

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :							
Product line	: Close Coupled Pump NEMA Premium Efficiency Three-Phase	Product code :	11083242				
Frame	: 213/5JM	Cooling method	: IC01 - ODP				
Insulation class	: F	Mounting	: F-1				
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)				
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line				
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 58.9 kg				
Protection degree	: IP21	Moment of inertia (J)	: 0.0243 kgm <sup>2</sup>				
Design	: B						
Output [HP]	15	10	10	10	15	15	15
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	34.8/17.4	14.3	13.7	13.4	21.5	20.6	19.9
L. R. Amperes [A]	251/125	93.0	95.9	93.8	112	122	127
LRC [A]	7.2x(Code H)	6.5x(Code J)	7.0x(Code K)	7.0x(Code K)	5.2x(Code F)	5.9x(Code G)	6.4x(Code G)
No load current [A]	11.6/5.80	5.50	5.60	5.70	5.12	5.90	6.68
Rated speed [RPM]	3515	2930	2935	2935	2885	2900	2910
Slip [%]	2.36	2.33	2.17	2.17	3.83	3.33	3.00
Rated torque [kgfm]	3.10	2.47	2.47	2.46	3.79	3.76	3.74
Locked rotor torque [%]	210	210	229	250	170	190	210
Breakdown torque [%]	270	280	310	330	229	260	290
Service factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	16s (cold) 9s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)
Noise level <sup>2</sup>	69.0 dB(A)						
Efficiency (%)	25%						
	50%	90.2	88.0	88.0	89.0	86.5	86.5
	75%	91.0	90.0	90.0	90.0	86.5	86.5
	100%	91.0	90.5	90.5	90.7	86.5	86.5
Power Factor	25%						
	50%	0.73	0.75	0.74	0.70	0.84	0.80
	75%	0.82	0.85	0.83	0.81	0.89	0.86
	100%	0.87	0.88	0.87	0.86	0.90	0.89
Bearing type	: Drive end : 6209 ZZ Non drive end : 6206 ZZ	Foundation loads		Max. traction : 171 kgf			
Sealing	: Without Bearing Seal Without Bearing Seal			Max. compression : 230 kgf			
Lubrication interval	: -						
Lubricant amount	: -						
Lubricant type	: Mobil Polyrex EM						
Notes USABLE @208V 38.5A SF 1.15 SFA 44.3A							
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	

# LOAD PERFORMANCE CURVE

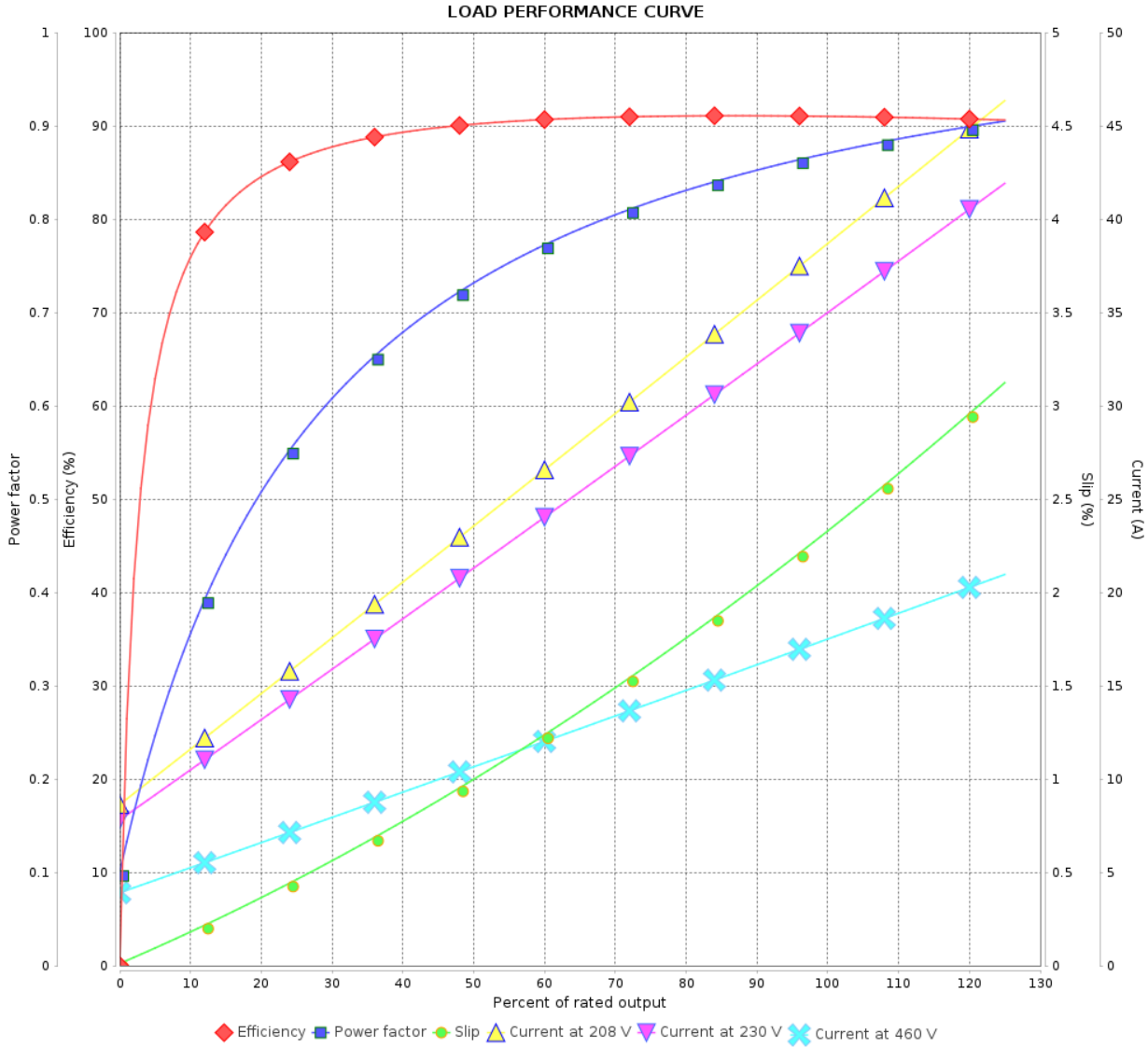
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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

Product code : 11083242



Performance : 230/460 V 60 Hz 2P

Rated current : 34.8/17.4 A  
 LRC : 7.2  
 Rated torque : 3.10 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 270 %  
 Rated speed : 3515 rpm

Moment of inertia (J) : 0.0243 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Performed by			Page	Revision
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# LOAD PERFORMANCE CURVE

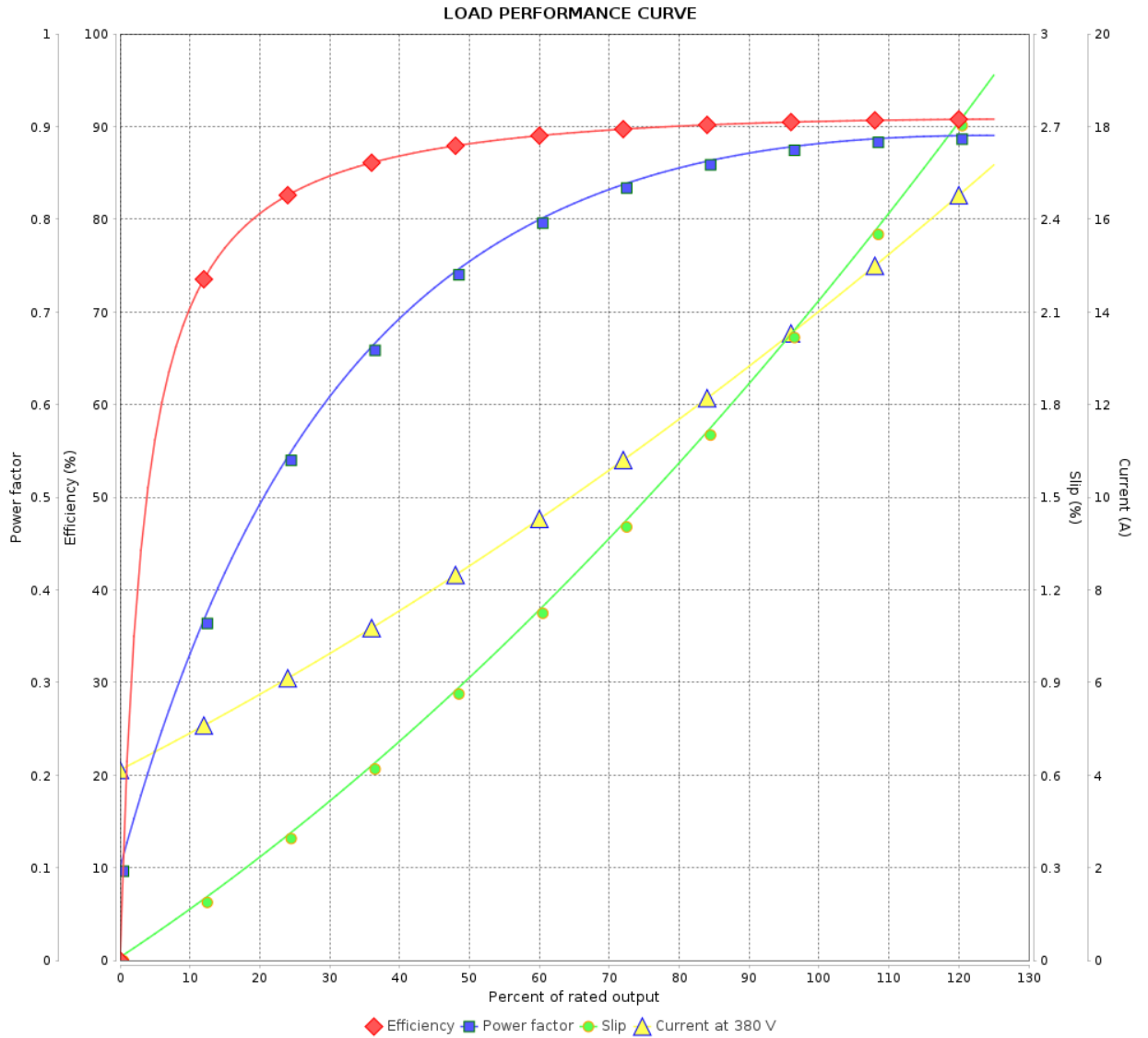
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11083242



Performance : 380 V 50 Hz 2P IE3

Rated current : 14.3 A  
 LRC : 6.5  
 Rated torque : 2.47 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 280 %  
 Rated speed : 2930 rpm

Moment of inertia (J) : 0.0243 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Date				
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Three Phase Induction Motor - Squirrel Cage

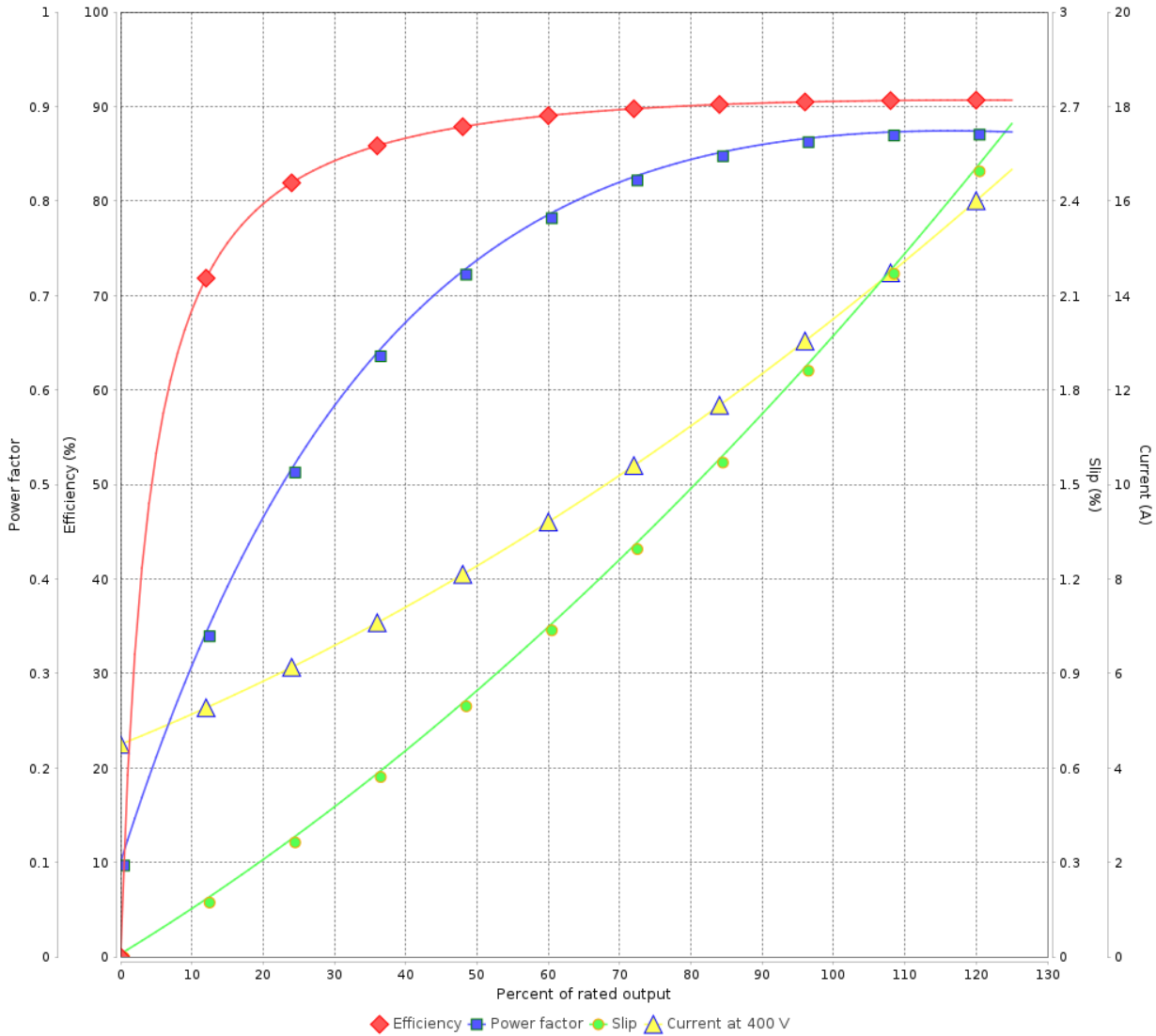


Customer :

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

Product code : 11083242

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current : 13.7 A  
LRC : 7.0  
Rated torque : 2.47 kgfm  
Locked rotor torque : 229 %  
Breakdown torque : 310 %  
Rated speed : 2935 rpm

Moment of inertia (J) : 0.0243 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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# LOAD PERFORMANCE CURVE

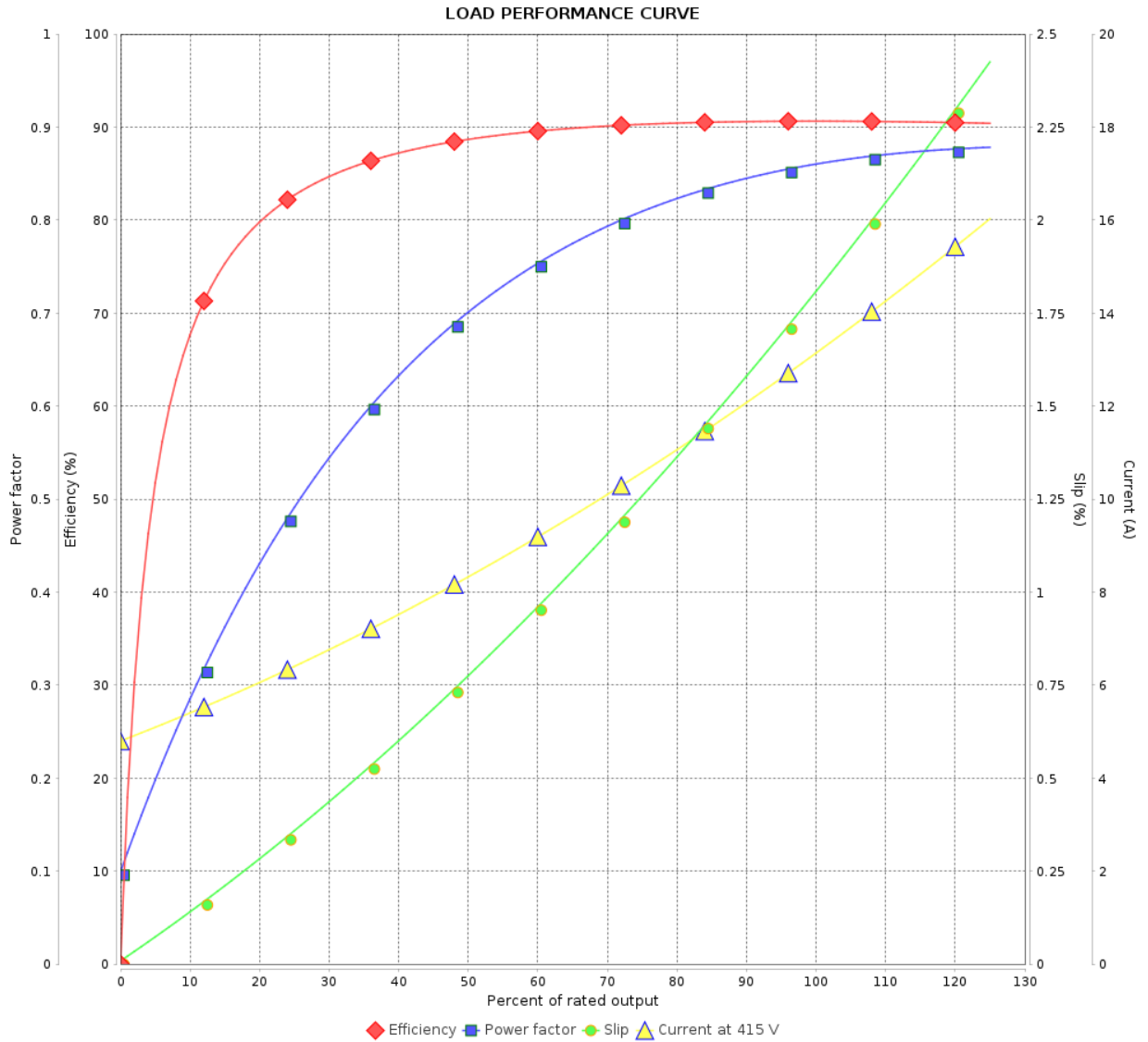
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11083242



Performance : 415 V 50 Hz 2P IE3

Rated current : 13.4 A  
 LRC : 7.0  
 Rated torque : 2.46 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 330 %  
 Rated speed : 2935 rpm

Moment of inertia (J) : 0.0243 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Performed by			Page	Revision
Checked by				
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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

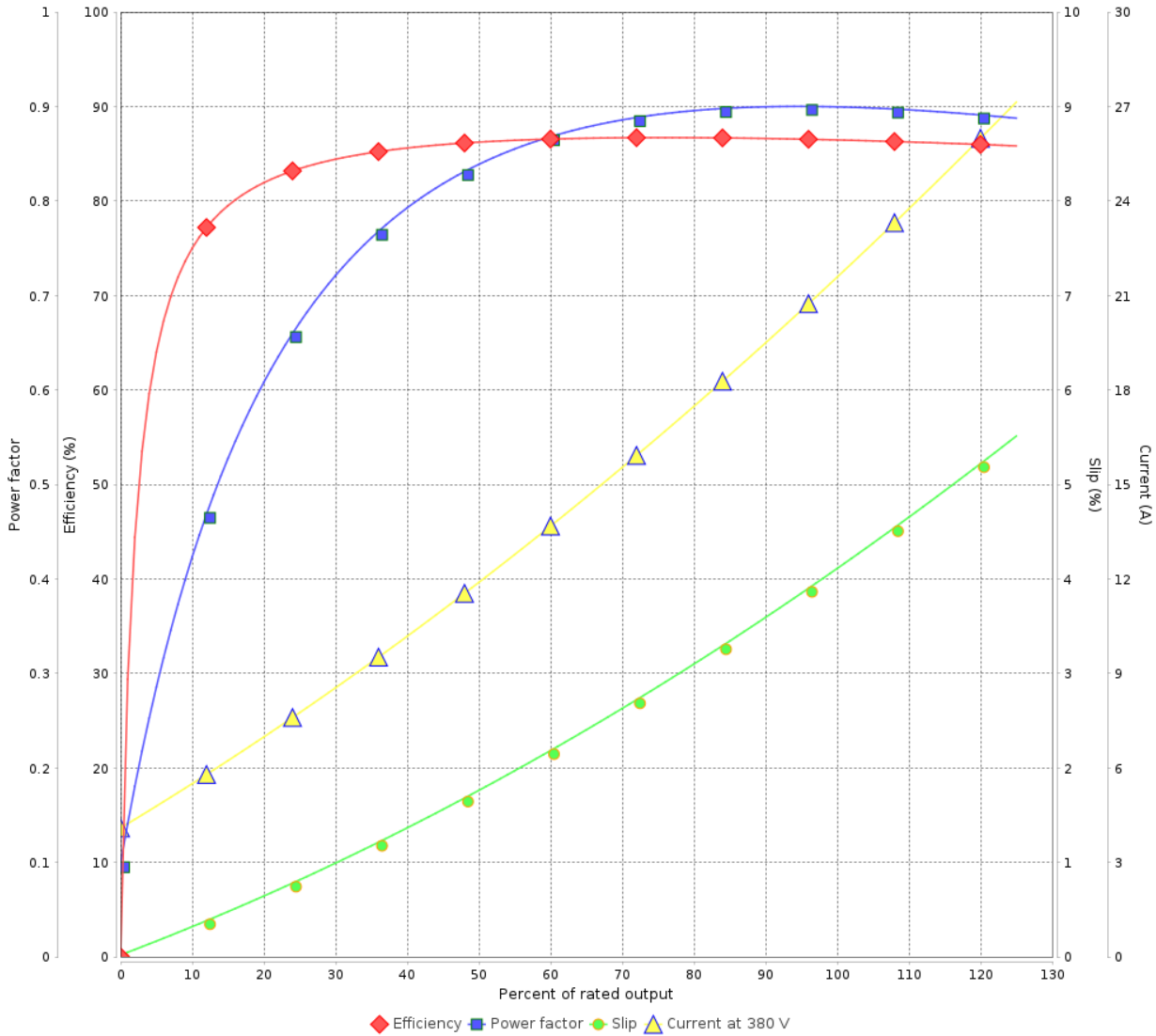


Customer : \_\_\_\_\_

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

Product code : 11083242

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 2P

Rated current : 21.5 A  
LRC : 5.2  
Rated torque : 3.79 kgfm  
Locked rotor torque : 170 %  
Breakdown torque : 229 %  
Rated speed : 2885 rpm

Moment of inertia (J) : 0.0243 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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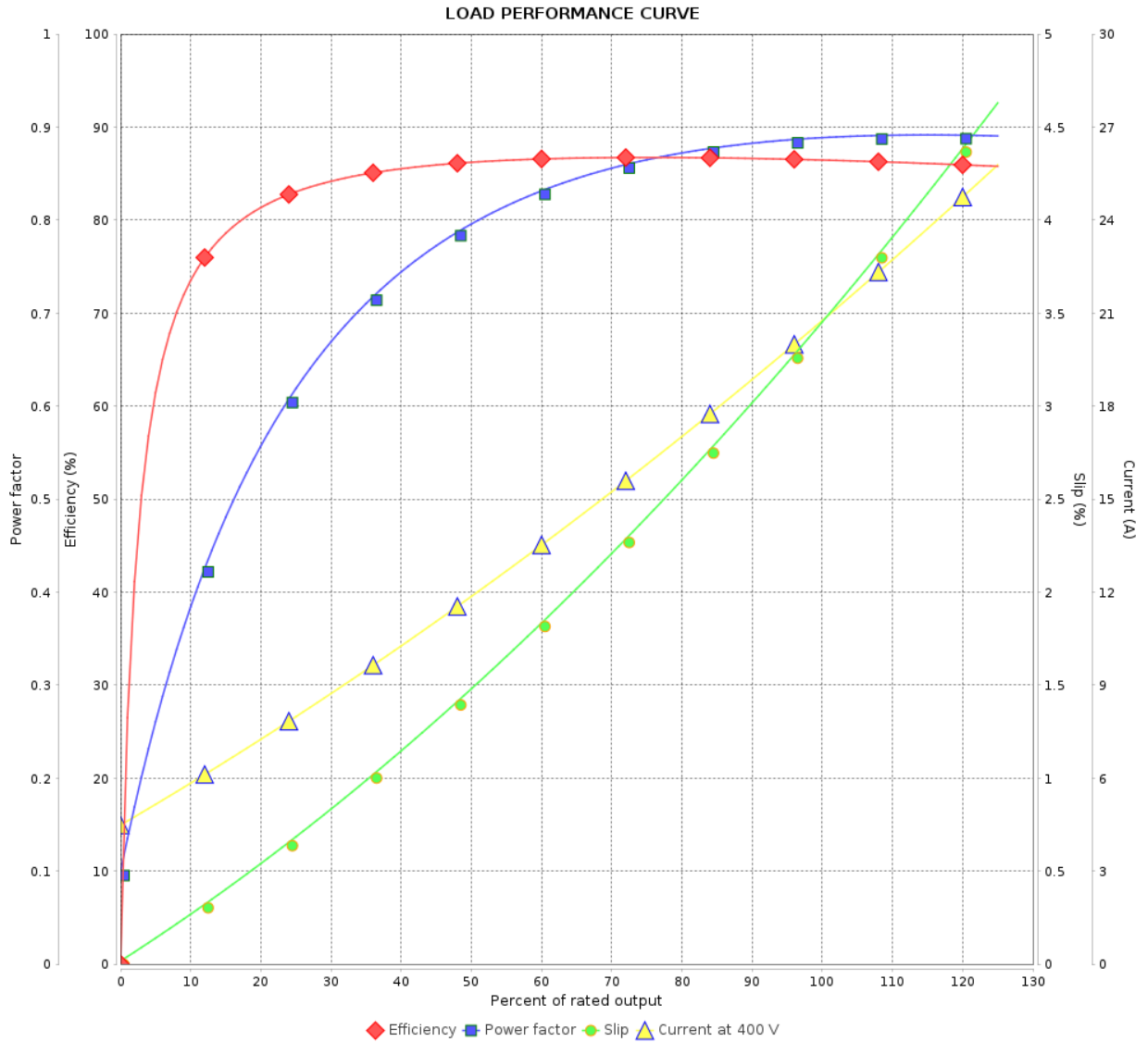
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11083242



Performance : 400 V 50 Hz 2P

Rated current : 20.6 A  
 LRC : 5.9  
 Rated torque : 3.76 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 260 %  
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.0243 kgm<sup>2</sup>  
 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

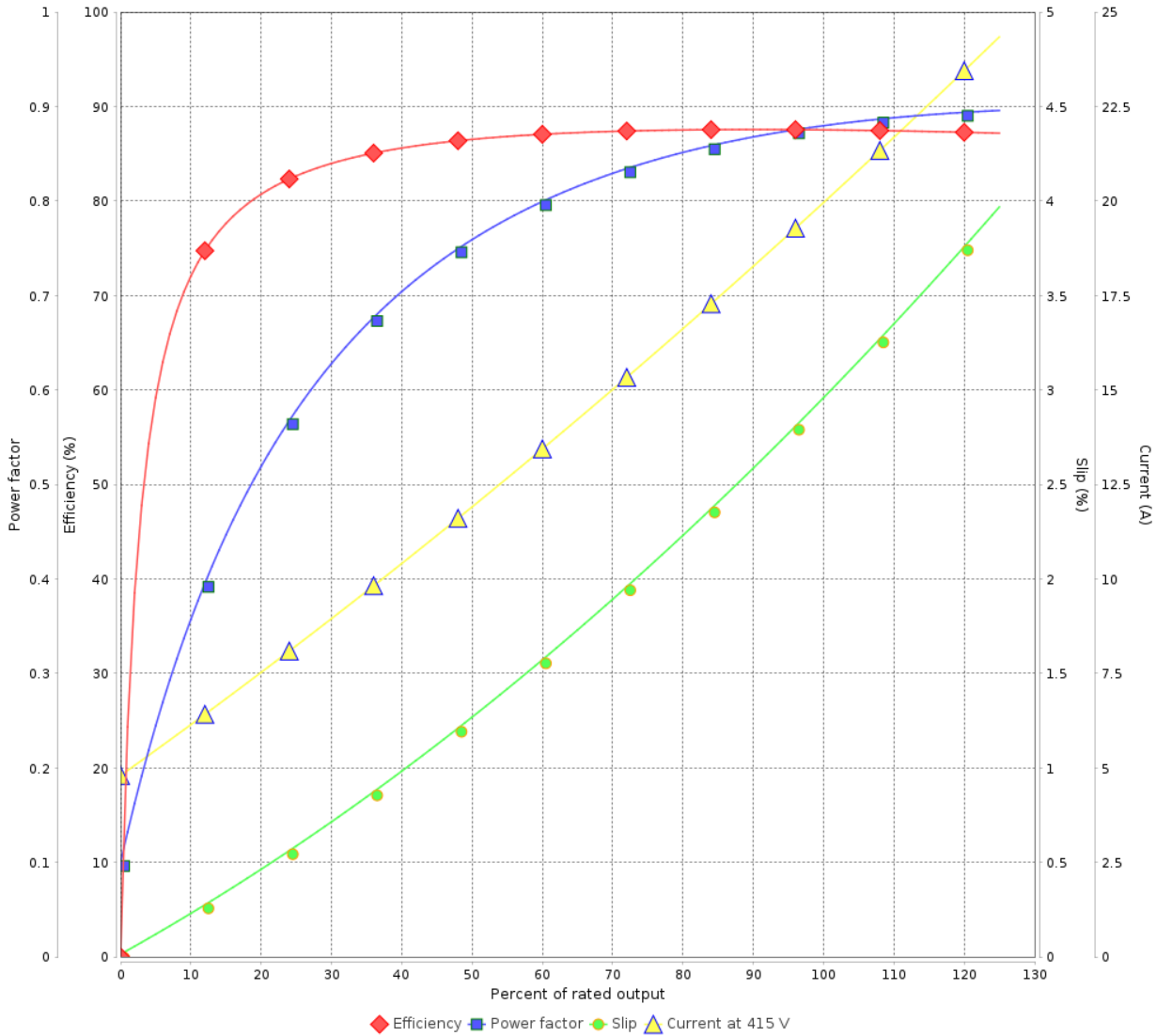


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Product code : 11083242

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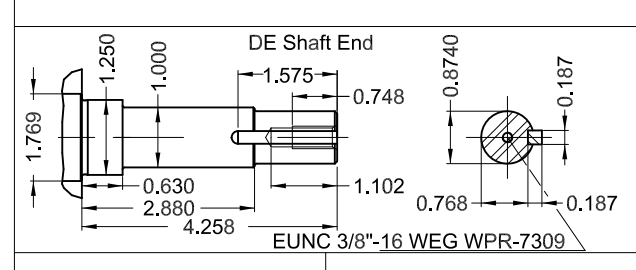
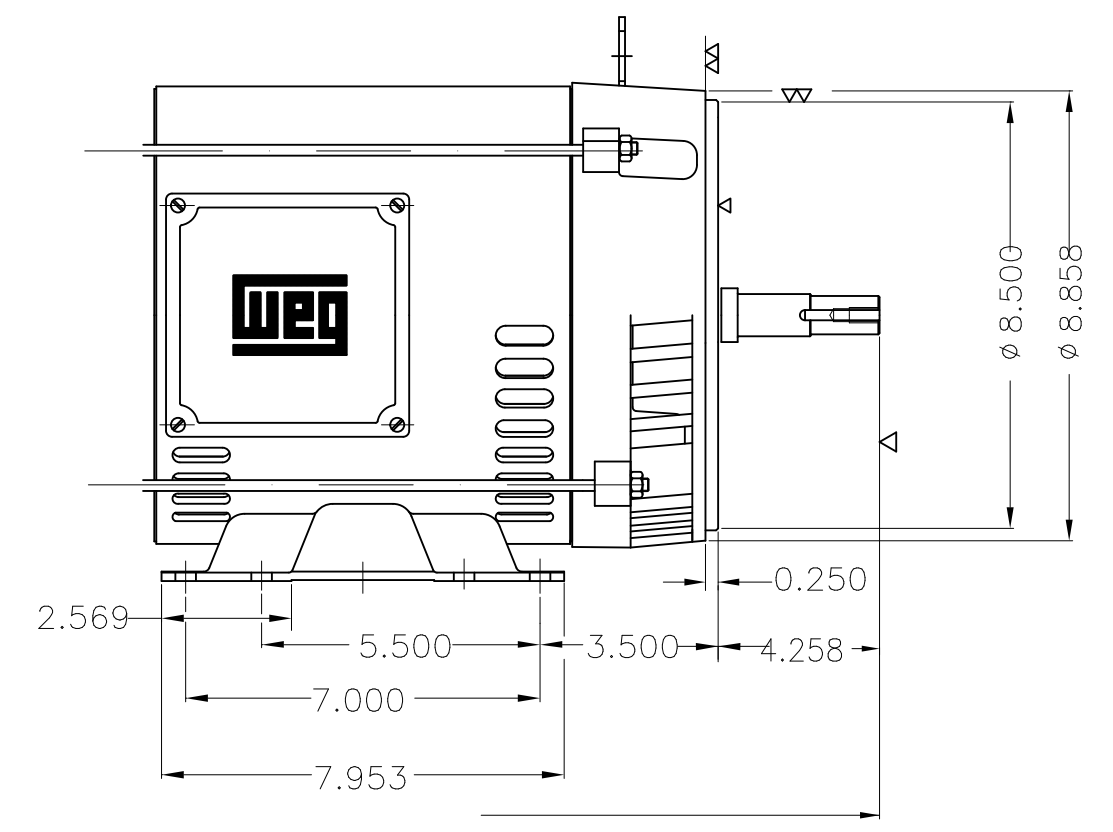
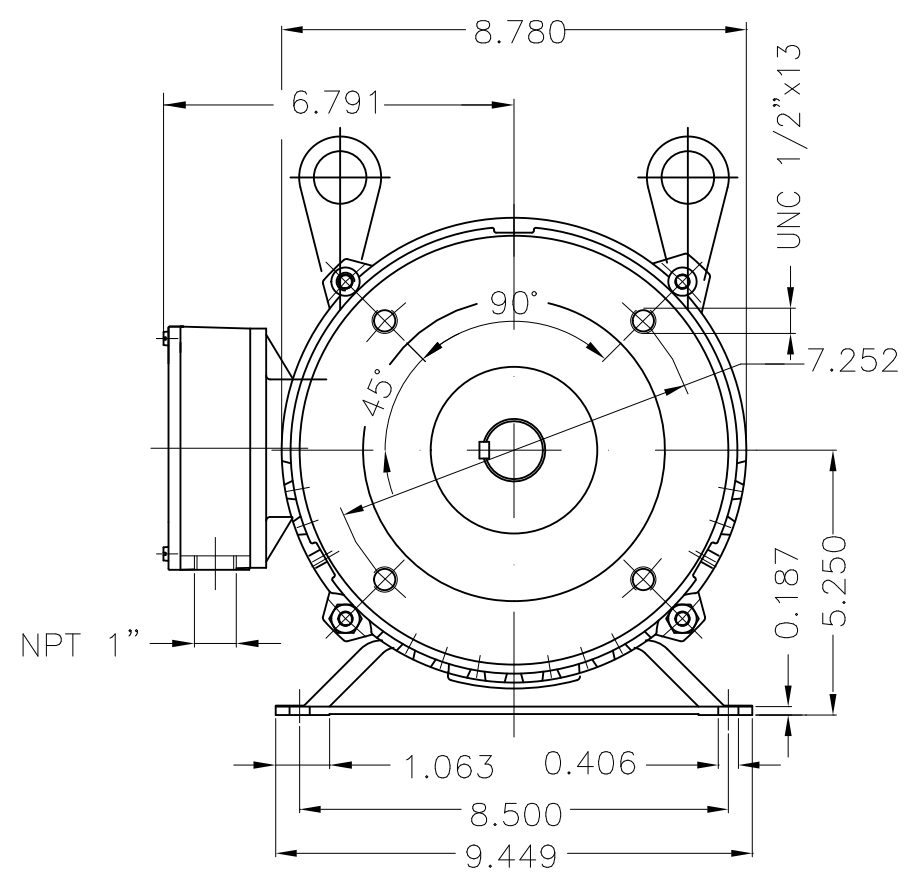
Performance : 415 V 50 Hz 2P

Rated current : 19.9 A  
LRC : 6.4  
Rated torque : 3.74 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 290 %  
Rated speed : 2910 rpm

Moment of inertia (J) : 0.0243 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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

15 HP 02 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					

