

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: Premium Efficiency Three-Phase																		
Product code :	12809700																		
Catalog # :	002180T3H56CFL-S																		
Frame : 56C Output : 2 HP (1.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 2.15 A L. R. Amperes : 16.6 A LRC : 7.7x(Code K) No load current : 1.10 A Rated speed : 1740 rpm Slip : 3.33 % Rated torque : 6.04 ft.lb Locked rotor torque : 260 % Breakdown torque : 320 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1168 sq.ft.lb Design : A	Locked rotor time : 30s (cold) 17s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Cooling method : IC01 - ODP Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 36.7 lb																		
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>85.2</td> <td>85.5</td> <td>86.5</td> <td>86.5</td> </tr> <tr> <td>Power Factor</td> <td>0.36</td> <td>0.61</td> <td>0.74</td> <td>0.81</td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	85.2	85.5	86.5	86.5	Power Factor	0.36	0.61	0.74	0.81	Foundation loads Max. traction : 171 lb Max. compression : 208 lb			
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Notes																			
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	14/04/2022		1 / 5																

TORQUE AND CURRENT VS SPEED CURVE

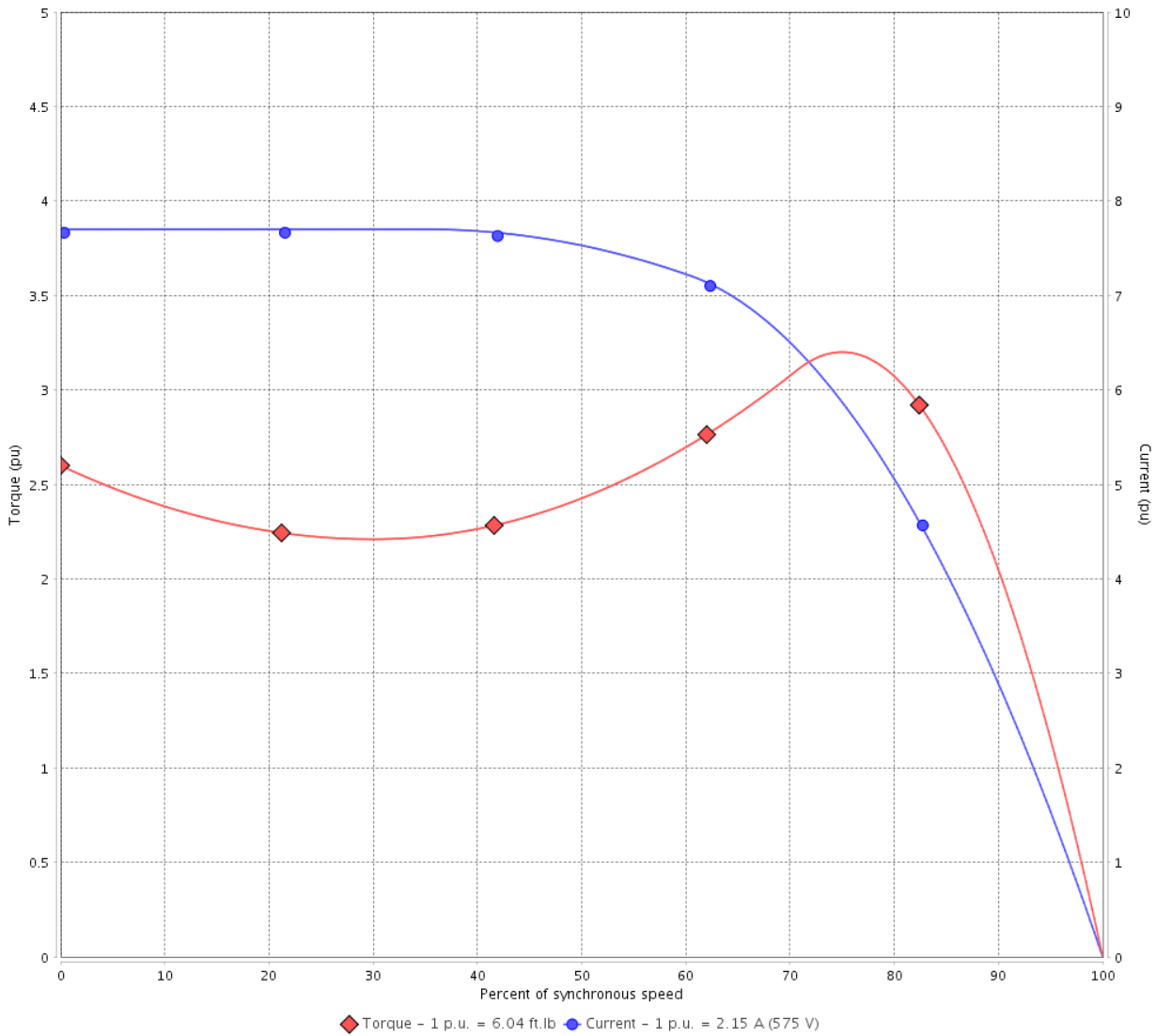
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12809700
 Catalog # : 002180T3H56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 2.15 A	Moment of inertia (J)	: 0.1168 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 6.04 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1740 rpm	Design	: A

Locked rotor time : 30s (cold) 17s (hot)

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Date	14/04/2022			

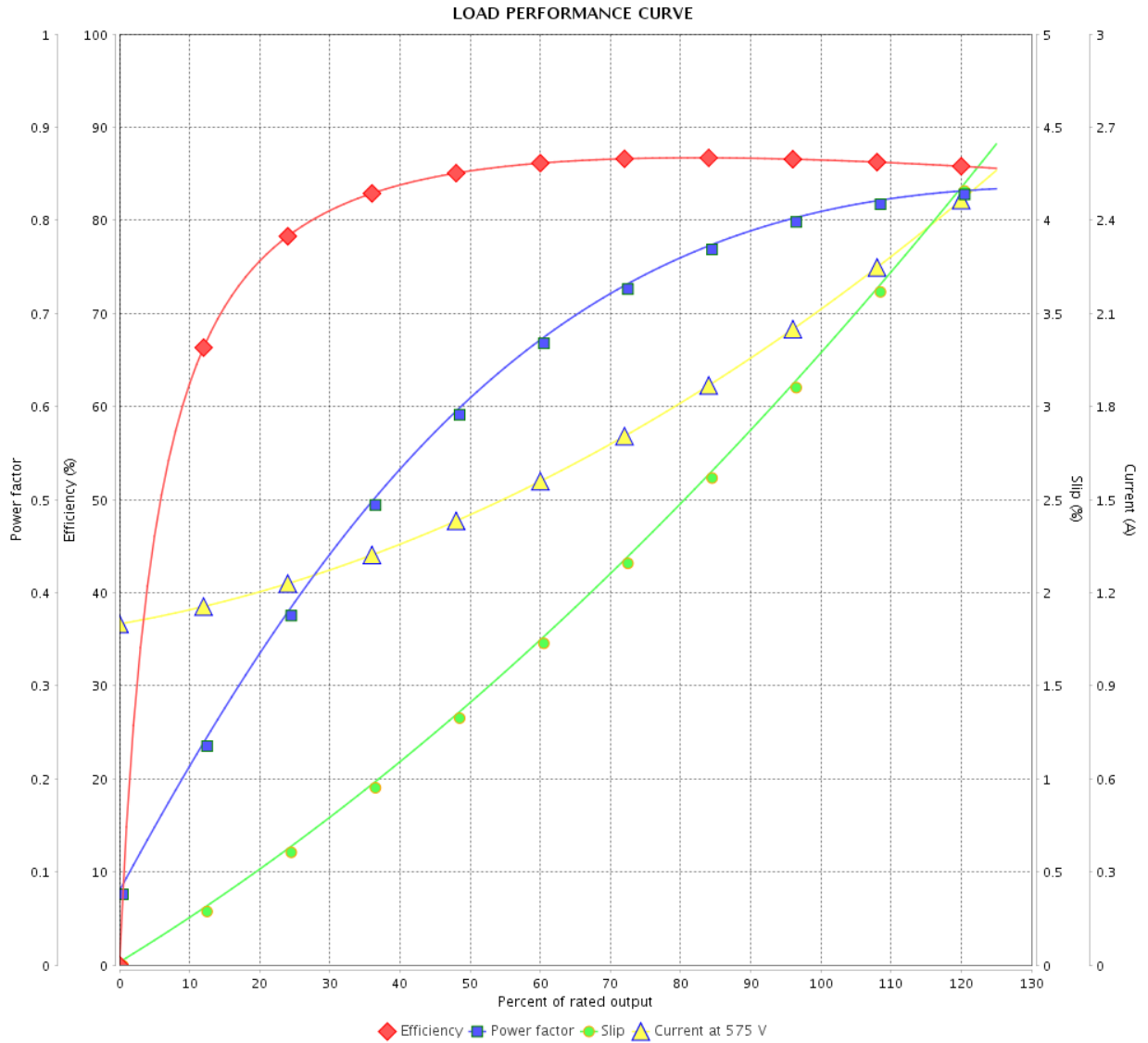
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Premium Efficiency Three-Phase Product code : 12809700
 Catalog # : 002180T3H56CFL-S



Performance : 575 V 60 Hz 4P

Rated current : 2.15 A
 LRC : 7.7
 Rated torque : 6.04 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 320 %
 Rated speed : 1740 rpm

Moment of inertia (J) : 0.1168 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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Date				
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

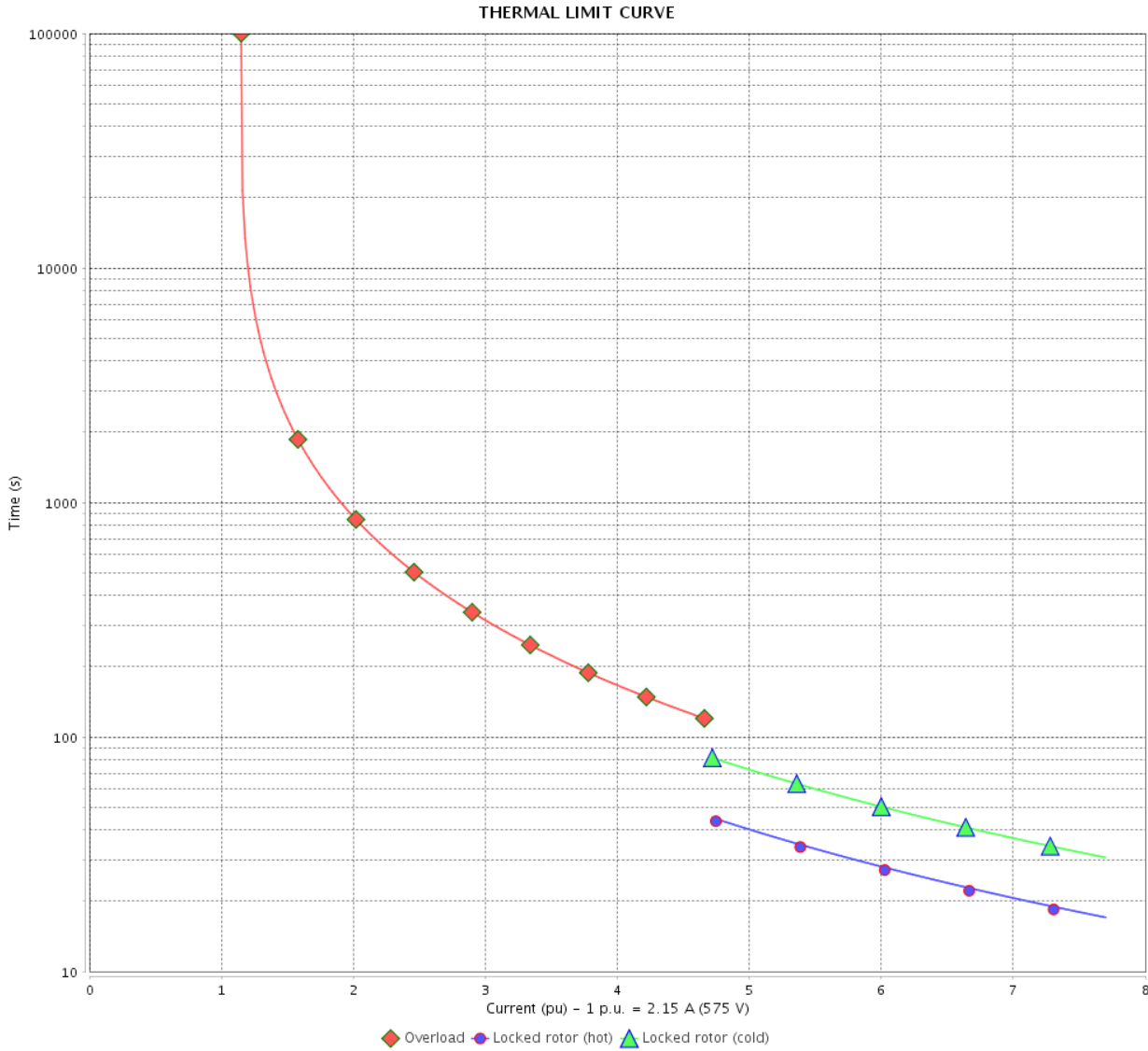
Product line : Premium Efficiency Three-Phase

Product code :

12809700

Catalog # :

002180T3H56CFL-S



Performance : 575 V 60 Hz 4P

Rated current : 2.15 A
 LRC : 7.7
 Rated torque : 6.04 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 320 %
 Rated speed : 1740 rpm

Moment of inertia (J) : 0.1168 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Heating constant

Cooling constant

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

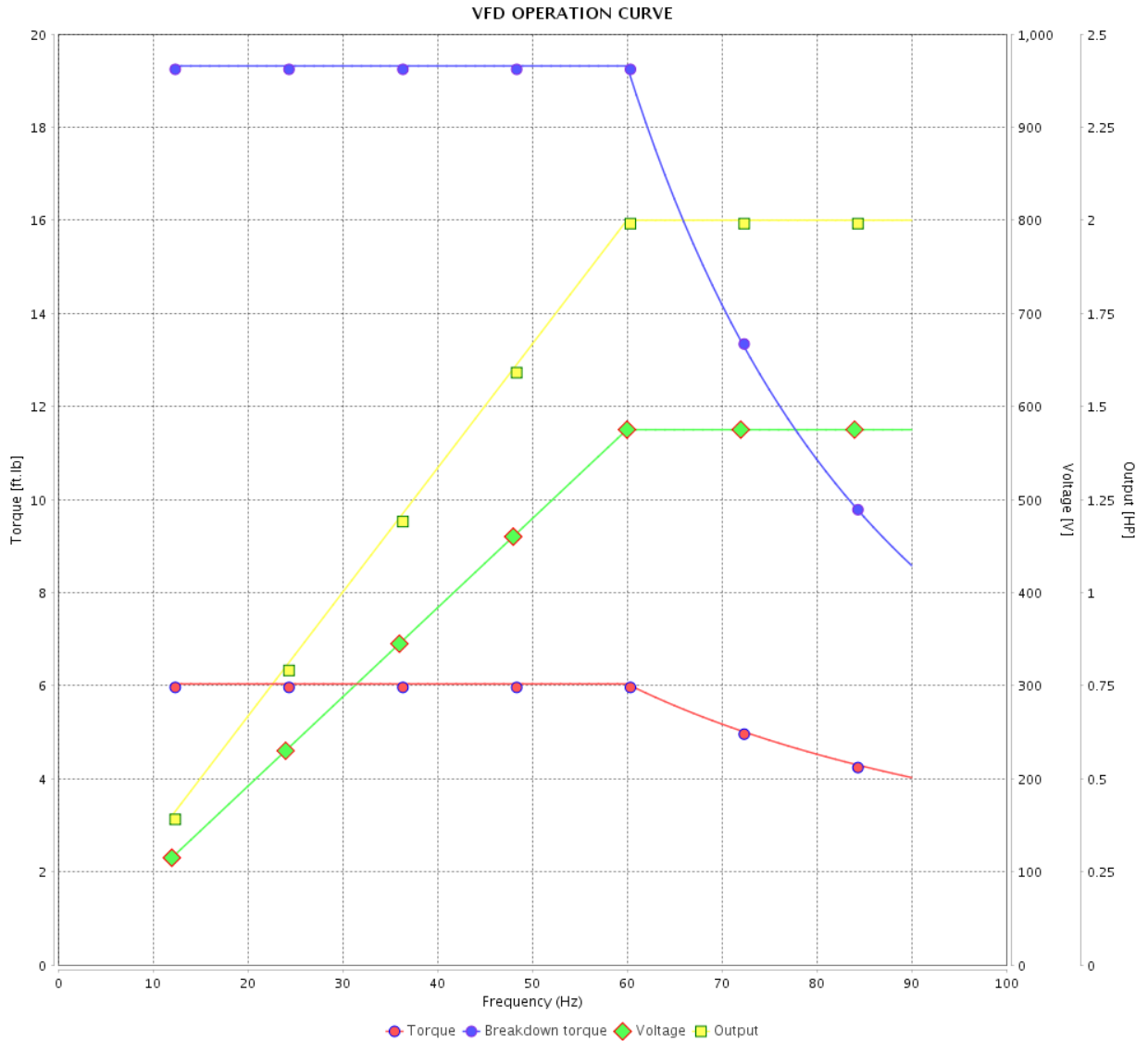
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12809700
 Catalog # : 00218OT3H56CFL-S



Performance : 575 V 60 Hz 4P

Rated current : 2.15 A
 LRC : 7.7
 Rated torque : 6.04 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 320 %
 Rated speed : 1740 rpm

Moment of inertia (J) : 0.1168 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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

1 2 3 4 5 6

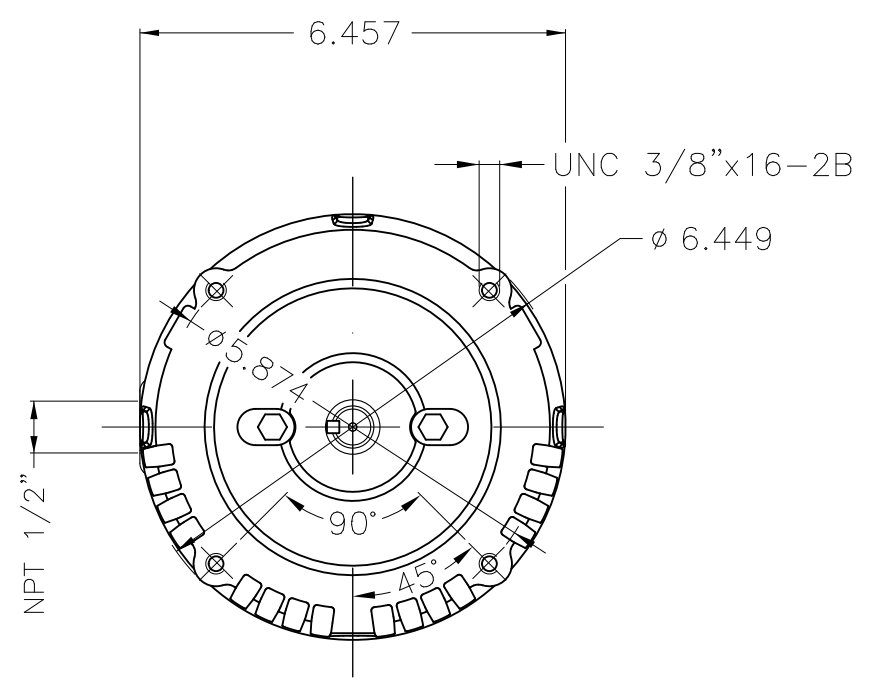
A

B

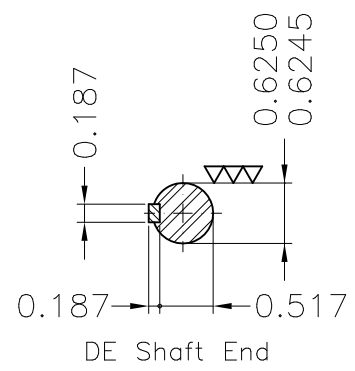
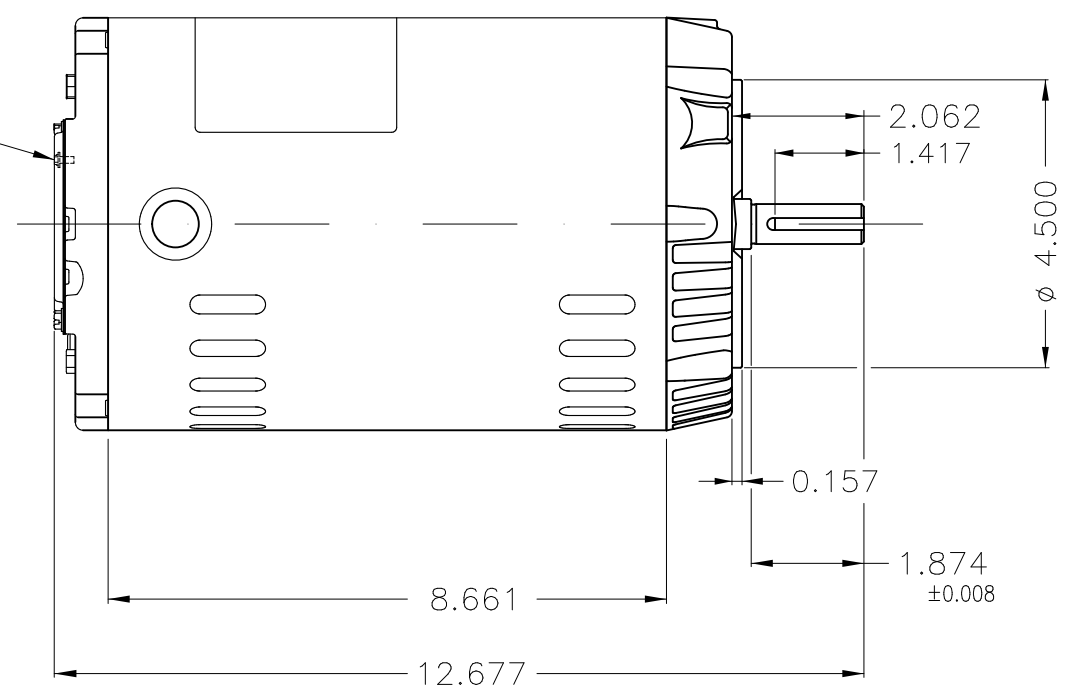
C

D


E



Grounding



Dimensions in inches

Without coating										
Mounting F-1/B14R(D)										
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.					PREVIEW			
CHECKED		FRAME 56C IP21 ODP					WDD			
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1				

2 HP 04 Poles 60 Hz

A

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XME A3



NEMA
Premium



MADE IN MEXICO

MAT: 12809700

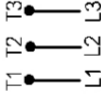
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MODEL 002180T3H56CFL-S
24FEV2021 B/N:

PH 3	Hz 60	HP 2.0
FR 56C		KW 1.5
DUTY CONT.		V 575
ALT 1000 m.a.s.l		A 2.15
INS CL F AT 80K		SFA 2.47
AMB 40°C	DES A	SF 1.15
ENCL ODP	CODE K	PF 0.81
		RPM 1740
		NEMA NOM. EFF 86.5%

Inverter duty motor For use on VPWM 1000:1 VT, 5:1 CT

DE 6204-ZZ	ODE 6202-ZZ	MOBIL POLYREX EM
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T1-BLU

T2-WHT

T3-ORG



INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



AVERTISSEMENT: Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

