

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: W40 NEMA Premium Efficiency Three-Phase			
Product code :	14494183			
Catalog # :	01518OT3H254T-W40			
Frame : 254T Output : 15 HP (11 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 14.0 A L. R. Amperes : 89.6 A LRC : 6.4x(Code G) No load current : 5.44 A Rated speed : 1775 rpm Slip : 1.39 % Rated torque : 44.4 ft.lb Locked rotor torque : 220 % Breakdown torque : 260 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 2.72 sq.ft.lb Design : B	Locked rotor time : 61s (cold) 34s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP23 Cooling method : IC01 - ODP Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 62.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 246 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	91.0    91.7    92.4    93.0			
Power Factor	0.43    0.66    0.78    0.85			
Foundation loads				
Max. traction				
Max. compression				
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6209 Z C3			
Sealing	: Without Bearing Seal      Without Bearing Seal			
Lubrication interval	: 20000 h      20000 h			
Lubricant amount	: 13 g      9 g			
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



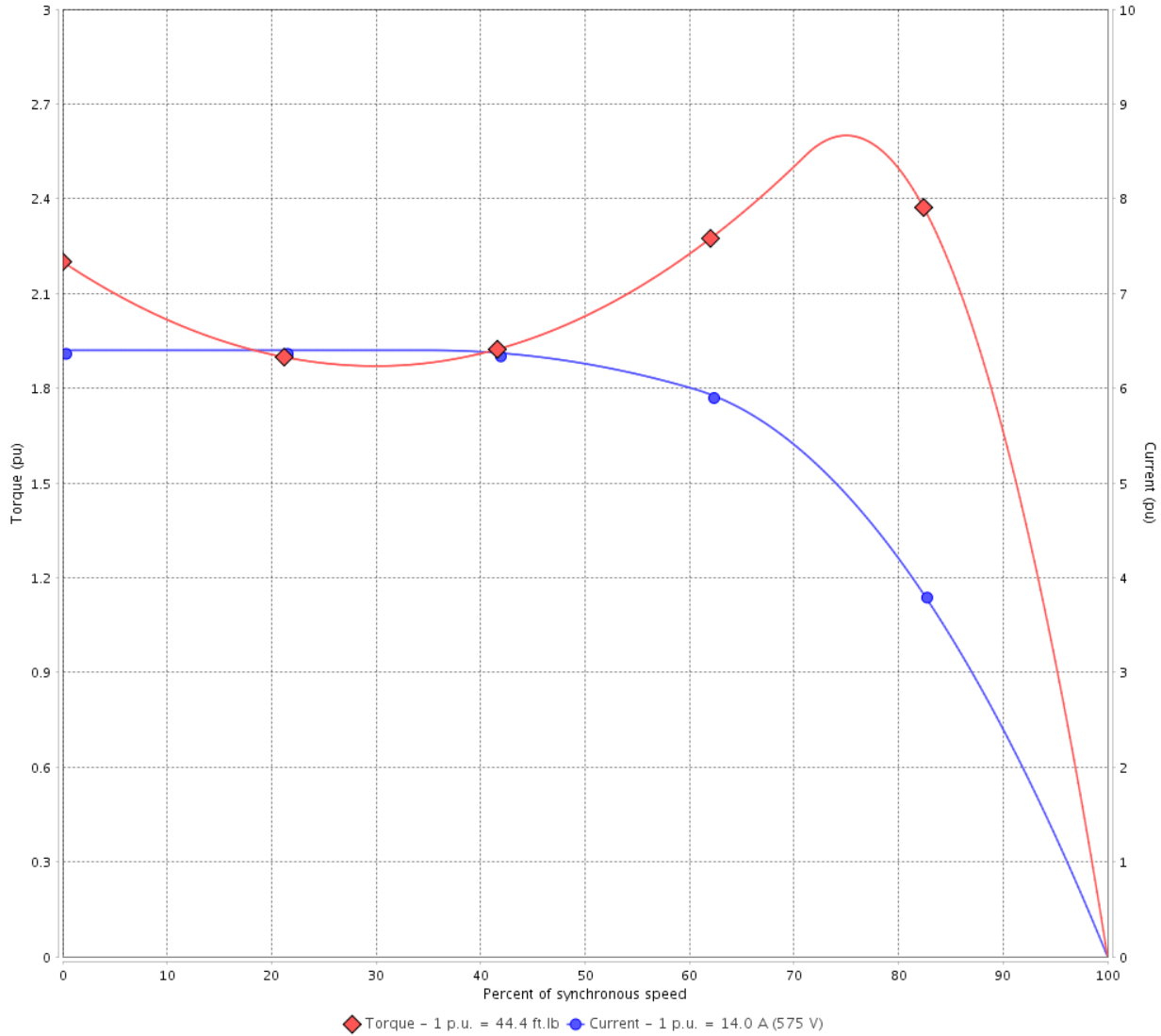
Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14494183

Catalog # : 01518OT3H254T-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 14.0 A	Moment of inertia (J)	: 2.72 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.4 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Locked rotor time : 61s (cold) 34s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

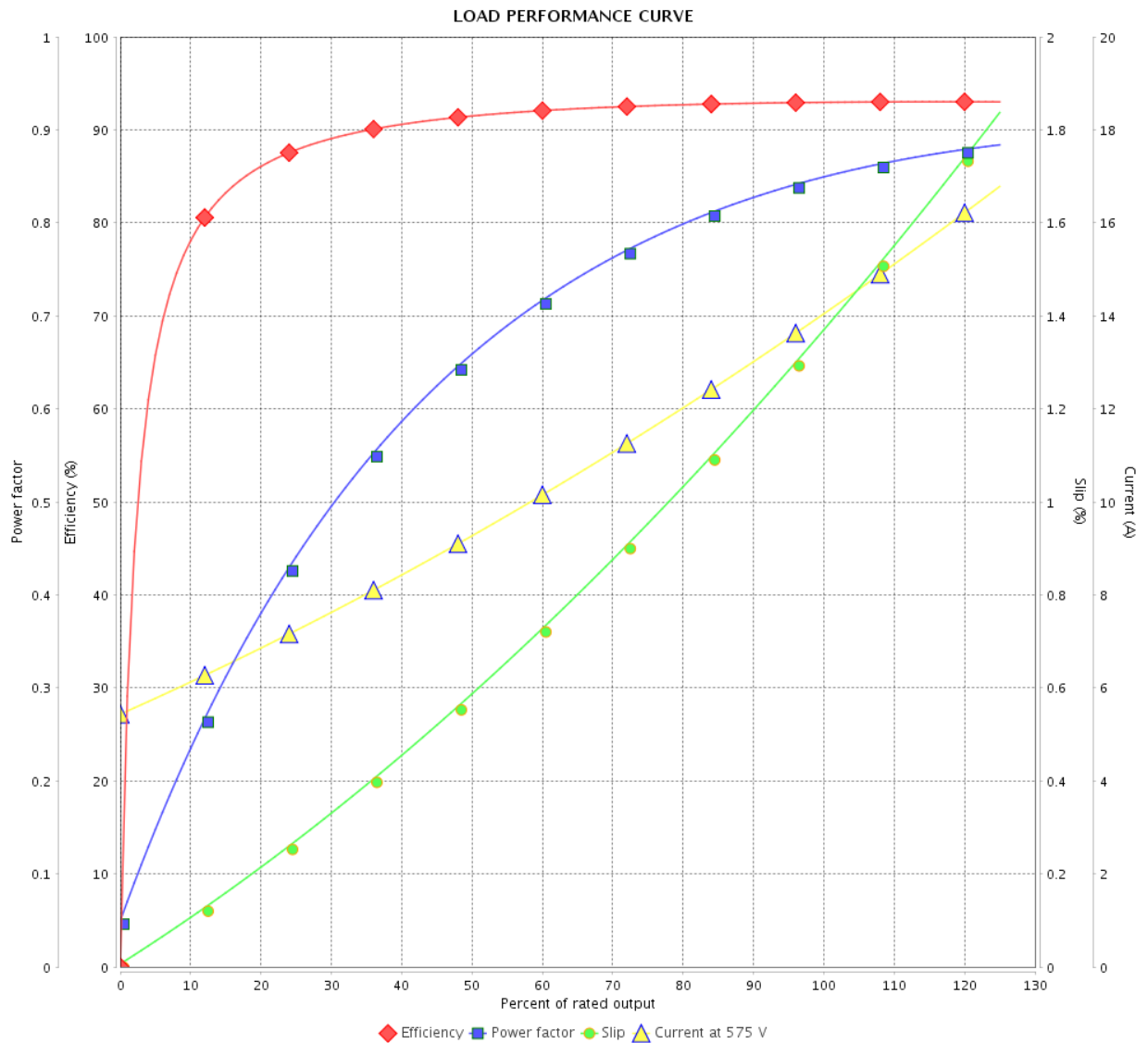


Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14494183

Catalog # : 01518OT3H254T-W40



Performance : 575 V 60 Hz 4P

Rated current : 14.0 A  
 LRC : 6.4  
 Rated torque : 44.4 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 2.72 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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Three-Phase

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LRC : 6.4  
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Locked rotor torque : 220 %  
Breakdown torque : 260 %  
Rated speed : 1775 rpm

Moment of inertia (J) : 2.72 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

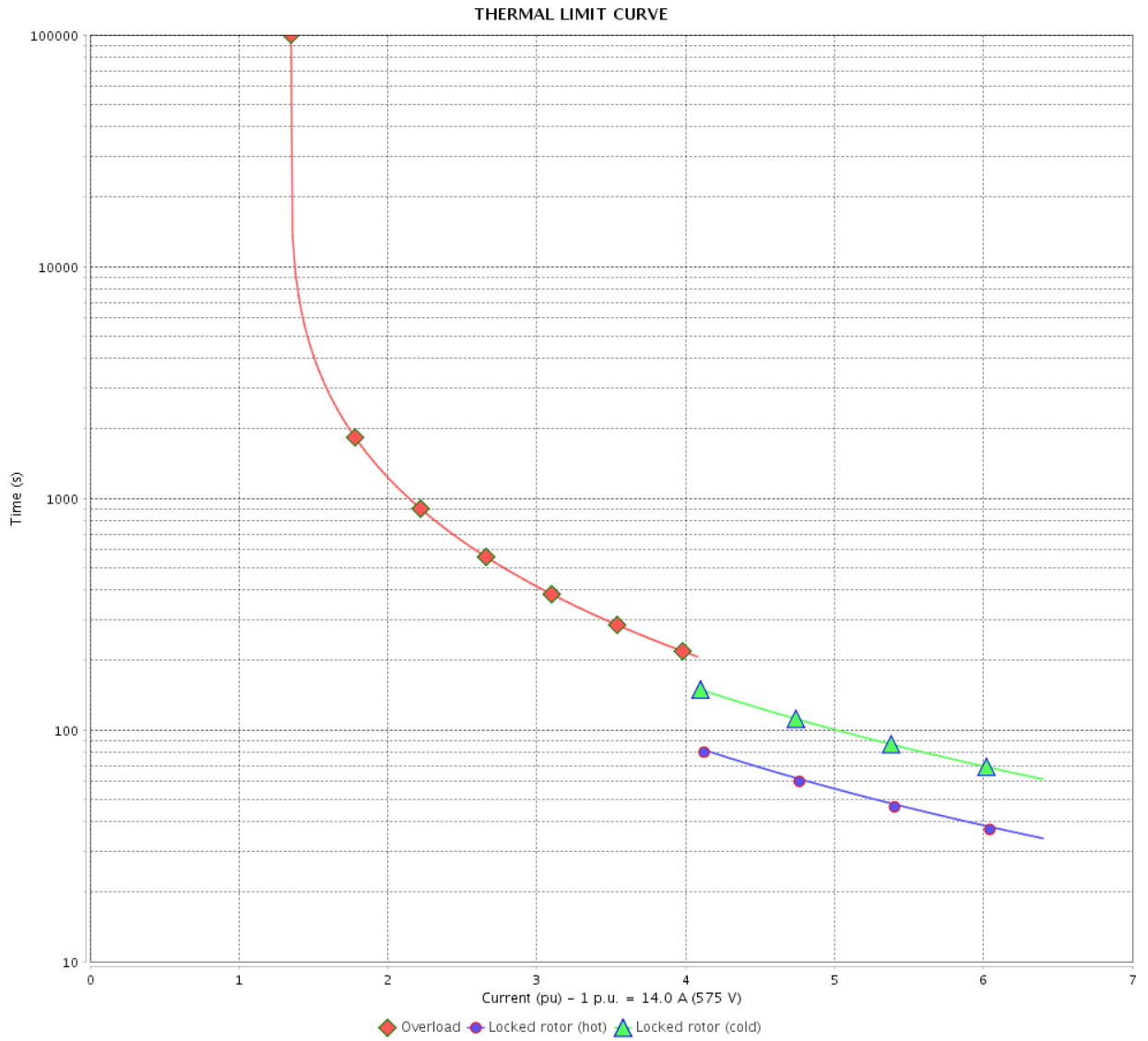
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



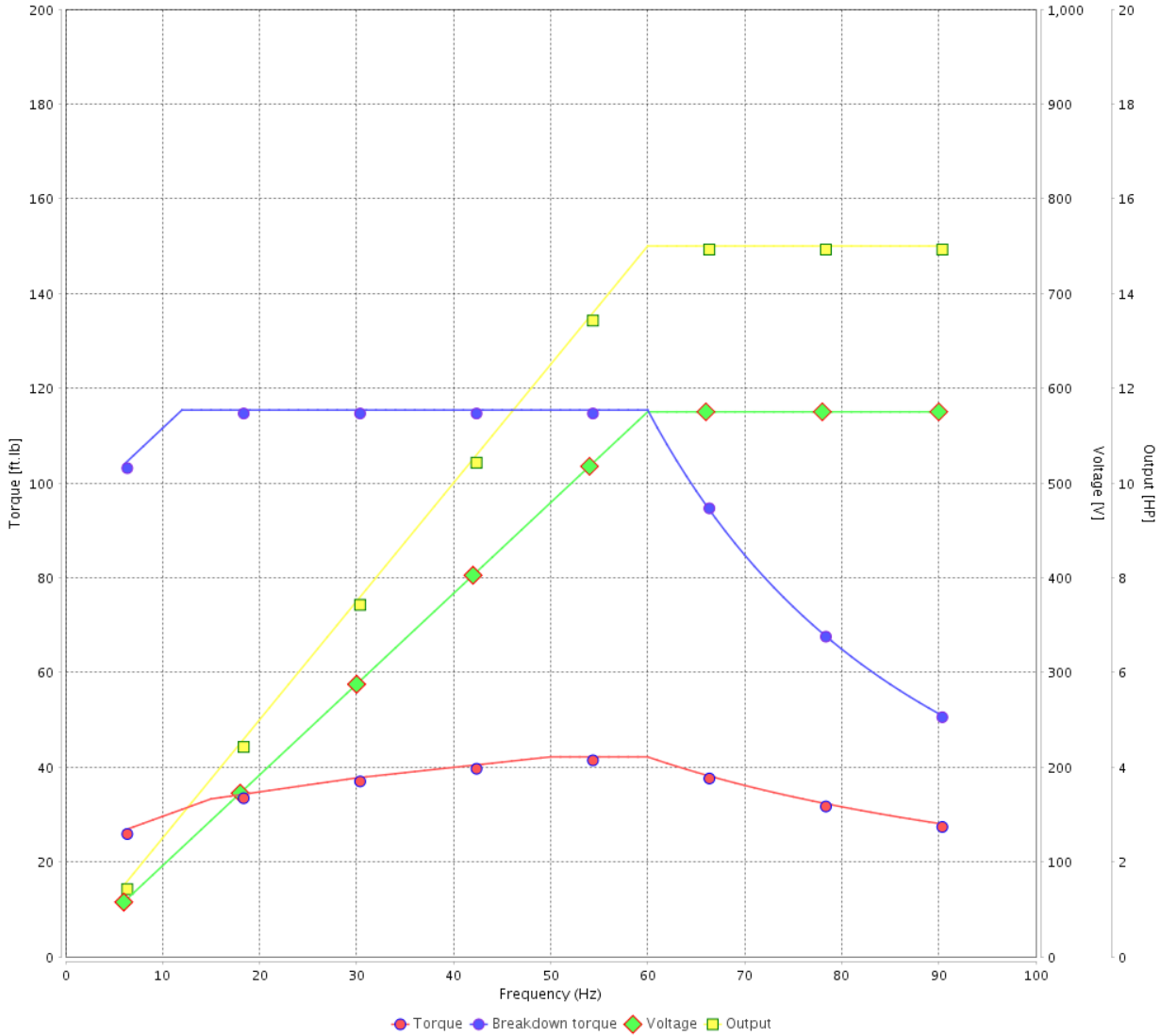
Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14494183

Catalog # : 01518OT3H254T-W40

VFD OPERATION CURVE

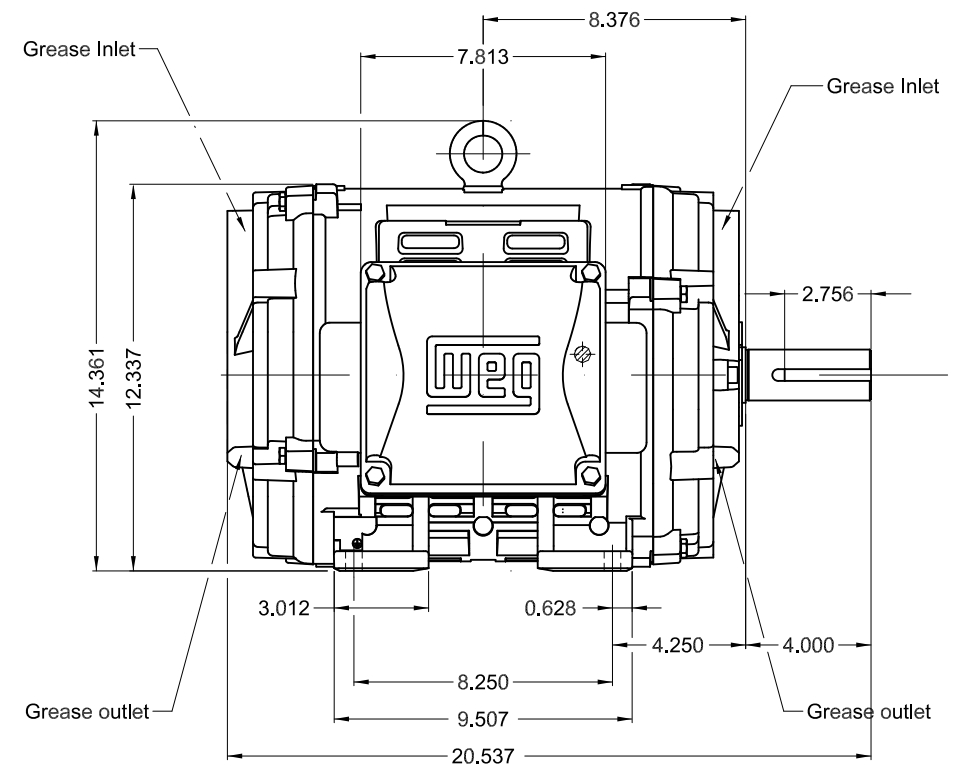
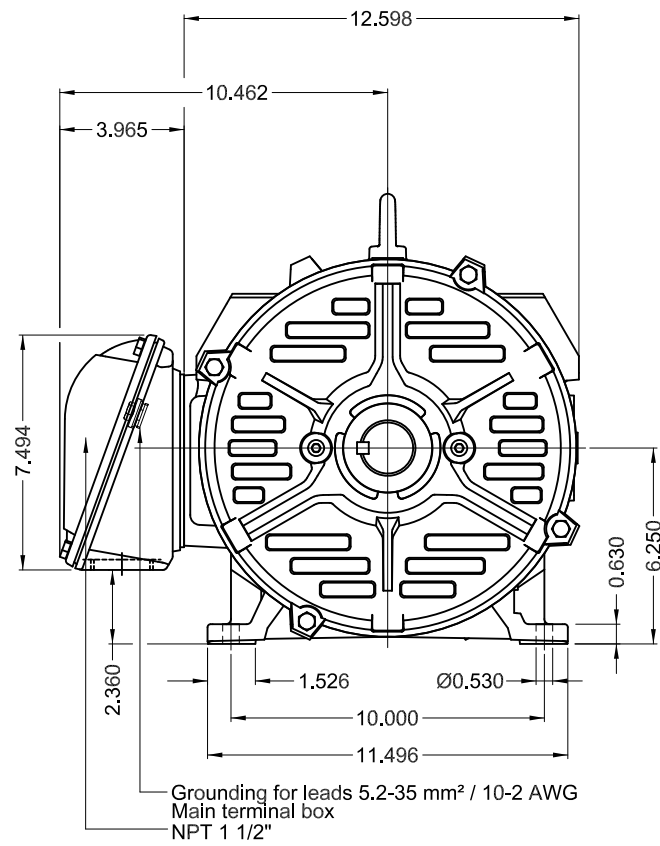


Performance : 575 V 60 Hz 4P

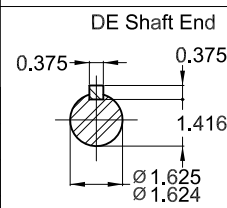
Rated current : 14.0 A  
LRC : 6.4  
Rated torque : 44.4 ft.lb  
Locked rotor torque : 220 %  
Breakdown torque : 260 %  
Rated speed : 1775 rpm

Moment of inertia (J) : 2.72 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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Color RAL 5009  
Painting plan 203A  
Mounting NEMA F-1  
Mounting B3R(D)



15 HP 04 Poles 60 Hz

A

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 254T IP23 ODP					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
WDD



MODEL 015180T3H254T-W40  
MADE IN BRAZIL  
14494183

**WEG** **W40 NEMA**  
**CC029A Premium**  
*Inverter Duty Motor*

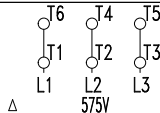


IEC 60034-1  
MOD.T01#FOXON



For use on PWM, VT 1000:1, CT 3:1, 1.0SF

PH 3	FR 254T	HP(kW) 15(11)		Hz 60
V 575		A 14.0		IP23
NEMA NOM EFF		93.0	%	RPM 1775
ENCL ODP	DUTY CONT.		INS. CL. F $\Delta$ T 80 K	
PF 0.85		DES B	CODE G	AMB. 40°C
SF 1.25	SFA 17.5		ALT 1000 m.a.s.l.	



→ 6309-Z-C3  
→ 6209-Z-C3

MOBIL POLYREX EM  
13 g 20000 h

245 Lbs