



# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11408296  
Catalog # : 35012ET3G449T-W22

Frame	: L447/9T	Locked rotor time	: 41s (cold) 23s (hot)
Output	: 350 HP (260 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 415 A	Protection degree	: IP55
L. R. Amperes	: 2864 A	Cooling method	: IC411 - TEFC
LRC	: 6.9x(Code H)	Mounting	: F-1
No load current	: 160 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1190 rpm	Noise level <sup>2</sup>	: 71.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 1520 ft.lb	Approx. weight <sup>3</sup>	: 3582 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 278 sq.ft.lb		
Design	: A		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	95.3	95.4	95.8	95.8	Max. traction	: 10936 lb
Power Factor	0.42	0.66	0.77	0.82	Max. compression	: 14518 lb

		Drive end	Non drive end
Bearing type	:	6322 C3	6319 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	11000 h	13000 h
Lubricant amount	:	60 g	45 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page Revision 1 / 4		
Checked by				
Date	27/04/2018			

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

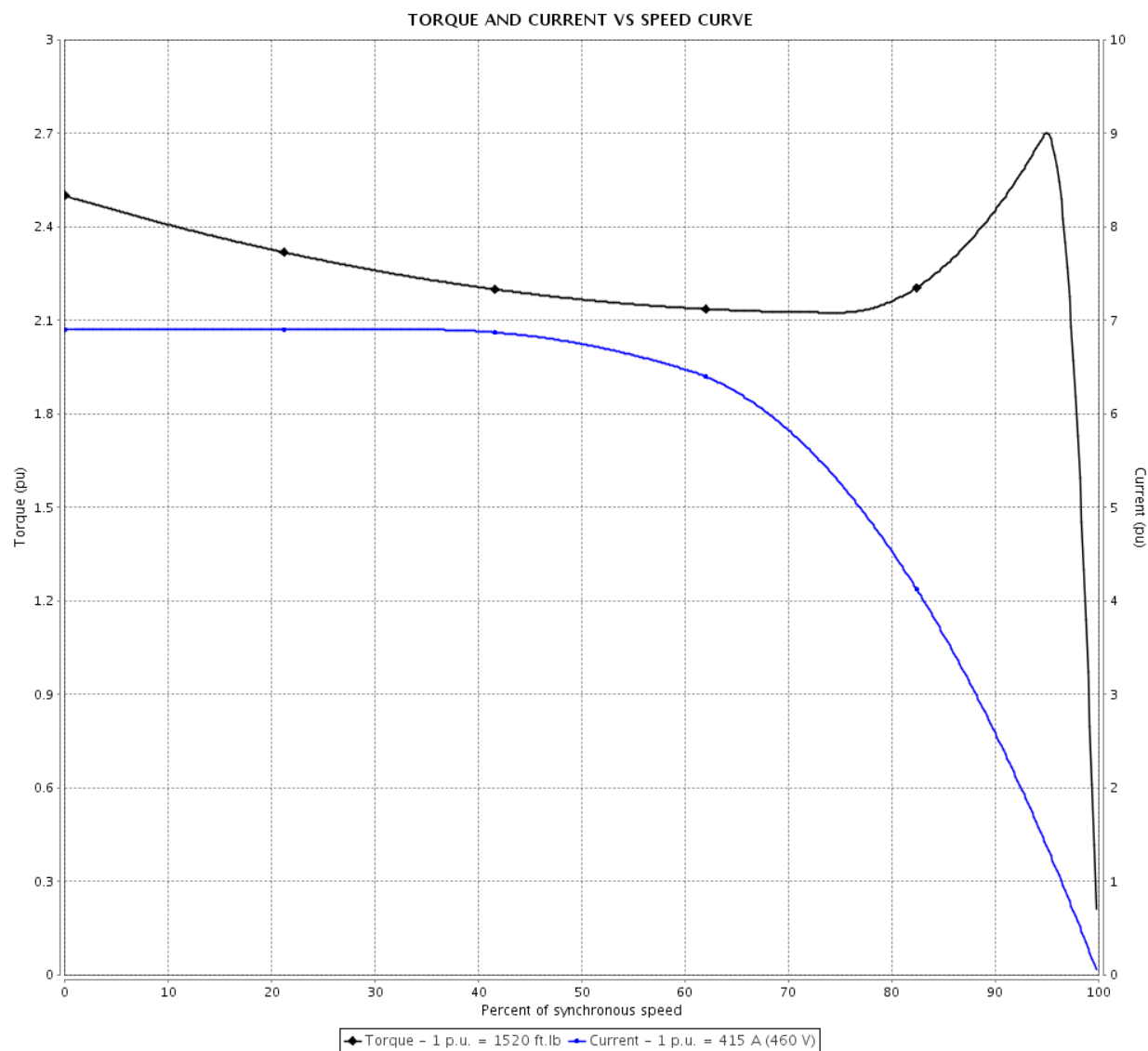


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11408296

Catalog # : 35012ET3G449T-W22



Performance : 460 V 60 Hz 6P

Rated current	: 415 A	Moment of inertia (J)	: 278 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 1520 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1190 rpm	Design	: A

Locked rotor time : 41s (cold) 23s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		<div>Page 2 / 4</div> <div>Revision</div>		
Checked by				
Date	27/04/2018			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

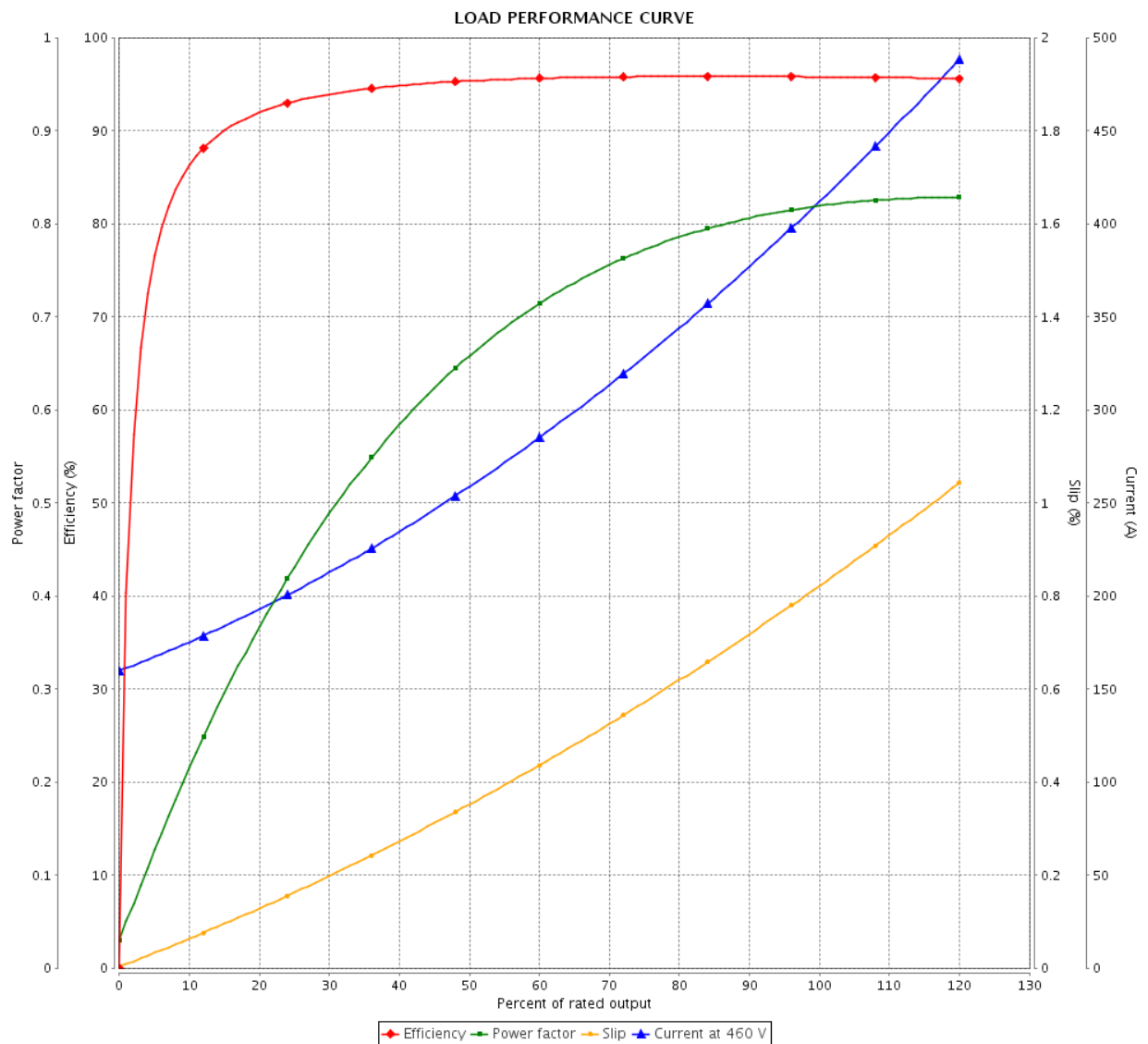


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11408296

Catalog # : 35012ET3G449T-W22



Performance : 460 V 60 Hz 6P

Rated current : 415 A  
LRC : 6.9  
Rated torque : 1520 ft.lb  
Locked rotor torque : 250 %  
Breakdown torque : 270 %  
Rated speed : 1190 rpm

Moment of inertia (J) : 278 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	27/04/2018			

Page	Revision
3 / 4	

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

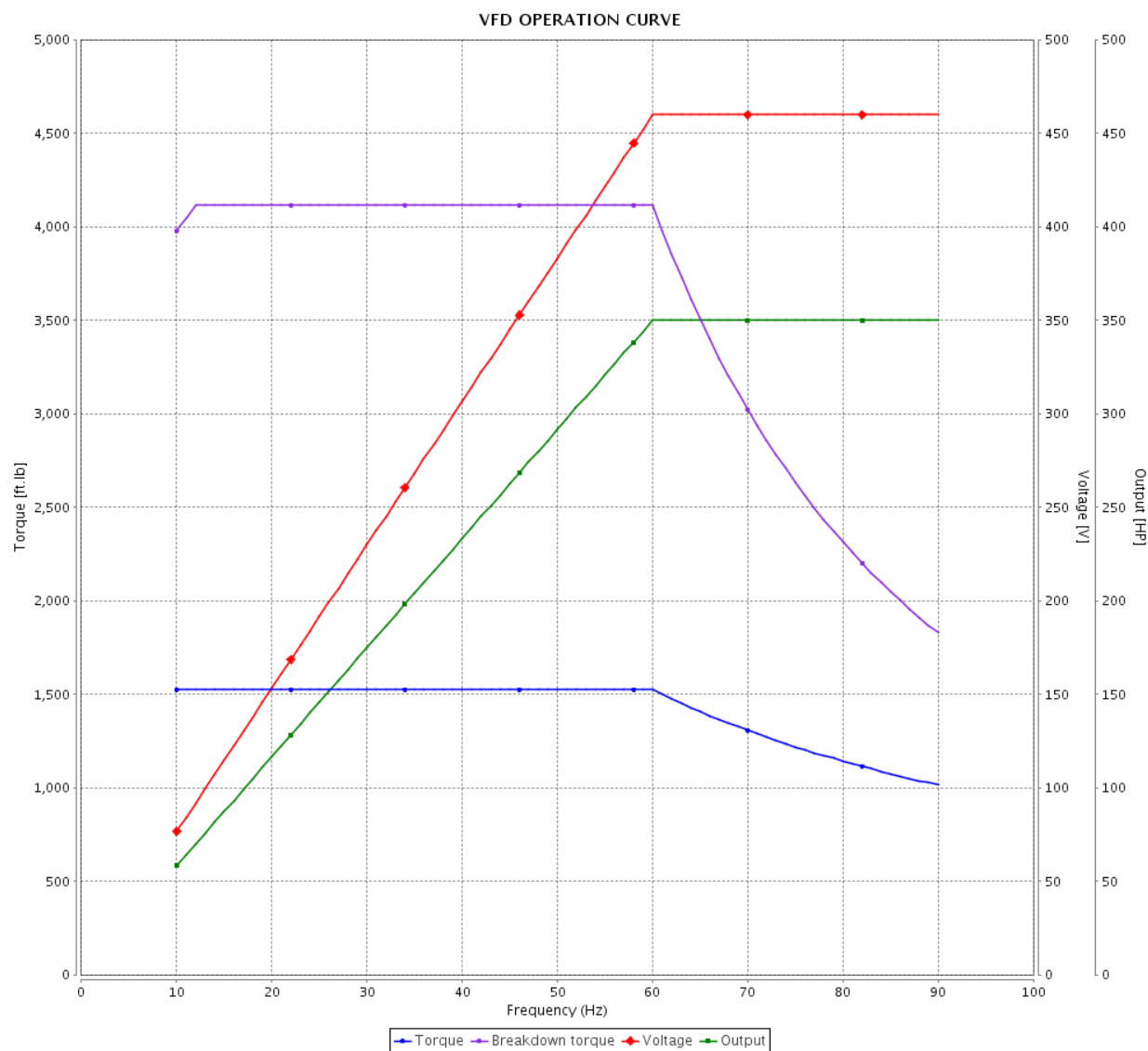


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11408296

Catalog # : 35012ET3G449T-W22

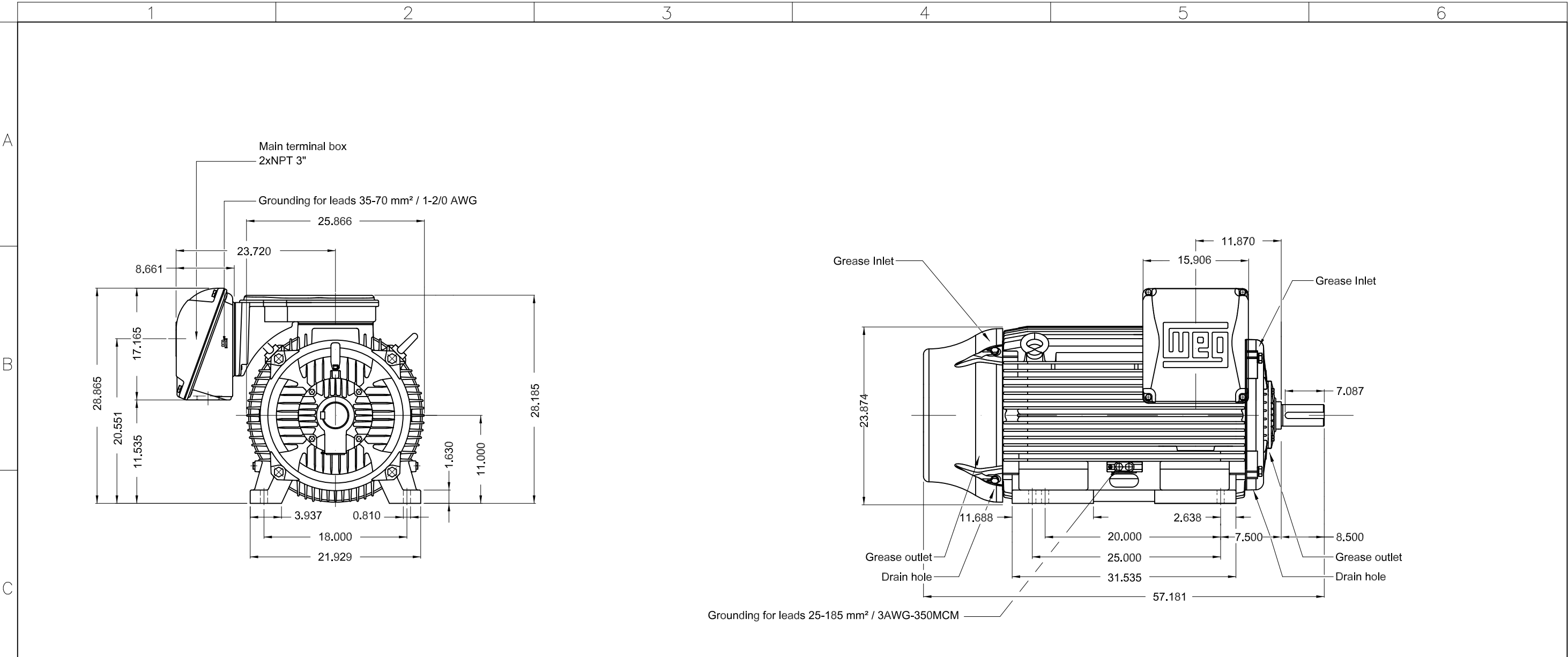


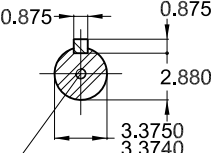


Performance : 460 V 60 Hz 6P

Rated current : 415 A  
LRC : 6.9  
Rated torque : 1520 ft.lb  
Locked rotor torque : 250 %  
Breakdown torque : 270 %  
Rated speed : 1190 rpm

Moment of inertia (J) : 278 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			4 / 4	
Date				



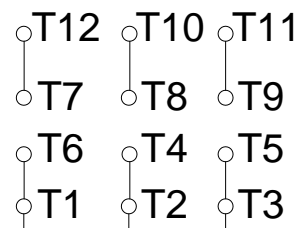
D															A	
E	<div><div>DE Shaft End</div><div></div></div>			ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER	
				EXECUTED	USERADMIN		THREE PHASE W22 MOTOR - NEMA PREMIUM EFF				PREVIEW					
				CHECKED			FRAME L447/9T IP55 TEFC				WDD					
				RELEASED												
				REL DT		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1						

1 2 3 4 5 6 7 8

A

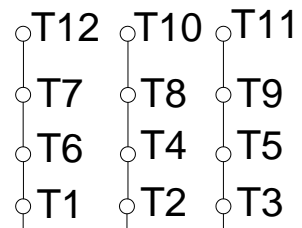
## PART-WINDING

### START



L1 L2 L3

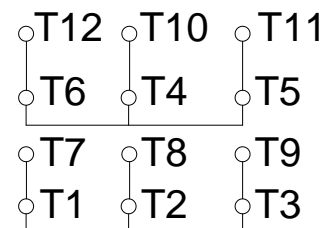
### RUN



L1 L2 L3

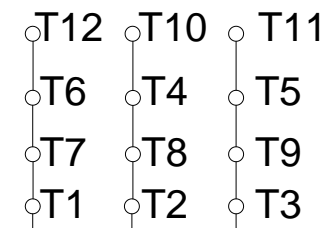
## WYE-DELTA

### START



L1 L2 L3

### RUN



L1 L2 L3

B

C

D

E

F

Notes:

Performed by:

Checked:

Customer:

W22 NEMA Premium - Ball Bearings

Three-phase induction motor  
Frame 447/9T - IP55

28-MAR-2018

