

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	12881320			
Catalog # :	00518OT3V184T-S			
Frame : 182/4T Output : 5 HP (3.7 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 14.6/7.28 A L. R. Amperes : 105/52.4 A LRC : 7.2x(Code J) No load current : 7.24/3.62 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 14.9 ft.lb Locked rotor torque : 200 % Breakdown torque : 310 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.4003 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (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> : 55.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 81.3 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	87.5    88.5    88.5    89.5			
Power Factor	0.38    0.63    0.76    0.82			
Foundation loads				
Max. traction : 255 lb				
Max. compression : 336 lb				
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6205 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



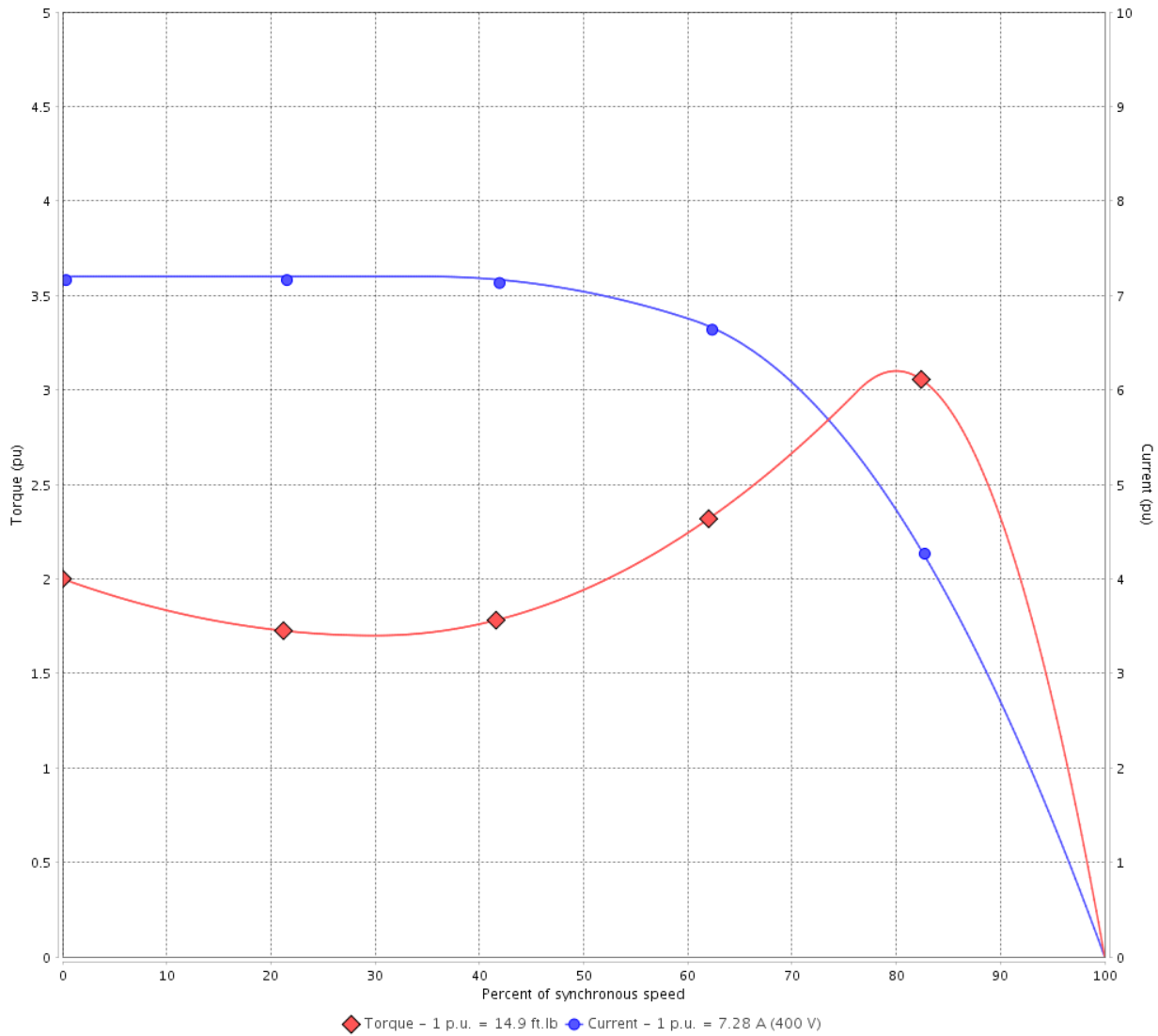
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12881320

Catalog # : 00518OT3V184T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 14.6/7.28 A  
 LRC : 7.2  
 Rated torque : 14.9 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 310 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 21s (cold) 12s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

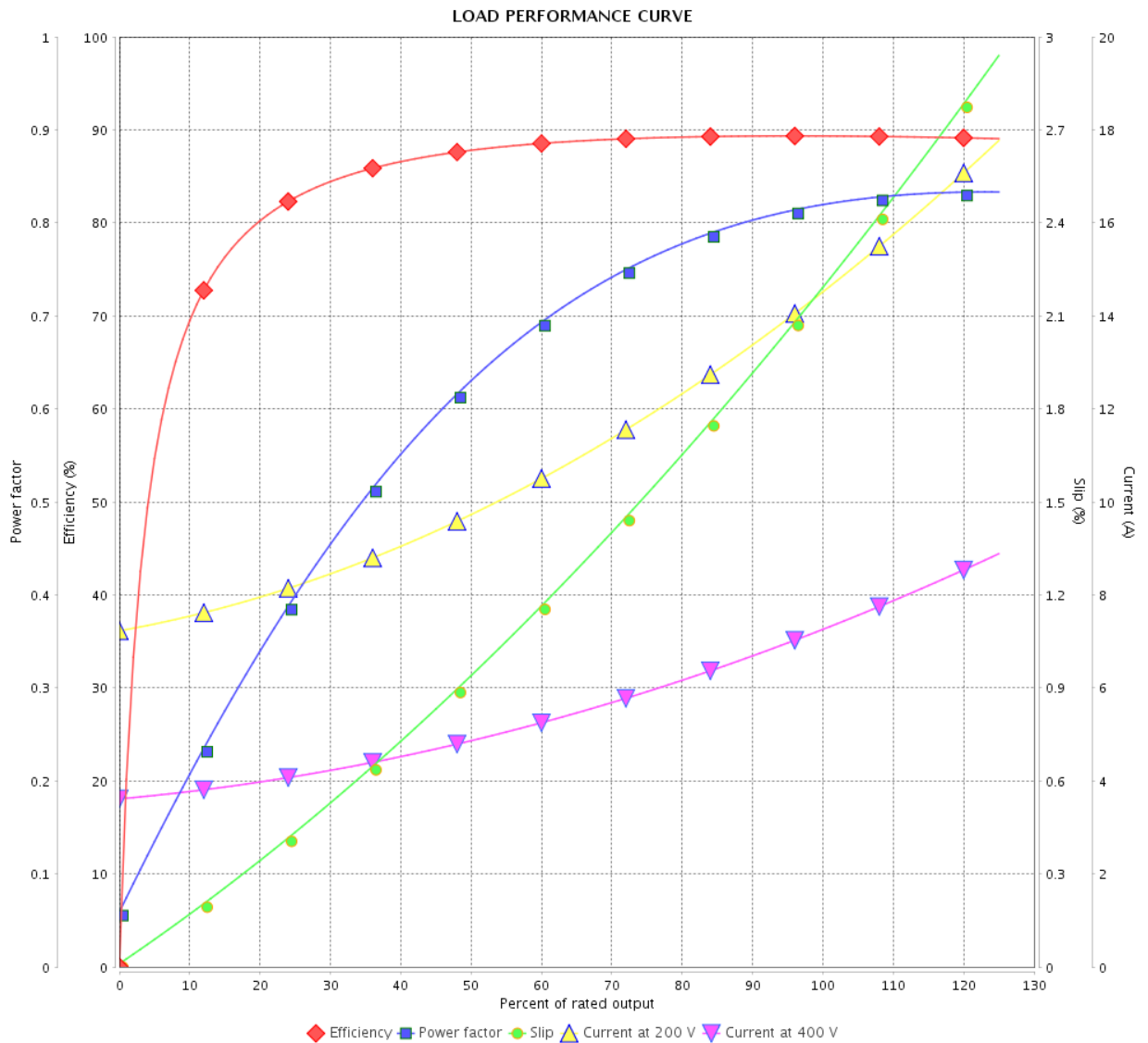


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12881320

Catalog # : 005180T3V184T-S



Performance : 200/400 V 60 Hz 4P

Rated current : 14.6/7.28 A  
 LRC : 7.2  
 Rated torque : 14.9 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 310 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12881320  
Catalog # : 00518OT3V184T-S

Performance : 200/400 V 60 Hz 4P

Rated current : 14.6/7.28 A	Moment of inertia (J) : 0.4003 sq.ft.lb
LRC : 7.2	Duty cycle : Cont.(S1)
Rated torque : 14.9 ft.lb	Insulation class : F
Locked rotor torque : 200 %	Service factor : 1.15
Breakdown torque : 310 %	Temperature rise : 80 K
Rated speed : 1760 rpm	Design : B

Heating constant

Cooling constant

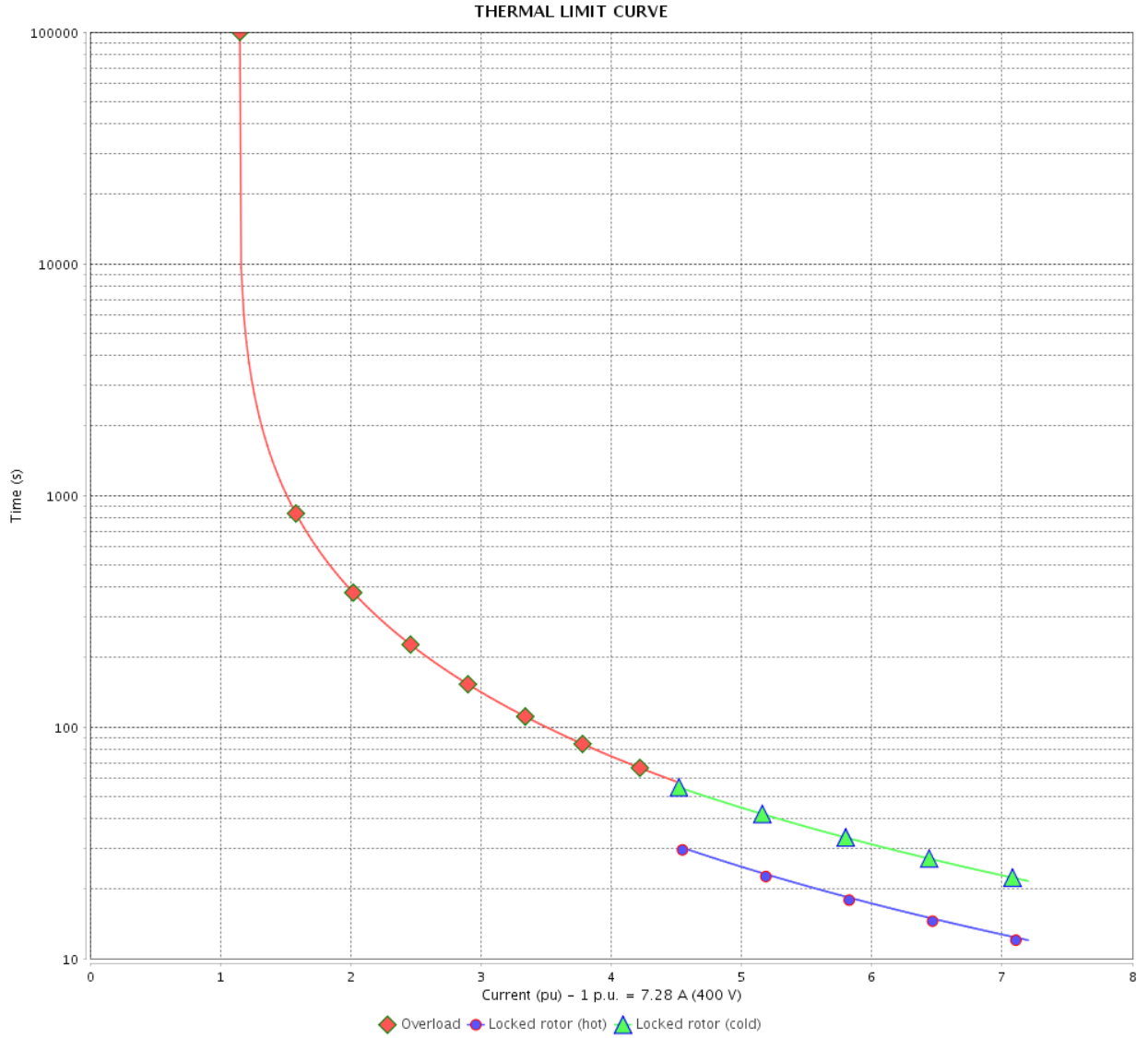
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

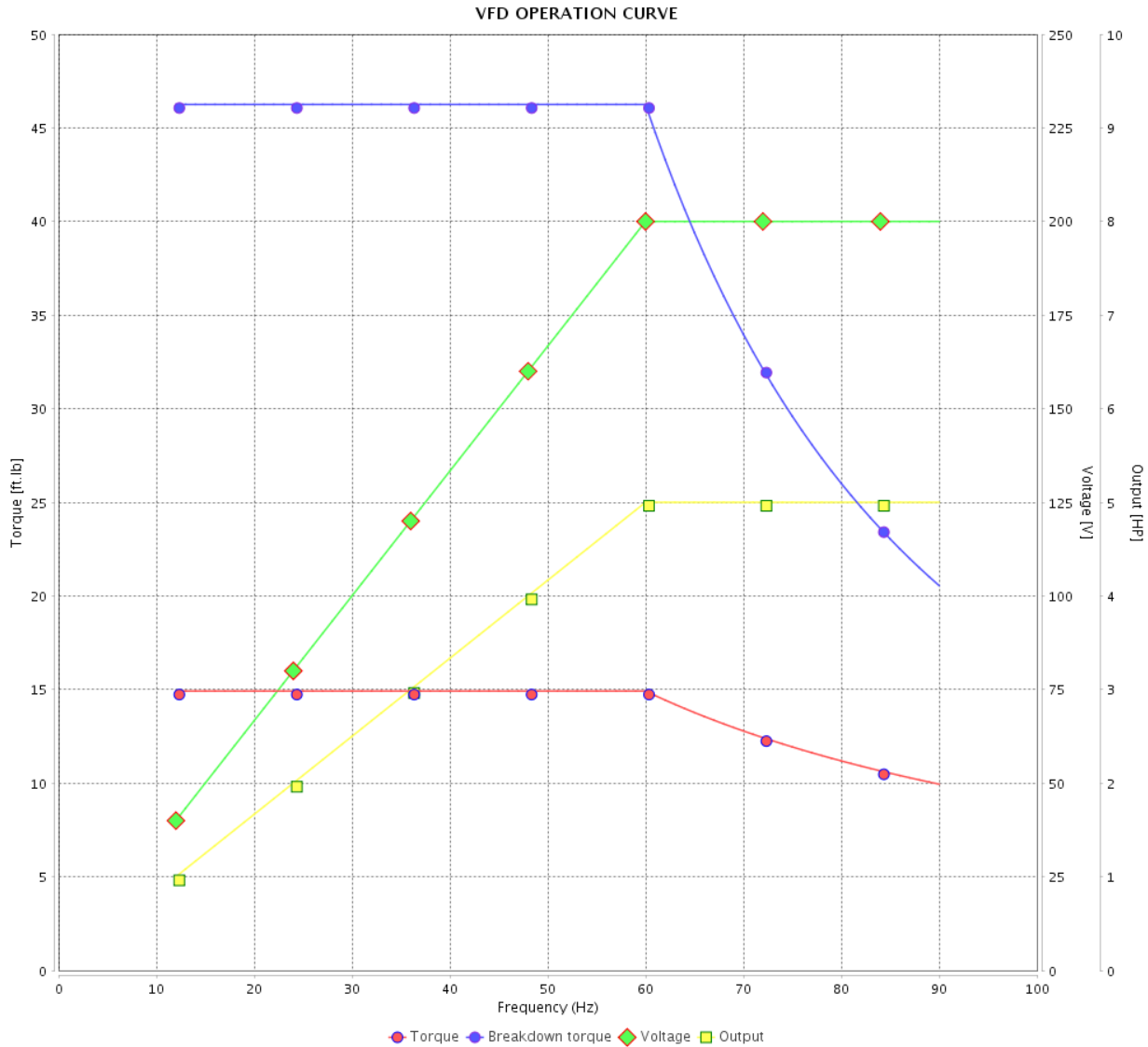


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12881320

Catalog # : 00518OT3V184T-S

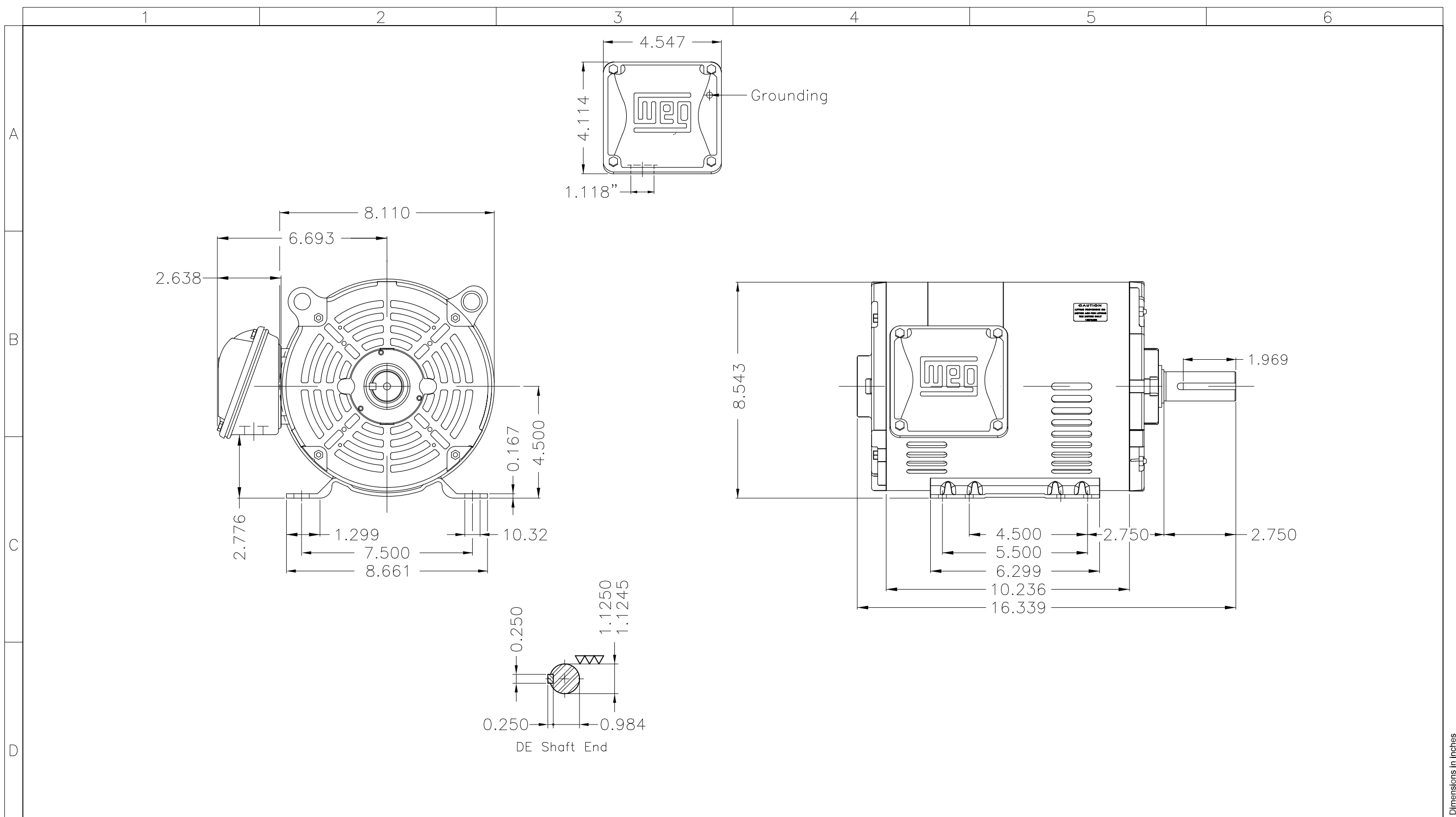



Performance : 200/400 V 60 Hz 4P

Rated current : 14.6/7.28 A  
 LRC : 7.2  
 Rated torque : 14.9 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 310 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
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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.					PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 182/4T IP21 ODP									
RELEASED											
REL DT.	WMO	Jaragua do Sul	Product Engineering								

5 HP 04 Poles 60 Hz

A

**NEMA**  
**Premium**

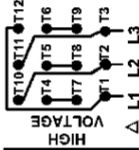
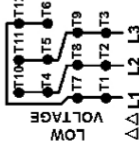
MADE IN MEXICO

**MAT:** 12881320 CC029A  
**W01:** T00IC0X0N  
**MODEL** 005180T3V184T-S  
**04AUG2021 S/N:**

<b>PH</b> 3	<b>HZ</b> 60	<b>HP</b> 5.0
<b>FR</b> 182/4T		<b>KW</b> 3.7
<b>DUTY</b> CONT.		<b>V</b> 200/400
<b>ALT</b> 1000 m.a.s.l.		<b>A</b> 14.6/7.28
<b>INS</b> CL F AT 80K		<b>SFA</b> 16.8/8.37
<b>AMB</b> 40°C	<b>DES</b> B	<b>SF</b> 1.15
<b>ENCL</b> ODP	<b>CODE</b> J	<b>PF</b> 0.82
		<b>RPM</b> 1760
		<b>NEMA</b>
		<b>NOM. EFF</b> 89.5%

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

<b>DE</b> 6206-ZZ	<b>ODE</b> 6205-ZZ	<b>MOBIL</b> POLYREX EM
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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

△△ L1 L2 L3

△ L1 L2 L3

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.

