

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line	: W40 NEMA Premium Efficiency Three-Phase	Product code :	14272425	Catalog # :	20036OT3H444TS-W40	
Frame	: 444/5TS	Locked rotor time	: 37s (cold) 21s (hot)			
Output	: 200 HP (150 kW)	Temperature rise	: 80 K			
Poles	: 2	Duty cycle	: Cont.(S1)			
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C			
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.			
Rated current	: 180 A	Protection degree	: IP23			
L. R. Amperes	: 1170 A	Cooling method	: IC01 - ODP			
LRC	: 6.5x(Code G)	Mounting	: F-1			
No load current	: 53.6 A	Rotation <sup>1</sup>	: Both (CW and CCW)			
Rated speed	: 3570 rpm	Noise level <sup>2</sup>	: 85.0 dB(A)			
Slip	: 0.83 %	Starting method	: Direct On Line			
Rated torque	: 294 ft.lb	Approx. weight <sup>3</sup>	: 1267 lb			
Locked rotor torque	: 140 %					
Breakdown torque	: 229 %					
Insulation class	: F					
Service factor	: 1.15					
Moment of inertia (J)	: 23.8 sq.ft.lb					
Design	: B					
Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	92.4	93.0	94.5	95.0	Max. traction : 1170 lb	
Power Factor	0.54	0.79	0.86	0.88	Max. compression : 2437 lb	
Bearing type	:	<u>Drive end</u> 6314 C3	<u>Non drive end</u> 6212 Z C3			
Sealing	:	Without Bearing Seal	Without Bearing Seal			
Lubrication interval	:	14418 h	20000 h			
Lubricant amount	:	27 g	13 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



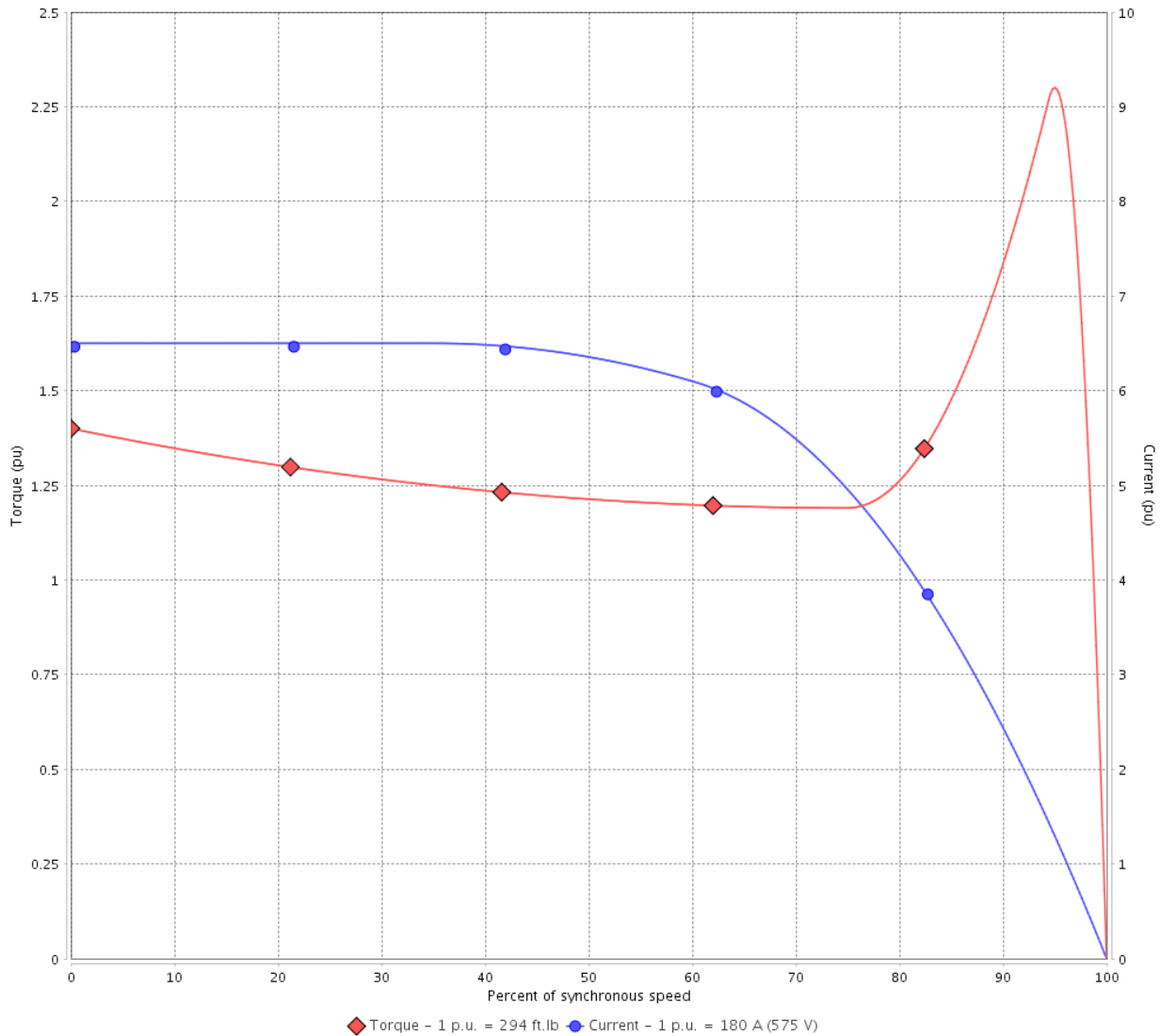
Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14272425

Catalog # : 20036OT3H444TS-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 180 A	Moment of inertia (J)	: 23.8 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 294 ft.lb	Insulation class	: F
Locked rotor torque	: 140 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3570 rpm	Design	: B

Locked rotor time : 37s (cold) 21s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

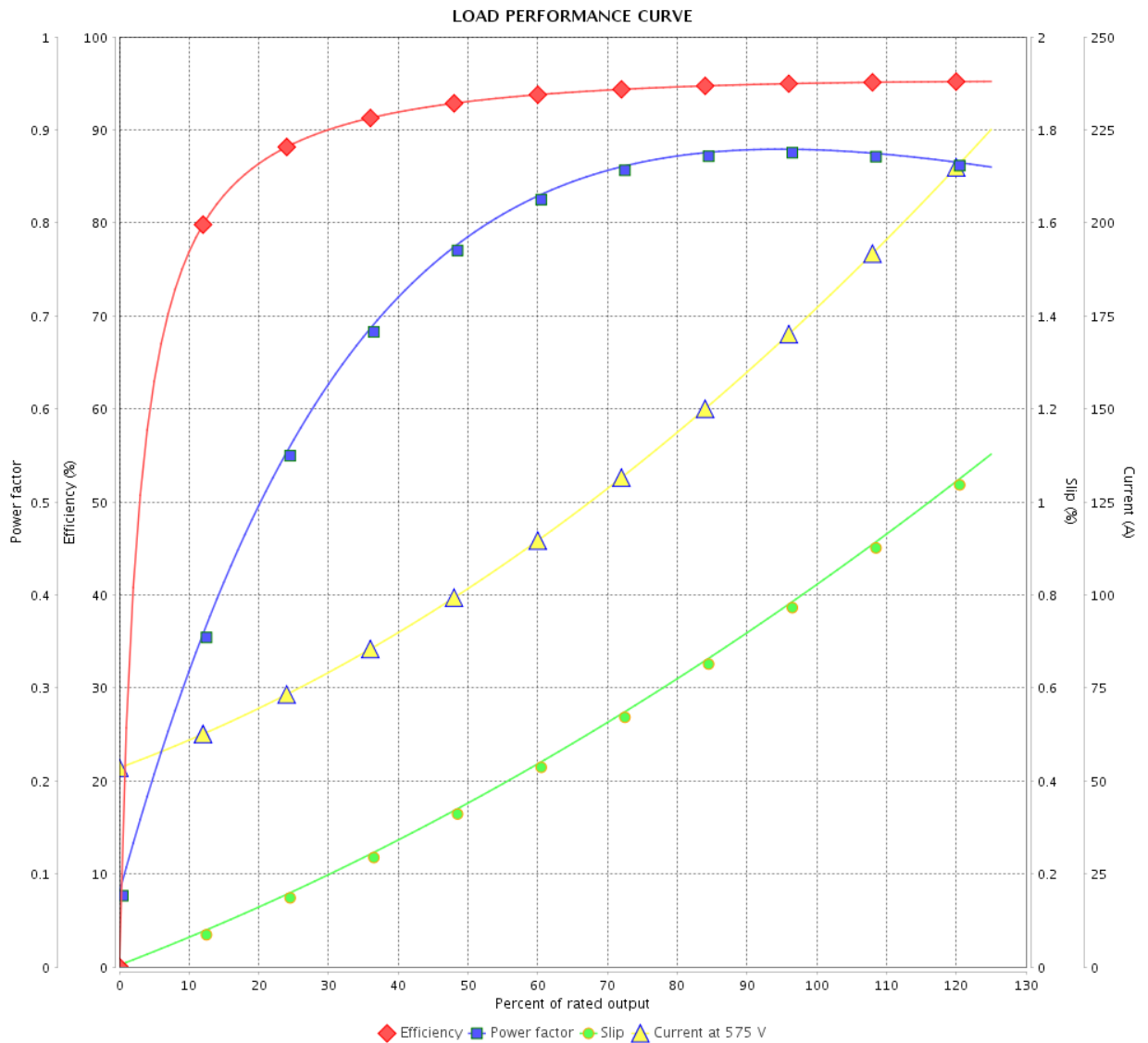


Customer : \_\_\_\_\_

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14272425

Catalog # : 20036OT3H444TS-W40



Performance : 575 V 60 Hz 2P

Rated current : 180 A  
 LRC : 6.5  
 Rated torque : 294 ft.lb  
 Locked rotor torque : 140 %  
 Breakdown torque : 229 %  
 Rated speed : 3570 rpm

Moment of inertia (J) : 23.8 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

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Three-Phase

Product code : 14272425

Catalog # : 20036OT3H444TS-W40

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Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3570 rpm	Design	: B

Heating constant

Cooling constant

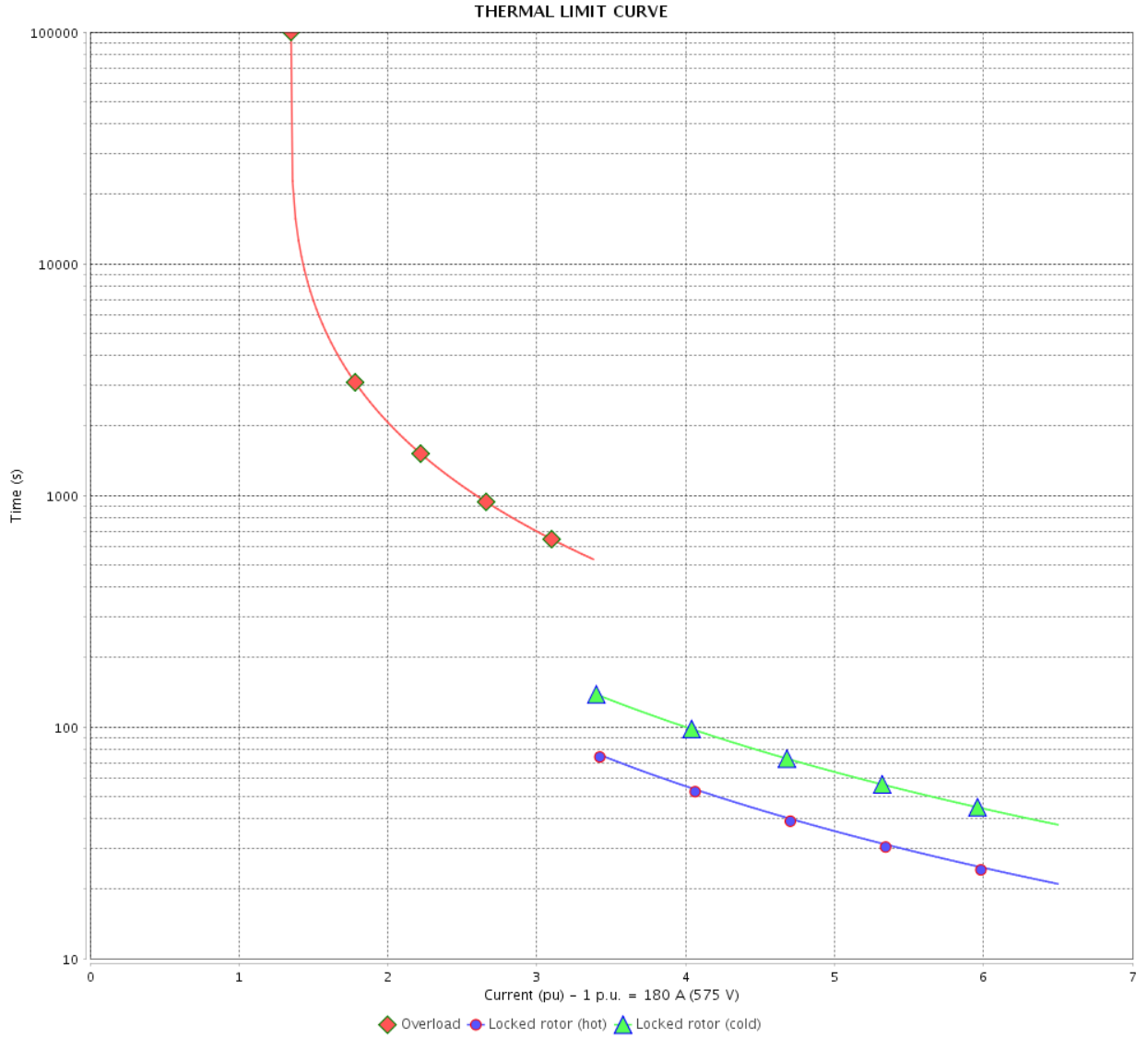
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



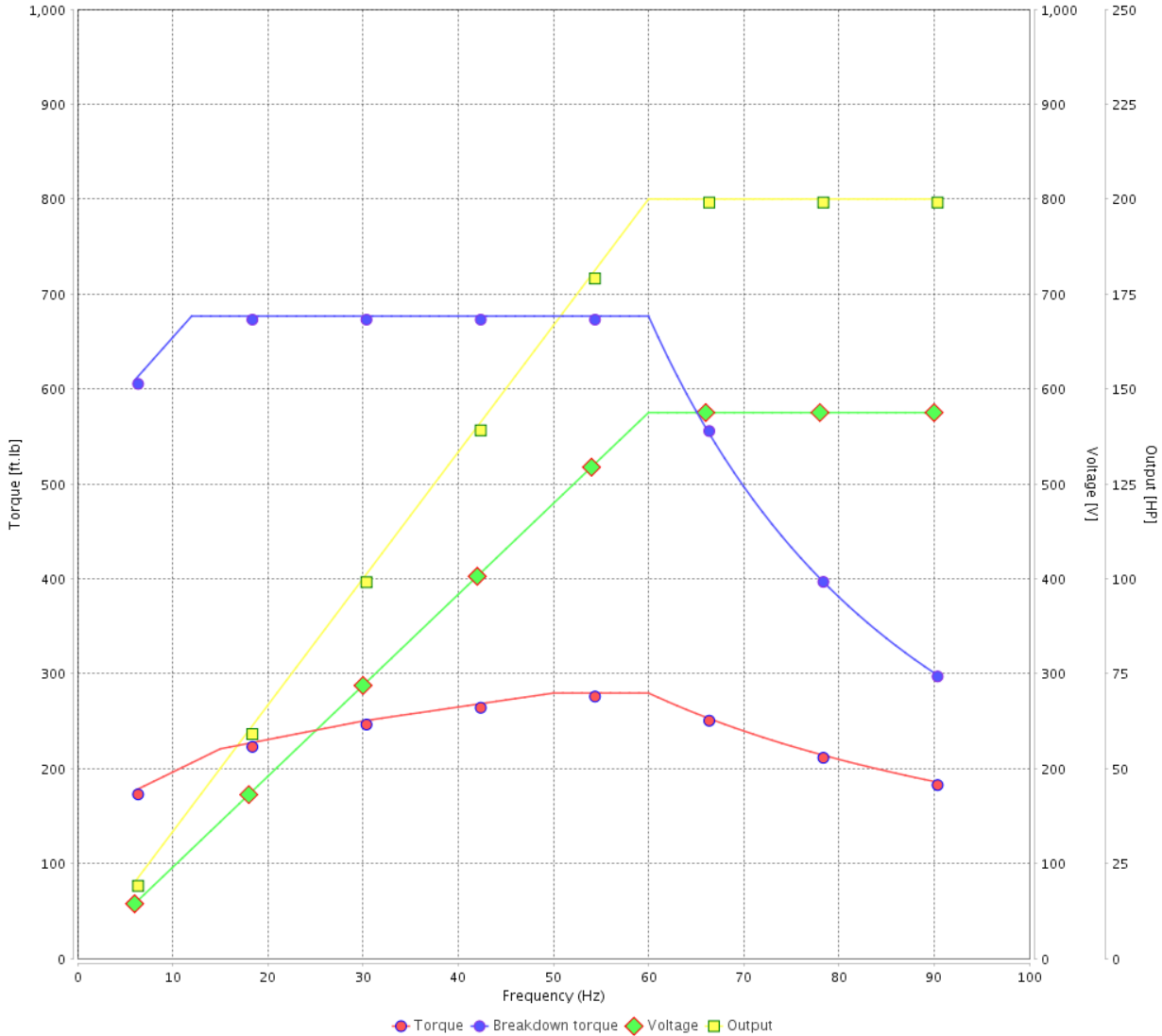
Customer : \_\_\_\_\_

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14272425

Catalog # : 20036OT3H444TS-W40

VFD OPERATION CURVE

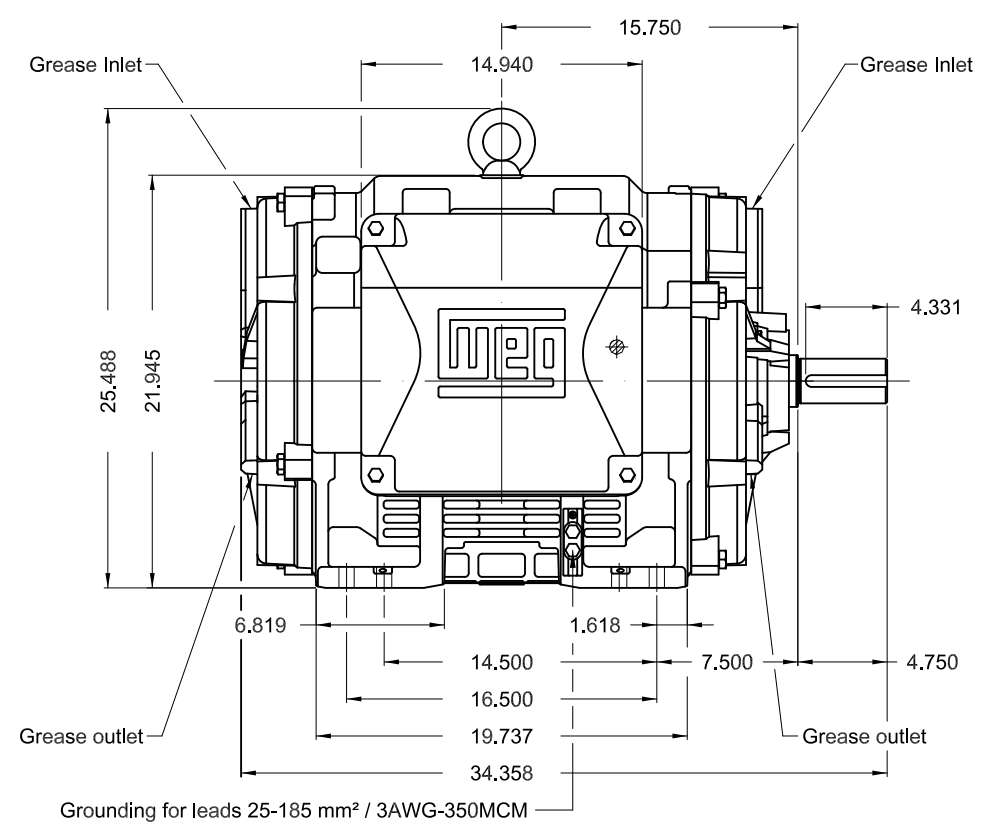
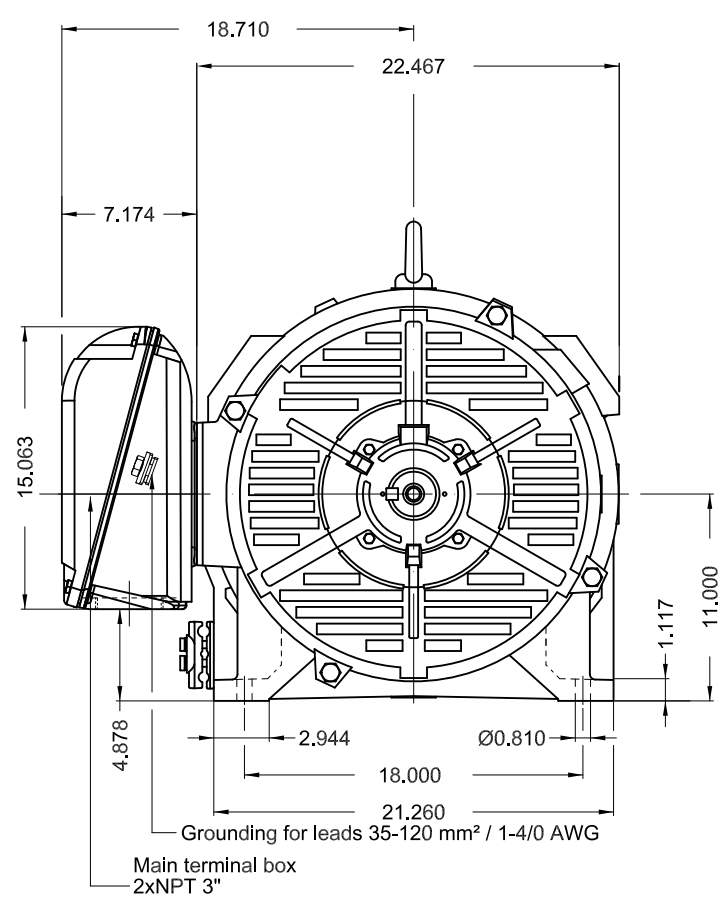


Performance : 575 V 60 Hz 2P

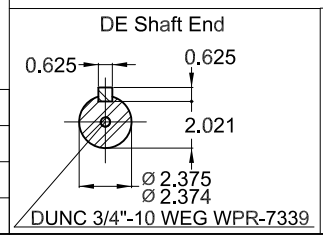
Rated current : 180 A  
LRC : 6.5  
Rated torque : 294 ft.lb  
Locked rotor torque : 140 %  
Breakdown torque : 229 %  
Rated speed : 3570 rpm

Moment of inertia (J) : 23.8 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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



200 HP 02 Poles 60 Hz A

1:10

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 444/5TS IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**  
**WDD**



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



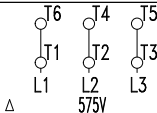
MOD.T01#FOXON




For use on PWM, VT 1000:1, CT 2:1, 1.0SF

DP200502NPBBW40  
 MADE IN BRAZIL  
 14272425

PH 3	FR 444/5TS	HP(kW) 200(150)	Hz 60
V 575	A 180	IP23	
NEMA NOM EFF	95.0 %	RPM 3570	
ENCL ODP	DUTY CONT.	INS. CL. F $\Delta$ T 80 K	
PF 0.88	DES B	CODE G	AMB. 40°C
SF 1.15	SFA 207	ALT 1000 m.a.s.l.	



 → 6314-C3(27g) MOBIL POLYREX EM  
 → 6212-Z-C3(13g) 14418 h

1268 Lbs