

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13180570

Frame	: 213/5JM	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	: 64.0 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	: 6209 ZZ	6206 ZZ	Max. traction	: 214 kgf
Sealing	: V'Ring	Without Bearing Seal	Max. compression	: 278 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	16/05/2022		Page 1 / 4	Revision

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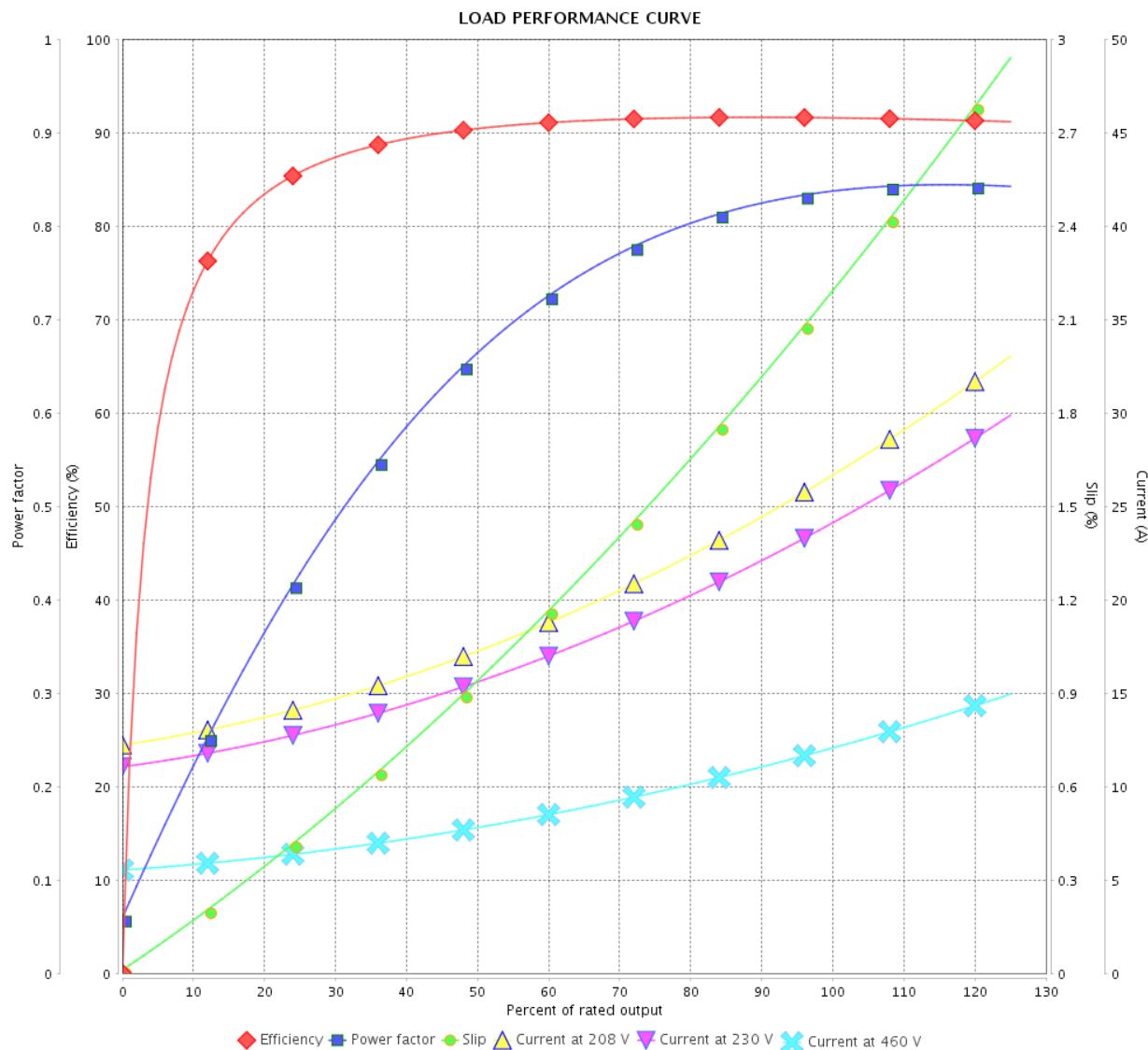
Three Phase Induction Motor - Squirrel Cage



Customer :

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Efficiency Three-Phase

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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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				2 / 4	
Date					

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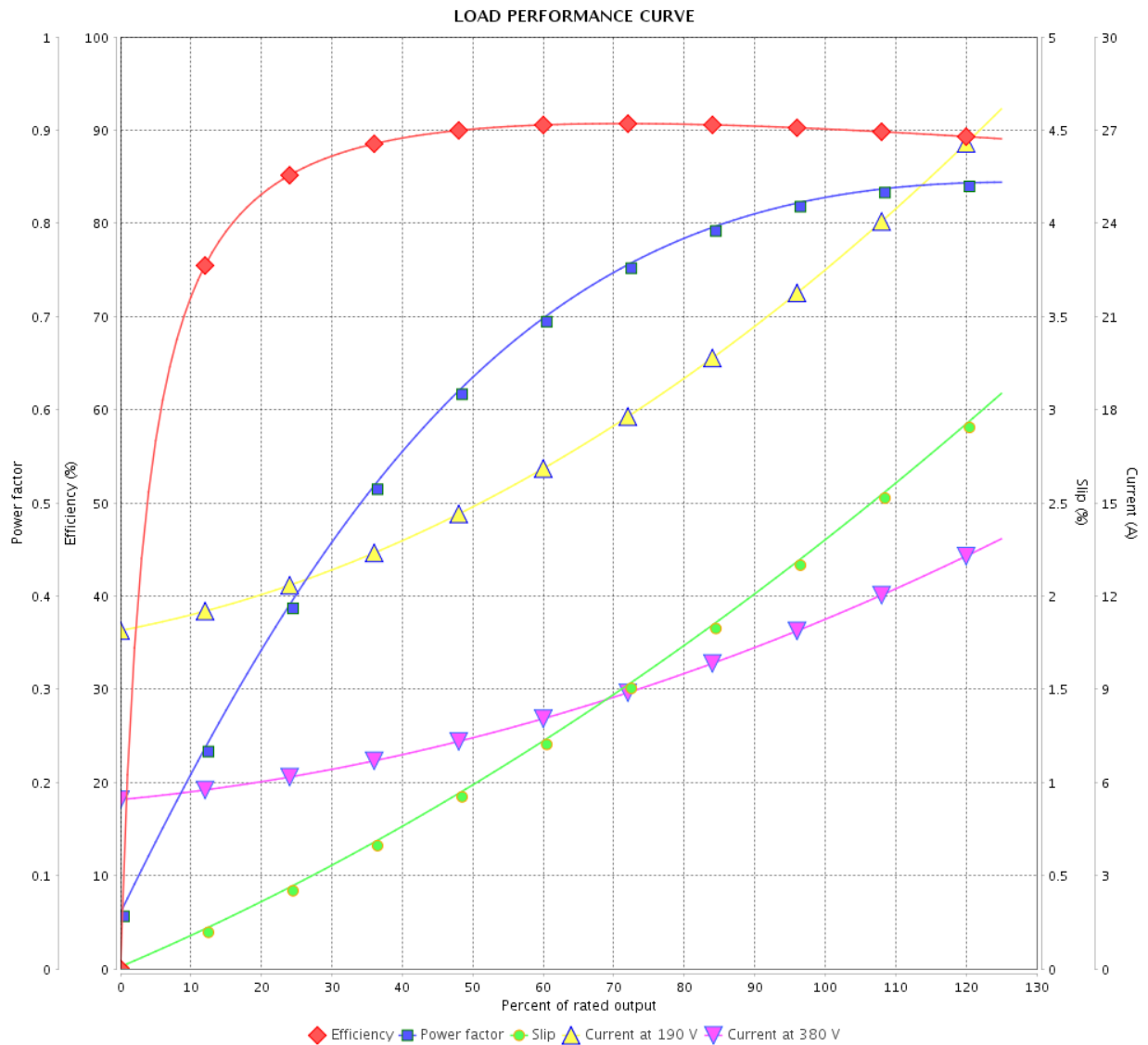
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13180570



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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 4 Revision		
Checked by				
Date	16/05/2022			

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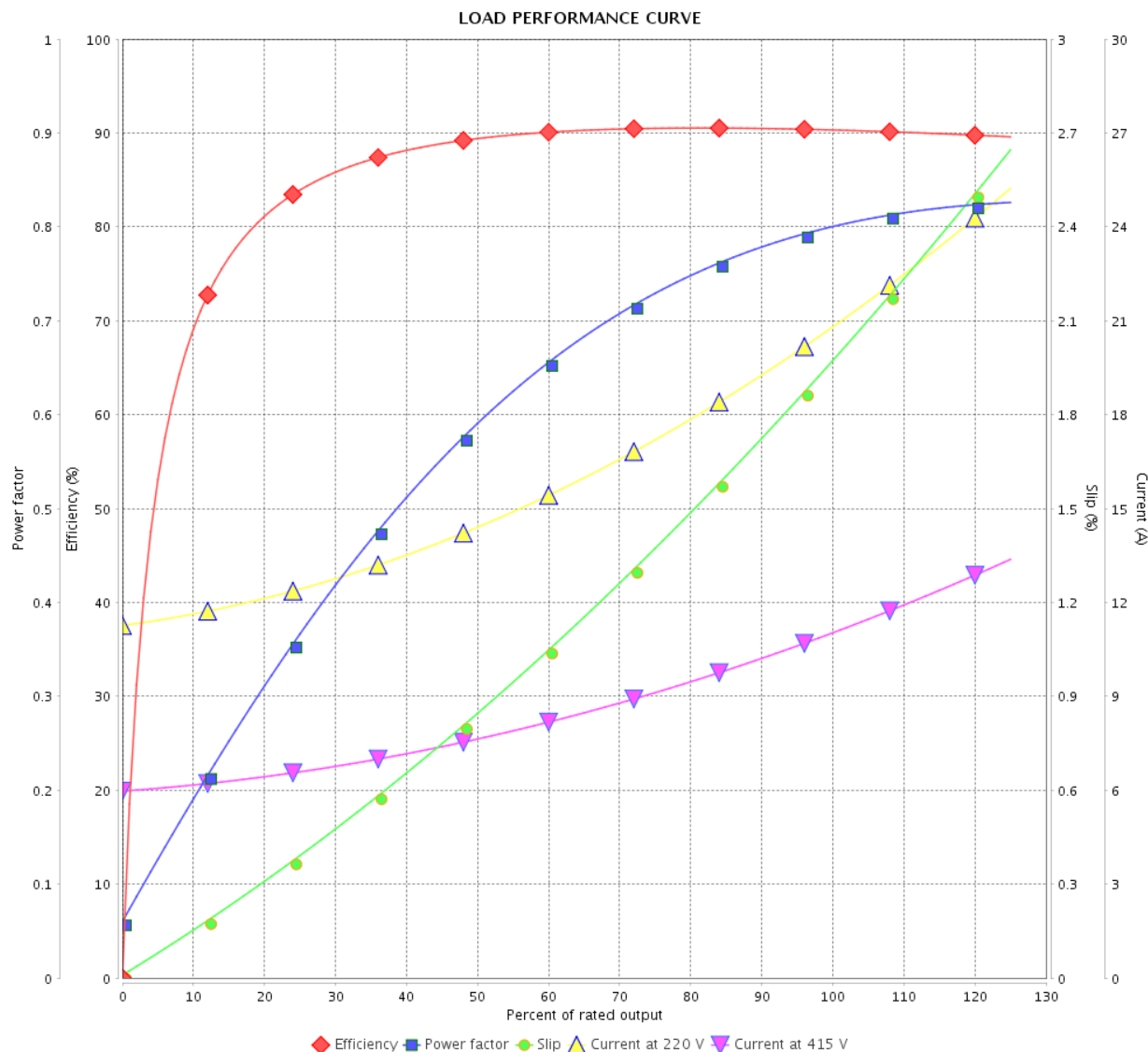
Three Phase Induction Motor - Squirrel Cage



Customer :

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Efficiency Three-Phase

Product code : 13180570



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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 4 / 4	Revision
Checked by					
Date	16/05/2022				

