

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

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

Product line : W40 NEMA Premium Efficiency Three-Phase      Product code : 14272487  
 Catalog # : 06018OT3H364TC-W40

Frame	: 364/5TC	Locked rotor time	: 34s (cold) 19s (hot)
Output	: 60 HP (45 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 55.9 A	Protection degree	: IP23
L. R. Amperes	: 363 A	Cooling method	: IC01 - ODP
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 19.8 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level <sup>2</sup>	: 69.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 177 ft.lb	Approx. weight <sup>3</sup>	: 769 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 15.6 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.4	94.5	95.0	95.0	Max. traction	: 1071 lb
Power Factor	0.48	0.73	0.82	0.85	Max. compression	: 1840 lb

	Drive end	Non drive end
Bearing type	: 6314 C3	: 6212 Z C3
Sealing	: Without Bearing Seal	: Without Bearing Seal
Lubrication interval	: 20000 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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Date	12/04/2022				

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



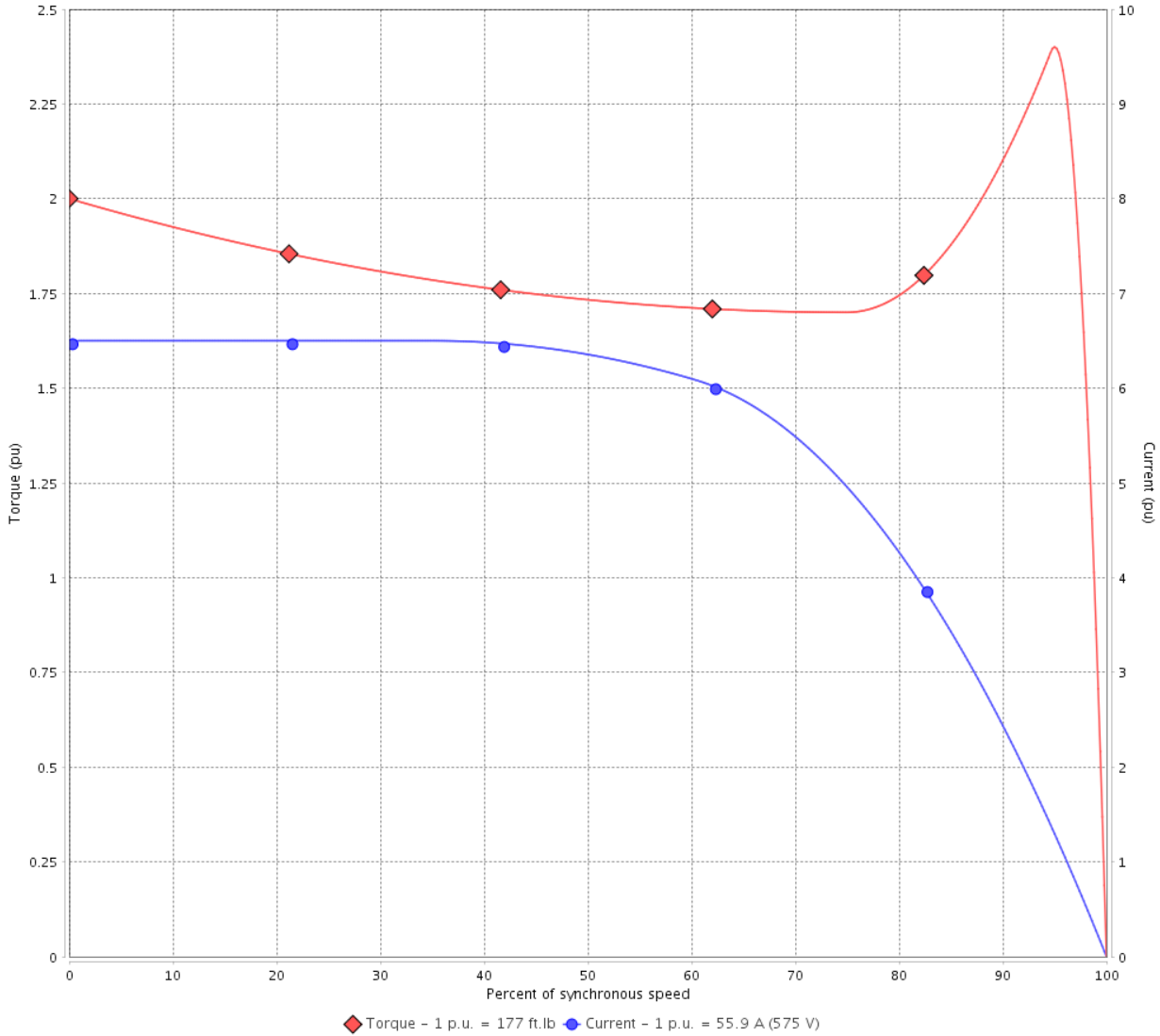
Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14272487

Catalog # : 06018OT3H364TC-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 55.9 A	Moment of inertia (J)	: 15.6 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 177 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Locked rotor time : 34s (cold) 19s (hot)

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Date	12/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

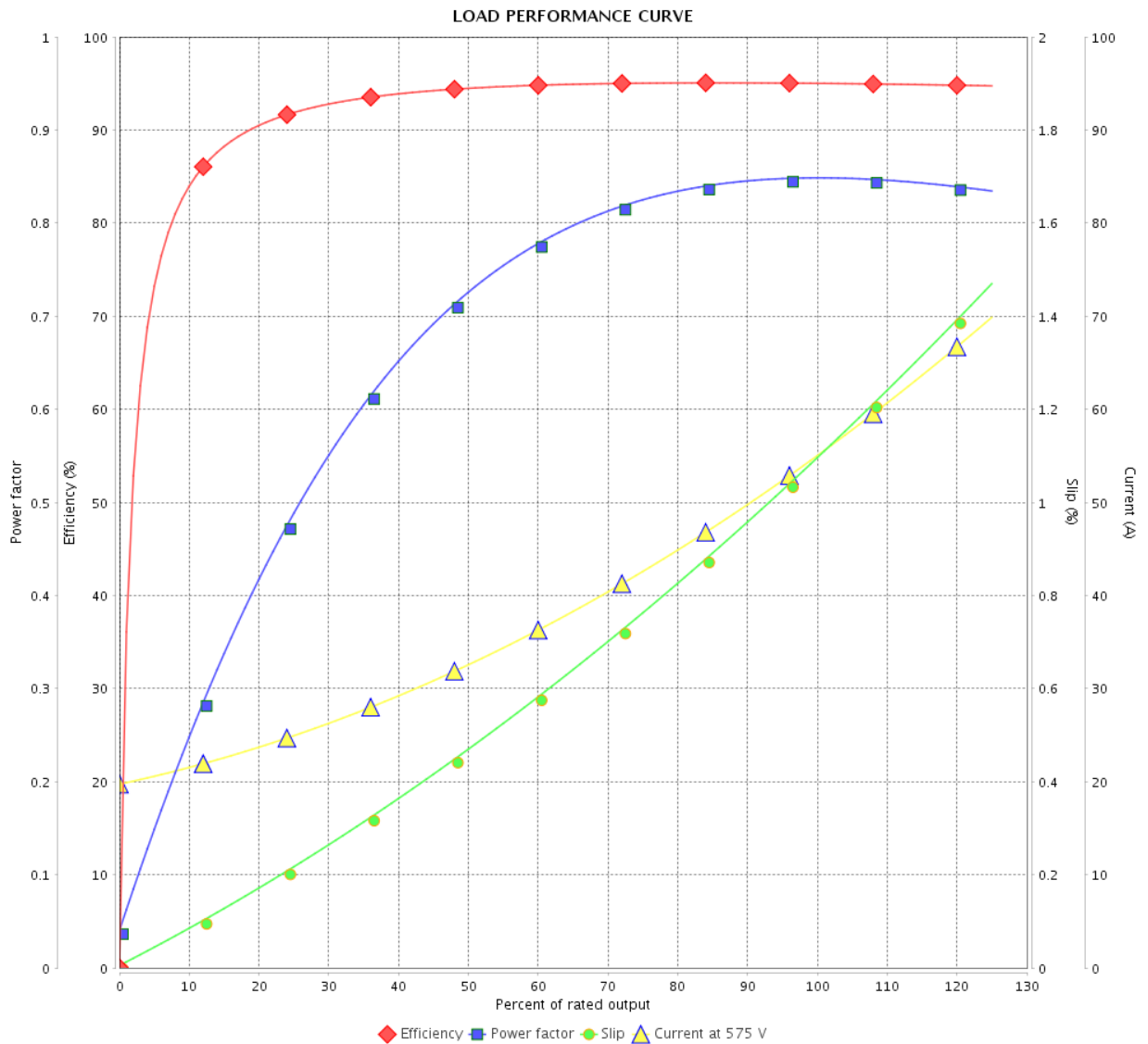


Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14272487

Catalog # : 06018OT3H364TC-W40



Performance : 575 V 60 Hz 4P

Rated current : 55.9 A  
 LRC : 6.5  
 Rated torque : 177 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 15.6 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

Product code : 14272487

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LRC : 6.5	Duty cycle : Cont.(S1)
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Locked rotor torque : 200 %	Service factor : 1.25
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 1780 rpm	Design : B

Heating constant

Cooling constant

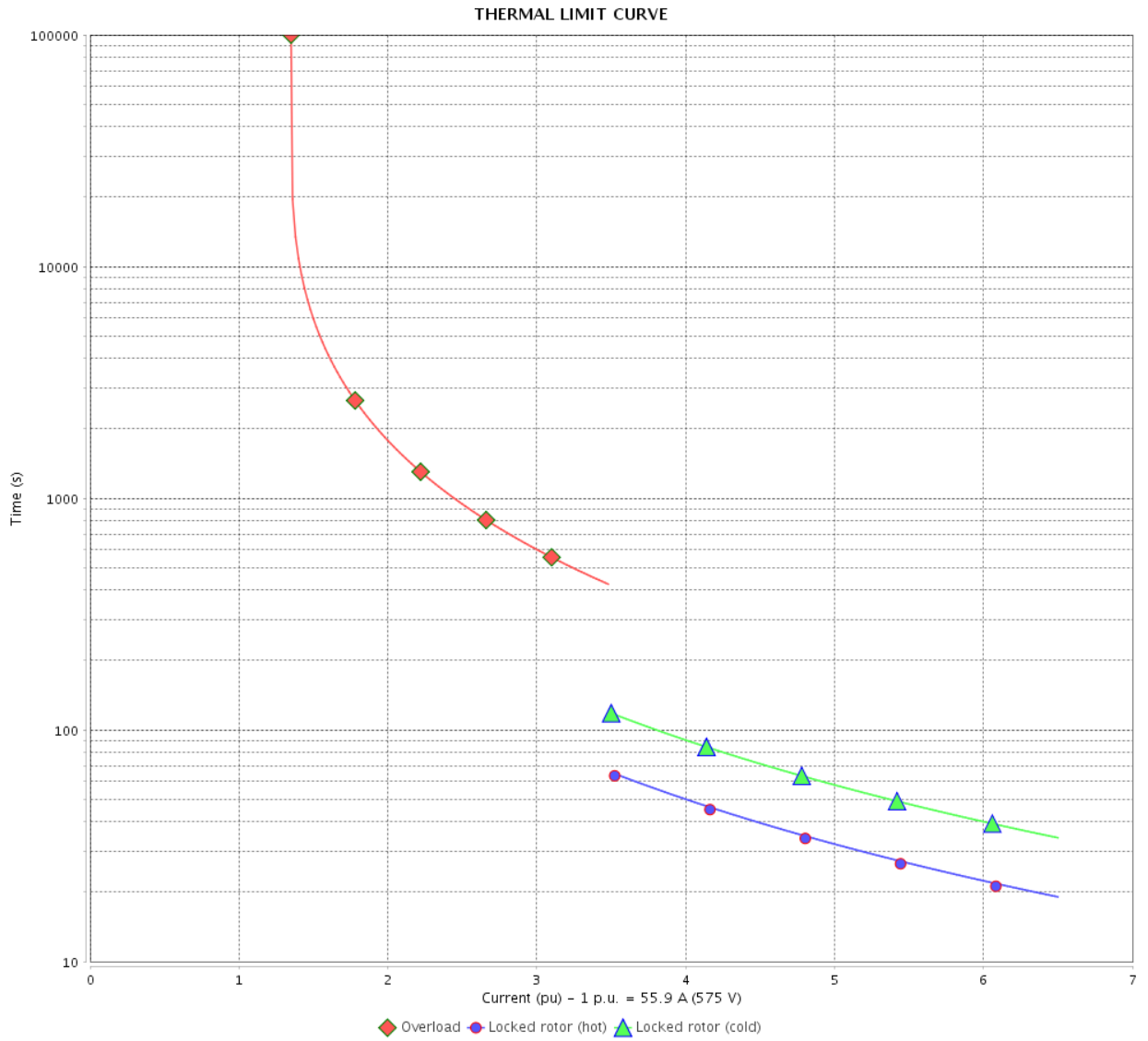
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Performed by			Page	Revision
Checked by				
Date				

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



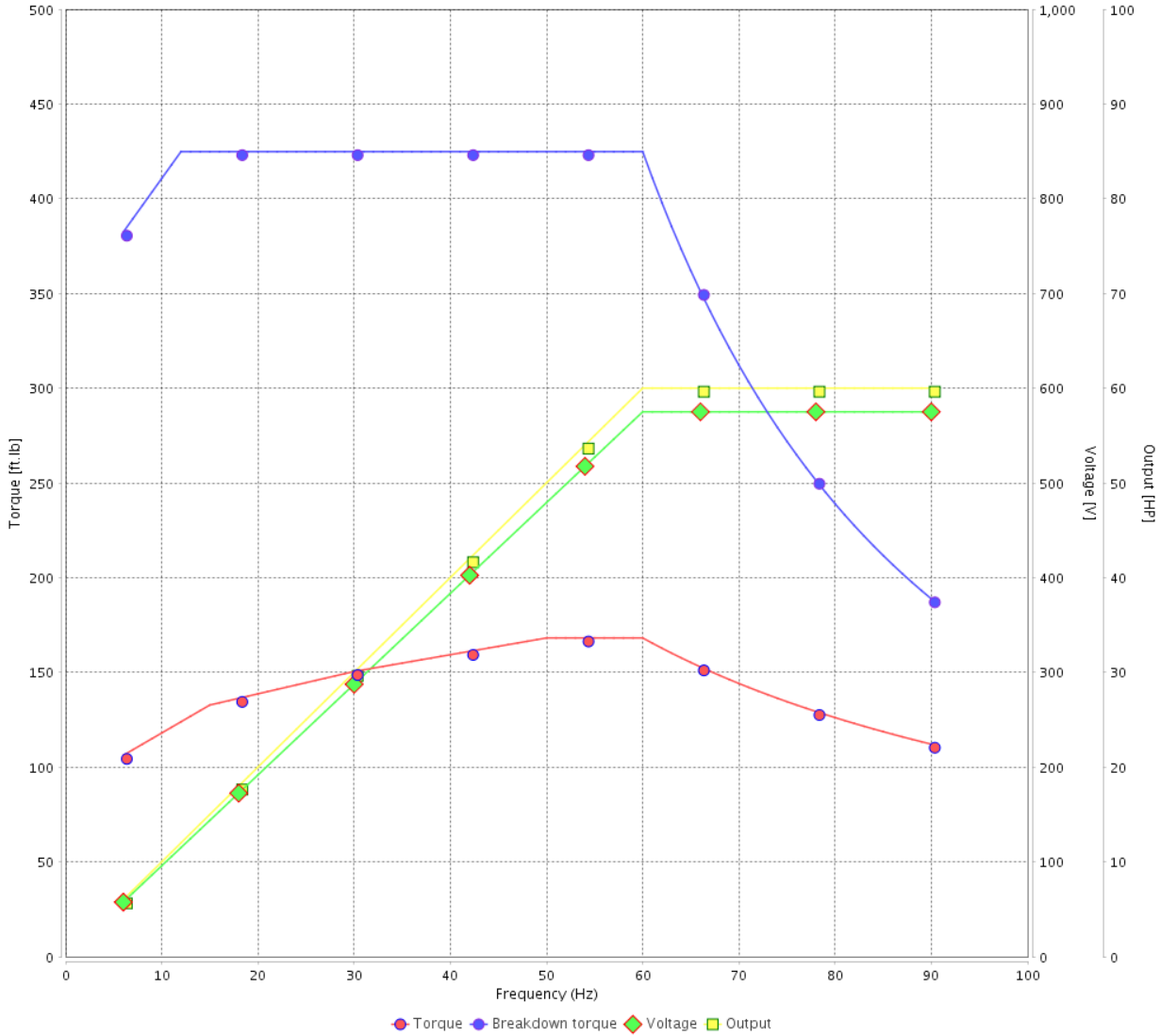
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Product code : 14272487

Catalog # : 06018OT3H364TC-W40

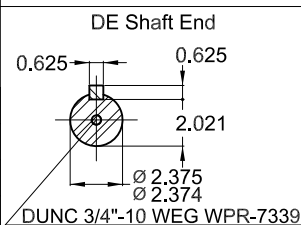
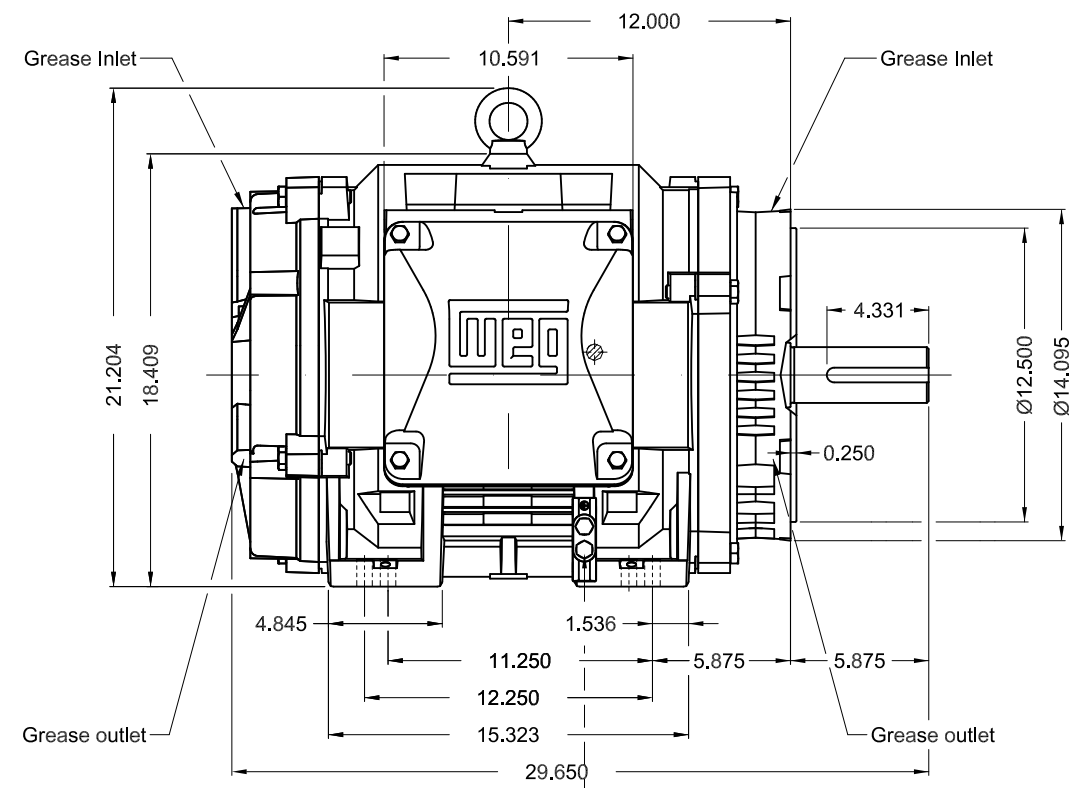
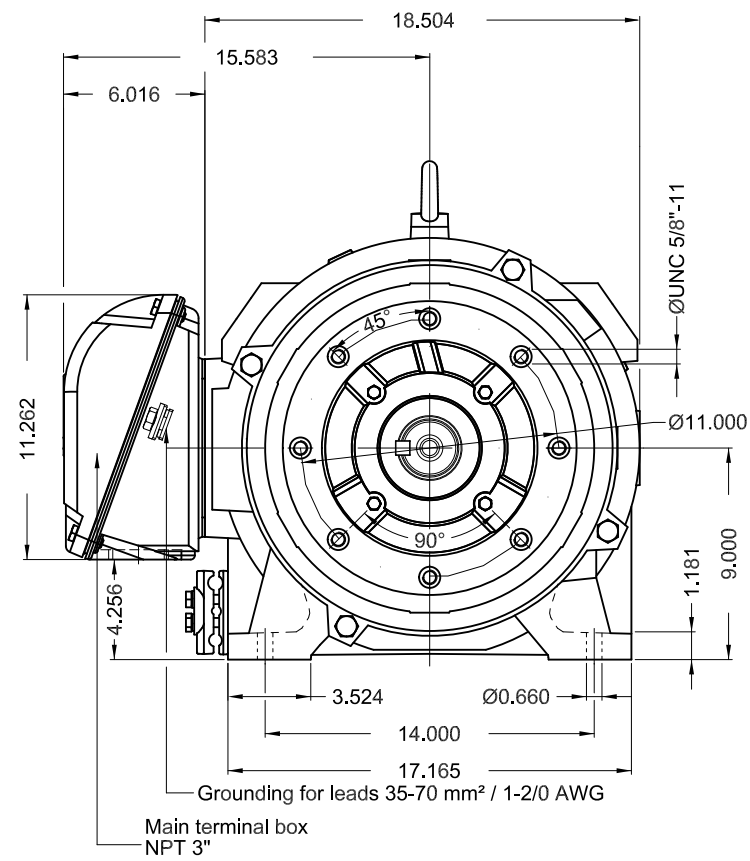
VFD OPERATION CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 55.9 A	Moment of inertia (J)	: 15.6 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 177 ft.lb	Insulation class	: F
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Color RAL 5009  
 Painting plan 203A  
 Mounting NEMA F-1  
 Mounting B34R(D)

60 HP 04 Poles 60 Hz										A	
										1:8	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.									
CHECKED		FRAME 364/5TC IP23 ODP									
RELEASED											
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1					

PREVIEW  
 WDD



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



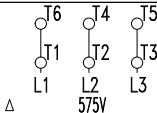
MOD.T01#FOXON



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

CP060504NPW40  
 MADE IN BRAZIL  
 14272487

PH 3	FR 364/5TC	HP(kW) 60(45)		Hz 60
V 575		A 55.9		IP23
NEMA NOM EFF		95.0	%	RPM 1780
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 69.9		ALT 1000 m.a.s.l.	



→ 6314-C3(27g)  
 → 6212-Z-C3(13g)

MOBIL POLYREX EM  
 20000 h

769 Lbs