

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase      Product code : 14503868  
Catalog # : 03018OT3V286T-W40G

Frame	: 284/6T	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 30 HP (22 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 200/400 V	Altitude	: 1000 m.a.s.l.
Rated current	: 80.3/40.1 A	Protection degree	: IP23
L. R. Amperes	: 530/265 A	Cooling method	: IC01 - ODP
LRC	: 6.6x(Code G)	Mounting	: F-1
No load current	: 31.1/15.5 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1765 rpm	Noise level <sup>2</sup>	: 64.0 dB(A)
Slip	: 1.94 %	Starting method	: Direct On Line
Rated torque	: 89.0 ft.lb	Approx. weight <sup>3</sup>	: 398 lb
Locked rotor torque	: 280 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 4.52 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	93.4	93.6	94.1	94.1	Max. traction
Power Factor	0.45	0.70	0.80	0.84	Max. compression

	Drive end	Non drive end
Bearing type	: 6311 Z C3	6211 Z C3
Sealing	: Without Bearing Seal	Without Bearing Seal
Lubrication interval	: 20000 h	20000 h
Lubricant amount	: 18 g	11 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



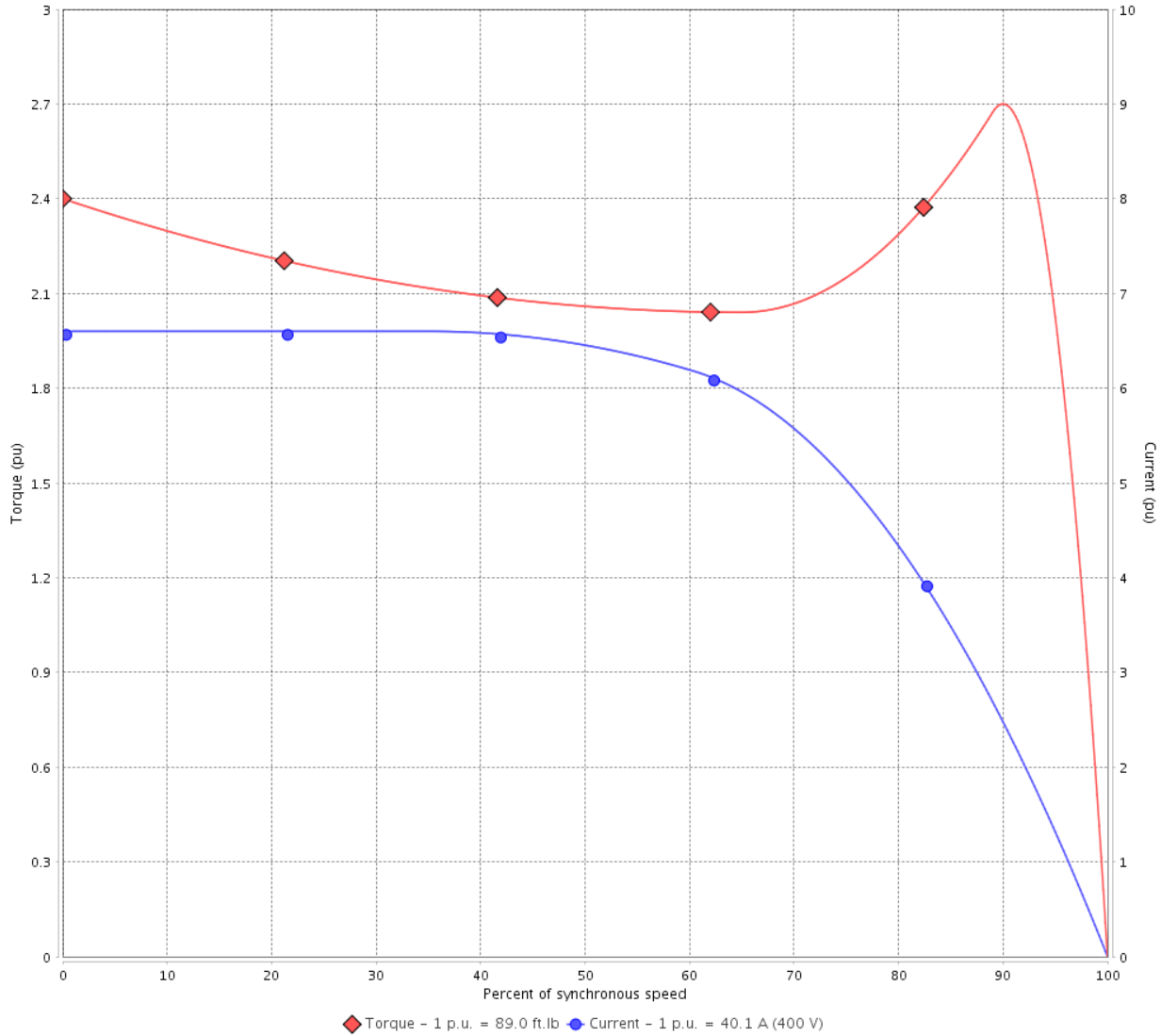
Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14503868

Catalog # : 03018OT3V286T-W40G

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current	: 80.3/40.1 A	Moment of inertia (J)	: 4.52 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 89.0 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

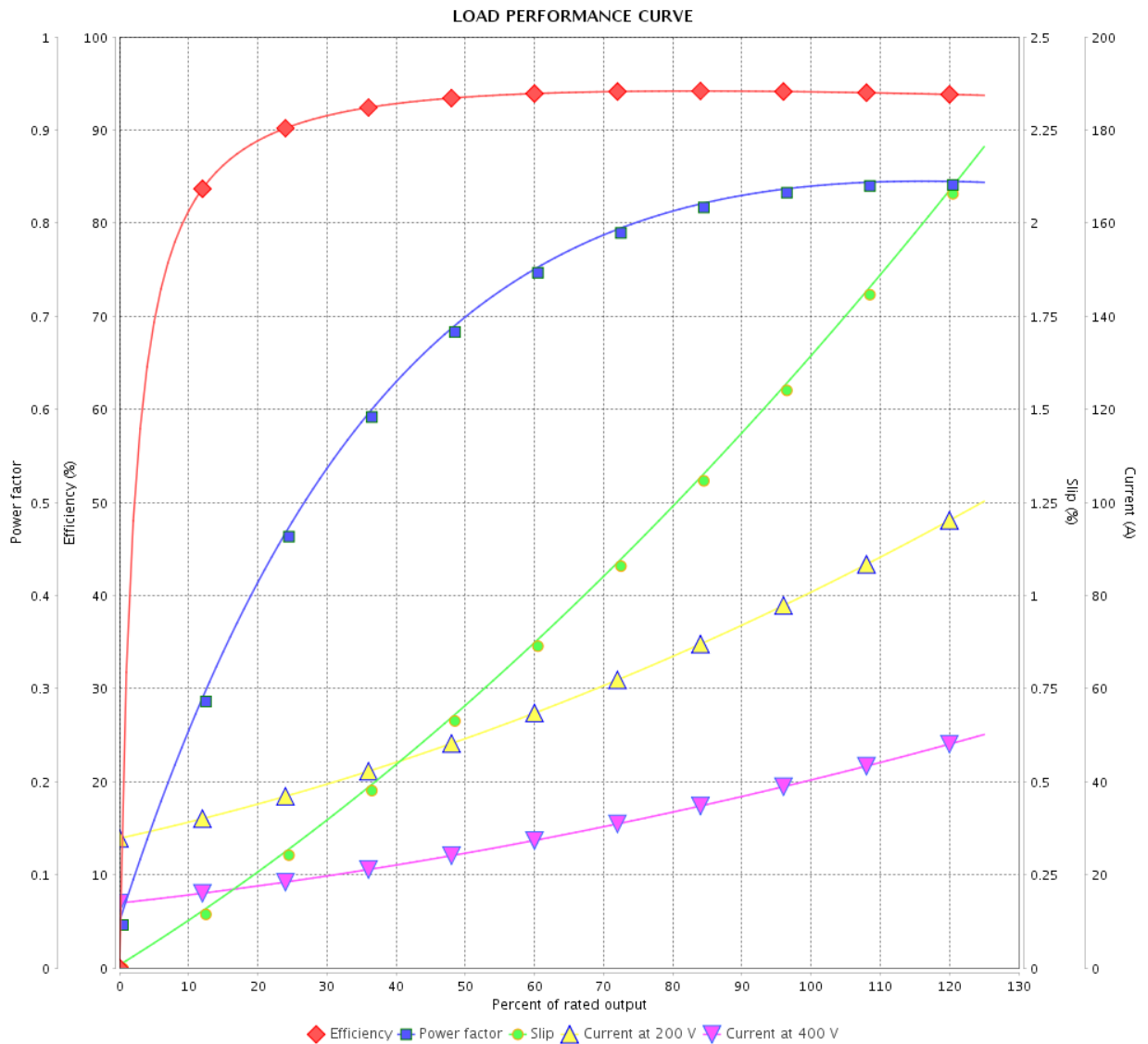


Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14503868

Catalog # : 03018OT3V286T-W40G



Performance : 200/400 V 60 Hz 4P

Rated current : 80.3/40.1 A  
 LRC : 6.6  
 Rated torque : 89.0 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 270 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 4.52 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



Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14503868

Catalog # : 03018OT3V286T-W40G

Performance : 200/400 V 60 Hz 4P

Rated current : 80.3/40.1 A  
LRC : 6.6  
Rated torque : 89.0 ft.lb  
Locked rotor torque : 280 %  
Breakdown torque : 270 %  
Rated speed : 1765 rpm

Moment of inertia (J) : 4.52 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

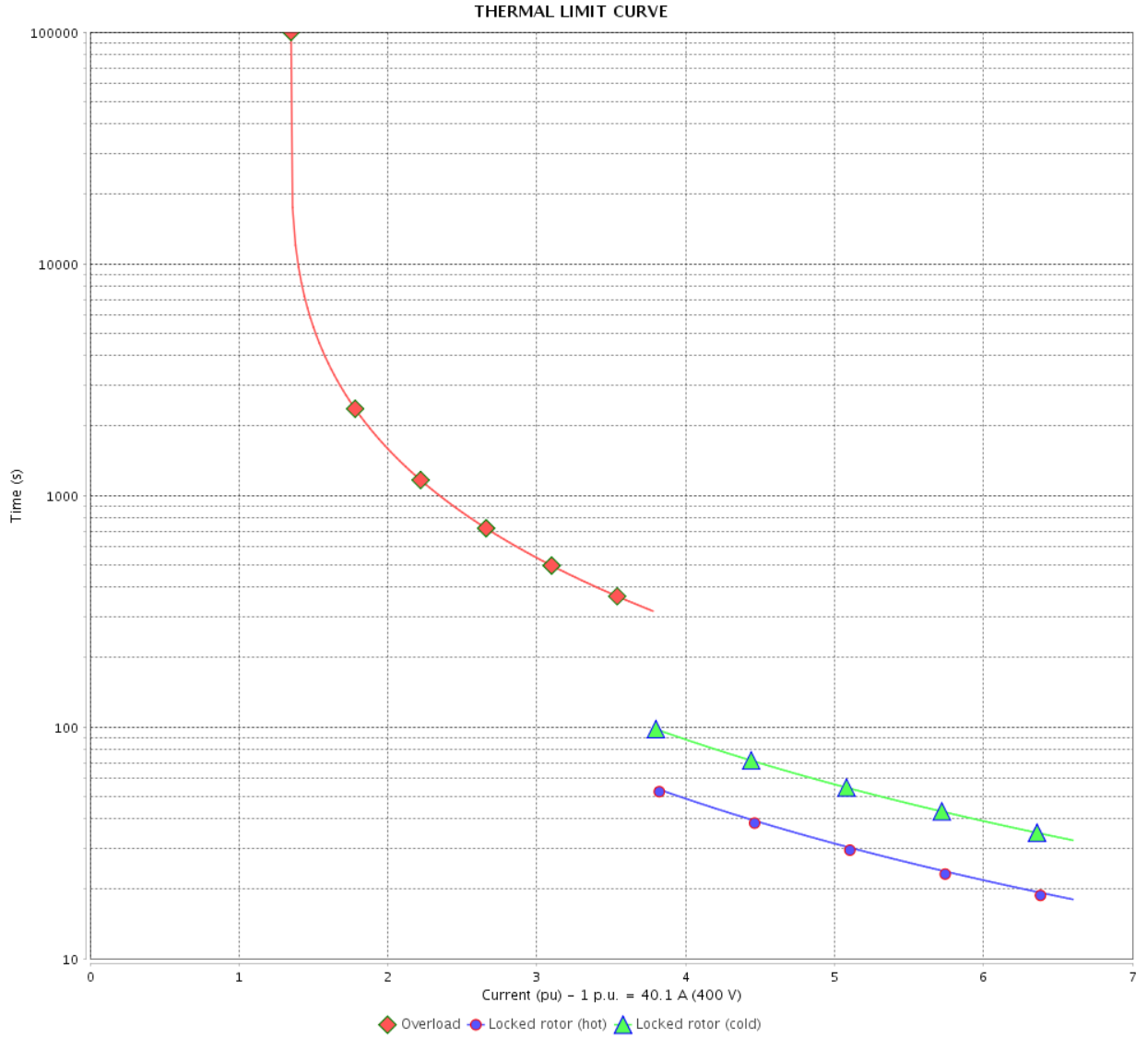
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

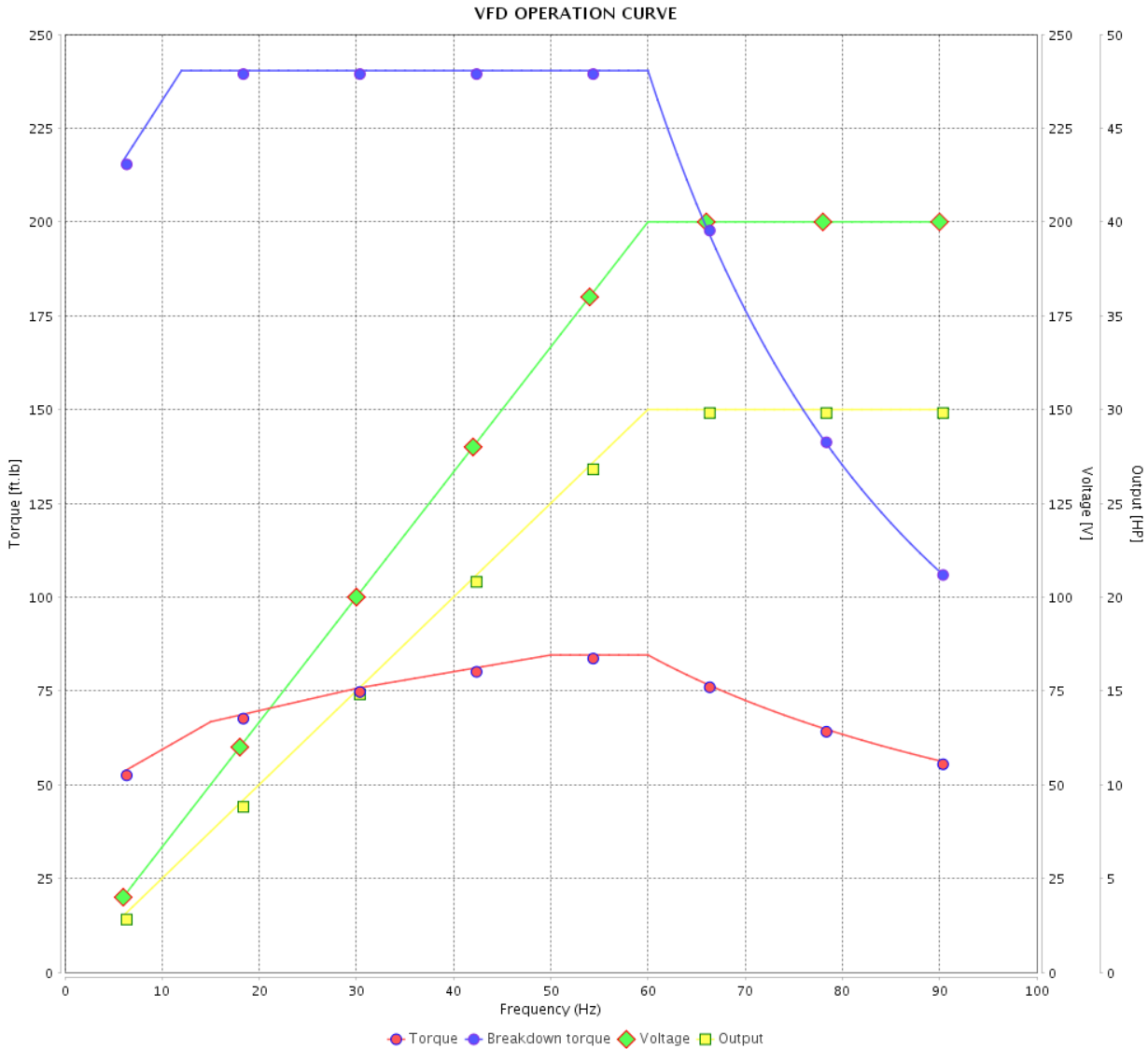


Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14503868

Catalog # : 03018OT3V286T-W40G

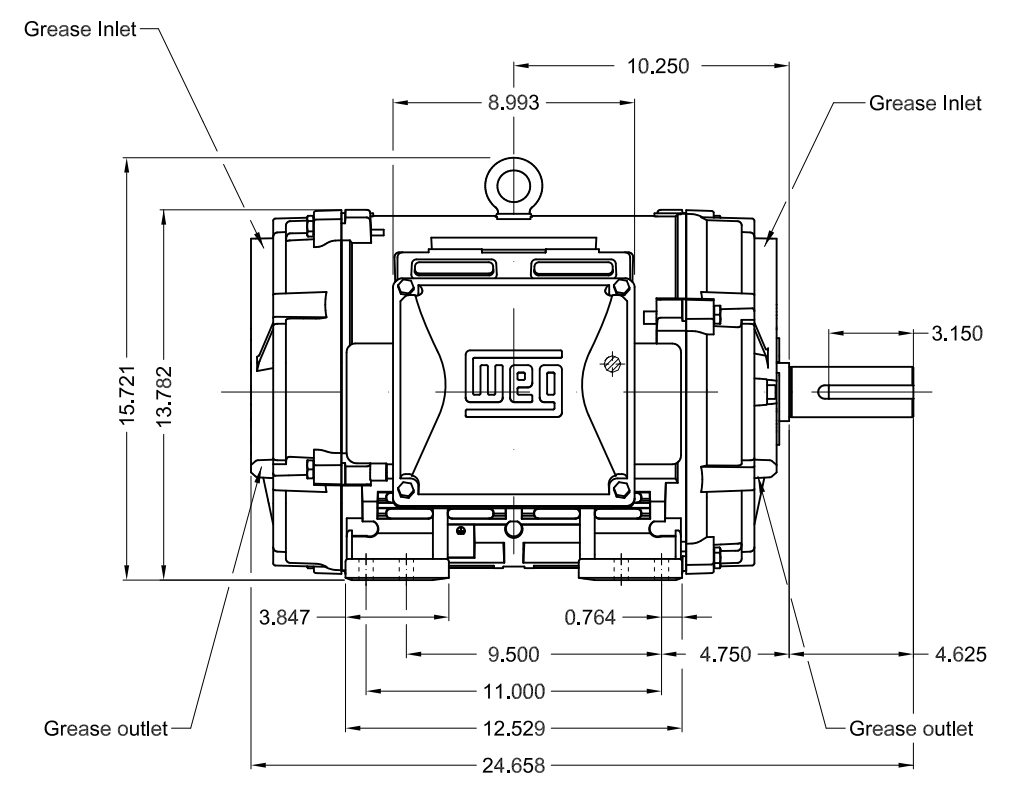
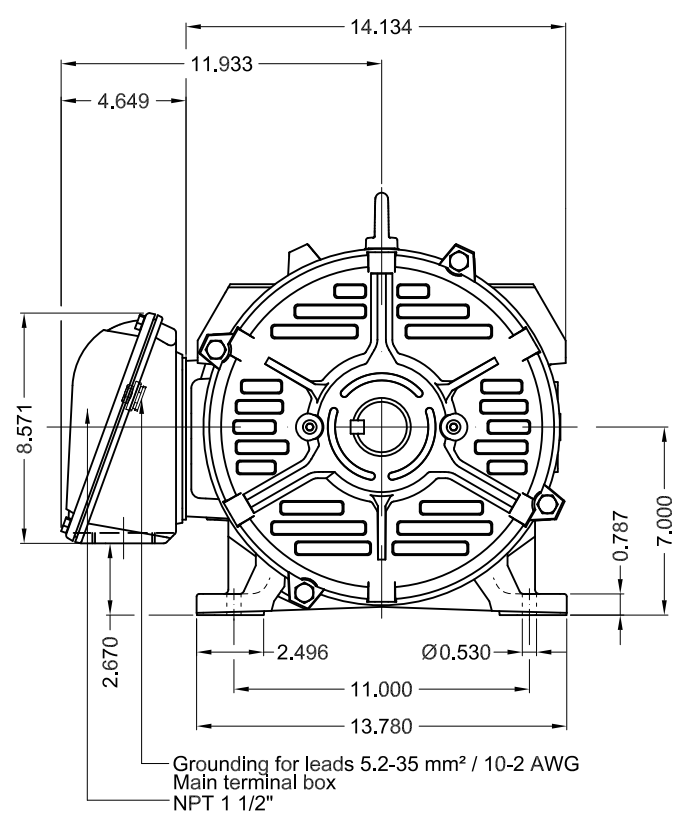


Performance : 200/400 V 60 Hz 4P

Rated current : 80.3/40.1 A  
 LRC : 6.6  
 Rated torque : 89.0 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 270 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 4.52 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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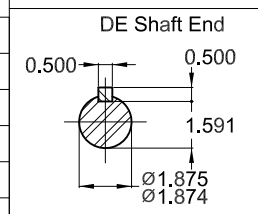


30 HP 04 Poles 60 Hz A

1:7

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 284/6T IP23 ODP					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

- Bearing cap
- Internal AEGIS ground ring on the DE
- Color RAL 5009
- Painting plan 203A
- Mounting NEMA F-1
- Mounting B3R(D)



Dimensions in inches XME A3



MODEL 030180T3V286T-W40G  
MADE IN BRAZIL  
14503868

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

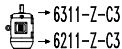
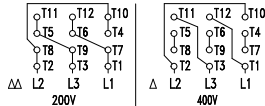


IEC 60034-1  
MOD.T01#FOXON



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

PH 3	FR 284/6T	HP(kW) 30.0(22.0)		Hz 60
V 200/400		A 80.3/40.1		IP23
NEMA NOM EFF		94.1	%	RPM 1770
ENCL ODP	DUTY CONT.		INS. CL. F $\Delta$ T 80 K	
PF 0.84		DES B	CODE G	AMB. 40°C
SF 1.25	SFA 100/50.1		ALT 1000 m.a.s.l.	



MOBIL POLYREX EM  
18 g 20000 h

397 Lbs