

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :			
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	15584459
Frame	: 182/4TC	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: W-12
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>	: 33.6 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0066 kgm <sup>2</sup>
Design	: B		
Output [HP]	3	3	3
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	7.34/3.67	8.70-7.51/4.35	4.07
L. R. Amperes [A]	64.6/32.3	60.0-51.8/30.0	33.4
LRC [A]	8.8x(Code K)	6.9x(Code H)	8.2x(Code J)
No load current [A]	3.22/1.61	3.18-2.74/1.59	1.80
Rated speed [RPM]	3515	2885	2910
Slip [%]	2.36	3.83	3.00
Rated torque [kgfm]	0.619	0.755	0.748
Locked rotor torque [%]	220	180	229
Breakdown torque [%]	300	280	340
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	39s (cold) 22s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%		
	50%	84.0	85.9
	75%	86.5	86.5
	100%	86.5	85.3
Power Factor	25%		
	50%	0.71	0.77
	75%	0.82	0.86
	100%	0.87	0.90
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6205 ZZ	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 36 kgf
		Max. compression	: 70 kgf
Lubrication interval	: -		
Lubricant amount	: -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 8.12A SF 1.00 SFA 8.12A			
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
Performed by			
Checked by			
Date	11/05/2022		
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# LOAD PERFORMANCE CURVE

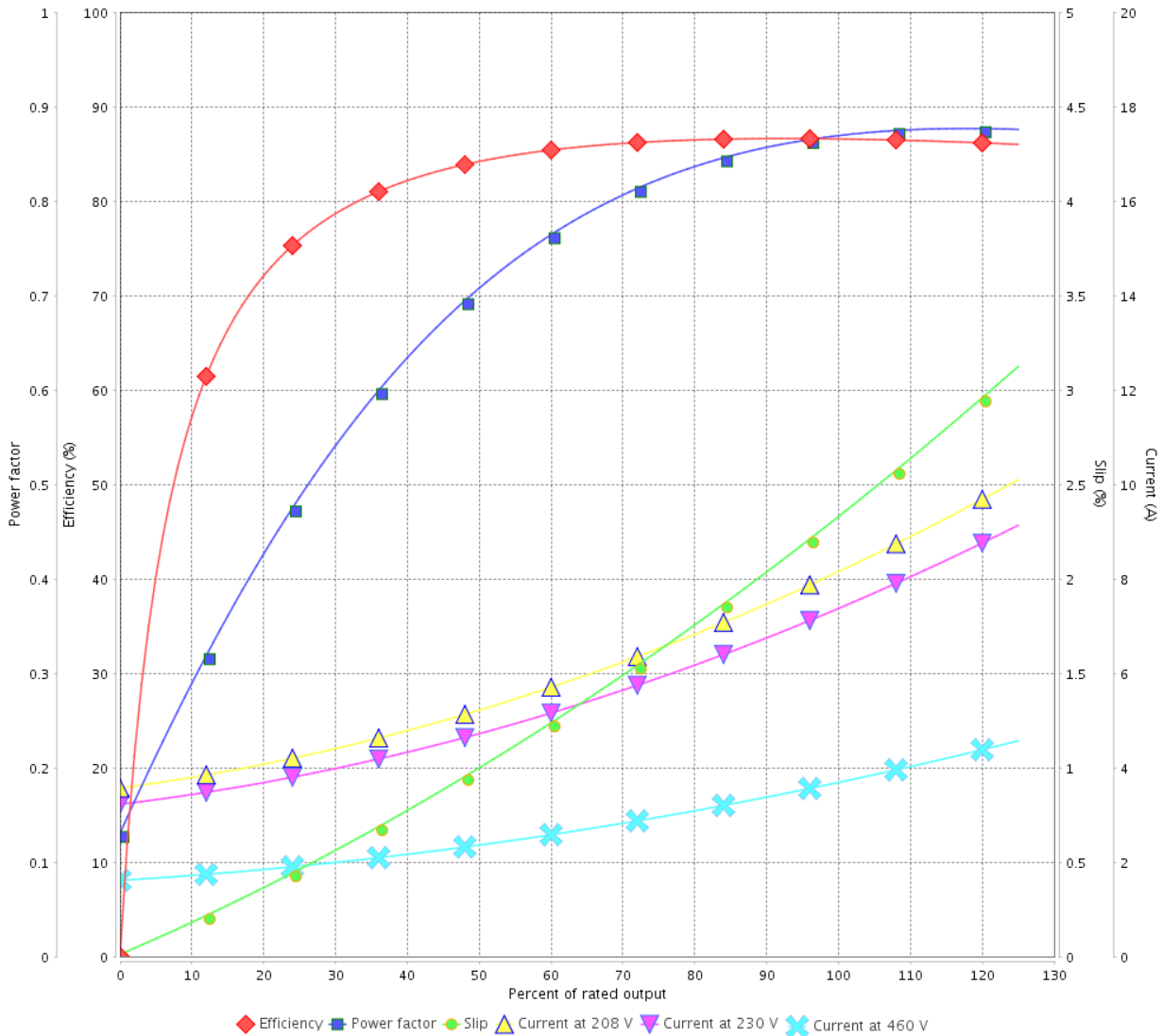
Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 15584459

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 7.34/3.67 A  
 LRC : 8.8  
 Rated torque : 0.619 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 3515 rpm

Moment of inertia (J) : 0.0066 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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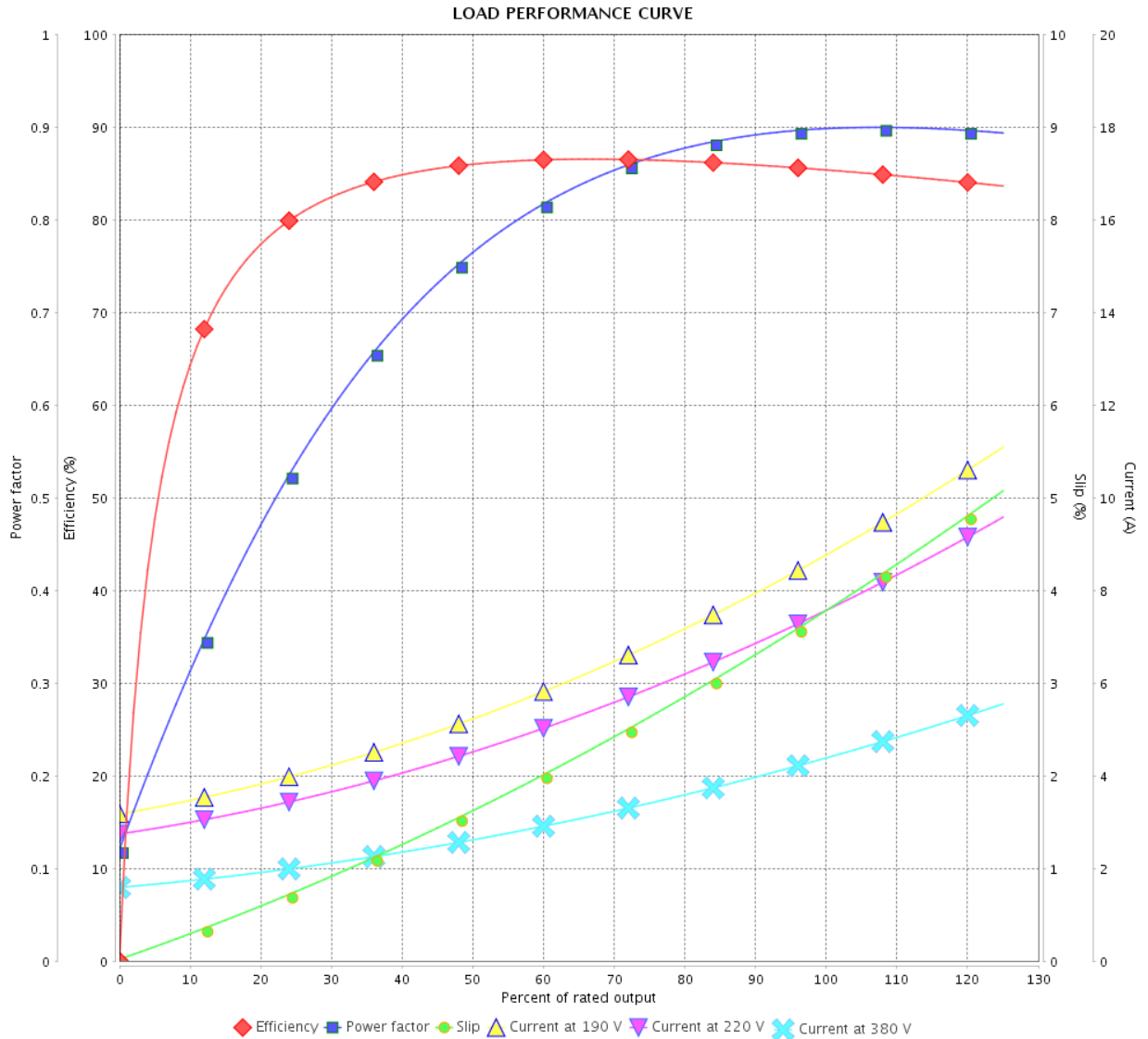
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 15584459



Performance : 190-220/380 V 50 Hz 2P

Rated current : 8.70-7.51/4.35 A  
 LRC : 6.9  
 Rated torque : 0.755 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 280 %  
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.0066 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

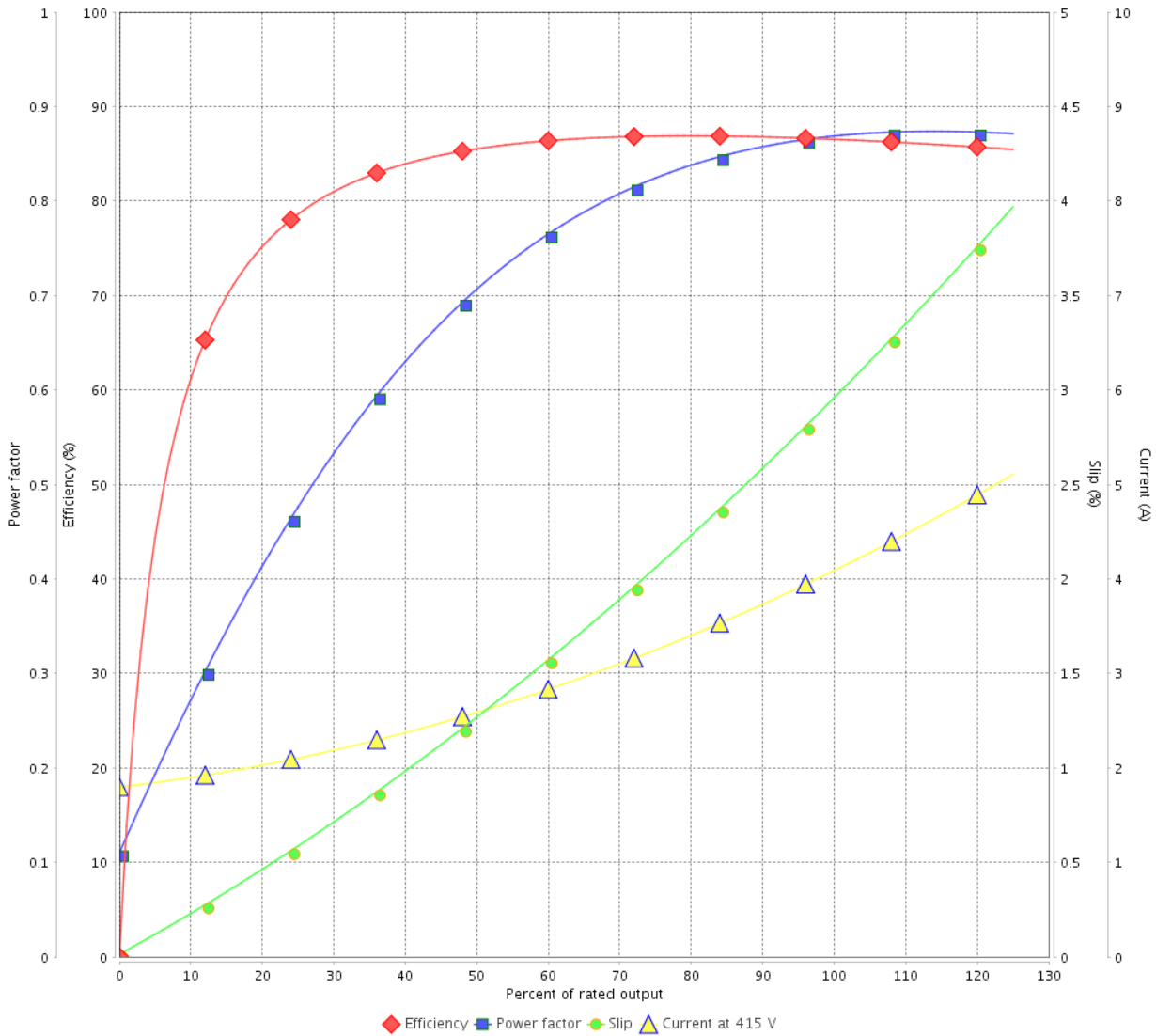
Three Phase Induction Motor - Squirrel Cage



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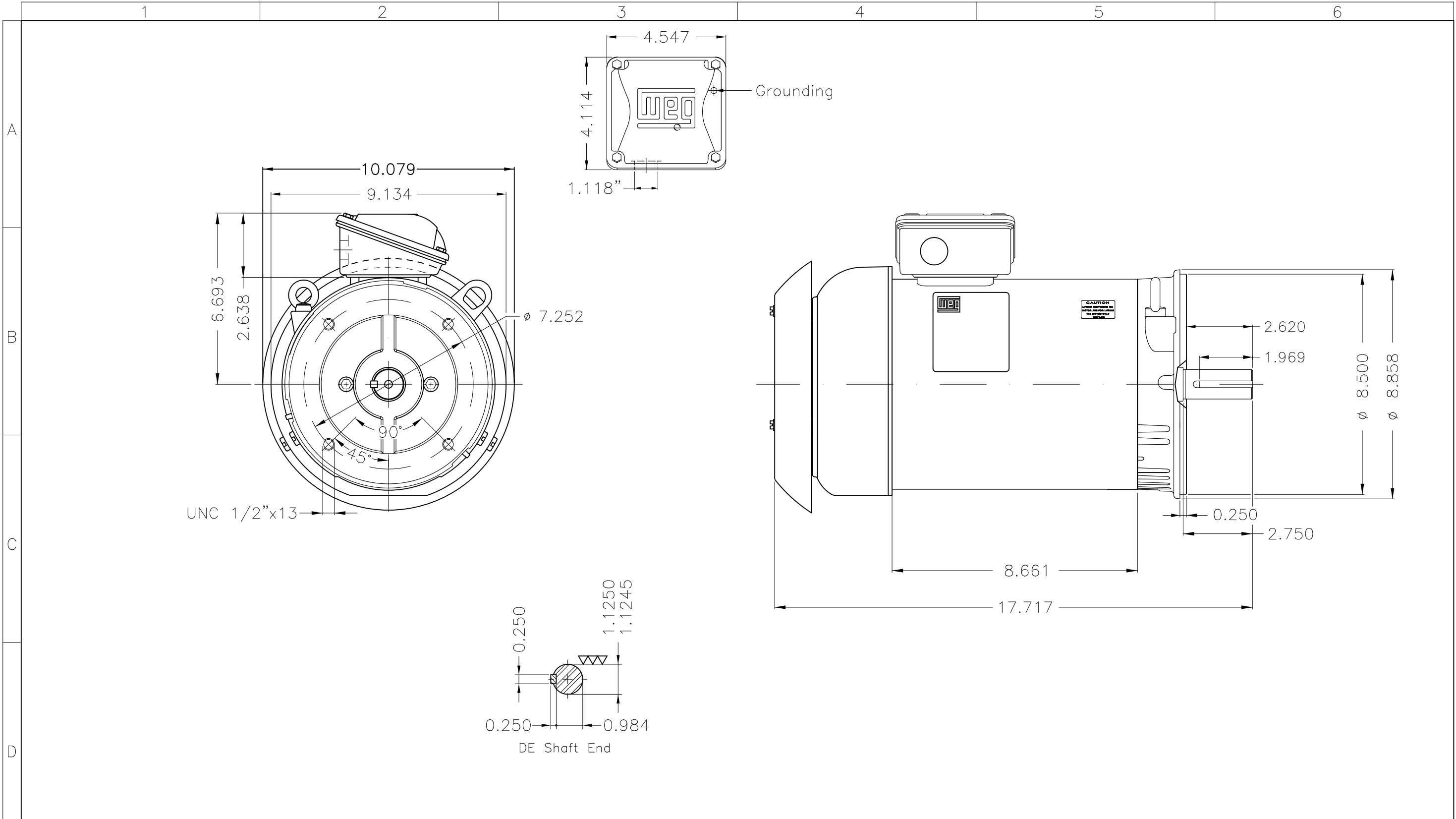
LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 2P



Rated current	: 4.07 A	Moment of inertia (J)	: 0.0066 kgm <sup>2</sup>
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 0.748 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 2910 rpm	Design	: B

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A  
B  
C  
D  
E

Dimensions in inches XME A3

Color Munsell N 1 matte black									
Painting plan 207N									
Mounting V18T									
					HYBRISUSER	00			
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL NEMA PREM. EFF.				<b>PREVIEW</b> WDD   00			
CHECKED		FRAME 182/4TC IP55 TEFC							
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

3 HP 02 Poles 60 Hz

A