

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

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

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12052653  
Catalog # : 45012ET3G586/7-W22

Frame	: 586/7T	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 450 HP (330 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	: 532 A	Protection degree	: IP55
L. R. Amperes	: 3245 A	Cooling method	: IC411 - TEFC
LRC	: 6.1x(Code G)	Mounting	: F-1
No load current	: 210 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1190 rpm	Noise level <sup>2</sup>	: 77.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 1960 ft.lb	Approx. weight <sup>3</sup>	: 4654 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 210 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 368 sq.ft.lb		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	95.7	95.8	96.2	96.2	Max. traction	: 7854 lb
Power Factor	0.43	0.67	0.77	0.81	Max. compression	: 12509 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6322 C3	6319 C3
Sealing	:	Taconite Labyrinth	Taconite Labyrinth
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 / 7		
Checked by				
Date	17/07/2018			

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

### Space heater information

Voltage: 200 - 240 V

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page 2 / 7		Revision
Checked by					
Date	17/07/2018				

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

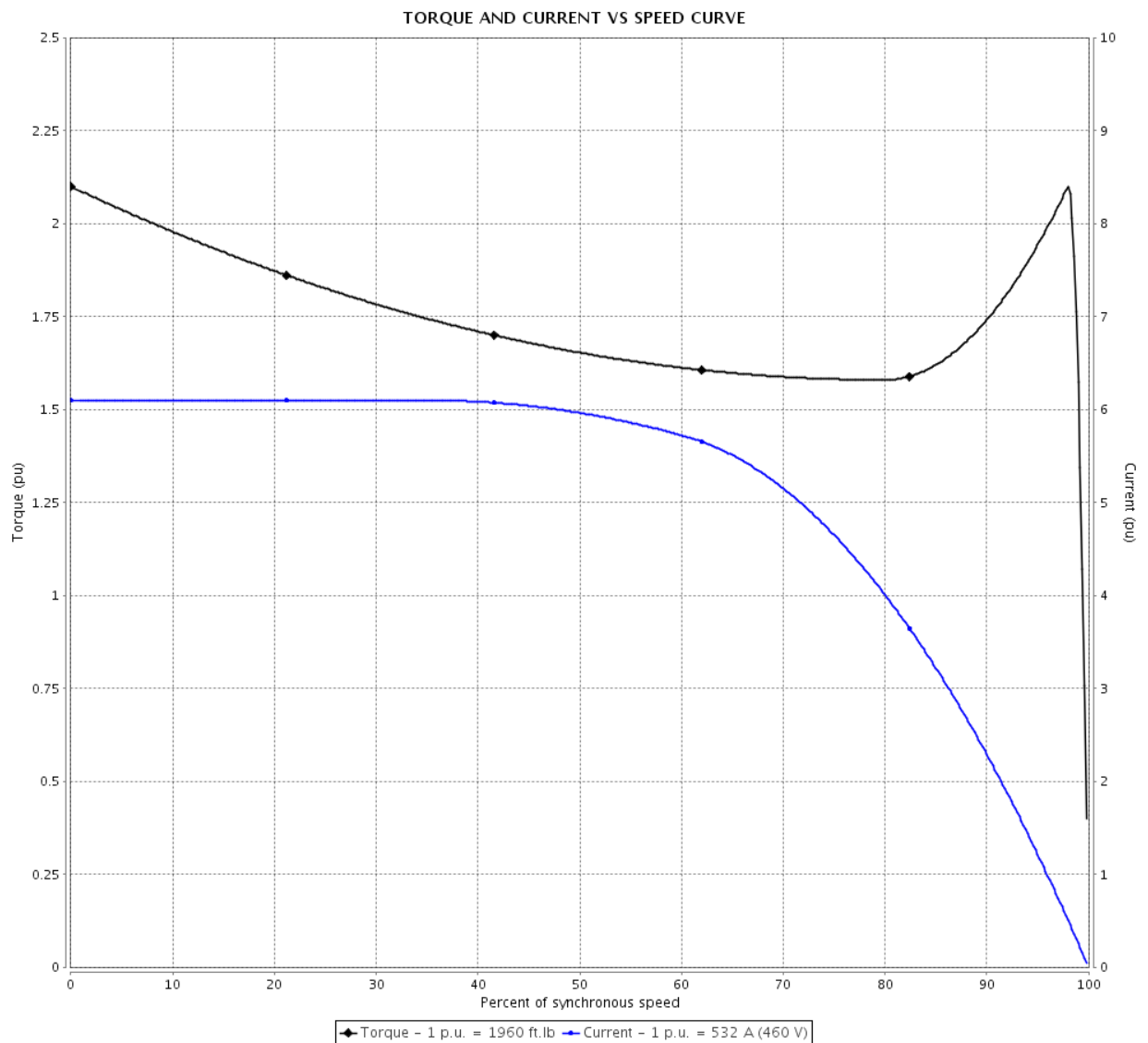


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12052653

Catalog # : 45012ET3G586/7-W22



Performance : 460 V 60 Hz 6P

Rated current : 532 A	Moment of inertia (J) : 368 sq.ft.lb
LRC : 6.1	Duty cycle : Cont.(S1)
Rated torque : 1960 ft.lb	Insulation class : F
Locked rotor torque : 210 %	Service factor : 1.15
Breakdown torque : 210 %	Temperature rise : 80 K
Rated speed : 1190 rpm	

Locked rotor time : 45s (cold) 25s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 7 Revision		
Checked by				
Date	17/07/2018			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

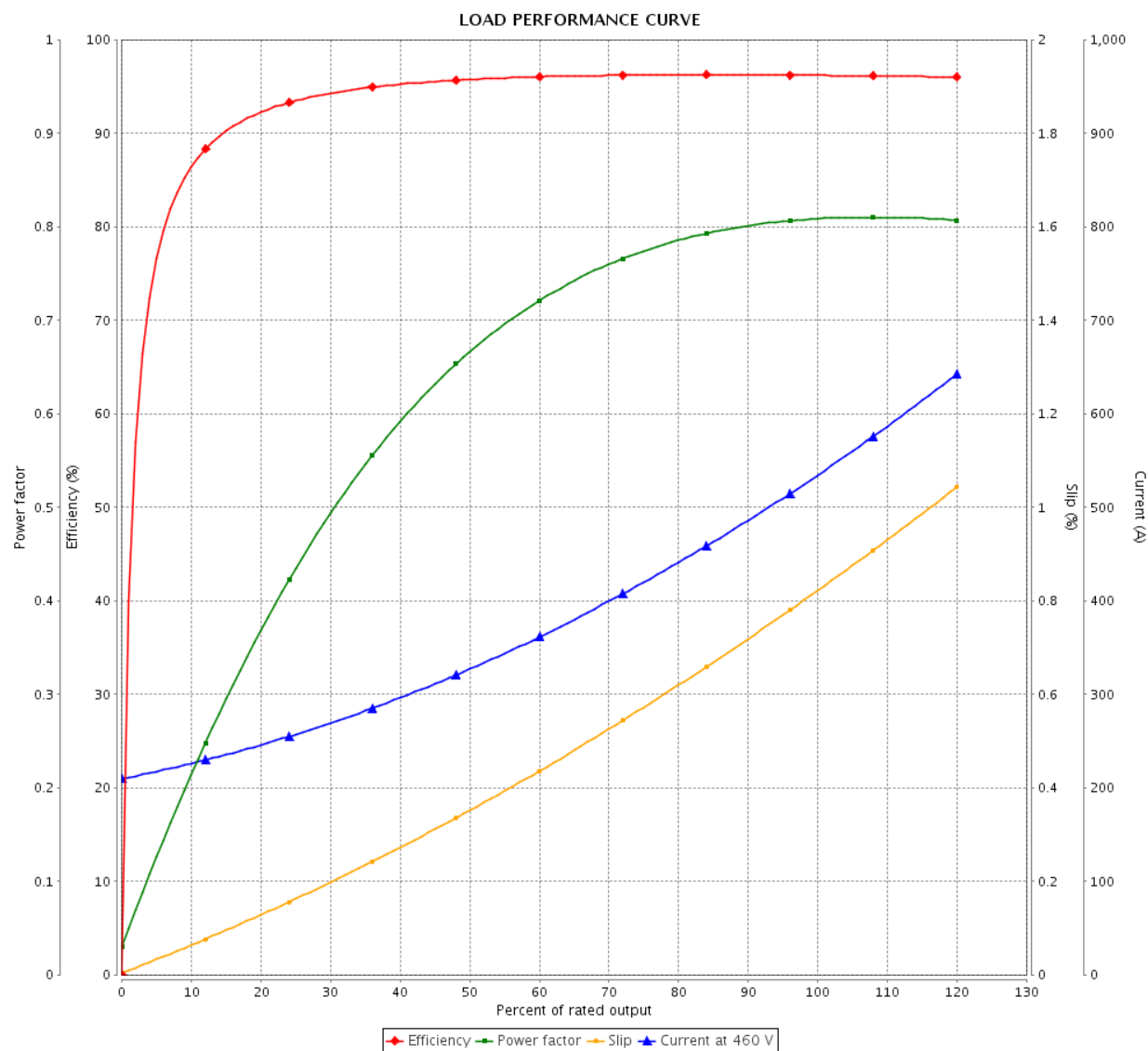


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12052653

Catalog # : 45012ET3G586/7-W22



Performance : 460 V 60 Hz 6P

Rated current : 532 A  
LRC : 6.1  
Rated torque : 1960 ft.lb  
Locked rotor torque : 210 %  
Breakdown torque : 210 %  
Rated speed : 1190 rpm

Moment of inertia (J) : 368 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 4 / 7	Revision
Checked by					
Date	17/07/2018				

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12052653

Catalog # : 45012ET3G586/7-W22

Performance : 460 V 60 Hz 6P

Rated current : 532 A  
LRC : 6.1  
Rated torque : 1960 ft.lb  
Locked rotor torque : 210 %  
Breakdown torque : 210 %  
Rated speed : 1190 rpm

Moment of inertia (J) : 368 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 7		Revision
Checked by				
Date	17/07/2018			

This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

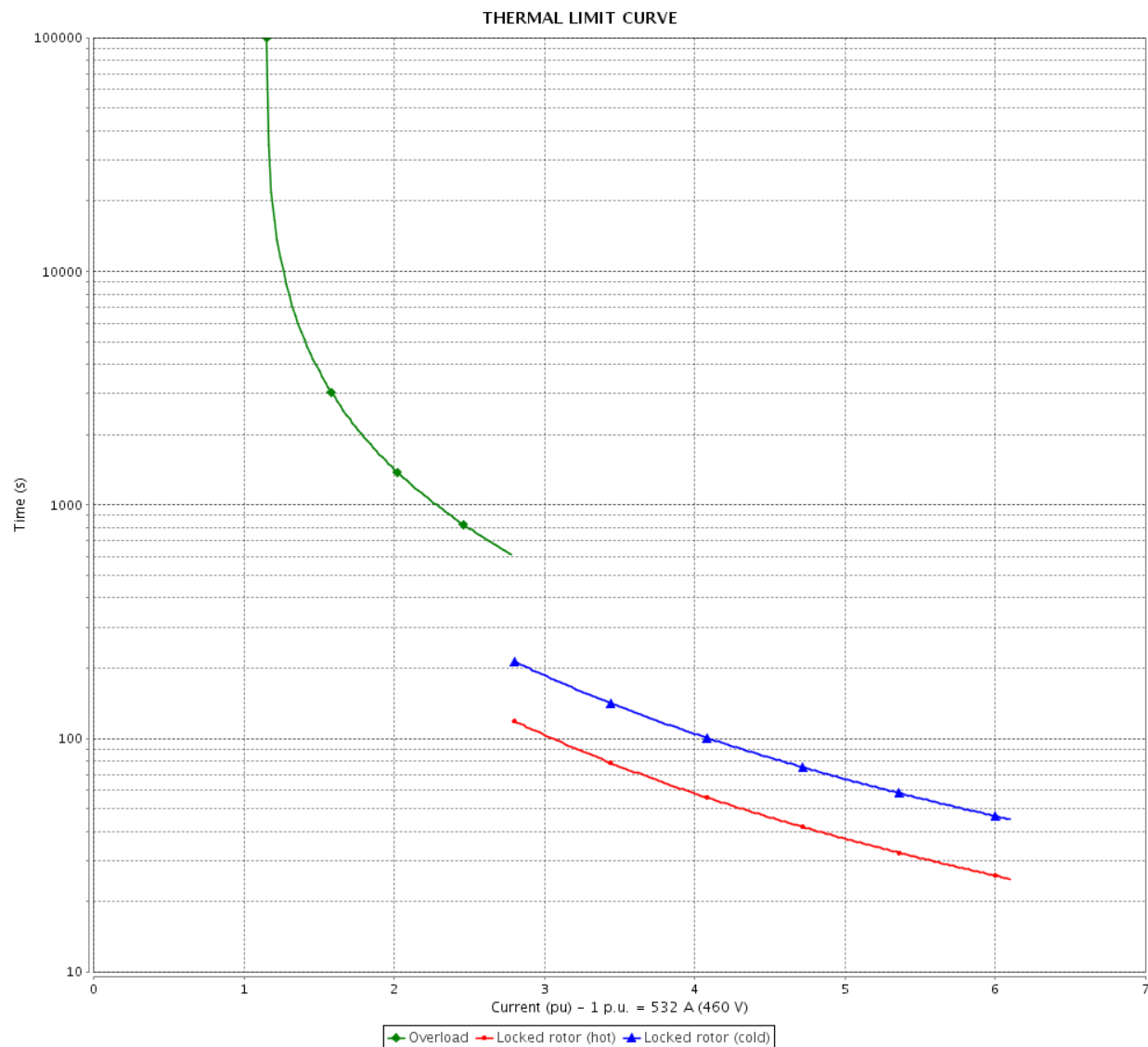
Subject to change without notice

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				6 / 7	
Date	17/07/2018				

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

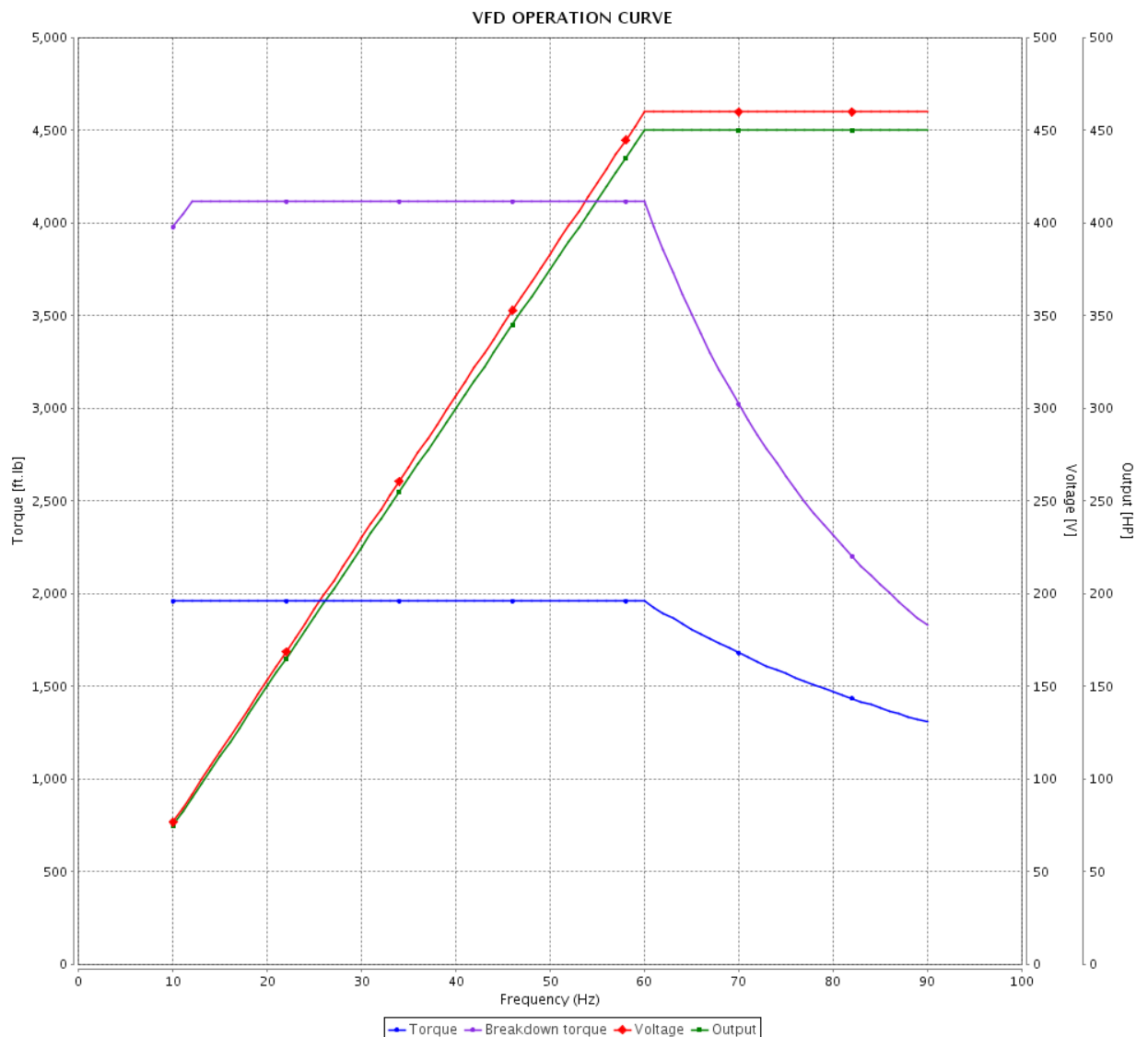


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12052653

Catalog # : 45012ET3G586/7-W22



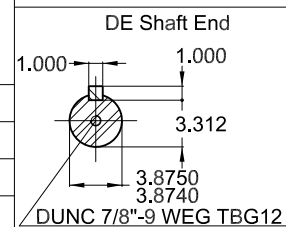
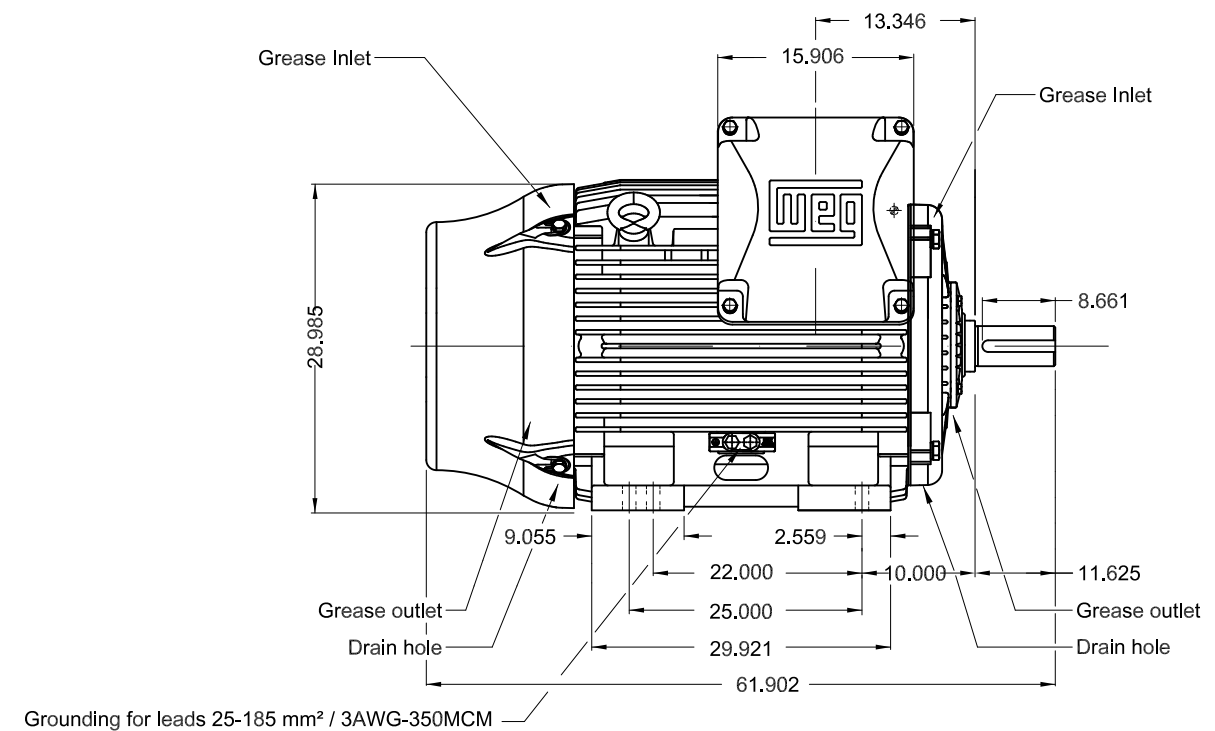
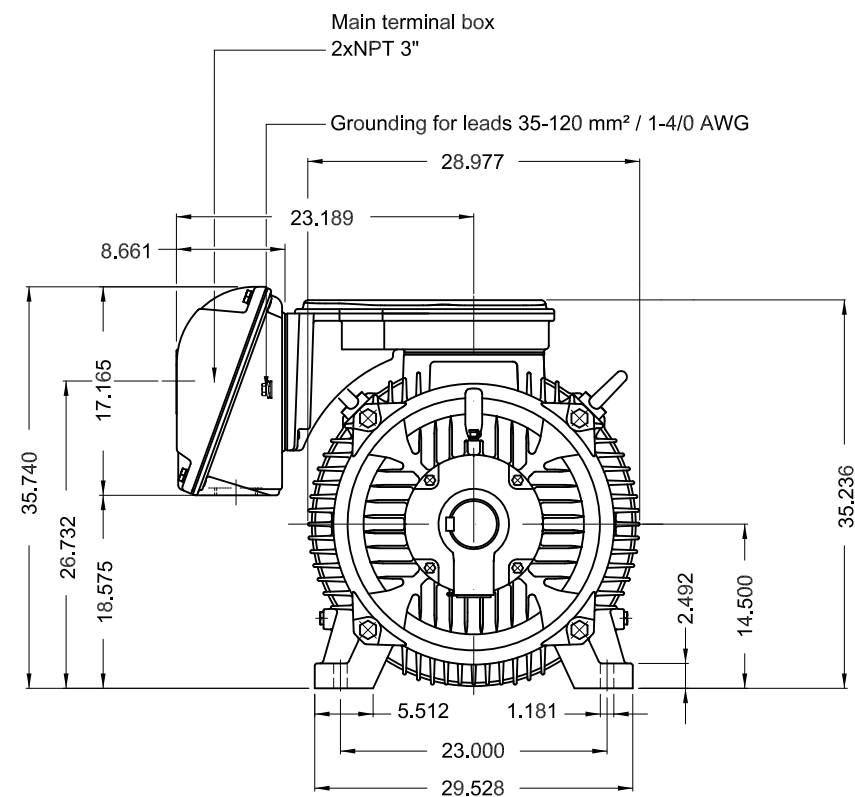
Performance : 460 V 60 Hz 6P

Rated current : 532 A  
LRC : 6.1  
Rated torque : 1960 ft.lb  
Locked rotor torque : 210 %  
Breakdown torque : 210 %  
Rated speed : 1190 rpm



Moment of inertia (J) : 368 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 7 / 7		
Checked by				
Date	17/07/2018			
		Revision		





NDE endshield with electrically insulated bearing hub
Color RAL 5009
Painting plan 203A
Mounting B3R(D)

450 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 586/7T IP55 TEFC					PREVIEW  WDD			
CHECKED											
RELEASED											
REL DT											
		WMO	Jaragua do Sul	Product Engineering			SHEET	1 / 1			