

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: Rolled Steel NEMA Premium Efficiency Three-Phase			
Product code :	12628876			
Catalog # :	002180T3E145T-S			
Frame : 143/5T Output : 2 HP (1.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 208-230/460 V Rated current : 5.95-5.38/2.69 A L. R. Amperes : 45.8-41.4/20.7 A LRC : 7.7x(Code K) No load current : 2.37-2.75/1.38 A Rated speed : 1740 rpm Slip : 3.33 % Rated torque : 5.96 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 : B	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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 52.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 40.2 lb			
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 : 159 lb				
Max. compression : 199 lb				
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ			
Sealing	: Without Bearing Seal      Without Bearing Seal			
Lubrication interval	: -      -			
Lubricant amount	: -      -			
Lubricant type	: Mobil Polyrex EM			
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.				
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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



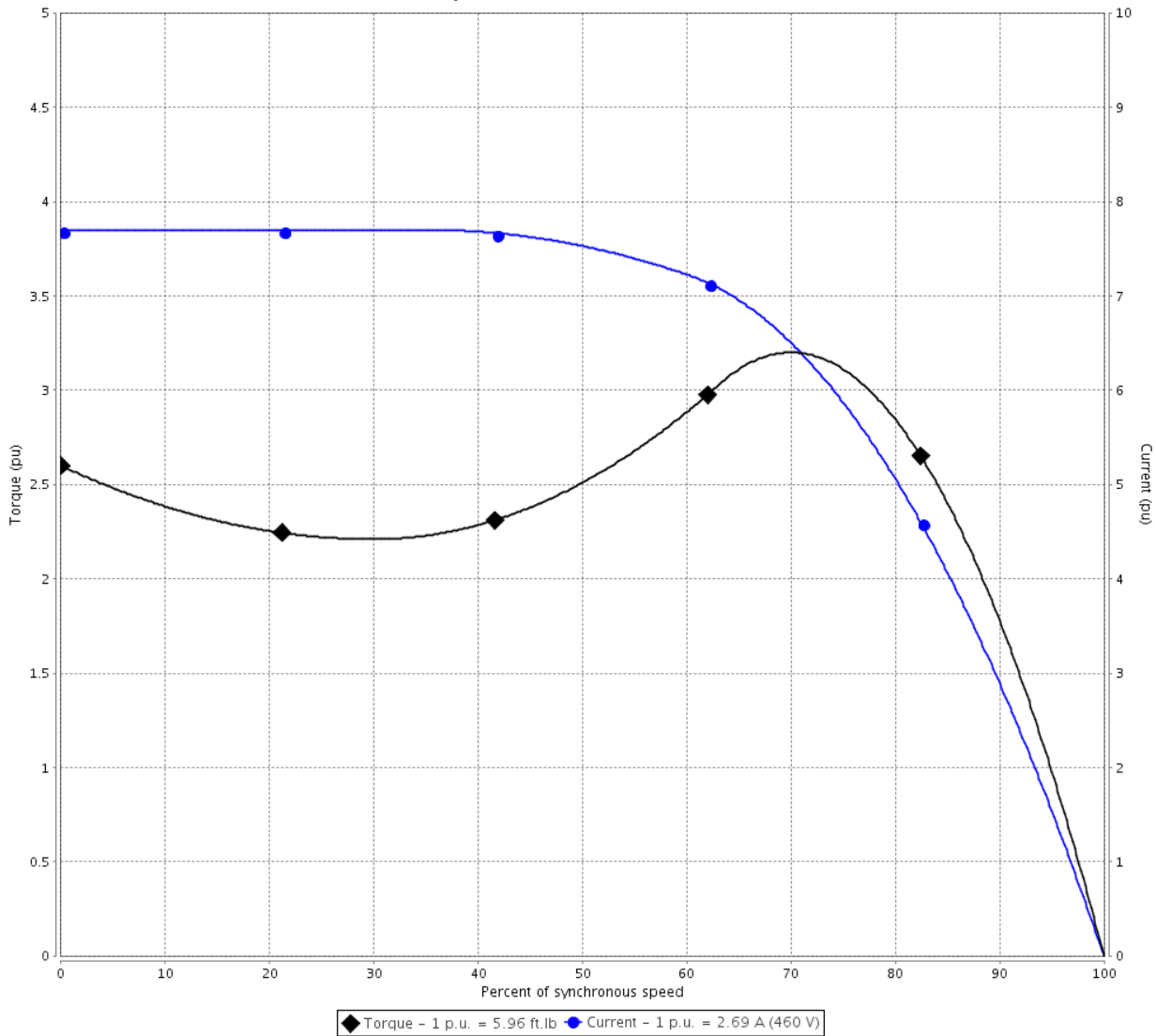
Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12628876

Catalog # : 002180T3E145T-S

TORQUE AND CURRENT VS SPEED CURVE



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

Rated current	: 5.95-5.38/2.69 A	Moment of inertia (J)	: 0.1168 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 5.96 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	:
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1740 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

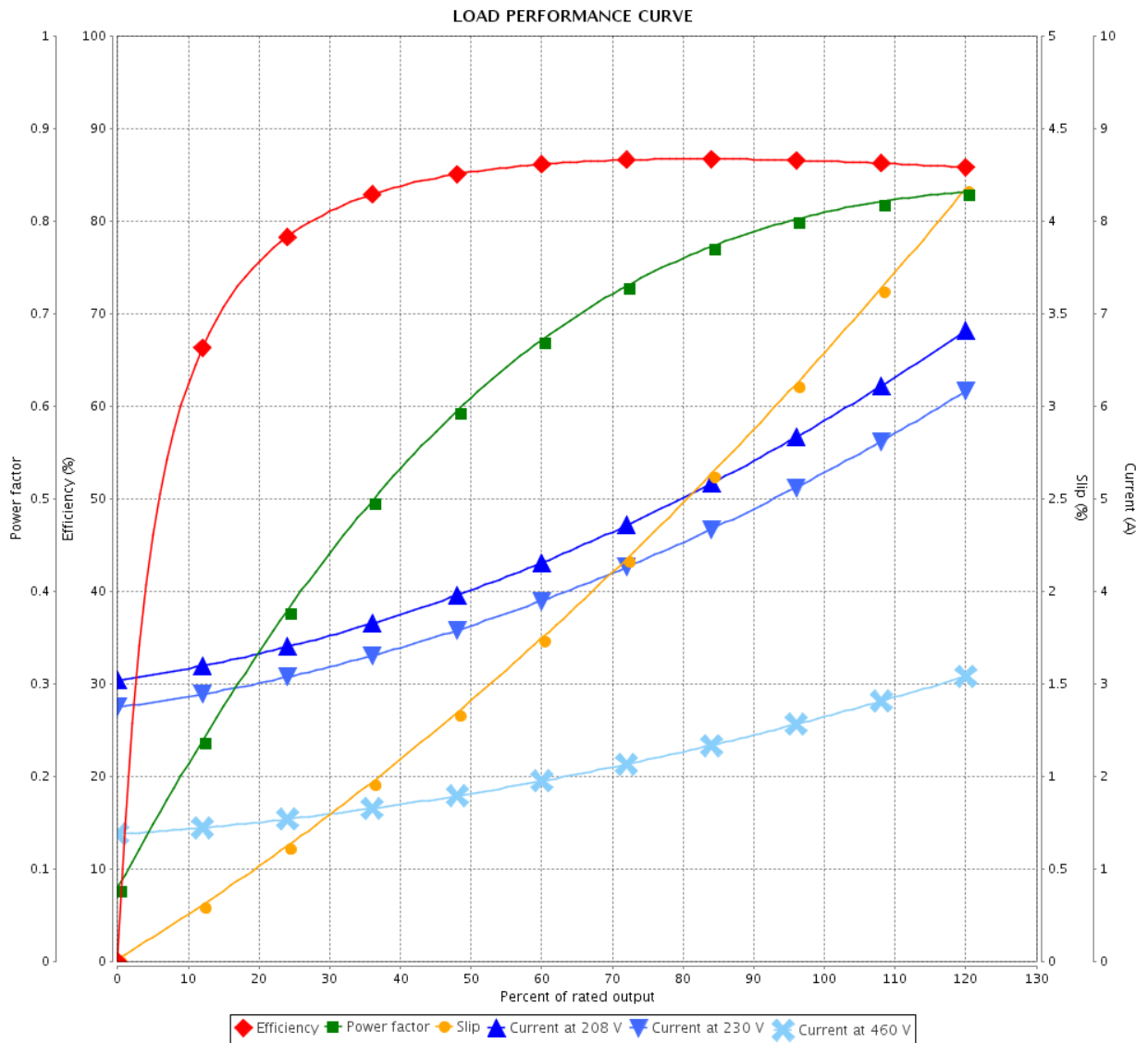


Customer : \_\_\_\_\_

Product line : Rolled Steel NEMA Premium  
Efficiency Three-Phase

Product code : 12628876

Catalog # : 002180T3E145T-S



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

Rated current : 5.95-5.38/2.69 A  
 LRC : 7.7  
 Rated torque : 5.96 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 :  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Rolled Steel NEMA Premium  
Efficiency Three-Phase

Product code : 12628876

Catalog # : 00218OT3E145T-S

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

Rated current : 5.95-5.38/2.69 A  
LRC : 7.7  
Rated torque : 5.96 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 :  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

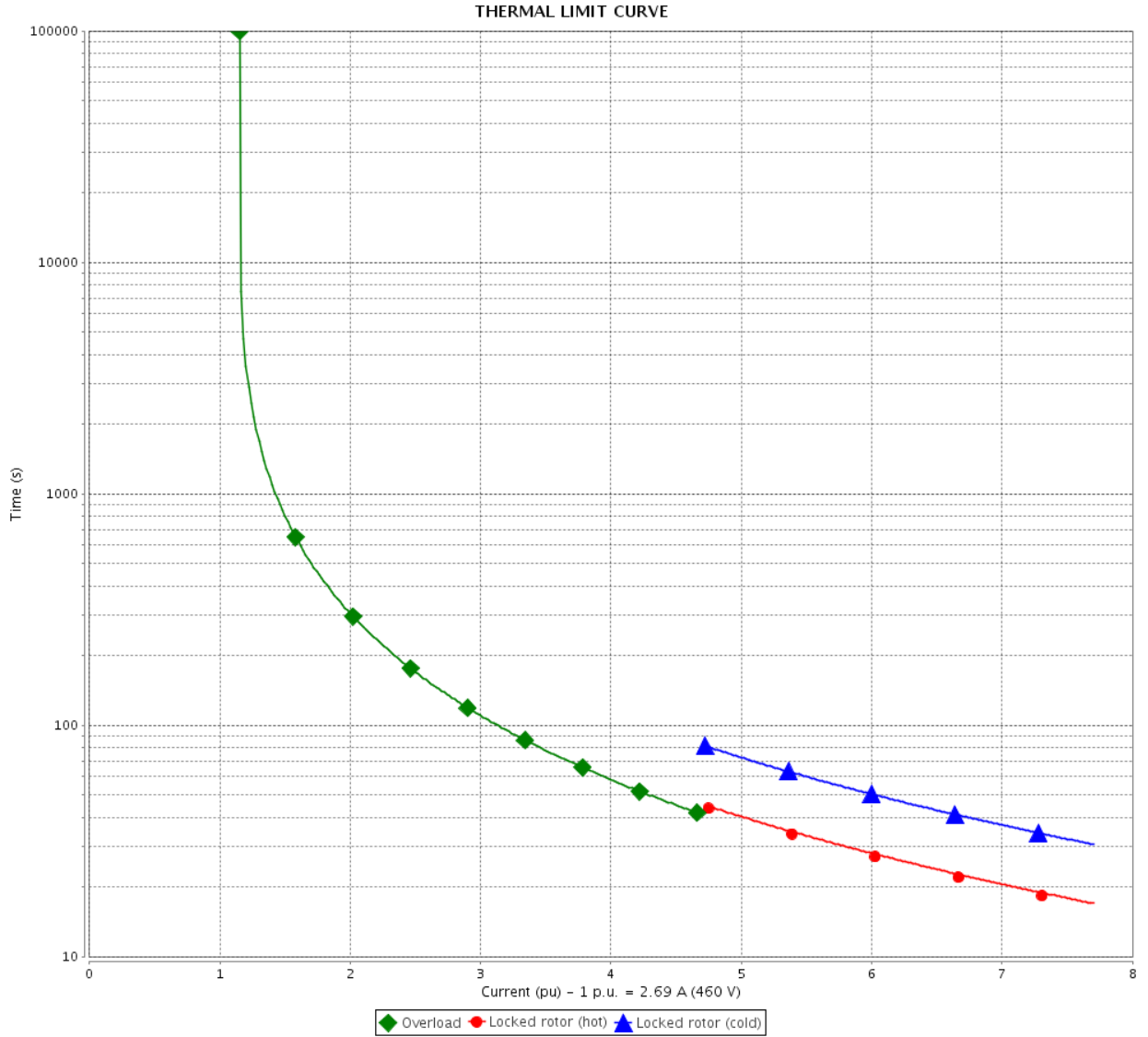
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

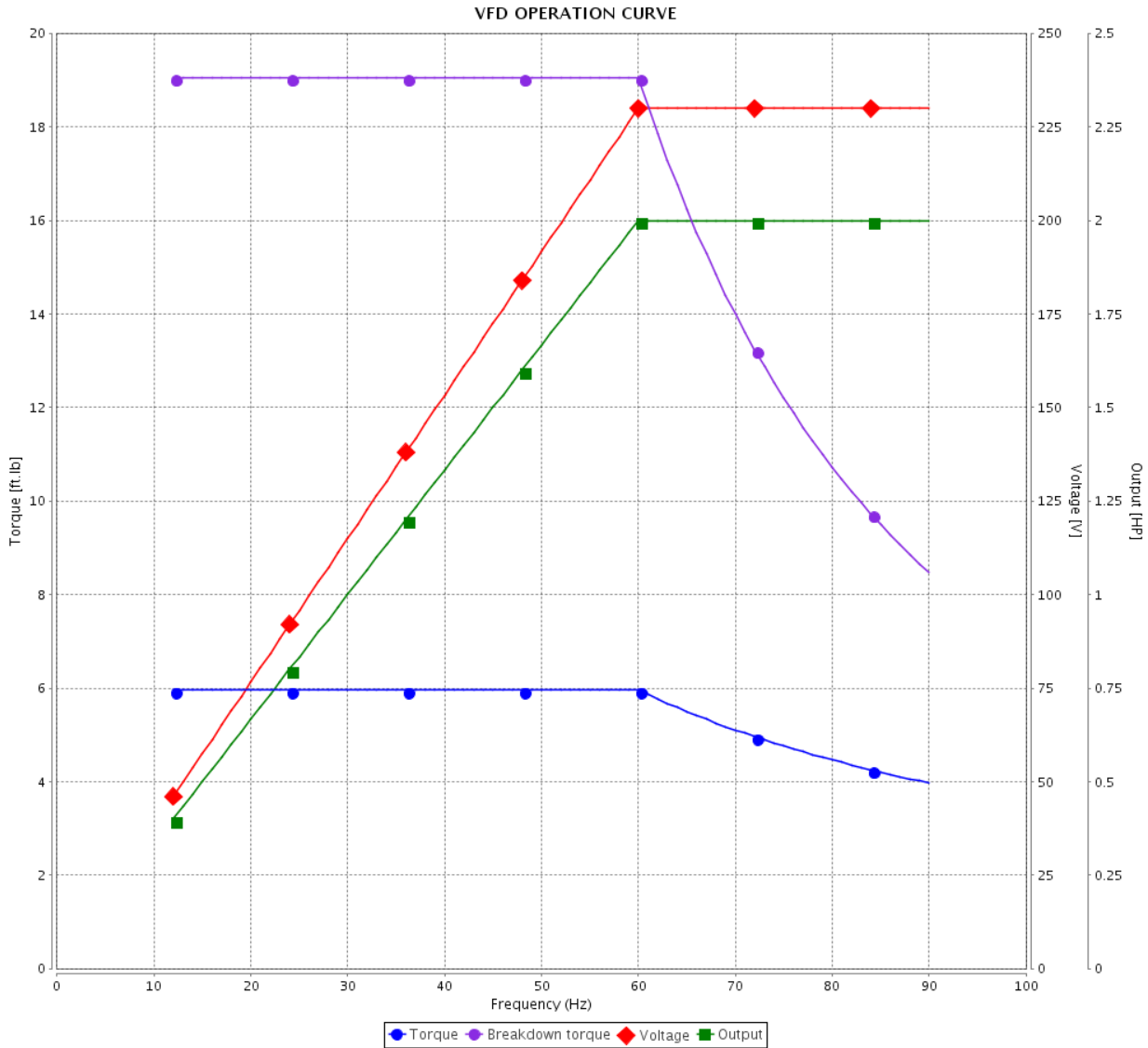


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12628876

Catalog # : 00218OT3E145T-S



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

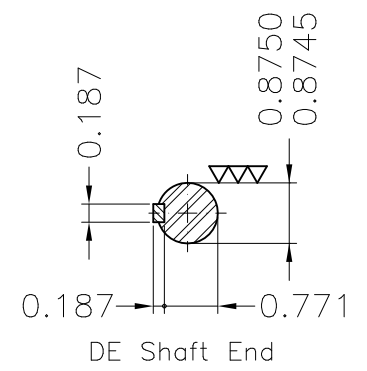
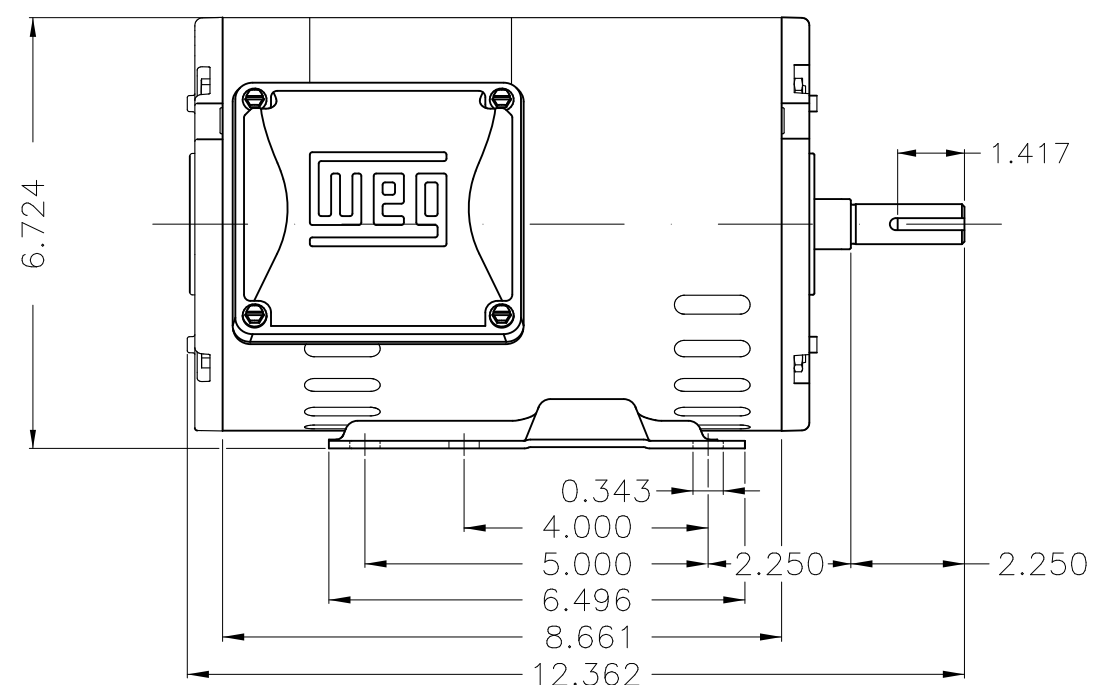
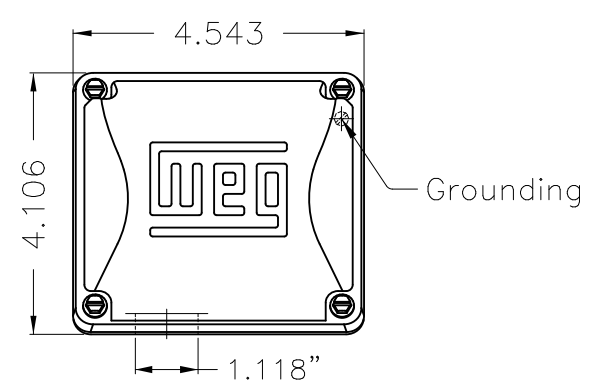
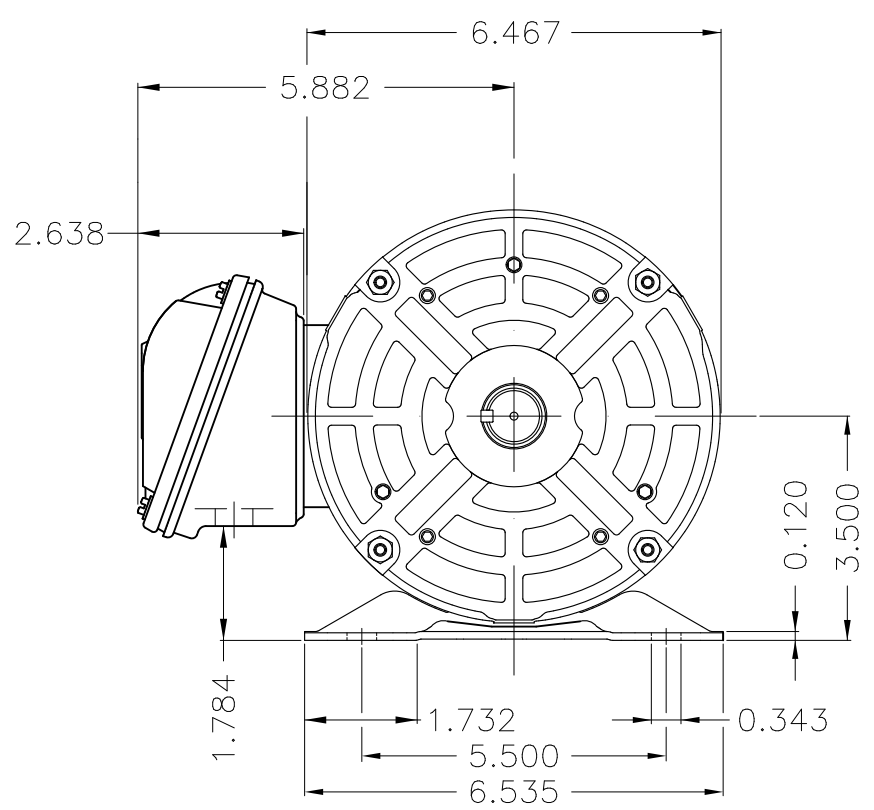
Rated current : 5.95-5.38/2.69 A  
 LRC : 7.7  
 Rated torque : 5.96 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 320 %  
 Rated speed : 1740 rpm

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

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Dimensões em polegada  
Dimensions in inches

THIS IS AN UPDATED REVISION, THE  
PREVIOUS ONE MUST BE DISREGARDED.



Color Munsell N 1 matte black  
Painting plan 207N  
Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE P. MOTOR OPEN ROLLED STEEL NEMA PREM					
CHECKED		FRAME 143/5T ODP					
RELEASED		WEG code: 12628876					
REL DT	24.09.2019	WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

2 HP 04 Poles 60Hz

A



**WEG**  
**NEMA**  
**Premium**3PT9  
C US LISTED

Energy Verified

MADE IN MEXICO

MAT: 12628876 CC029A

W01.T00IC0X0N

MODEL 002180T3E145T-S  
27SET2019

PH 3 FR 143/5T HP(KW) 2.0(1.5) Hz 60

V 230/460 RPM 1740

A 5.38/2.69 DUTY CONT.

SFA 6.19/3.09 CODE K DES B

SF 1.15 INS CL F AT 80K AMB 40°C ENCL ODP

PF 0.81 NEMA NOM.EFF. 86.5%

ALT 1000 m.a.s.l. USABLE @ 208V 5.95A SF1.00

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.00  
6.52-5.79/3.26-3.07A 1410RPM EFF 82.2% (IE1) IEC 60034-1

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE: 6205-ZZ ODE: 6203-ZZ MOBIL POLYREX EM

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.

