

DATA SHEET

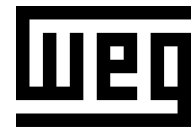


Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: Rolled Steel NEMA Premium Efficiency Three-Phase																		
Product code :	12708221																		
Catalog # :	00158OT3E145T-SG																		
Frame : 143/5T Output : 1.5 HP (1.1 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 230/460 V Rated current : 4.14/2.07 A L. R. Amperes : 36.0/18.0 A LRC : 8.7x(Code L) No load current : 2.40/1.20 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 4.48 ft.lb Locked rotor torque : 280 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1426 sq.ft.lb Design : B	Locked rotor time : 27s (cold) 15s (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 : 42.6 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	83.6 84.0 86.5 86.5																		
Power Factor	0.32 0.56 0.69 0.77																		
Foundation loads																			
Max. traction : 111 lb																			
Max. compression : 154 lb																			
<table border="0" style="width:100%"> <tr> <td></td> <td style="text-align:center"><u>Drive end</u></td> <td style="text-align:center"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type :</td> <td style="text-align:center">6205 ZZ</td> <td style="text-align:center">6203 ZZ</td> </tr> <tr> <td>Sealing :</td> <td style="text-align:center">Without Bearing Seal</td> <td style="text-align:center">Without Bearing Seal</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align:center">-</td> <td style="text-align:center">-</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align:center">-</td> <td style="text-align:center">-</td> </tr> <tr> <td>Lubricant type :</td> <td colspan="2" style="text-align:center">Mobil Polyrex EM</td> </tr> </table>			<u>Drive end</u>	<u>Non drive end</u>	Bearing type :	6205 ZZ	6203 ZZ	Sealing :	Without Bearing Seal	Without Bearing Seal	Lubrication interval :	-	-	Lubricant amount :	-	-	Lubricant type :	Mobil Polyrex EM	
	<u>Drive end</u>	<u>Non drive end</u>																	
Bearing type :	6205 ZZ	6203 ZZ																	
Sealing :	Without Bearing Seal	Without Bearing Seal																	
Lubrication interval :	-	-																	
Lubricant amount :	-	-																	
Lubricant type :	Mobil Polyrex EM																		
Notes																			
USABLE @208V 4.58A SF 1.00 SFA 4.58A																			
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	18/05/2020		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

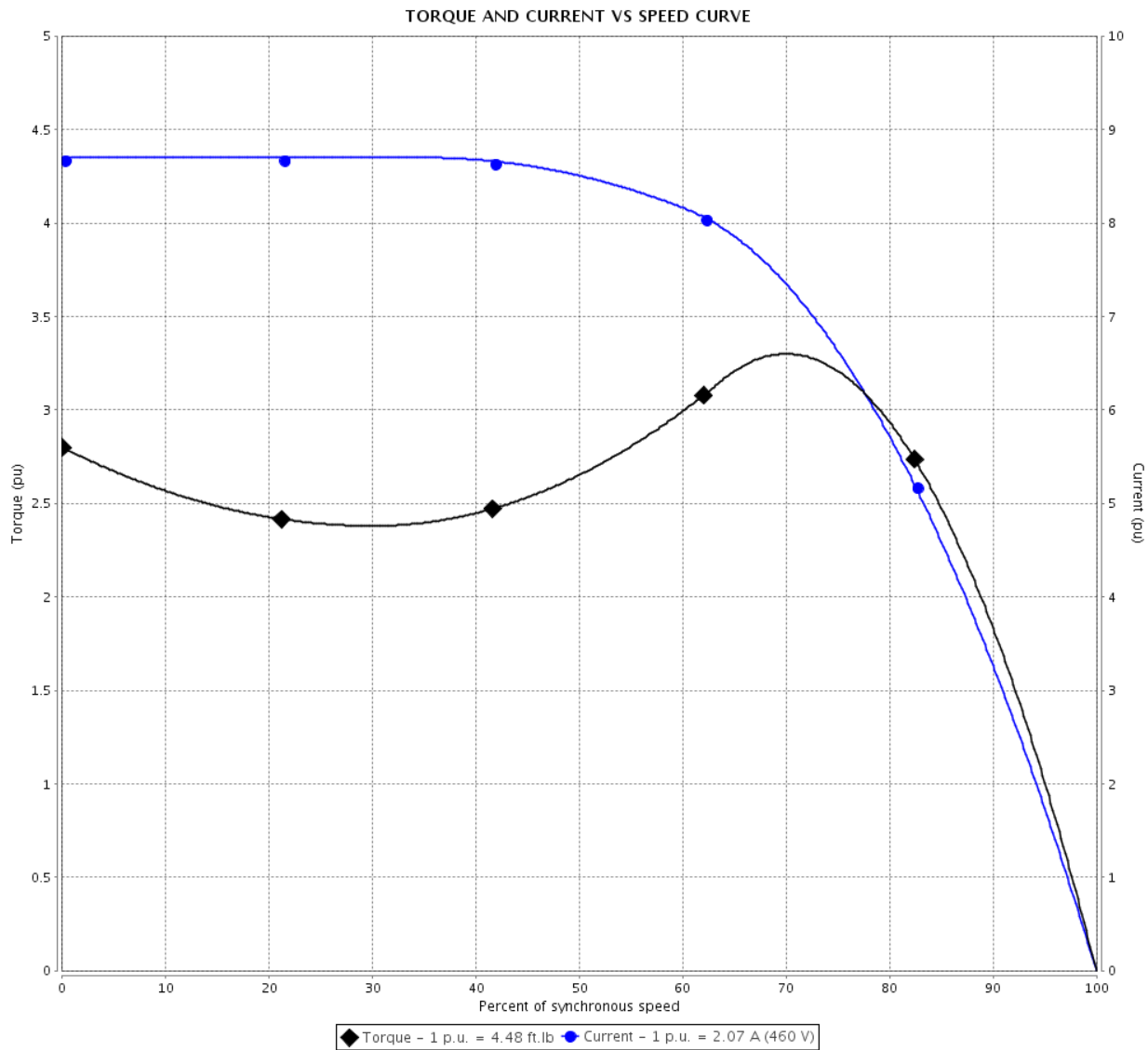


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12708221

Catalog # : 00158OT3E145T-SG



Performance : 230/460 V 60 Hz 4P

Rated current	: 4.14/2.07 A	Moment of inertia (J)	: 0.1426 sq.ft.lb
LRC	: 8.7	Duty cycle	: Cont.(S1)
Rated torque	: 4.48 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	:
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	18/05/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

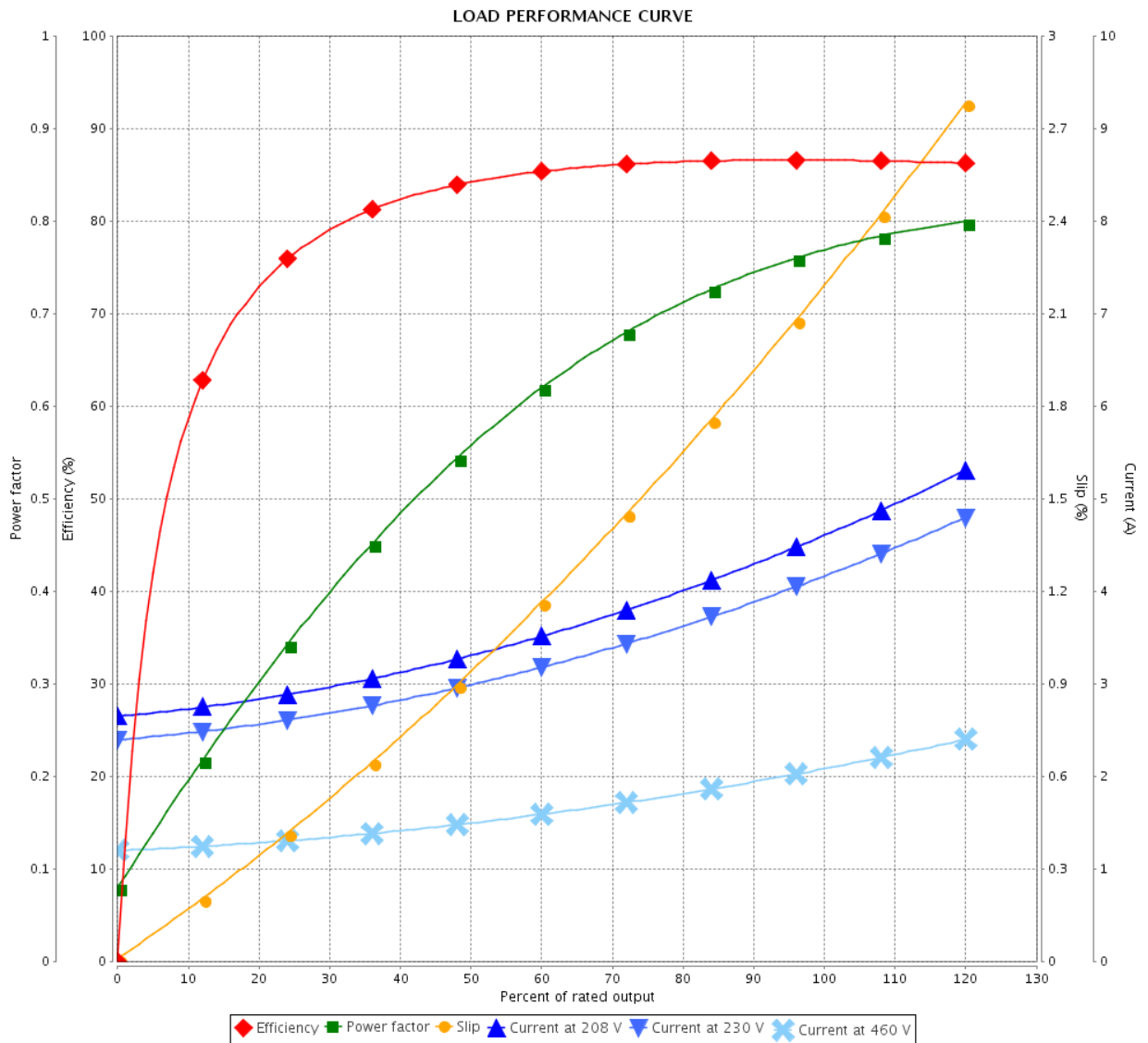


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12708221

Catalog # : 00158OT3E145T-SG



Performance : 230/460 V 60 Hz 4P

Rated current : 4.14/2.07 A
 LRC : 8.7
 Rated torque : 4.48 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 330 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1426 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Rolled Steel NEMA Premium
Efficiency Three-Phase

Product code : 12708221

Catalog # : 00158OT3E145T-SG

Performance : 230/460 V 60 Hz 4P

Rated current : 4.14/2.07 A
LRC : 8.7
Rated torque : 4.48 ft.lb
Locked rotor torque : 280 %
Breakdown torque : 330 %
Rated speed : 1760 rpm

Moment of inertia (J) : 0.1426 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

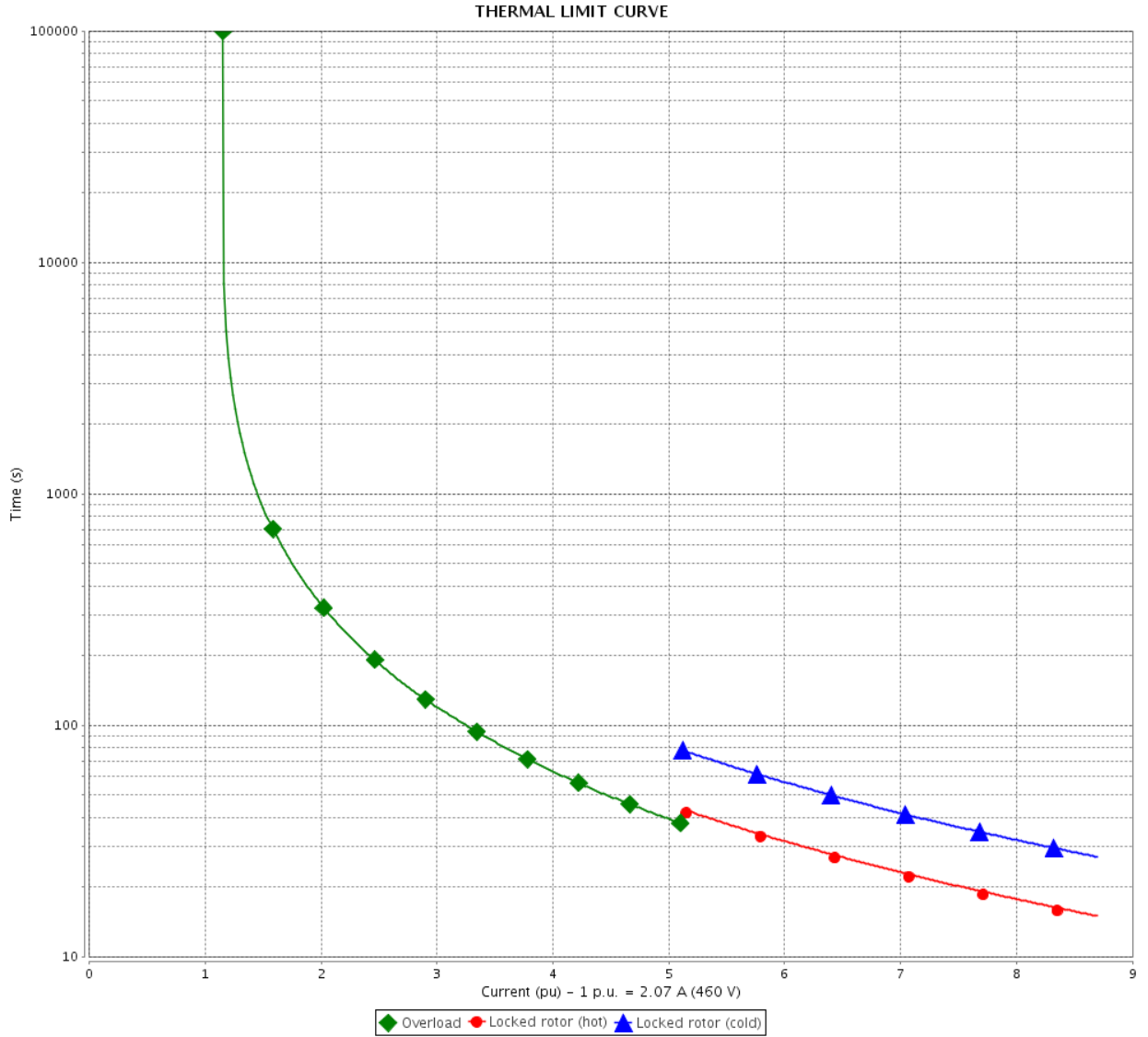
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	18/05/2020		4 / 6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
			Page	Revision
			5 / 6	

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

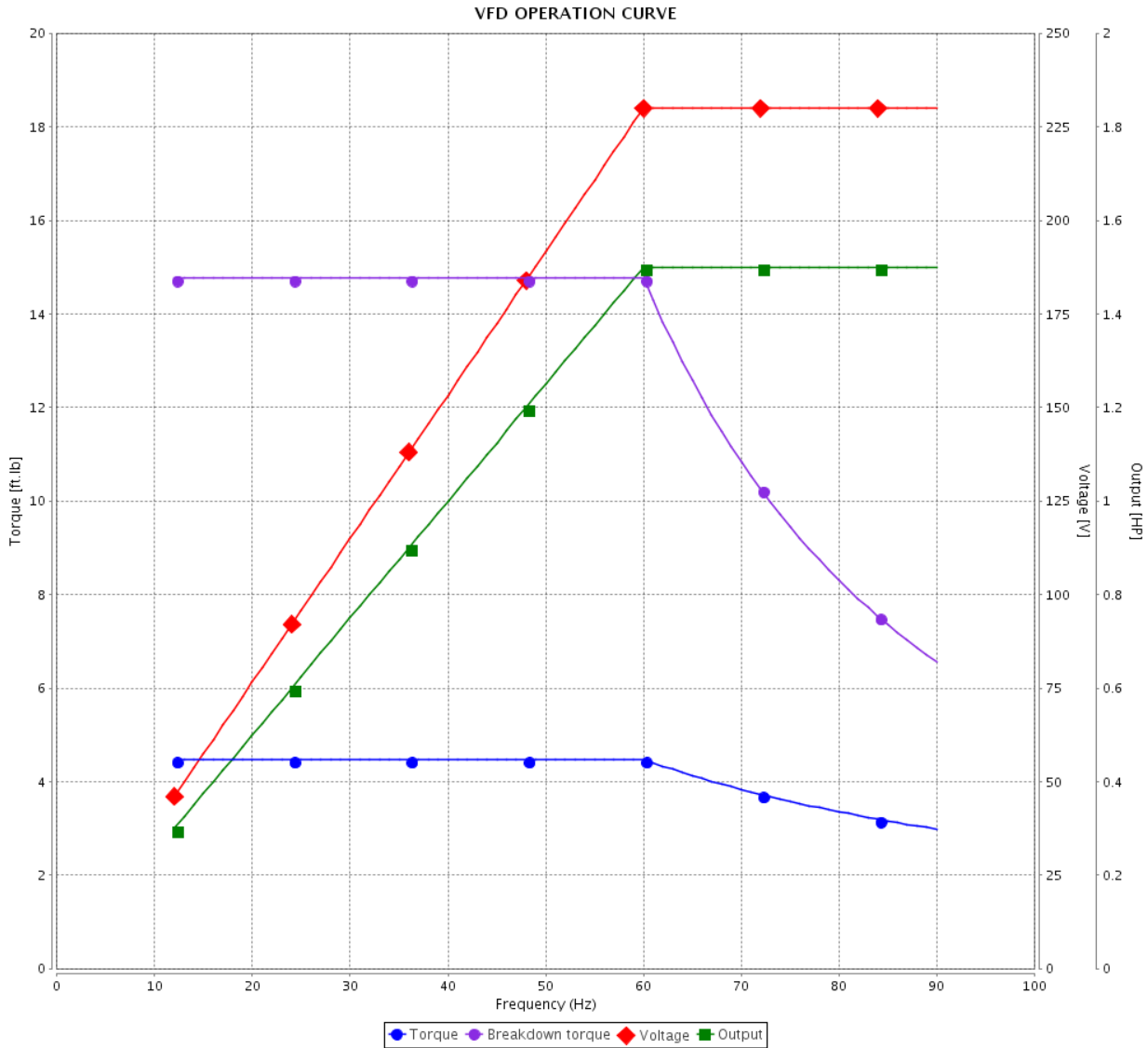


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12708221

Catalog # : 00158OT3E145T-SG



Performance : 230/460 V 60 Hz 4P

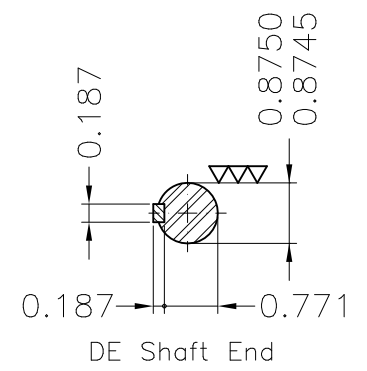
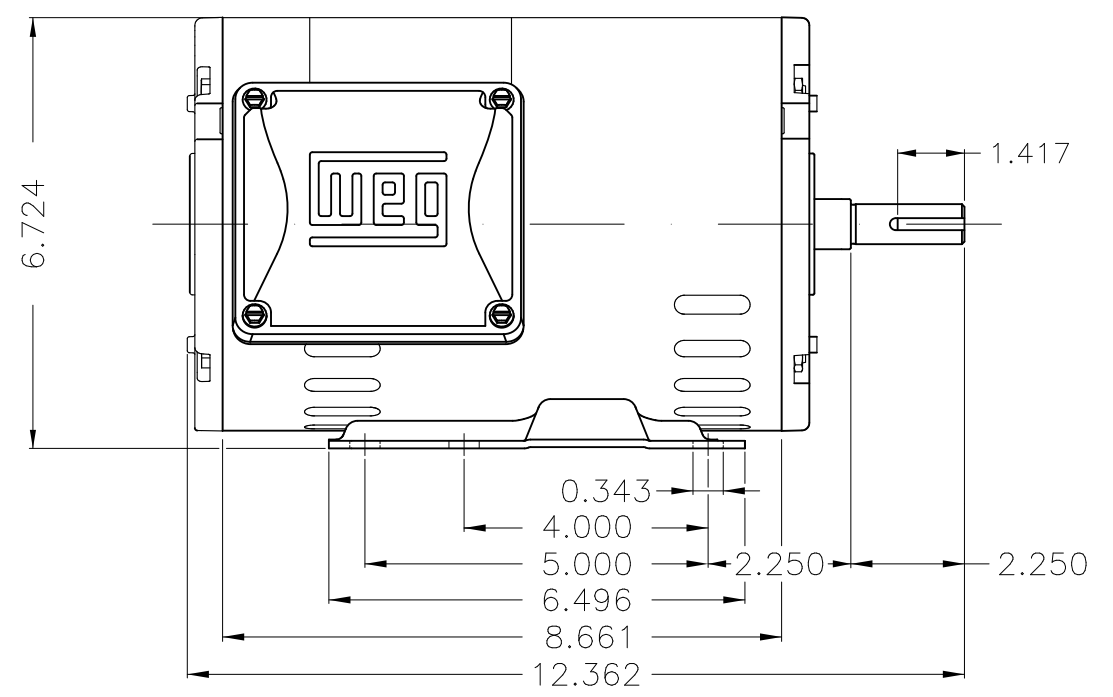
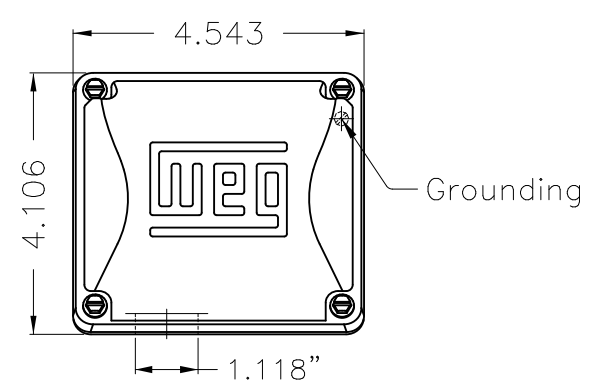
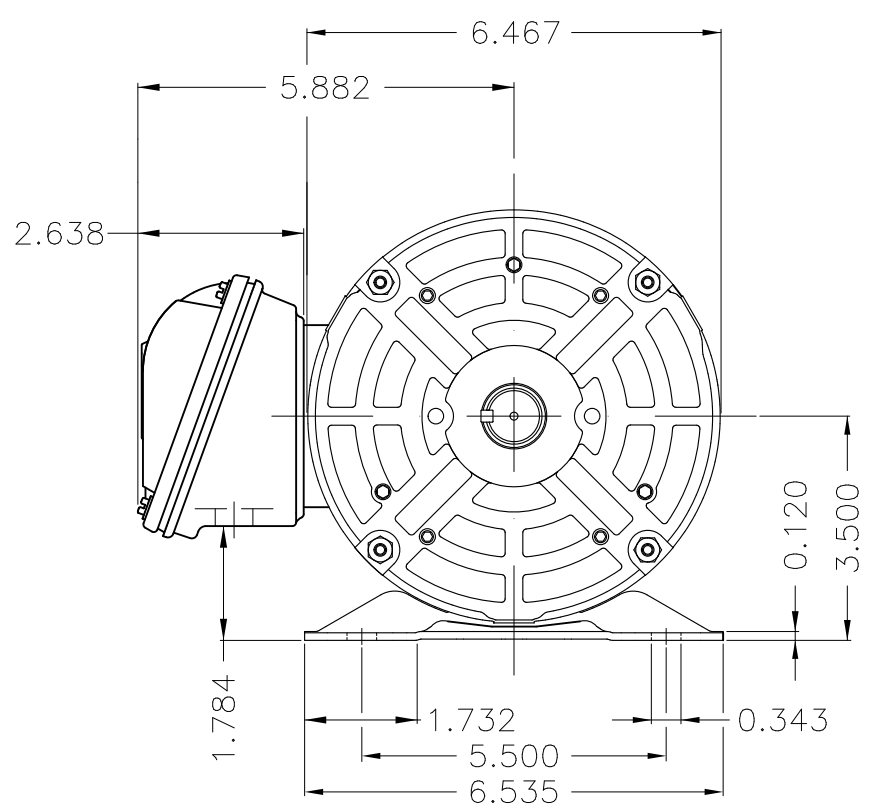
Rated current : 4.14/2.07 A
 LRC : 8.7
 Rated torque : 4.48 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 330 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1426 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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

Dimensões em polegada
Dimensions in inches

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



Internal AEGIS ground ring on the DE
Bearing cap
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: 12708221					
REL DT	18.05.2020	WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

1.5 HP 04 Poles 60Hz



**NEMA**
Premium3PT9
C US LISTED

Energy Verified

MADE IN MEXICO

MAT: 12708221 CC029A

W01.T00IC0X0N

MODEL 001580T3E145T-SG
08MAI2020

PH 3 FR 143/5T HP(KW) 1.5(1.1) Hz 60

V 230/460 RPM 1760

A 4.14/2.07 DUTY CONT.

SFA 4.76/2.38 CODE L DES B

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

PF 0.77 NEMA NOM.EFF. 86.5%

ALT 1000 m.a.s.l. USABLE @ 208V 4.58A SF1.00

ALTERNATE RATING: 1.5HP 50Hz 190-220/380-415V SF1.15
4.84-4.34/2.42-2.30A 1440RPM EFF 83.2% (IE2) IEC 60034-1T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-RED BRK

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.

