

MODELS: GB-425102-R0O-D, GB-425102-R1O-D

- NOTES:
1. COUPLING GUARD NOT SHOWN IN TOP VIEW.
  2. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11626903  
Catalog # : 15012ET3E447T-W22

Frame	: 445/7T	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 150 HP (110 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 208-230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 389-352/176 A	Protection degree	: IP55
L. R. Amperes	: 2413-2182/1091 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 129-150/75.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1185 rpm	Noise level <sup>2</sup>	: 69.0 dB(A)
Slip	: 1.25 %	Starting method	: Direct On Line
Rated torque	: 90.6 kgfm	Approx. weight <sup>3</sup>	: 1043 kg
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 5.63 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.0	95.4	95.8	Max. traction	: 2172 kgf
Power Factor	0.67	0.78	0.82	Max. compression	: 3215 kgf

	Drive end	Non drive end
Bearing type	: 6319 C3	6316 C3
Sealing	: WSeal	WSeal
Lubrication interval	: 13000 h	16000 h
Lubricant amount	: 45 g	34 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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Performed by				
Checked by				
Date	23/05/2018			

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Revision

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line

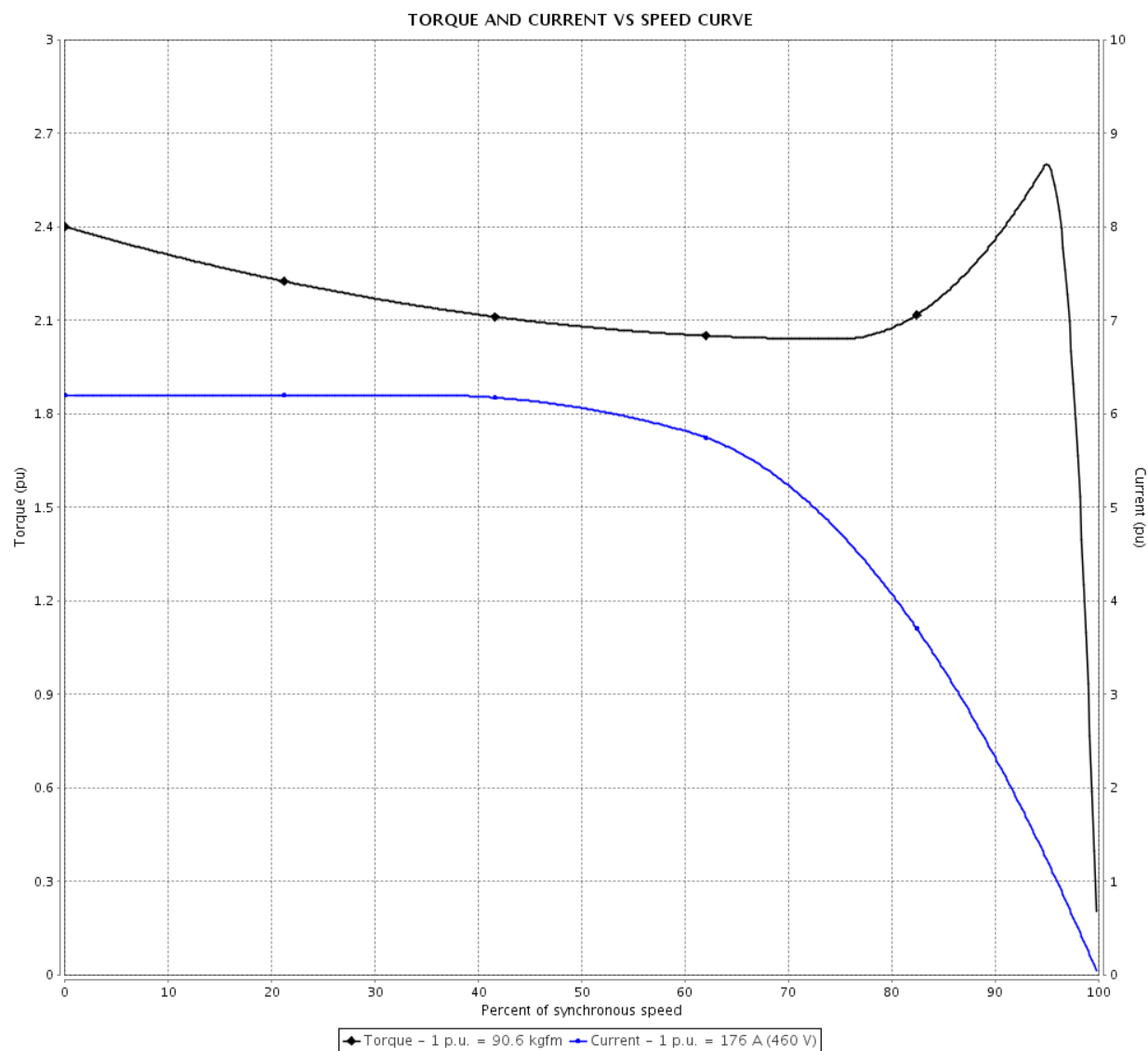
: W22 NEMA Premium Efficiency  
Three-Phase

Product code :

11626903

Catalog # :

15012ET3E447T-W22



Performance : 208-230/460 V 60 Hz 6P

Rated current : 389-352/176 A  
LRC : 6.2  
Rated torque : 90.6 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 260 %  
Rated speed : 1185 rpm

Moment of inertia (J) : 5.63 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Locked rotor time : 36s (cold) 20s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

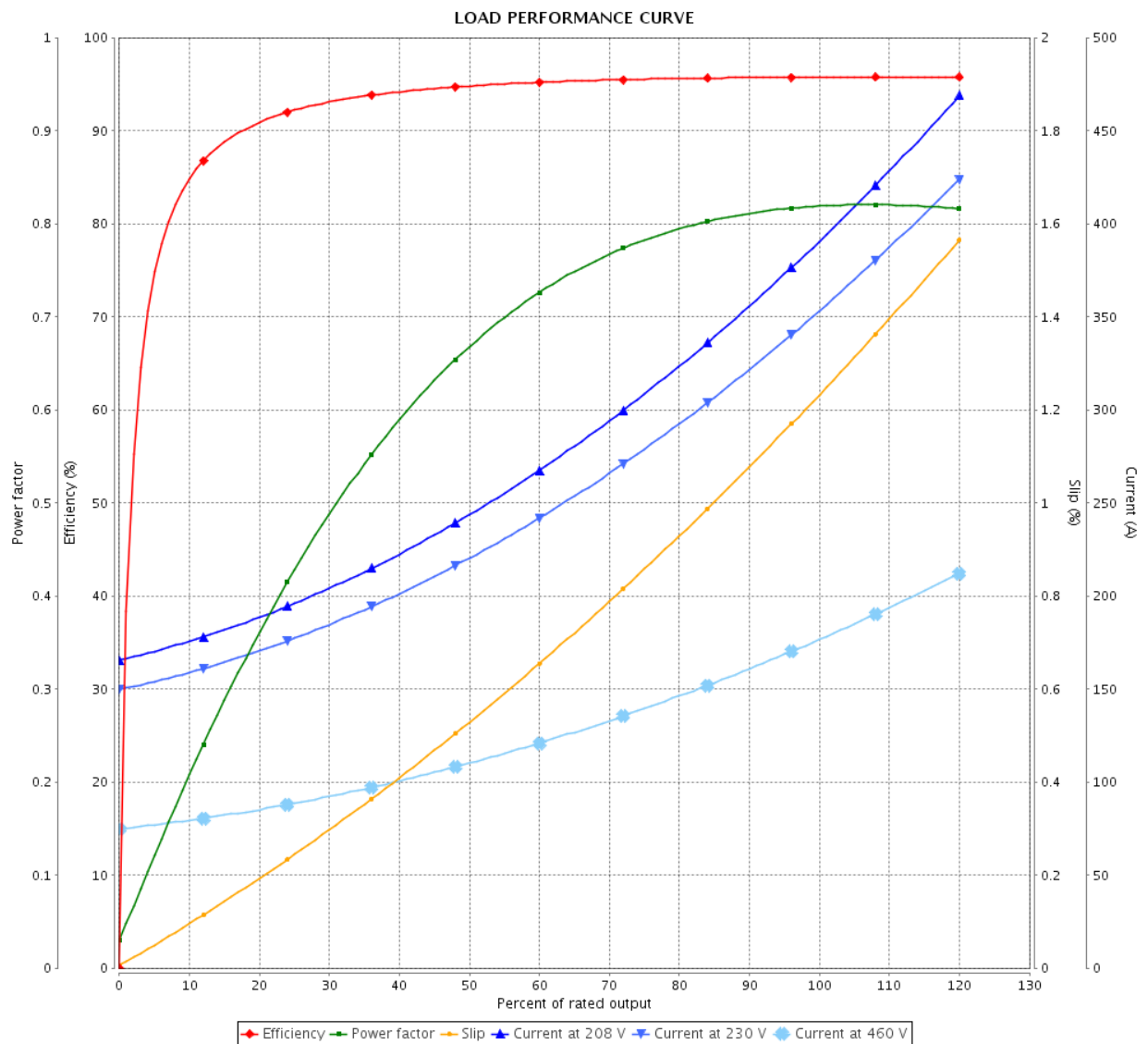


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11626903

Catalog # : 15012ET3E447T-W22



Performance : 208-230/460 V 60 Hz 6P

Rated current : 389-352/176 A  
LRC : 6.2  
Rated torque : 90.6 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 260 %  
Rated speed : 1185 rpm

Moment of inertia (J) : 5.63 kgm<sup>2</sup>  
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

: W22 NEMA Premium Efficiency  
Three-Phase

Product code :

11626903

Catalog # :

15012ET3E447T-W22

Performance : 208-230/460 V 60 Hz 6P

Rated current : 389-352/176 A  
LRC : 6.2  
Rated torque : 90.6 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 260 %  
Rated speed : 1185 rpm

Moment of inertia (J) : 5.63 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

Rev.

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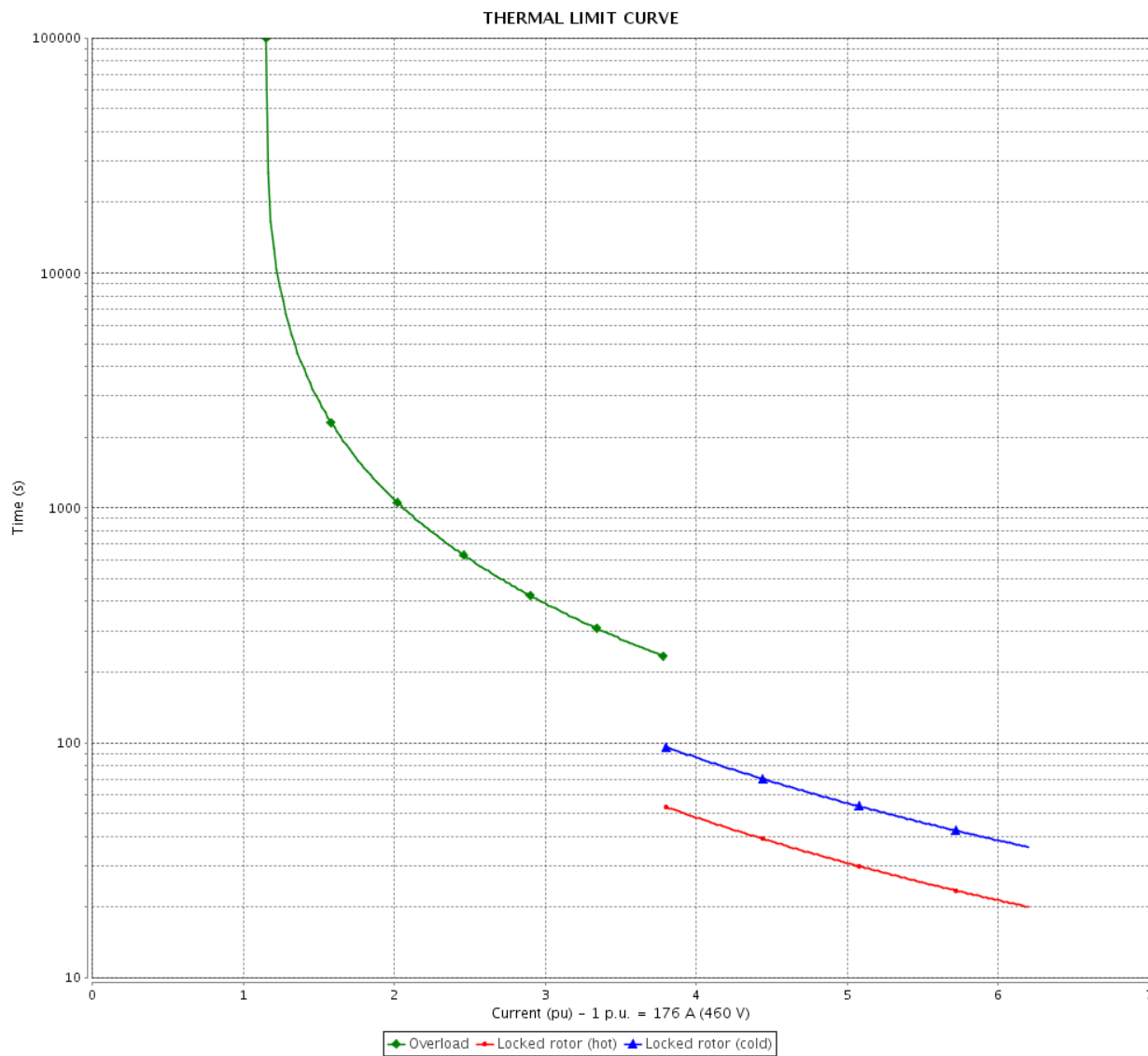
Revision

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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



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Checked by					
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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

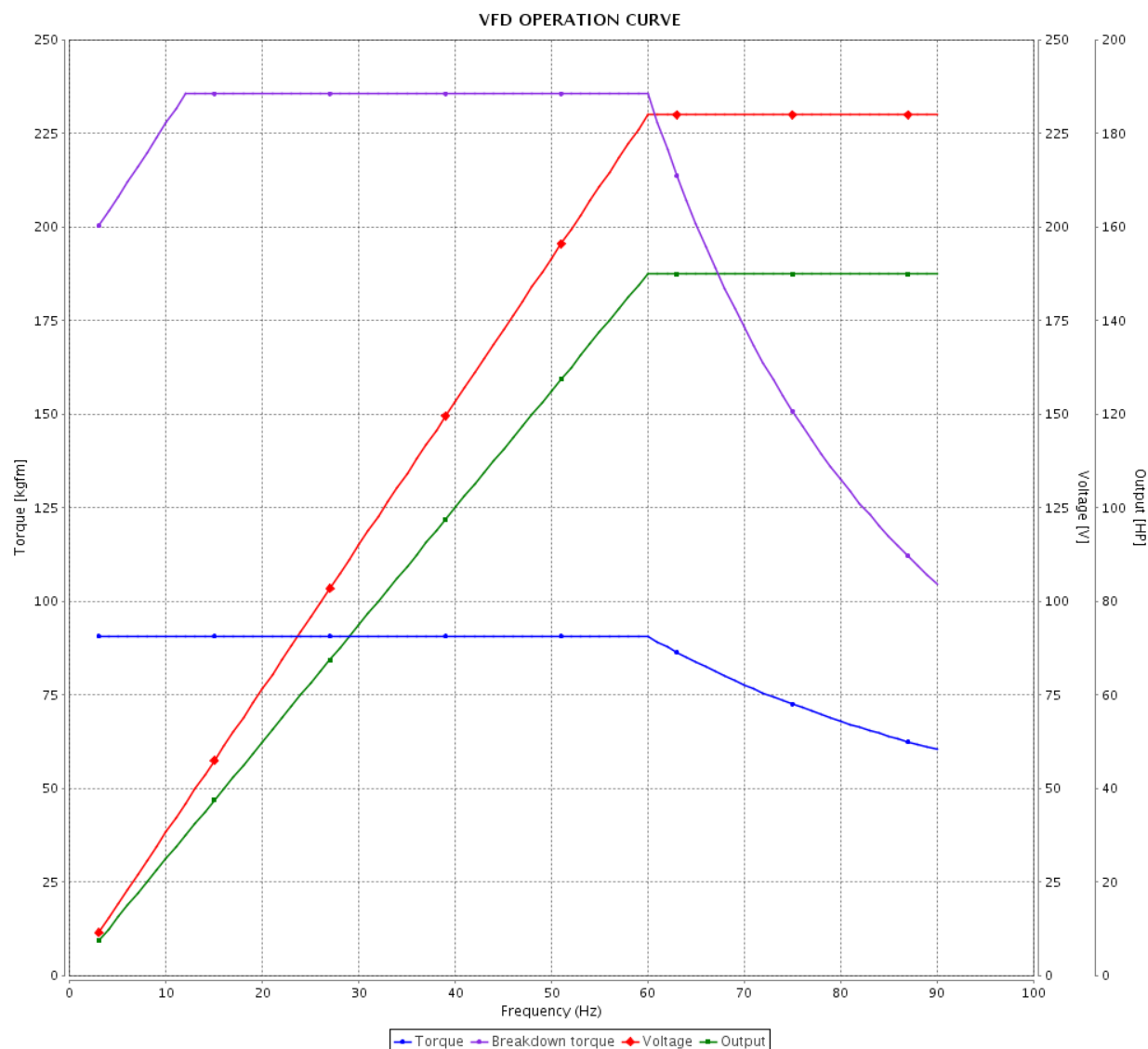


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11626903

Catalog # : 15012ET3E447T-W22

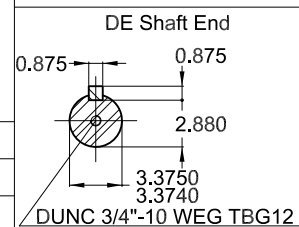
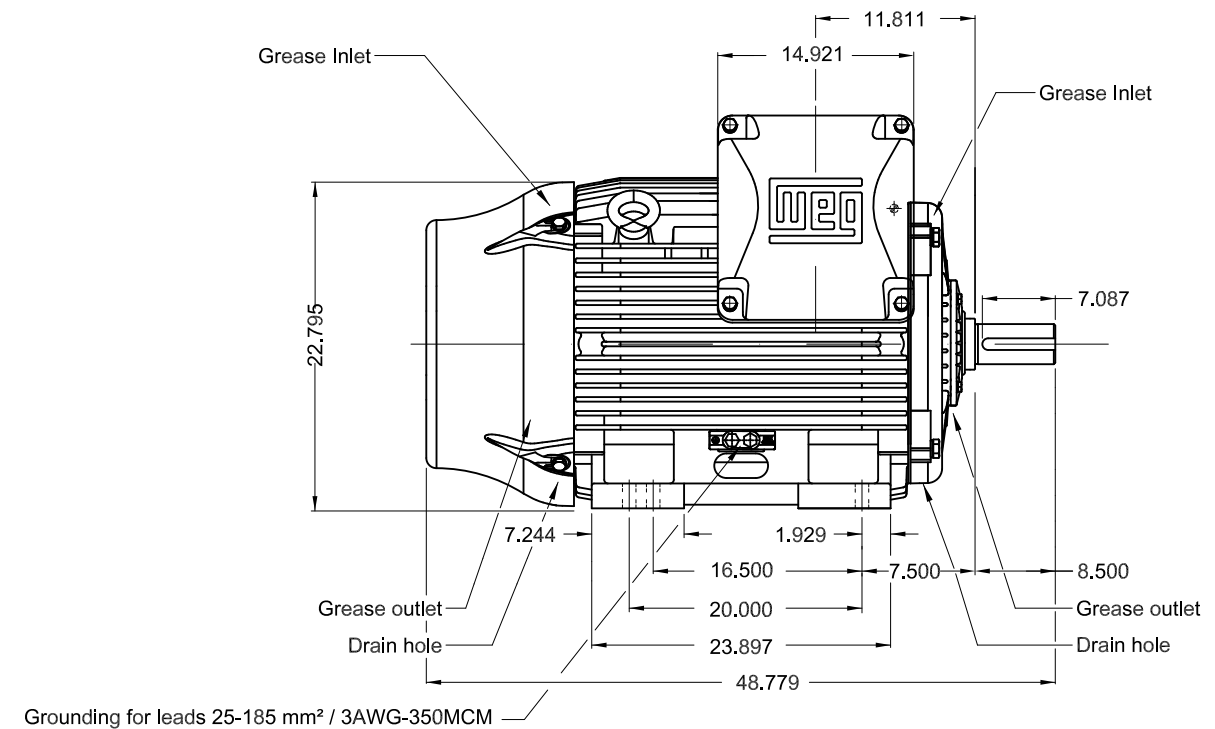
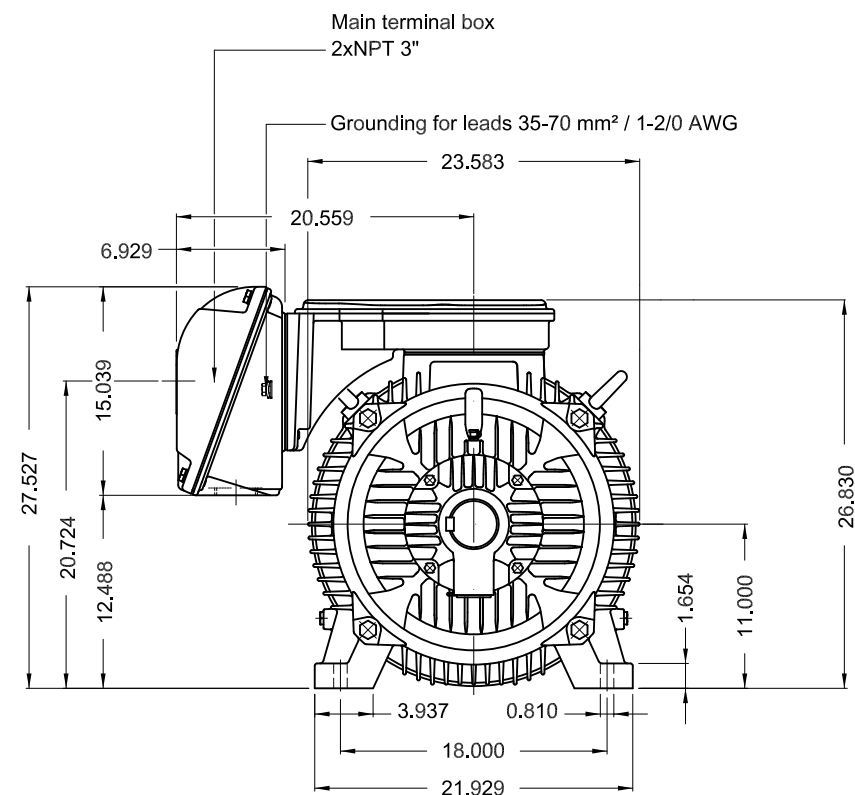


Performance : 208-230/460 V 60 Hz 6P



Rated current : 389-352/176 A  
LRC : 6.2  
Rated torque : 90.6 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 260 %  
Rated speed : 1185 rpm

Moment of inertia (J) : 5.63 kgm<sup>2</sup>  
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 B3R(D)

150 HP    06 Poles    60Hz										A	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN		THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME 445/7T IP55 TEFC					PREVIEW  WDD			
CHECKED											
RELEASED											
REL DT		WMO	Jaragua do Sul			Product Engineering		SHEET	1 / 1		



MODEL 10012ET3E444T-W22  
MADE IN MEXICO  
11355339



*Inverter Duty Motor  
Severe Duty*

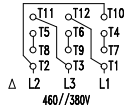
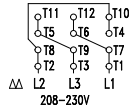


FOR SAFE AREA  
MOD.TE1BFOXON



For 60Hz: Class I, Div 2, Gr. A, B, C and D - T3  
Class I, Zone 2, IIC - T3  
Class II, Div 2, Gr. F and G - T3C  
For 60Hz use on PWM, Gr. A, B, C, D and F,  
VT 1000:1, CT 20:1, 1.0SF, T3A

PH 3	FR 444/5T	HP(kW) 100.0(75.0)	Hz 60
V 230/460	A 242/121	RPM 1185	DES B
NEMA NOM EFF 95.0 %	INS. CL. F $\Delta$ T 80 K	IP55	
ENCL TEFC	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.82	SF 1.25	SFA 303/151
USABLE @208V 268 A	SF 1.10	SFA 295	
100HP 75kW 50Hz 380V 145A 980RPM SF1.00 EFF 93.6% (IE1)			



→ 6319-C3 (45g)  
→ 6316-C3 (34g)

MOBIL POLYREX EM  
13000 h

ALT 1000 m.a.s.l. 1676 Lbs