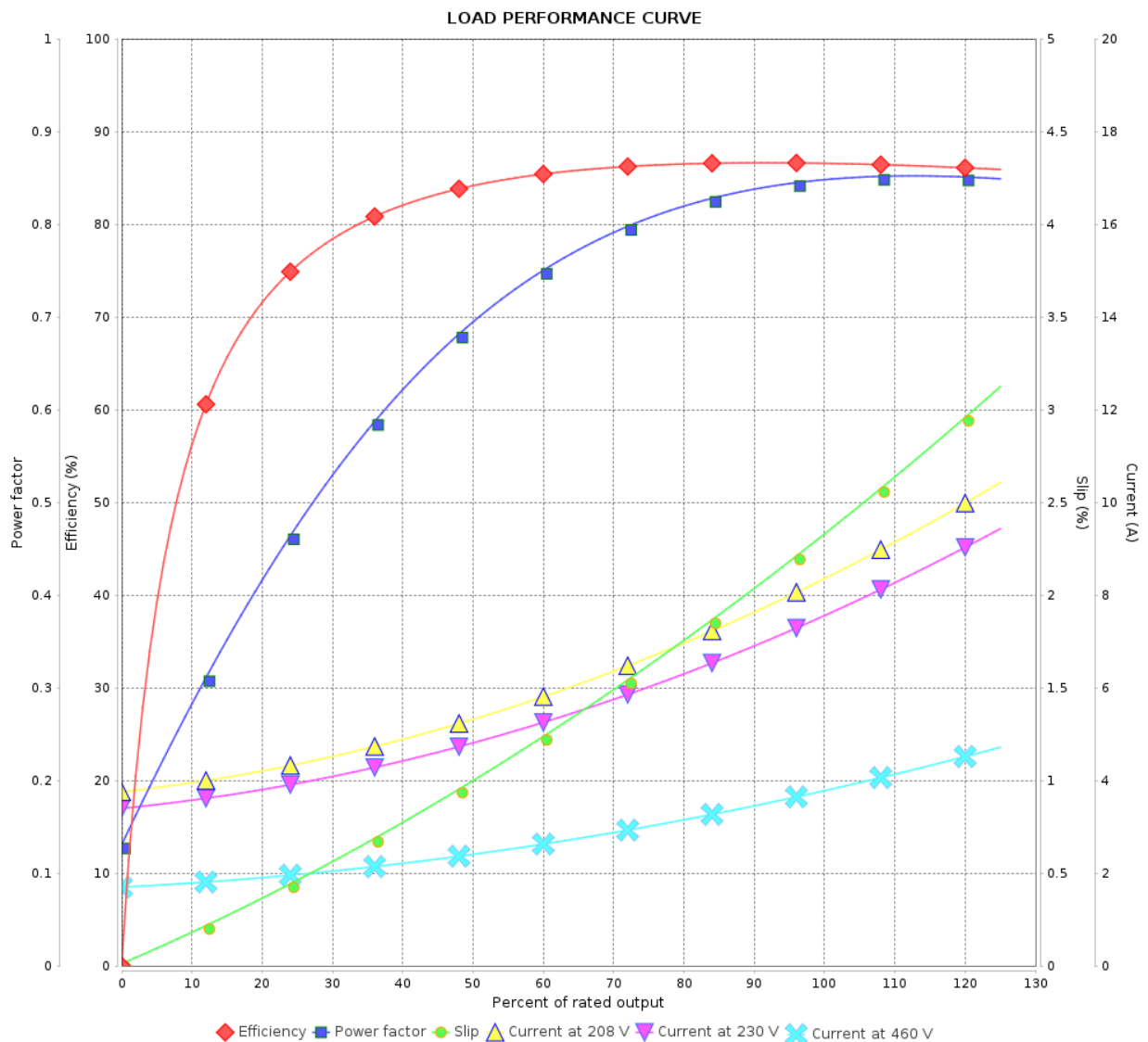
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Efficiency Three-Phase

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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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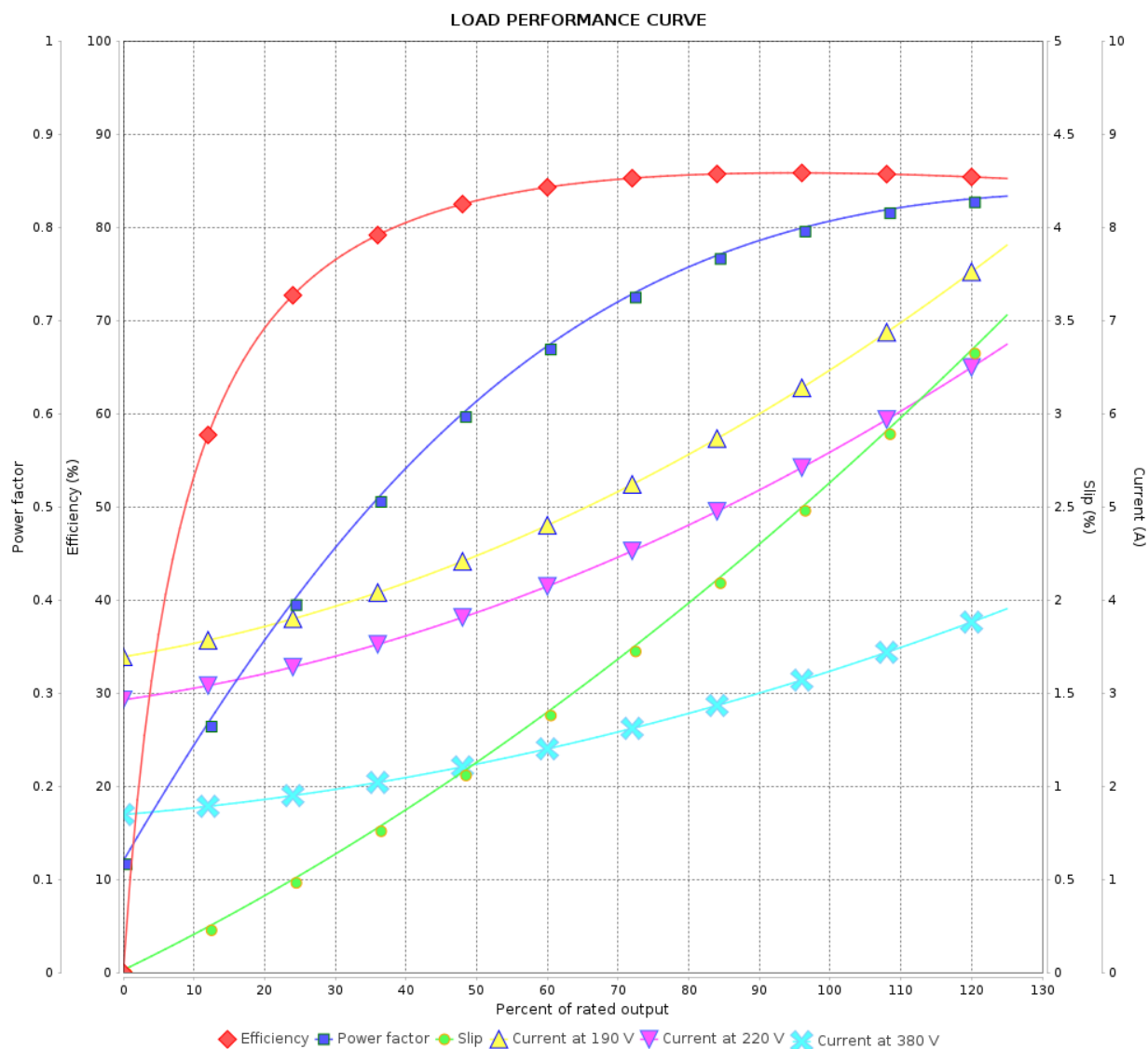
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Customer :

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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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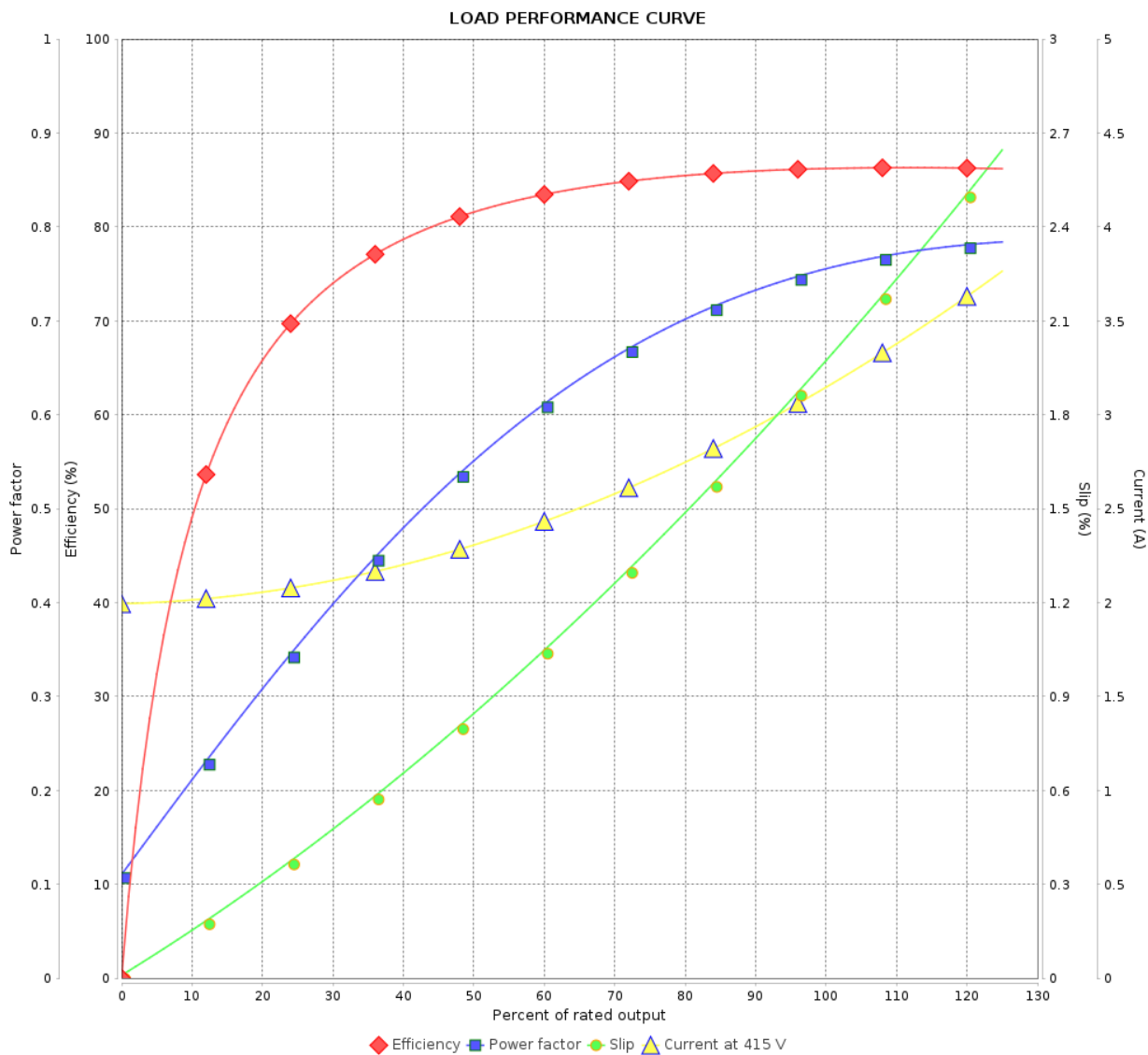
Three Phase Induction Motor - Squirrel Cage



Customer :

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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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