

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: Premium Efficiency Three-Phase	Product code :	14595231	
Frame	: 56	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>2</sup>	: 9.5 kg	
		Moment of inertia (J)	: 0.0025 kgm <sup>2</sup>	
Output [HP]	0.5	0.5	0.5	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	208-230/460	190-220/380	415	
Rated current [A]	1.90-1.72/0.861	1.89-1.63/0.943	0.959	
L. R. Amperes [A]	13.7-12.4/6.20	10.9-9.45/5.47	6.04	
LRC [A]	7.2x(Code L)	5.8x(Code J)	6.3x(Code K)	
No load current [A]	1.12-1.30/0.650	1.23-1.07/0.617	0.737	
Rated speed [RPM]	1765	1450	1460	
Slip [%]	1.94	3.33	2.67	
Rated torque [kgfm]	0.206	0.250	0.249	
Locked rotor torque [%]	240	180	220	
Breakdown torque [%]	330	260	320	
Service factor		1.25	1.25	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	48s (cold) 27s (hot)	55s (cold) 31s (hot)	46s (cold) 26s (hot)	
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%			
	50%	70.0	68.9	
	75%	75.5	74.6	
	100%	78.2	76.7	
Power Factor	25%			
	50%	0.47	0.47	
	75%	0.60	0.60	
	100%	0.69	0.70	
Bearing type	: <u>Drive end</u> 6203 ZZ <u>Non drive end</u> 6202 ZZ	Foundation loads		
Sealing	: Without Bearing Seal Without Bearing Seal	Max. traction	: 20 kgf	
		Max. compression	: 30 kgf	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V SF 1.00				
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
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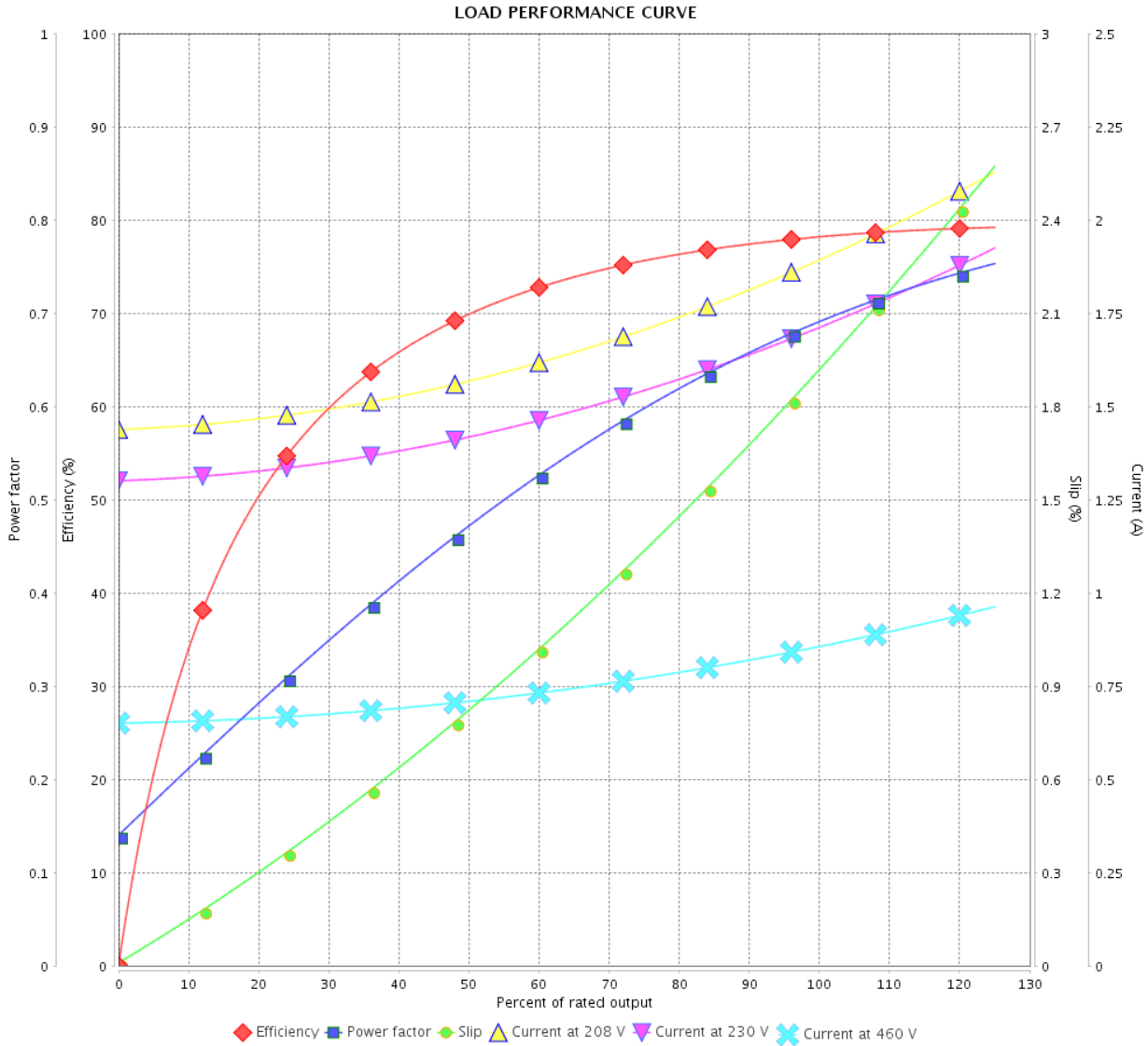
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14595231



Performance : 208-230/460 V 60 Hz 4P

Rated current : 1.90-1.72/0.861 A  
 LRC : 7.2  
 Rated torque : 0.206 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 330 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.0025 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K

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Date	17/05/2022			

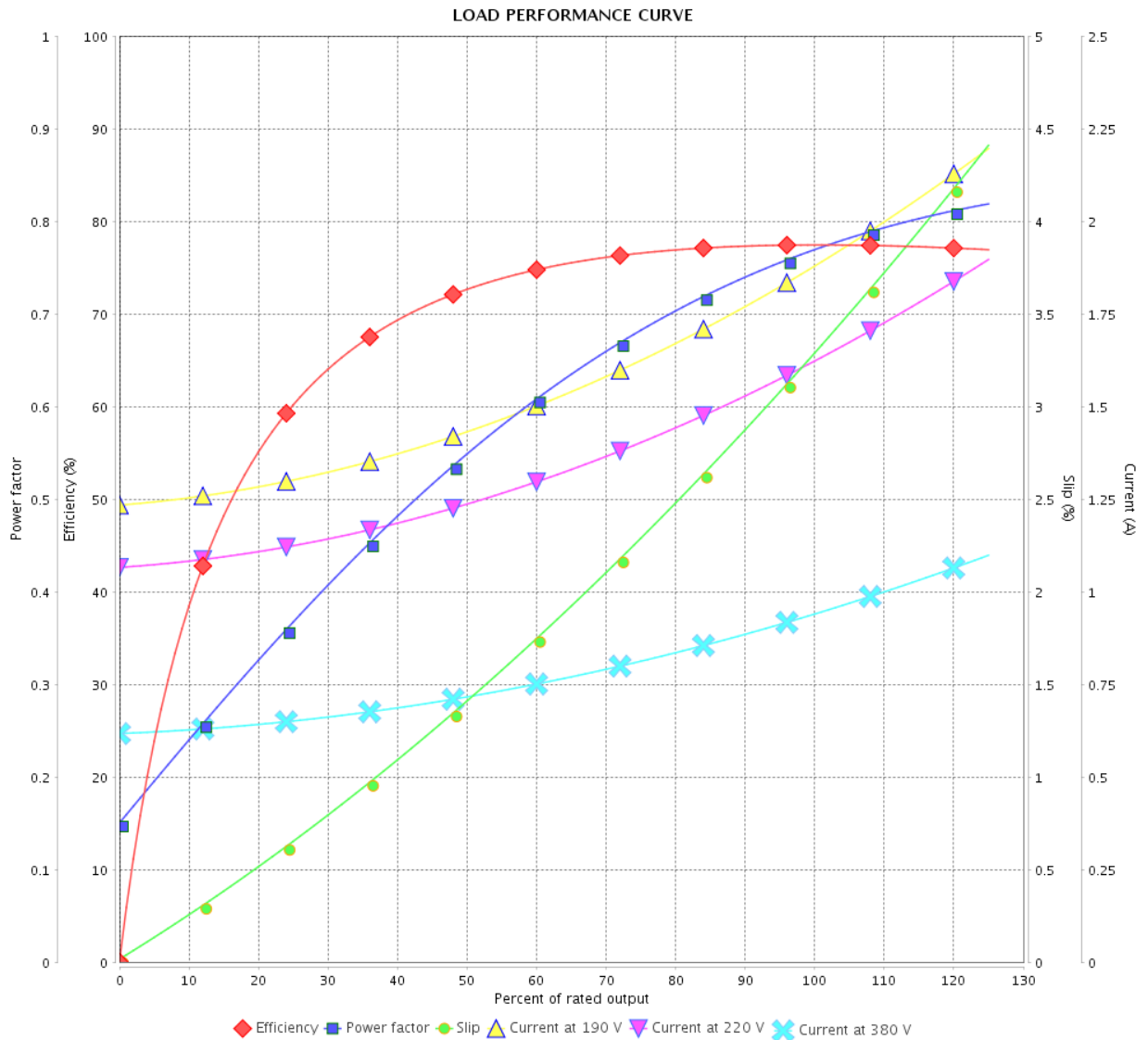
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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

Product line : Premium Efficiency Three-Phase      Product code : 14595231



Performance : 190-220/380 V 50 Hz 4P

Rated current : 1.89-1.63/0.943 A  
 LRC : 5.8  
 Rated torque : 0.250 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 260 %  
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0025 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
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Date				

# LOAD PERFORMANCE CURVE

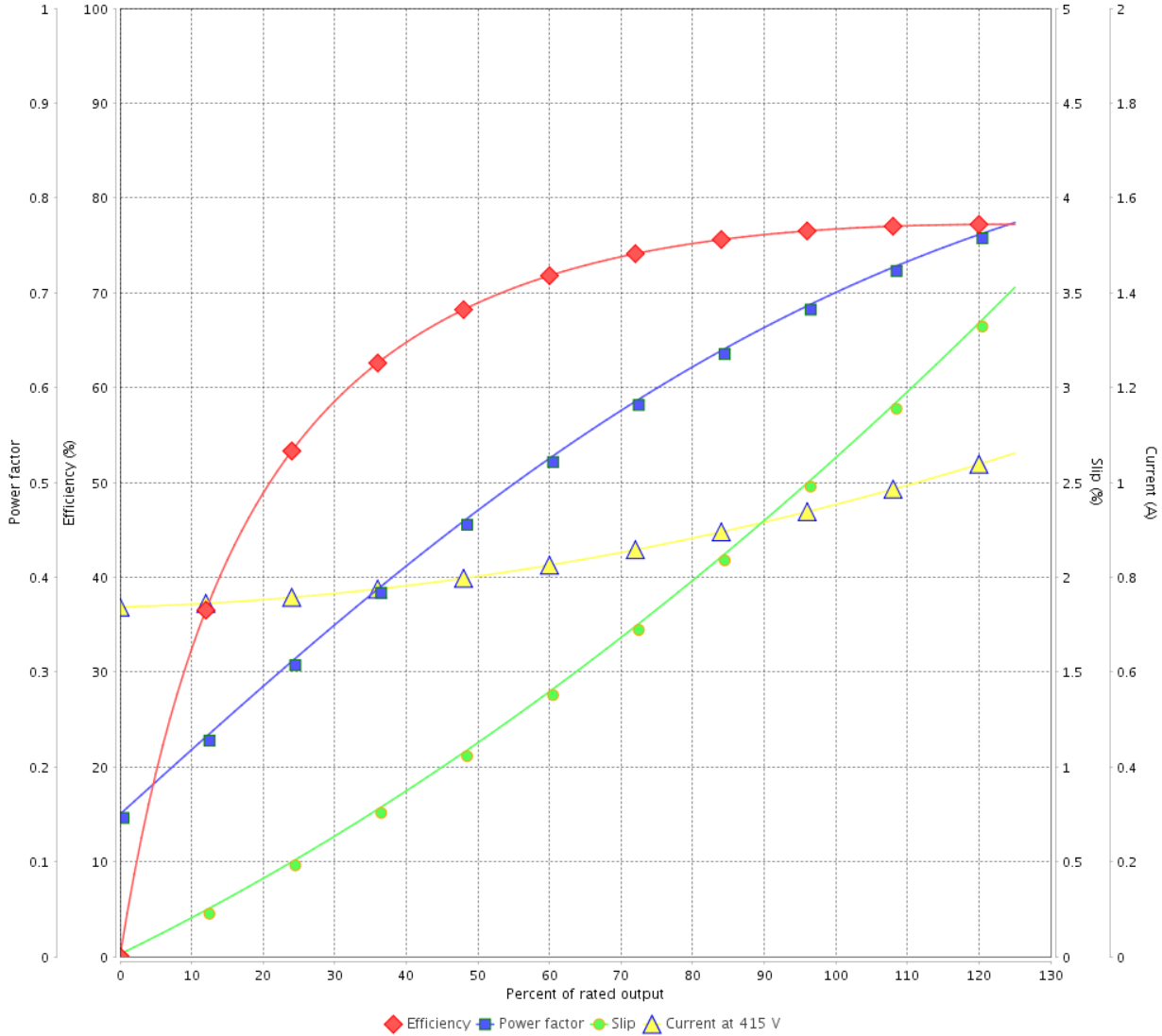
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14595231

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P

Rated current	: 0.959 A	Moment of inertia (J)	: 0.0025 kgm <sup>2</sup>
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 0.249 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm		

Rev.	Changes Summary	Performed	Checked	Date
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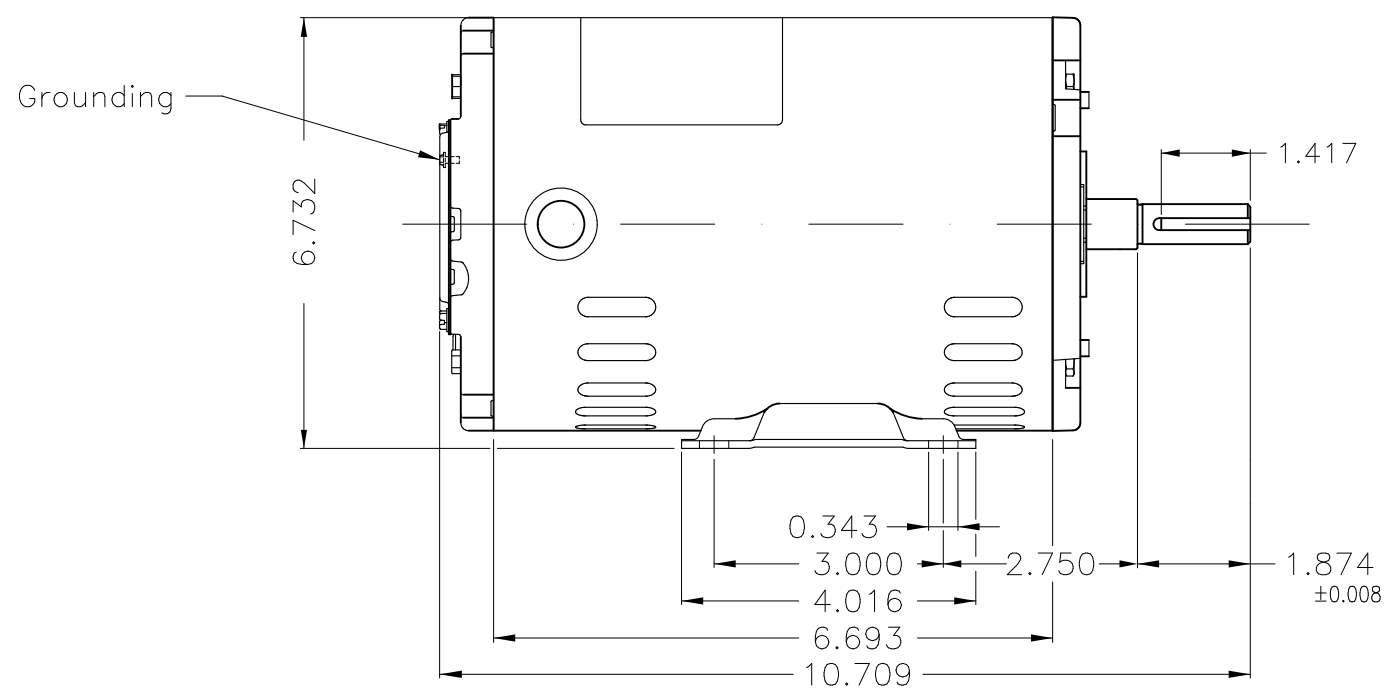
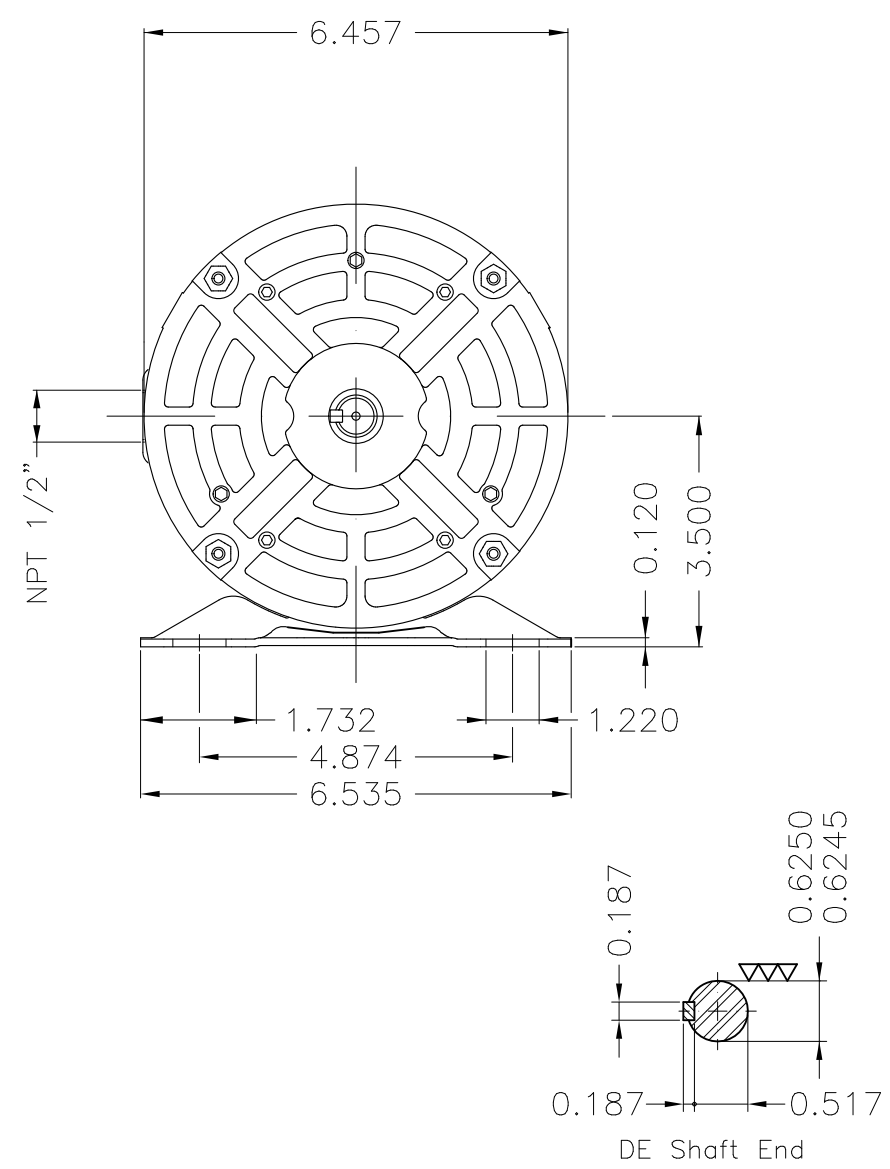
A

B

C

D

E



Color Munsell N 1 matte black											
Painting plan 207N											
Mounting F-1/B3R(D)											
				HYBRISUSER	00						
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED						
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 56 IP21 ODP									
CHECKED											
RELEASED											
REL. DATE	WMO	Jaragua do Sul	Product Engineering	<table border="1"> <tr> <td>PREVIEW</td> <td> </td> </tr> <tr> <td>WDD</td> <td>00</td> </tr> <tr> <td>SHEET</td> <td>1 / 1</td> </tr> </table>		PREVIEW		WDD	00	SHEET	1 / 1
PREVIEW											
WDD	00										
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0.5 HP 04 Poles 60 Hz

A

