

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: Close Coupled Pump NEMA Premium Efficiency Three-Phase	Product code :	11170049				
Frame	: 254JM	Cooling method	: IC01 - ODP				
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	: 110 kg				
Protection degree	: IP23	Moment of inertia (J)	: 0.0878 kgm ²				
Design	: B						
Output [HP]	15	10	10	10	15	15	15
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]	37.2/18.6	16.2	16.2	16.2	22.1	21.8	21.8
L. R. Amperes [A]	249/125	110	110	113	119	124	131
LRC [A]	6.7x(Code H)	6.8x(Code J)	6.8x(Code J)	7.0x(Code K)	5.4x(Code F)	5.7x(Code G)	6.0x(Code G)
No load current [A]	18.0/9.00	9.20	10.1	10.9	9.20	10.4	11.6
Rated speed [RPM]	1775	1480	1480	1485	1470	1470	1475
Slip [%]	1.39	1.33	1.33	1.00	2.00	2.00	1.67
Rated torque [kgfm]	6.13	4.90	4.90	4.89	7.41	7.41	7.38
Locked rotor torque [%]	290	270	280	300	180	190	210
Breakdown torque [%]	300	370	390	400	280	310	340
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	25s (cold) 14s (hot)	37s (cold) 21s (hot)	34s (cold) 19s (hot)	30s (cold) 17s (hot)	37s (cold) 21s (hot)	34s (cold) 19s (hot)	30s (cold) 17s (hot)
Noise level ²	59.0 dB(A)						
Efficiency (%)	25%						
	50%	91.7	86.4	86.2	85.9	88.5	88.5
	75%	92.4	89.2	89.3	89.3	89.5	89.5
	100%	93.0	90.4	90.5	90.6	91.0	91.0
Power Factor	25%						
	50%	0.60	0.56	0.52	0.50	0.66	0.61
	75%	0.72	0.70	0.66	0.62	0.77	0.73
	100%	0.80	0.78	0.74	0.71	0.83	0.80
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6209 Z C3	Foundation loads					
Sealing	: Without Without	Max. traction	: 339 kgf				
	: Bearing Seal Bearing Seal	Max. compression	: 450 kgf				
Lubrication interval	: 20000 h 20000 h						
Lubricant amount	: 13 g 9 g						
Lubricant type	: Mobil Polyrex EM						
Notes							
USABLE @208V 41.1A SF 1.15 SFA 47.3A							
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.					
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Three Phase Induction Motor - Squirrel Cage

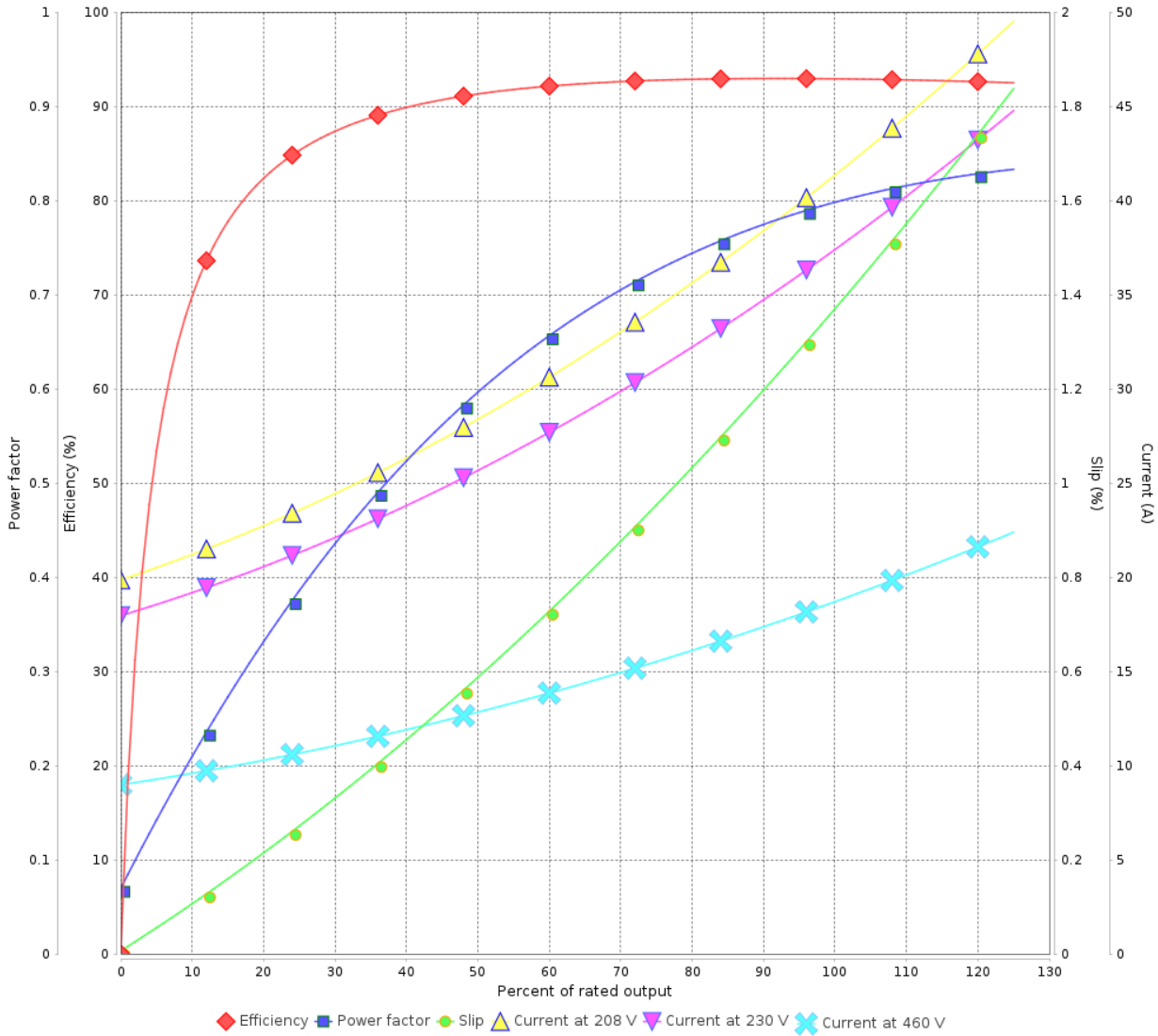


Customer :

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

Product code : 11170049

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Performance : 230/460 V 60 Hz 4P

Rated current : 37.2/18.6 A
LRC : 6.7
Rated torque : 6.13 kgfm
Locked rotor torque : 290 %
Breakdown torque : 300 %
Rated speed : 1775 rpm

Moment of inertia (J) : 0.0878 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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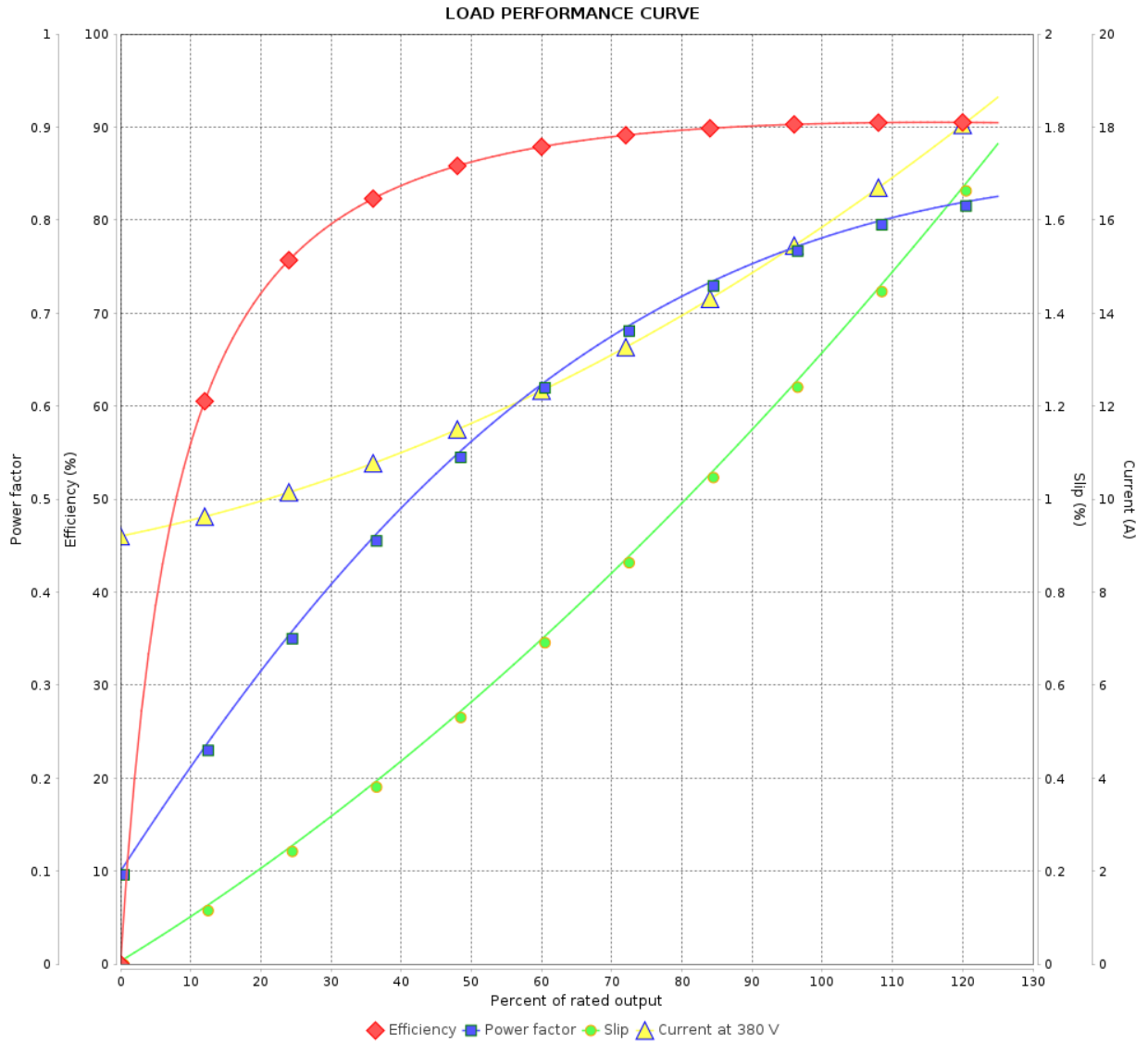
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11170049



Performance : 380 V 50 Hz 4P IE3

Rated current : 16.2 A
 LRC : 6.8
 Rated torque : 4.90 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 370 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.0878 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 : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11170049

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Performance : 400 V 50 Hz 4P IE3

Rated current : 16.2 A
LRC : 6.8
Rated torque : 4.90 kgfm
Locked rotor torque : 280 %
Breakdown torque : 390 %
Rated speed : 1480 rpm

Moment of inertia (J) : 0.0878 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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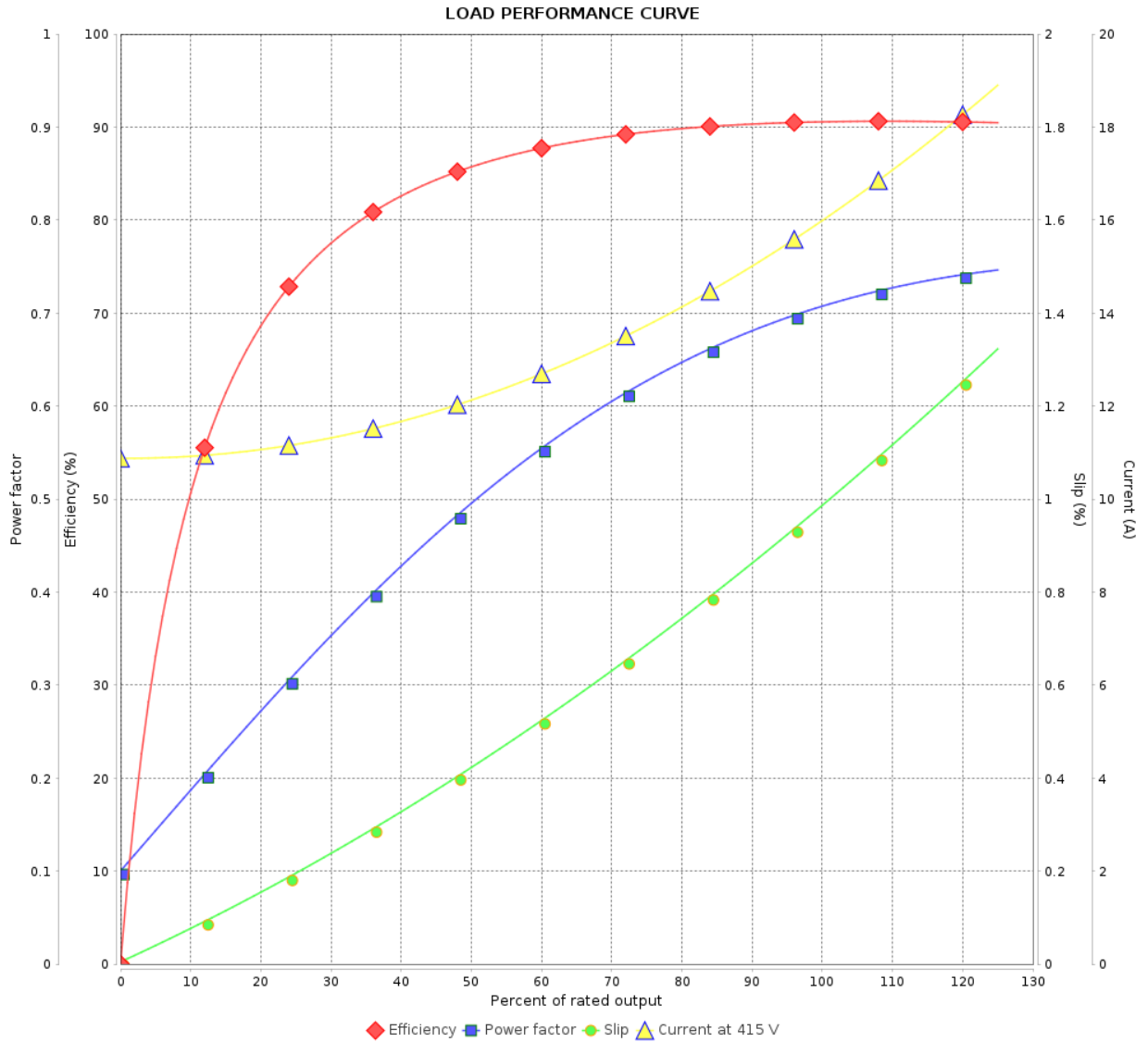
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11170049



Performance : 415 V 50 Hz 4P IE3

Rated current : 16.2 A
LRC : 7.0
Rated torque : 4.89 kgfm
Locked rotor torque : 300 %
Breakdown torque : 400 %
Rated speed : 1485 rpm

Moment of inertia (J) : 0.0878 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

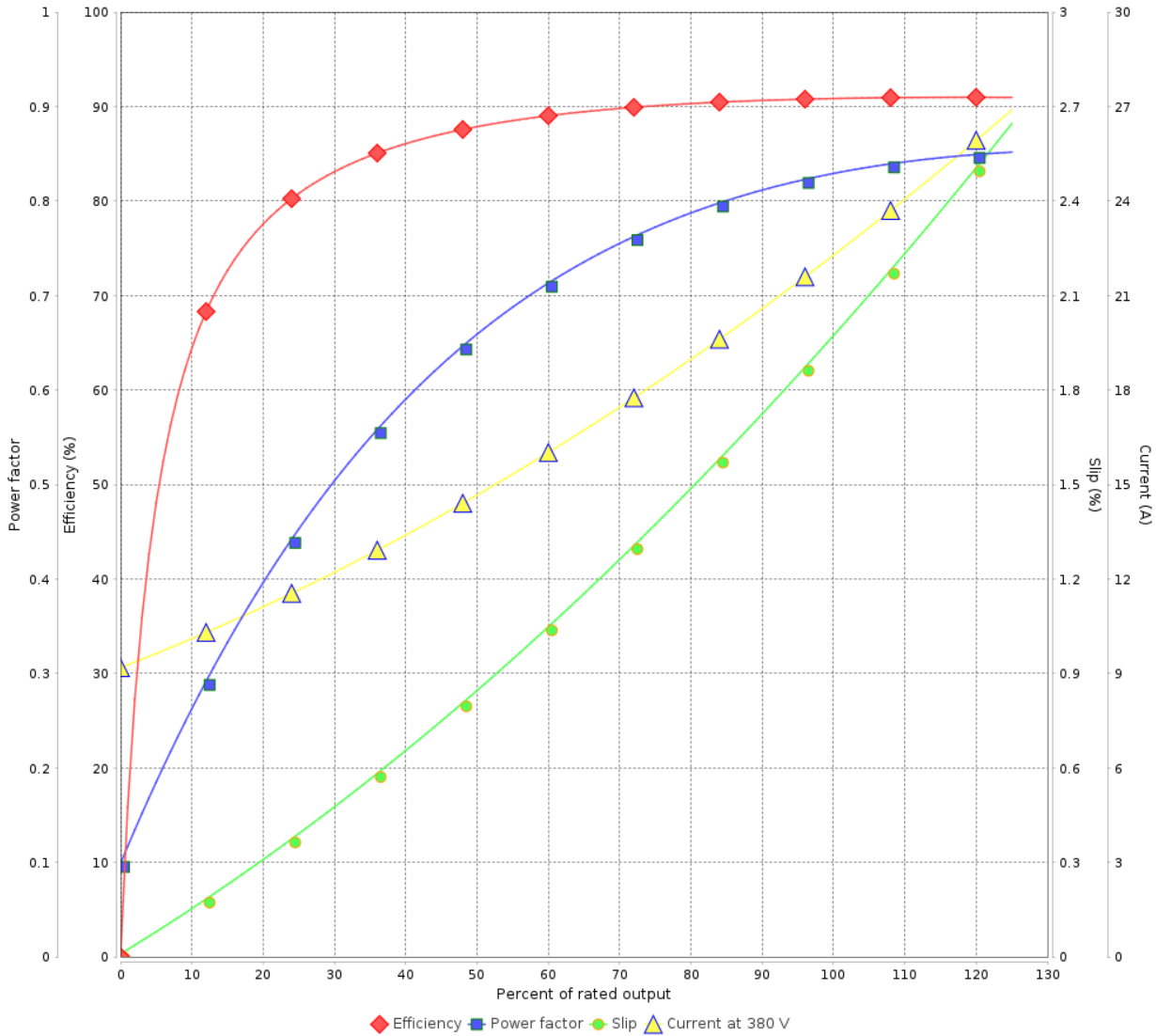


Customer :

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

Product code : 11170049

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Performance : 380 V 50 Hz 4P IE2

Rated current : 22.1 A
LRC : 5.4
Rated torque : 7.41 kgfm
Locked rotor torque : 180 %
Breakdown torque : 280 %
Rated speed : 1470 rpm

Moment of inertia (J) : 0.0878 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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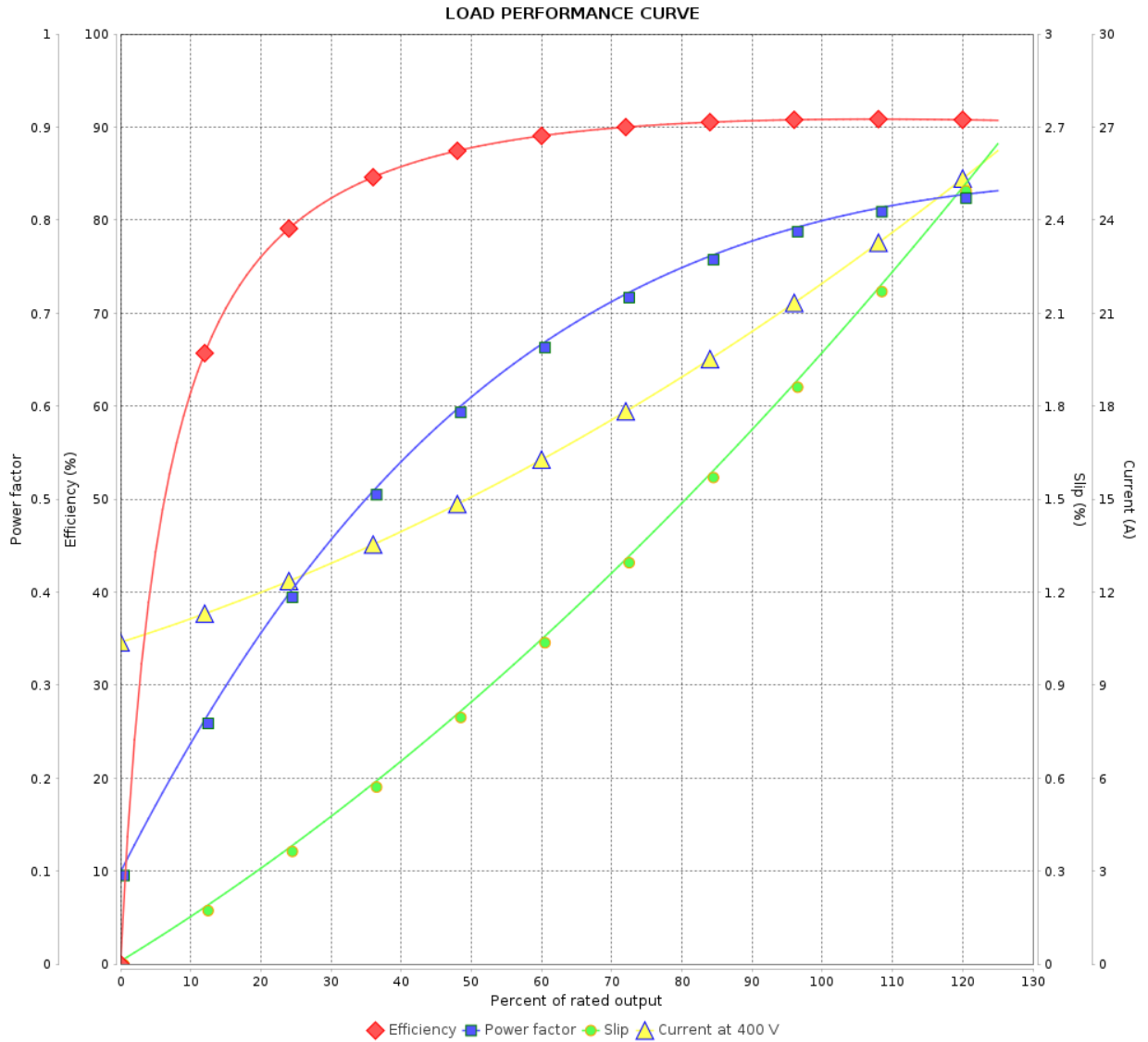
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11170049



Performance : 400 V 50 Hz 4P IE2

Rated current : 21.8 A
 LRC : 5.7
 Rated torque : 7.41 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 310 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0878 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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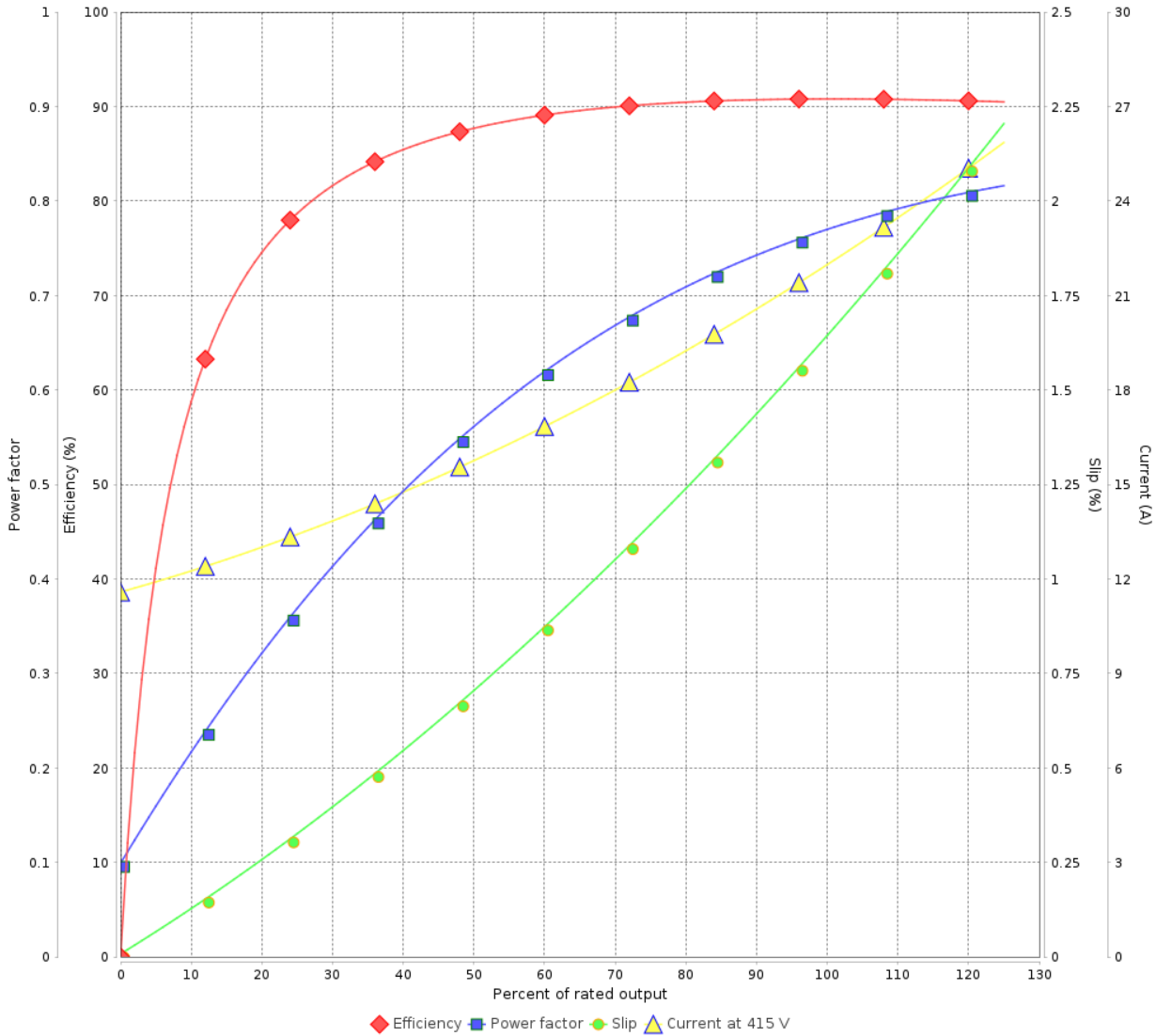


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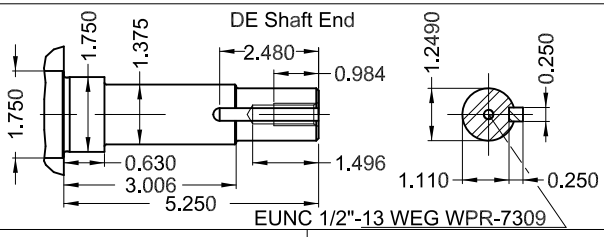
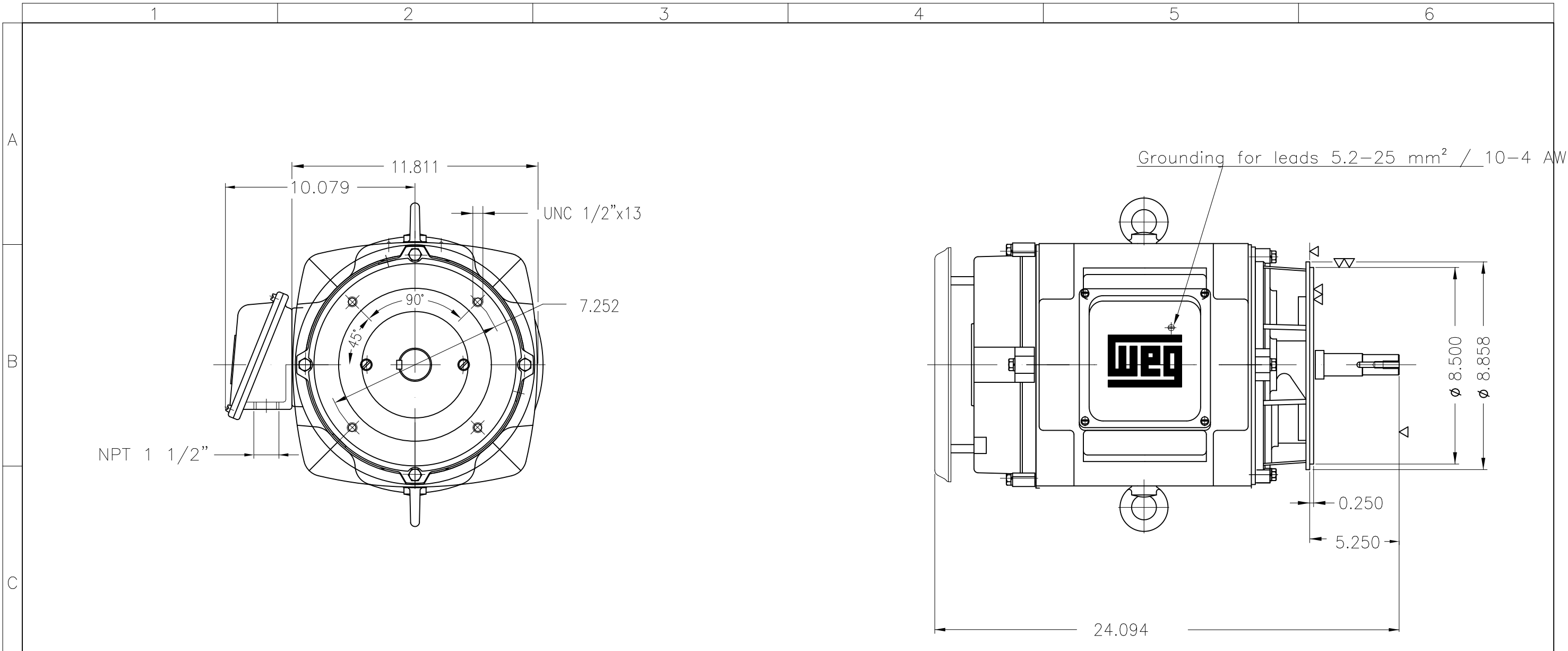


Performance : 415 V 50 Hz 4P IE2

Rated current : 21.8 A
LRC : 6.0
Rated torque : 7.38 kgfm
Locked rotor torque : 210 %
Breakdown torque : 340 %
Rated speed : 1475 rpm


Moment of inertia (J) : 0.0878 kgm²
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 203A
 Mounting B14R(D)

15 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR JM/JP/JET PUMP NEMA PREM. EFF.					
CHECKED		FRAME 254JM IP23 ODP					
RELEASED							
REL. DATE	WMO	Jaragua do Sul	Product Engineering	PREVIEW		WDD 00	
				SHEET	1 / 1		

Dimensions in inches XME A3