

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	12792530			
Catalog # :	00158OT3V145T-SG			
Frame : 143/5T Output : 1.5 HP (1.1 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 4.76/2.38 A L. R. Amperes : 41.4/20.7 A LRC : 8.7x(Code L) No load current : 2.76/1.38 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 <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> : 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 : 107 lb				
Max. compression : 150 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.				
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		1 / 6	

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



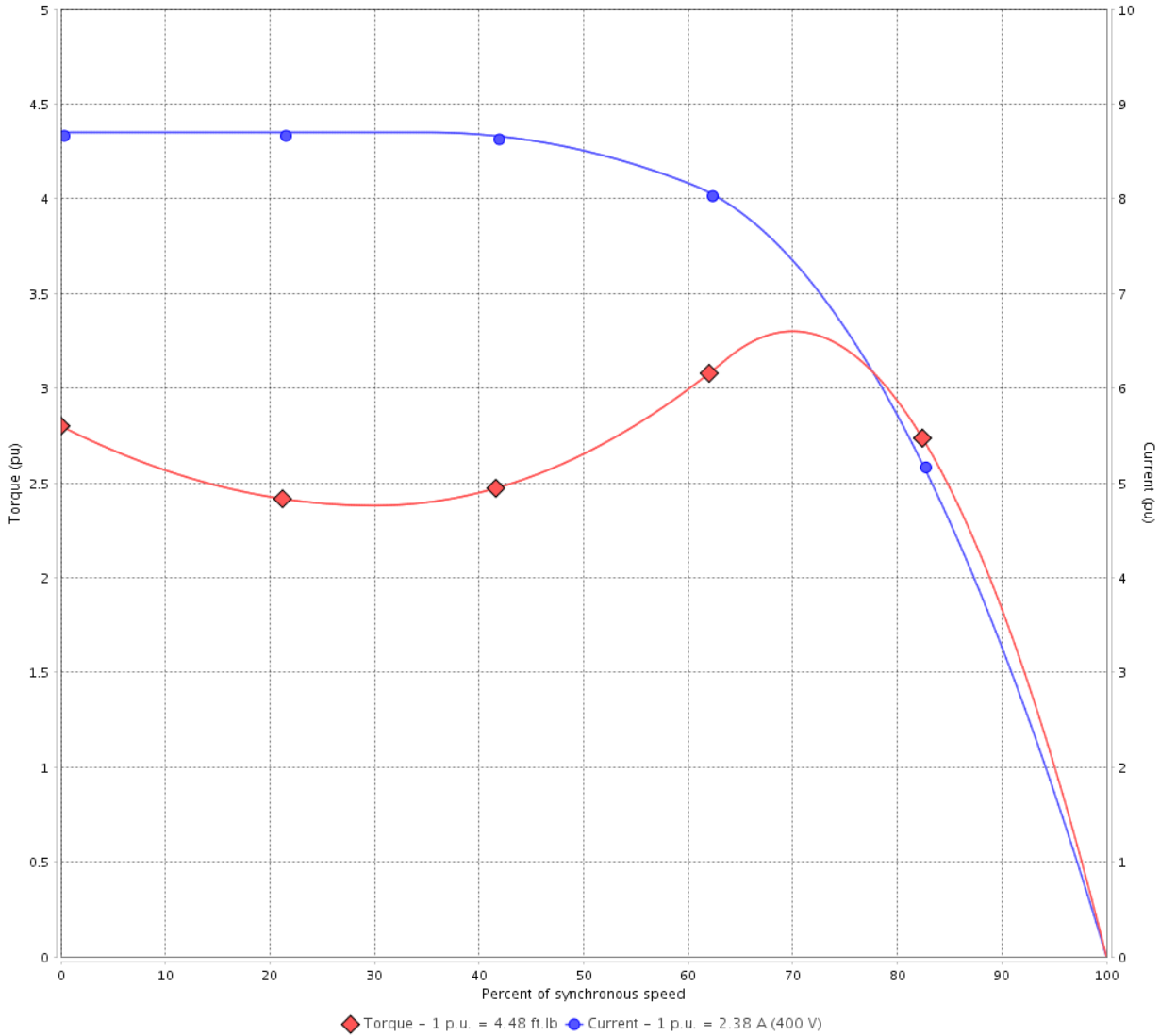
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12792530

Catalog # : 00158OT3V145T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 4.76/2.38 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 : 1.15  
 Temperature rise : 80 K  
 Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	12/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

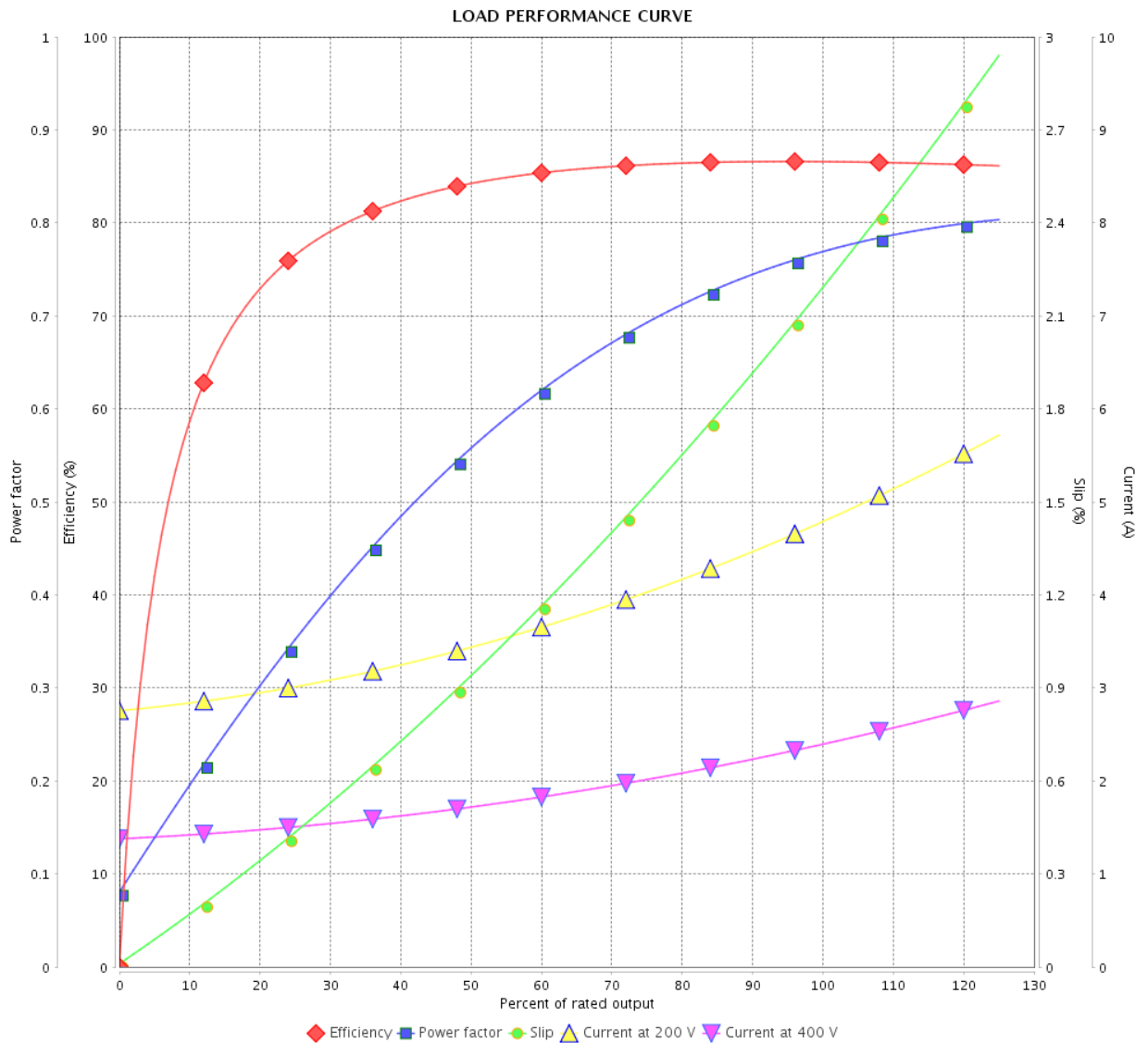


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12792530

Catalog # : 00158OT3V145T-SG



Performance : 200/400 V 60 Hz 4P

Rated current : 4.76/2.38 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 : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			3 / 6	
Date	12/04/2022			

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 12792530  
 Catalog # : 00158OT3V145T-SG

Performance : 200/400 V 60 Hz 4P

Rated current : 4.76/2.38 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 : 1.15
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 1760 rpm	Design : B

Heating constant

Cooling constant

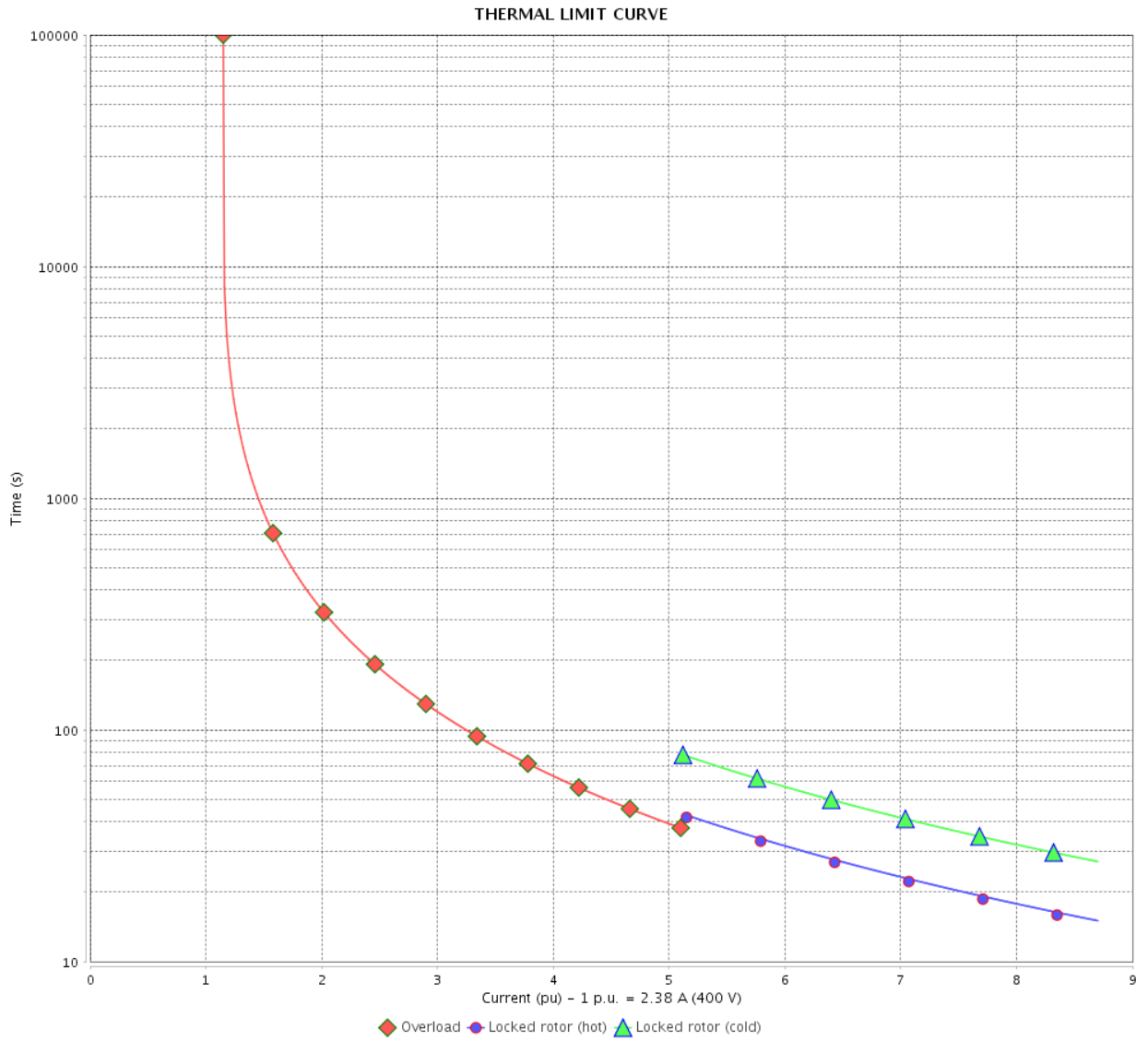
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	12/04/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



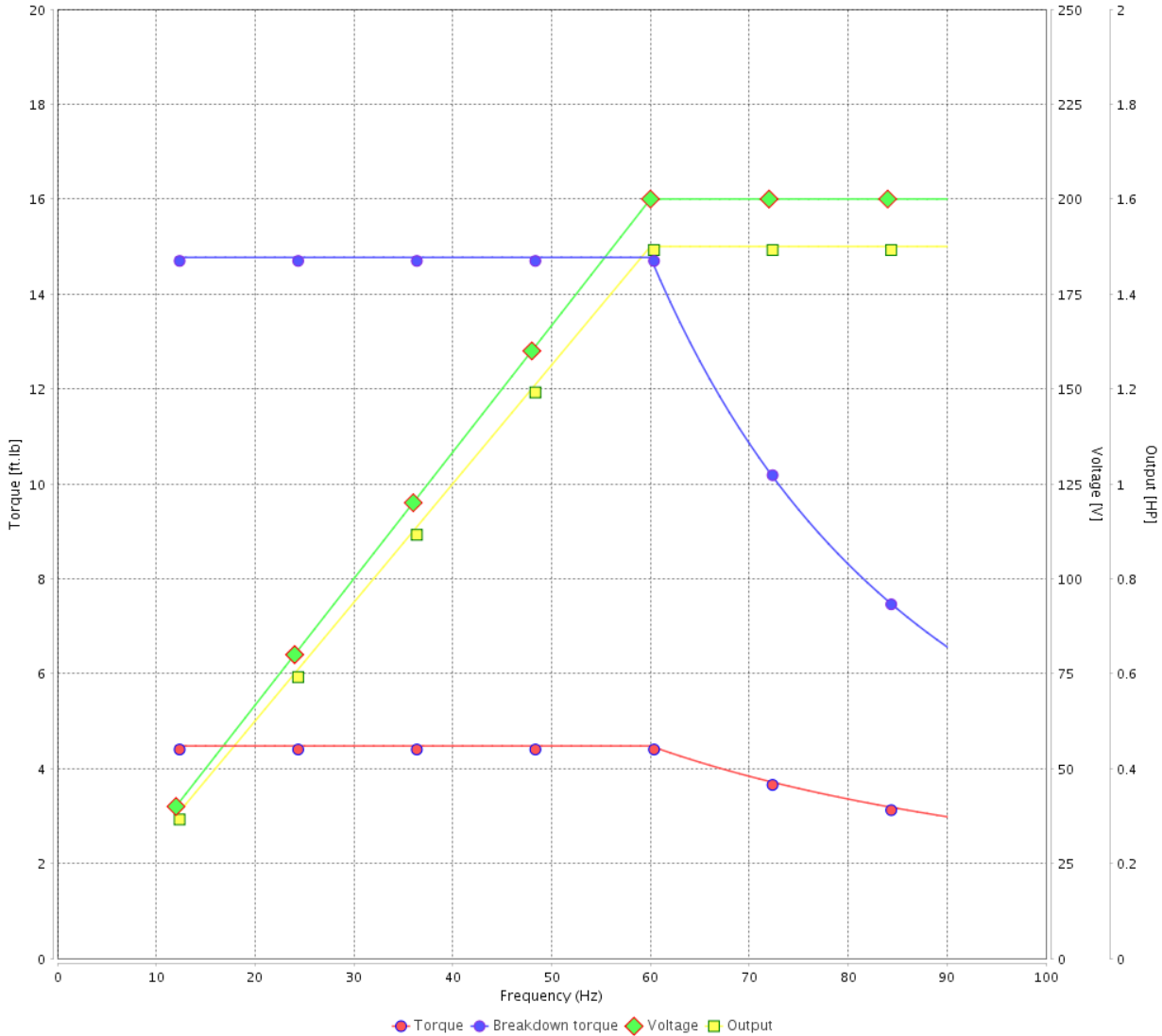
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12792530

Catalog # : 00158OT3V145T-SG

VFD OPERATION CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 4.76/2.38 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 : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	12/04/2022			

1 2 3 4 5 6

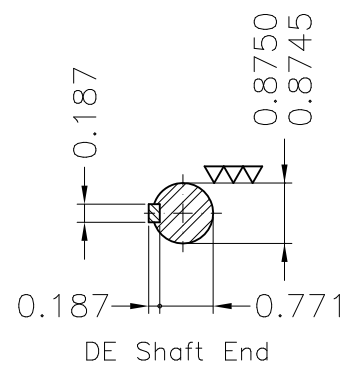
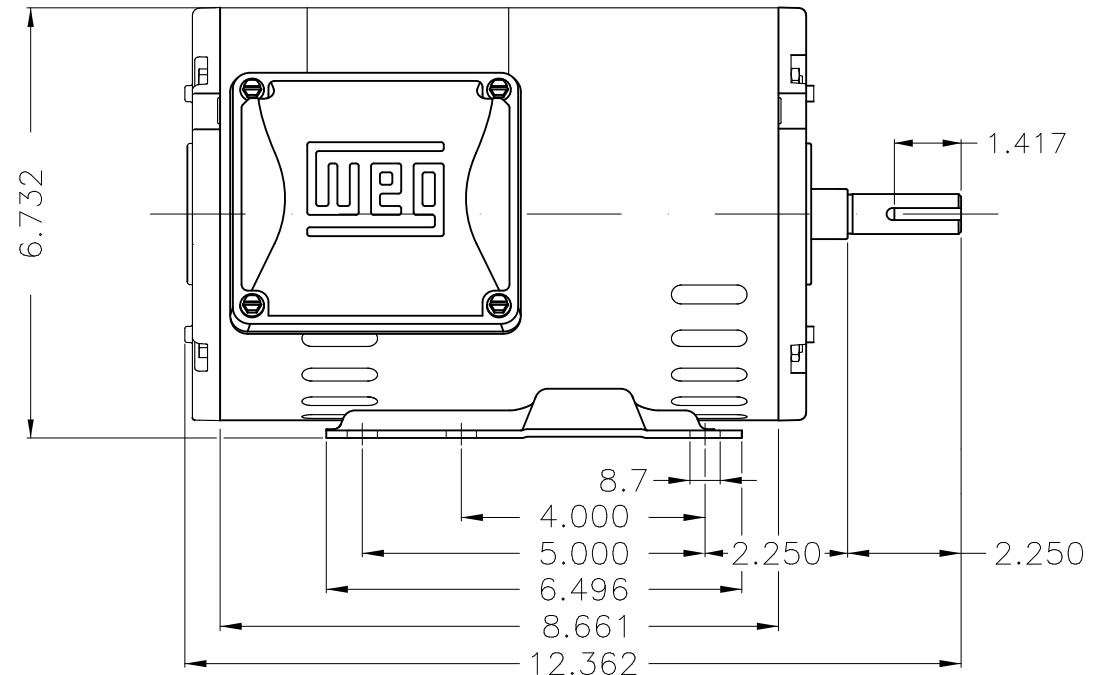
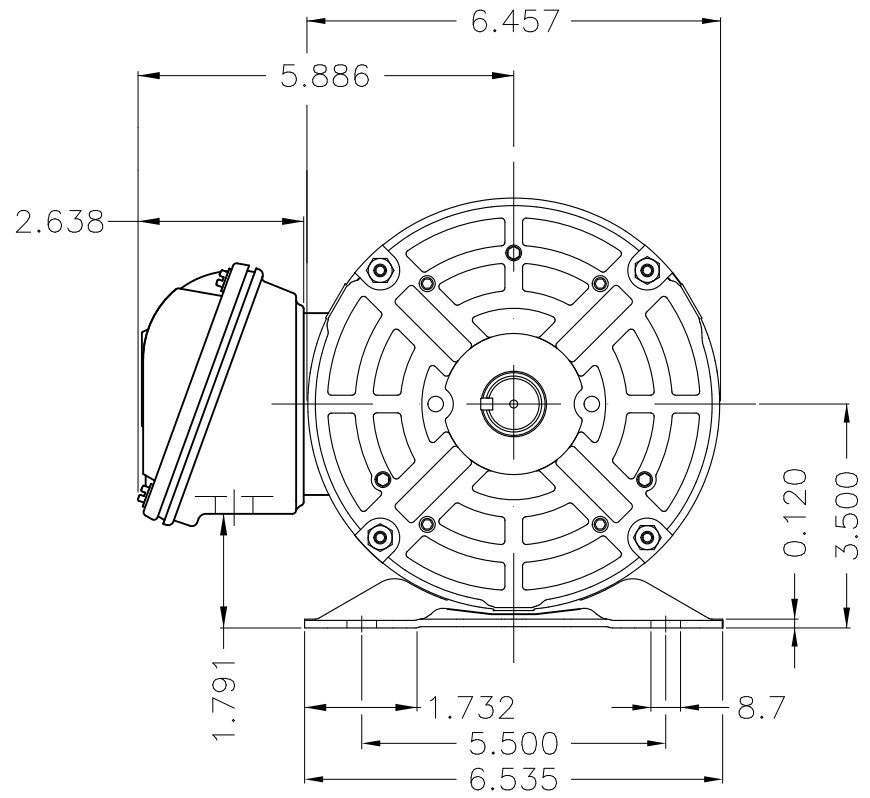
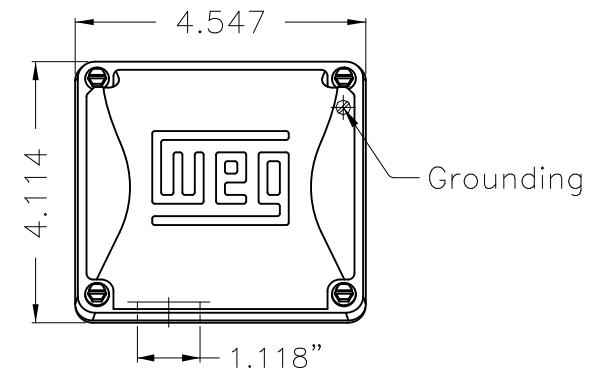
A

B

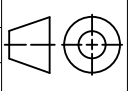
C

D

E



Bearing cap  
 Internal AEGIS ground ring on the DE  
 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	PIRWBUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 143/5T IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

1.5 HP 04 Poles 60 Hz

A

PREVIEW  
WDD





**NEMA**  
**Premium**



MADE IN MEXICO

**MAT: 12792530 CC029A**

**W01.T00IC0X0N**

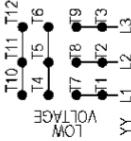
**MODEL 001580T3V145T-SG**

**26NOV2021 B/N:**

<b>PH 3</b>	<b>Hz 60</b>	<b>HP 1.5</b>
<b>FR 143/5T</b>		<b>KW 1.1</b>
<b>DUTY CONT.</b>		<b>V 200/400</b>
<b>ALT 1000 m.a.s.l.</b>		<b>A 4.76/2.38</b>
<b>INS CL F AT 80K</b>		<b>SFA 5.47/2.74</b>
<b>AMB 40°C</b>	<b>DES B</b>	<b>SF 1.15</b>
<b>ENCL ODP</b>	<b>CODE L</b>	<b>PF 0.77</b>
		<b>RPM 1760</b>
		<b>NEMA NOM. EFF 86.5%</b>

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

<b>DE 6205-ZZ</b>	<b>ODE 6203-ZZ</b>	<b>MOBIL POLYREX EM</b>
-------------------	--------------------	-------------------------



T1-BLU T2-WHT  
 T3-ORG T4-YEL  
 T5-BLK T6-GRY  
 T7-PNK T8-RED  
 T9-BRK RED  
 T10-CURRY  
 T11-GRN T12-VLT

**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.

