

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line		: Close Coupled Pump NEMA Premium Efficiency Three-Phase			Product code :		11168186
Frame : 213/5JM Insulation class : F Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP21 Design : B				Cooling method : IC01 - ODP Mounting : F-1 Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ³ : 57.4 kg Moment of inertia (J) : 0.0504 kgm ²			
Output [HP]	10	7.5	7.5	7.5	10	10	10
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	24.7/12.4	11.5	11.4	11.4	15.1	14.5	14.2
L. R. Amperes [A]	161/80.4	82.9	87.5	93.2	78.7	84.3	89.6
LRC [A]	6.5x(Code H)	7.2x(Code J)	7.7x(Code K)	8.2x(Code K)	5.2x(Code F)	5.8x(Code G)	6.3x(Code H)
No load current [A]	10.9/5.45	5.50	6.00	6.50	5.50	6.00	6.50
Rated speed [RPM]	1765	1470	1475	1475	1450	1455	1460
Slip [%]	1.94	2.00	1.67	1.67	3.33	3.00	2.67
Rated torque [kgfm]	4.11	3.70	3.69	3.69	5.01	4.99	4.97
Locked rotor torque [%]	210	220	260	280	170	180	200
Breakdown torque [%]	290	290	320	360	210	229	250
Service factor	1.15	1.15	1.15	1.15	1.00	1.00	1.15
Temperature rise	105 K	105 K	105 K	105 K	105 K	105 K	105 K
Locked rotor time	10s (cold) 6s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)
Noise level ²	59.0 dB(A)						
Efficiency (%)	25%						
	50%	90.2	85.1	85.1	85.0	87.5	88.2
	75%	91.0	87.5	88.0	88.4	87.5	88.7
	100%	91.7	89.6	89.6	89.7	87.5	89.5
Power Factor	25%						
	50%	0.64	0.59	0.55	0.51	0.69	0.61
	75%	0.76	0.72	0.69	0.65	0.80	0.75
	100%	0.83	0.81	0.78	0.75	0.86	0.82
Bearing type		Drive end : 6209 ZZ	Non drive end : 6206 ZZ	Foundation loads			
Sealing		Without Bearing Seal	Without Bearing Seal	Max. traction		: 201 kgf	
Lubrication interval		-		Max. compression		: 258 kgf	
Lubricant amount		-					
Lubricant type		Mobil Polyrex EM					
Notes USABLE @208V 27.0A SF 1.15 SFA 31.0A							
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						Page	Revision
Date	23/10/2024					1 / 8	

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Three Phase Induction Motor - Squirrel Cage

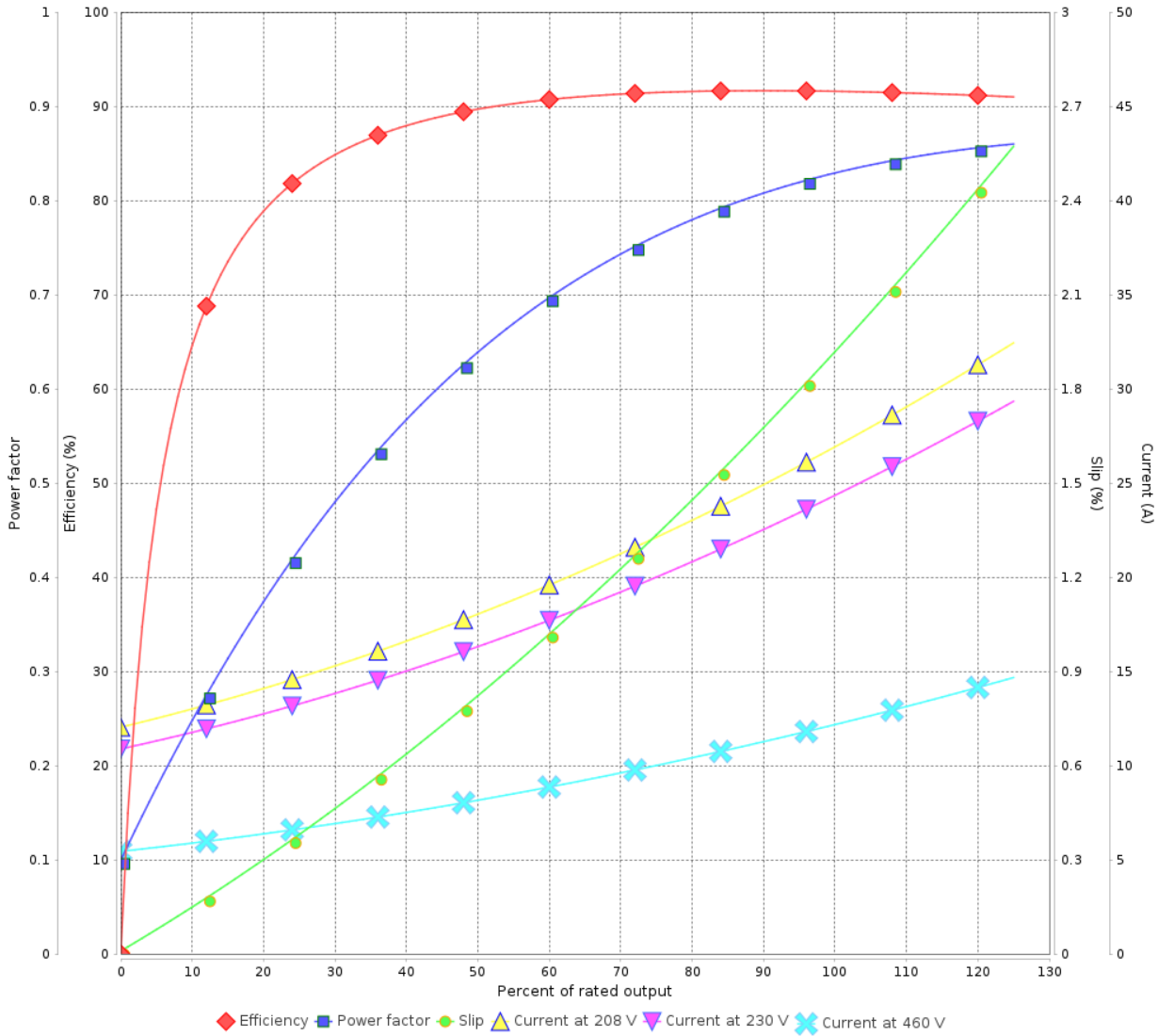


Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11168186

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Performance : 230/460 V 60 Hz 4P

Rated current : 24.7/12.4 A
LRC : 6.5
Rated torque : 4.11 kgfm
Locked rotor torque : 210 %
Breakdown torque : 290 %
Rated speed : 1765 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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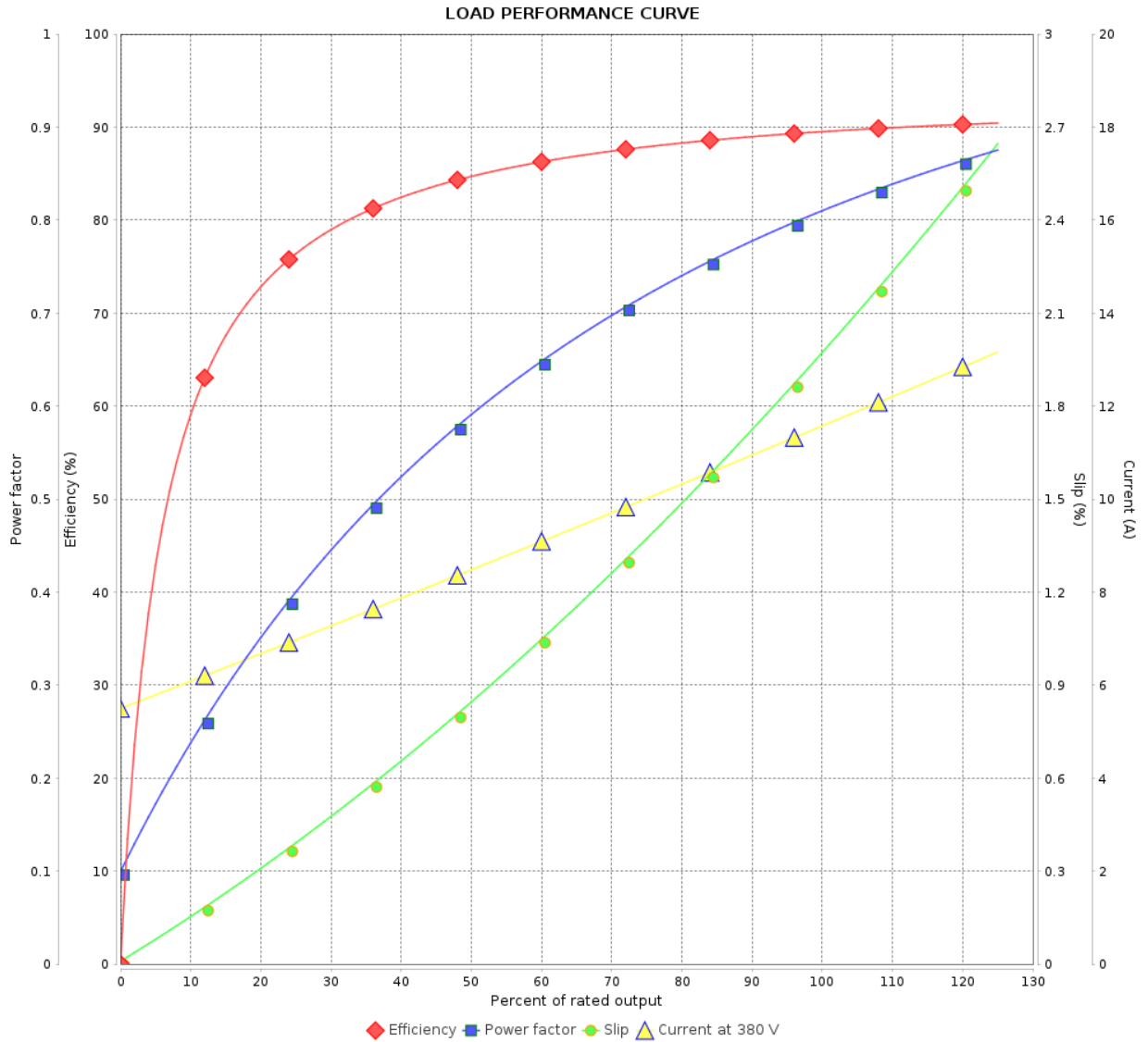
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11168186



Performance : 380 V 50 Hz 4P IE3

Rated current : 11.5 A
 LRC : 7.2
 Rated torque : 3.70 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 290 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0504 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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Three Phase Induction Motor - Squirrel Cage

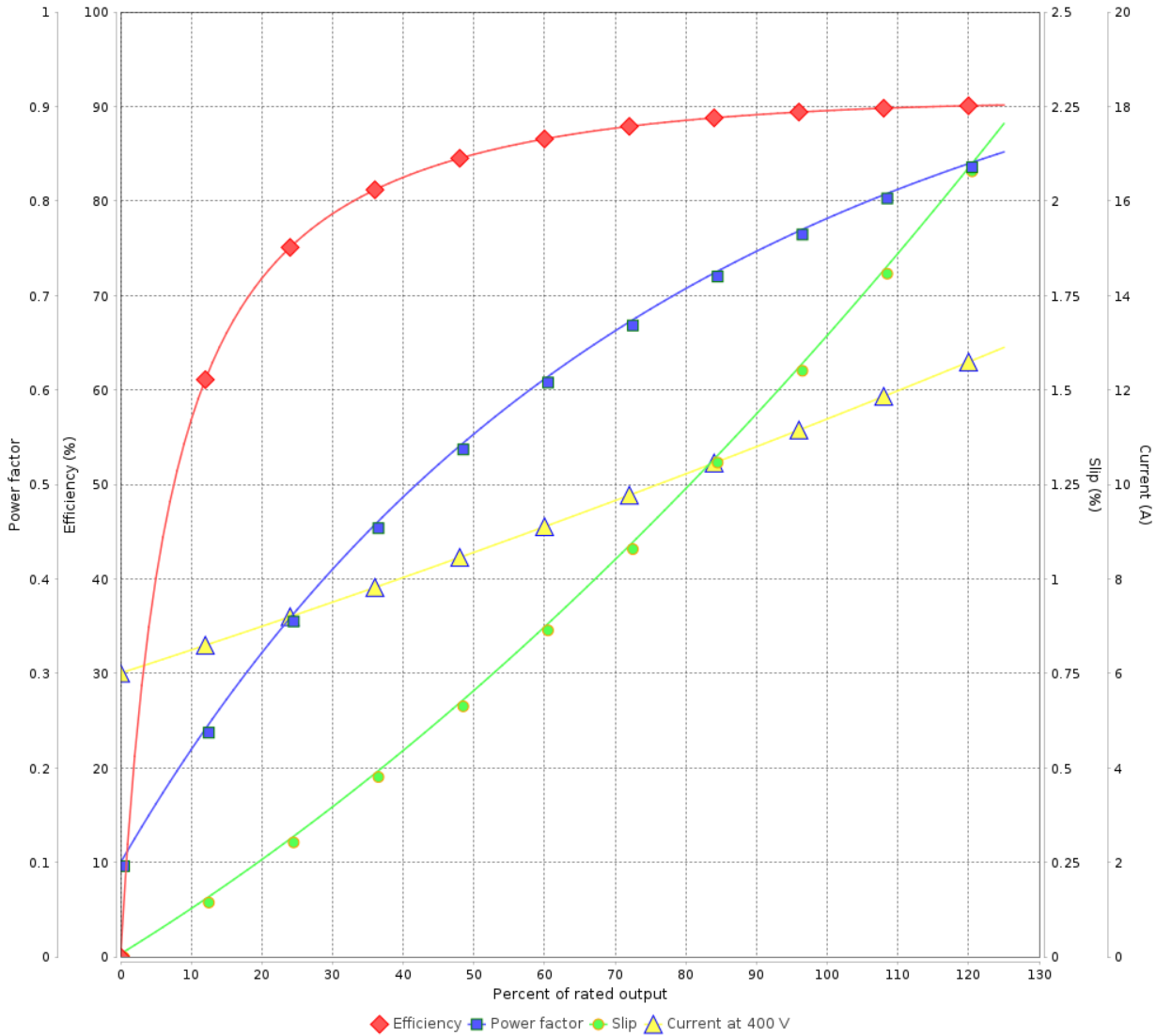


Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11168186

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Performance : 400 V 50 Hz 4P IE3

Rated current : 11.4 A
LRC : 7.7
Rated torque : 3.69 kgfm
Locked rotor torque : 260 %
Breakdown torque : 320 %
Rated speed : 1475 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 8	Revision
Checked by				
Date	23/10/2024			

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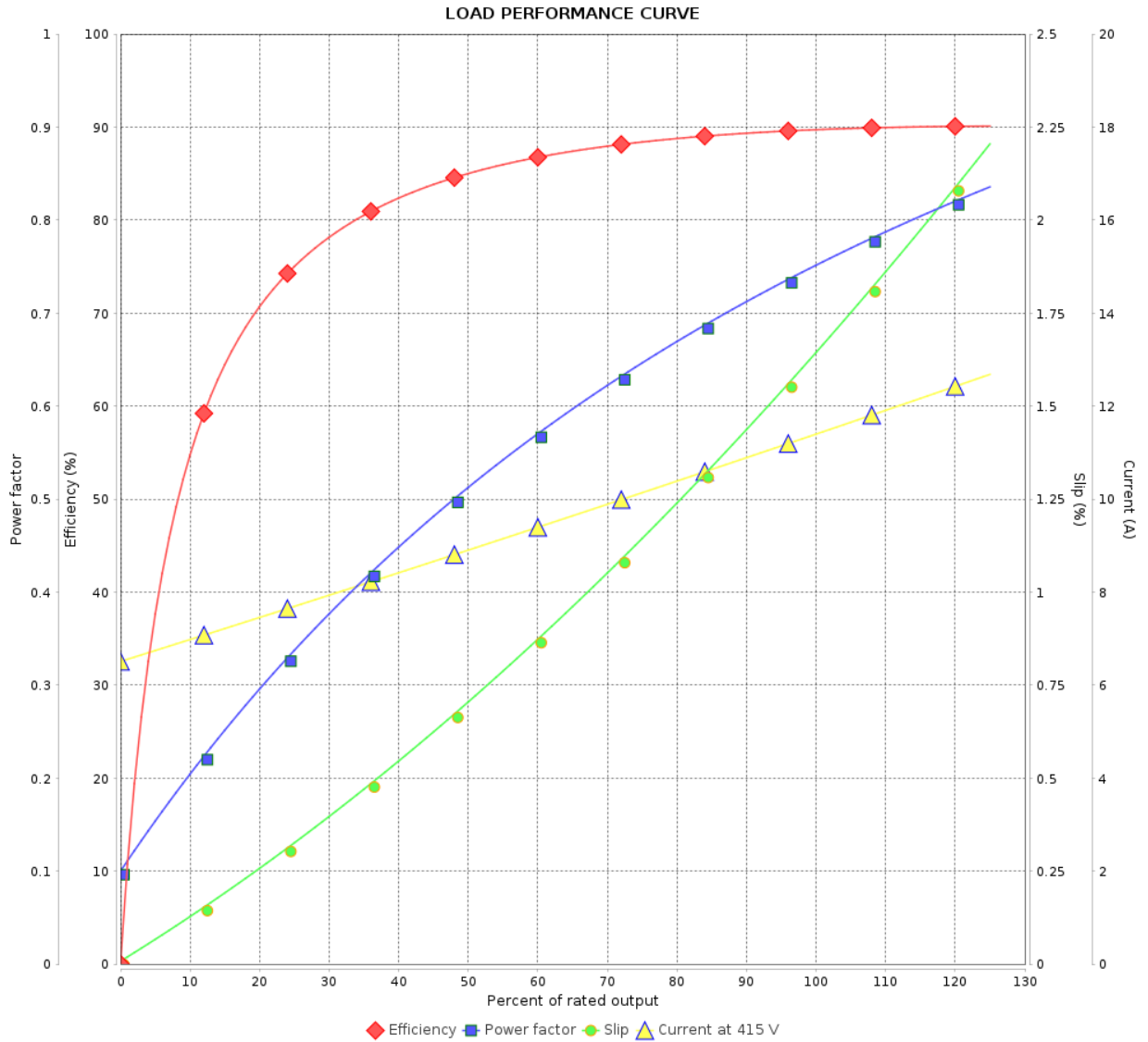
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11168186



Performance : 415 V 50 Hz 4P IE3

Rated current : 11.4 A
 LRC : 8.2
 Rated torque : 3.69 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 360 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.0504 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 8		
Date		23/10/2024		

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Three Phase Induction Motor - Squirrel Cage

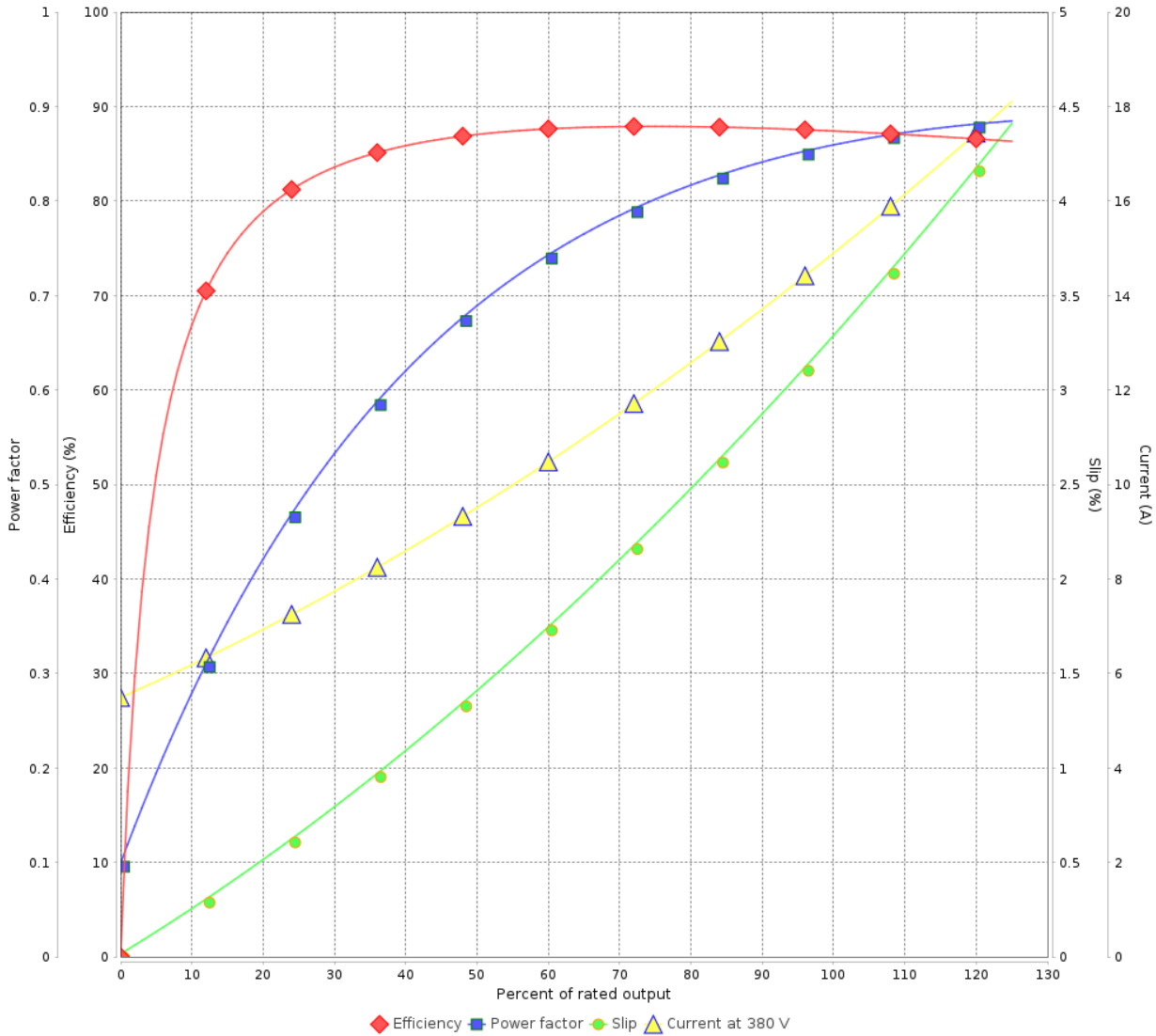


Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11168186

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Performance : 380 V 50 Hz 4P IE1

Rated current : 15.1 A
LRC : 5.2
Rated torque : 5.01 kgfm
Locked rotor torque : 170 %
Breakdown torque : 210 %
Rated speed : 1450 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 8	Revision
Checked by				
Date	23/10/2024			

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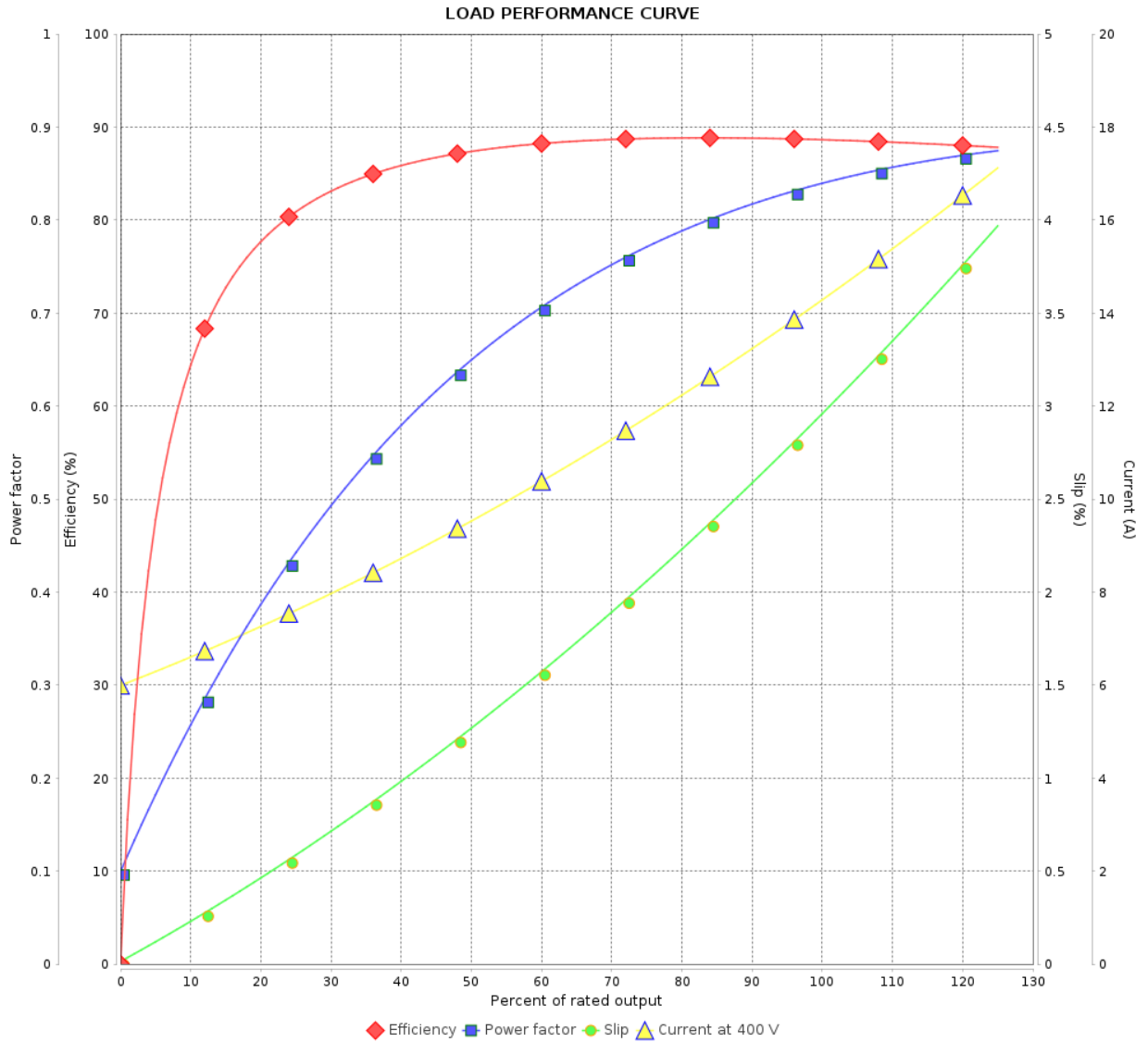
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11168186



Performance : 400 V 50 Hz 4P IE2

Rated current : 14.5 A
 LRC : 5.8
 Rated torque : 4.99 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 229 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0504 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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Checked by				
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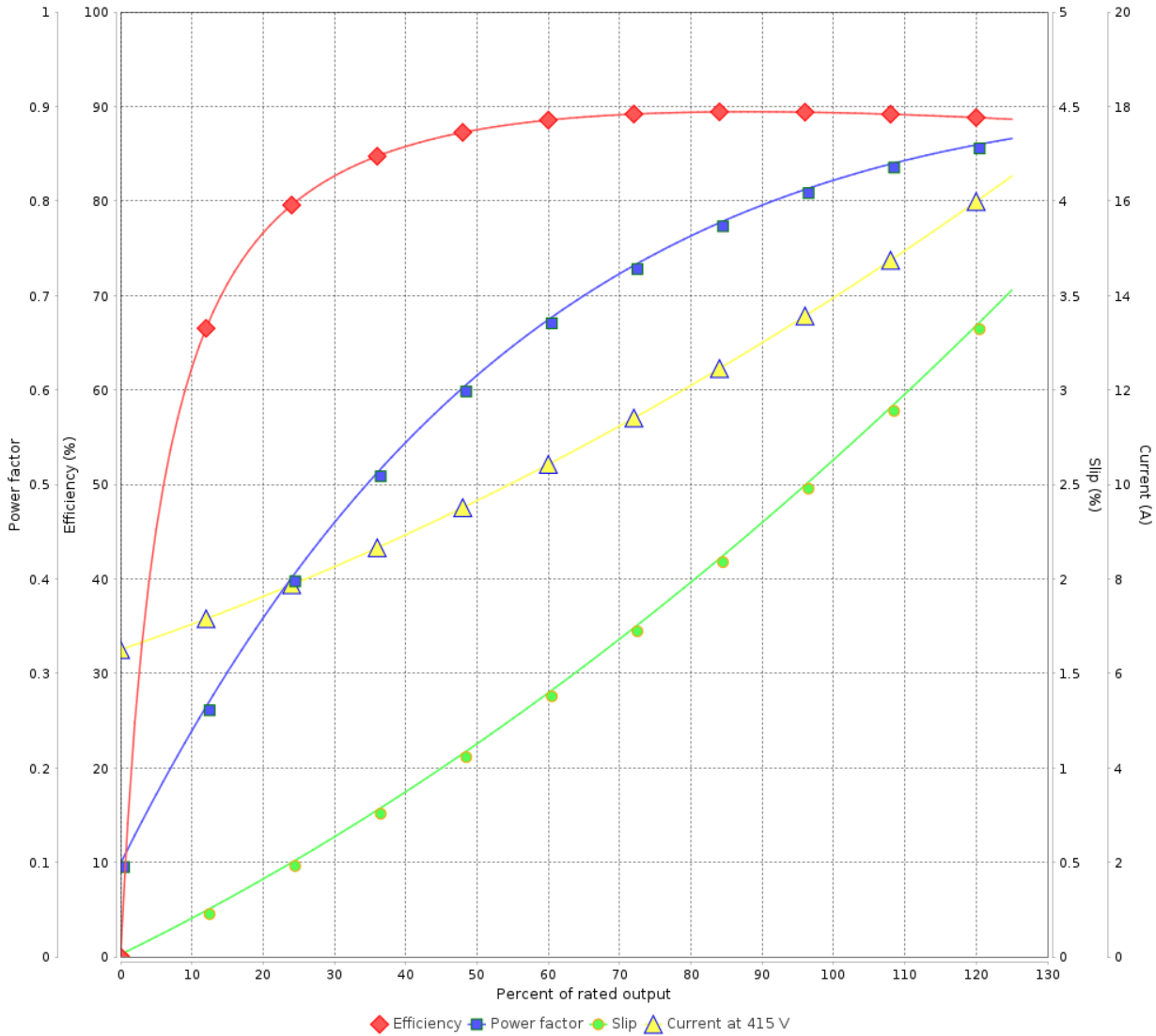
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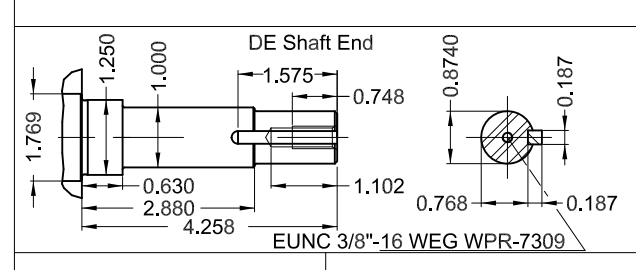
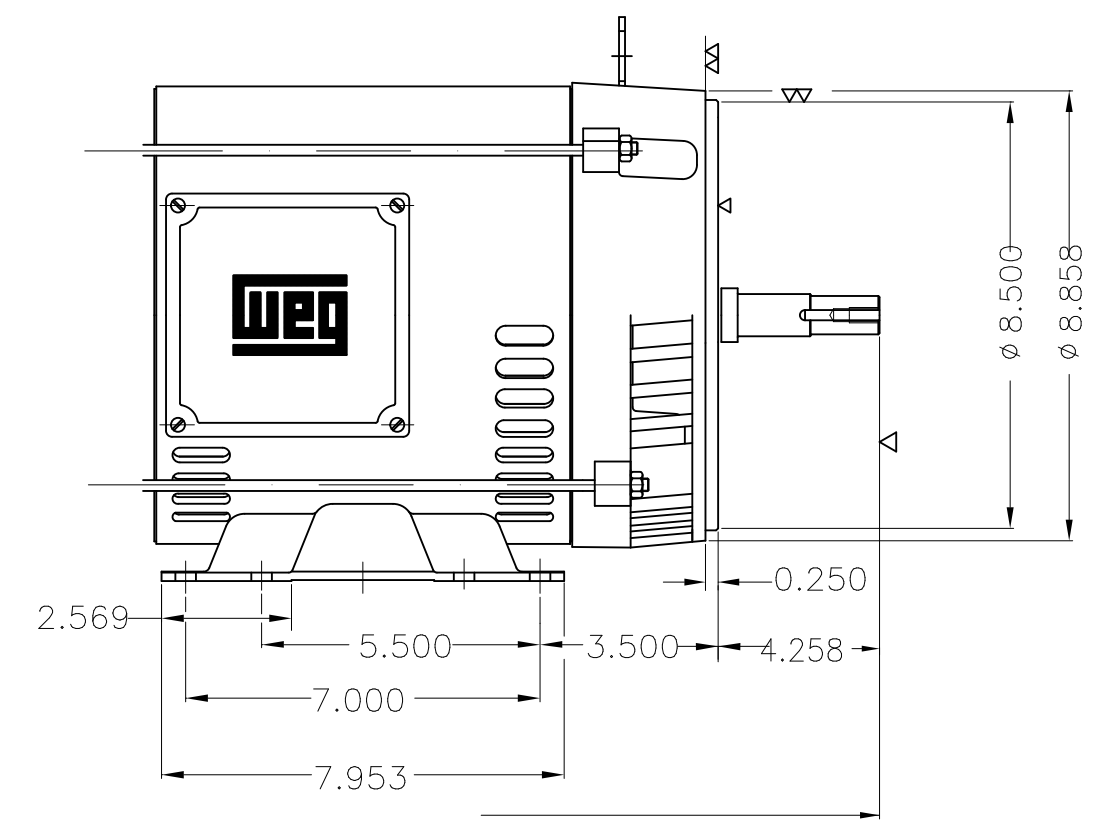
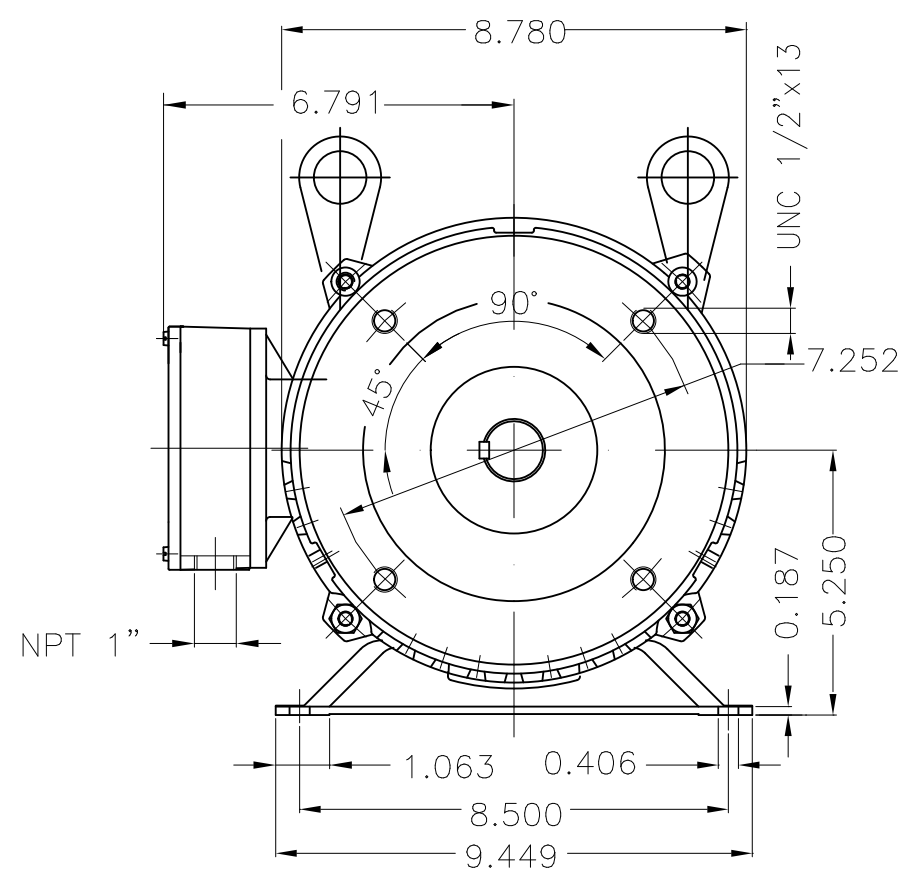
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Performance : 415 V 50 Hz 4P IE2

Rated current	: 14.2 A	Moment of inertia (J)	: 0.0504 kgm ²
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 4.97 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 1460 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 8	Revision
Checked by				
Date	23/10/2024			



Without switch off thermal protection
 Color RAL 5009
 Painting plan 207A
 Mounting B34R(D)

10 HP 04 Poles 60 Hz						A			
HYBRISUSER						00			
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR JM/JP/JET PUMP NEMA PREM. EFF.			PREVIEW				
CHECKED		FRAME 213/5JM IP21 ODP			WDD 00				
RELEASED					SHEET		1 / 1		
REL. DATE		WMO	Jaragua do Sul	Product Engineering					

