

MODELS: GB-425102-R00-D, GB-425102-R10-D

STATE	Released	07/19/2023	DIMENSIONS ARE IN INCHES	 VIKING PUMP, INC. A Unit of IDEX Corporation Cedar Falls, IA 50613 U.S.A.	THIS DRAWING IS THE PROPERTY OF VIKING PUMP, INC. AND IS PROPRIETARY IN GENERAL AND DETAIL. IT SHALL NOT BE COPIED OR ITS CONTENTS REVEALED TO OUTSIDE PARTIES WITHOUT THE WRITTEN CONSENT OF VIKING PUMP, INC.	3D	DWG. NO. GPV-25102-6	SHEET 1 OF 1	REV. A.1
DRAWN	bmanternach	2/22/2023	PROJECT: E324						07/19/2023
CHECKED	BAM	07/19/2023	WAS: EX-E324-507						

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 12182294  
Catalog # : 50012ET3G586/7-W22

Frame	: 586/7T	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 500 HP (370 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	: 603 A	Protection degree	: IP55
L. R. Amperes	: 3618 A	Cooling method	: IC411 - TEFC
LRC	: 6.0x(Code G)	Mounting	: F-1
No load current	: 250 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	: 2180 ft.lb	Approx. weight <sup>3</sup>	: 4660 lb
Locked rotor torque	: 220 %		
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	: 9125 lb
Power Factor	0.41	0.66	0.76	0.80	Max. compression	: 13784 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 1 / 5		
Checked by				
Date	02/02/2018			
			Revision	

# 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 / 5		Revision
Checked by					
Date	02/02/2018				

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

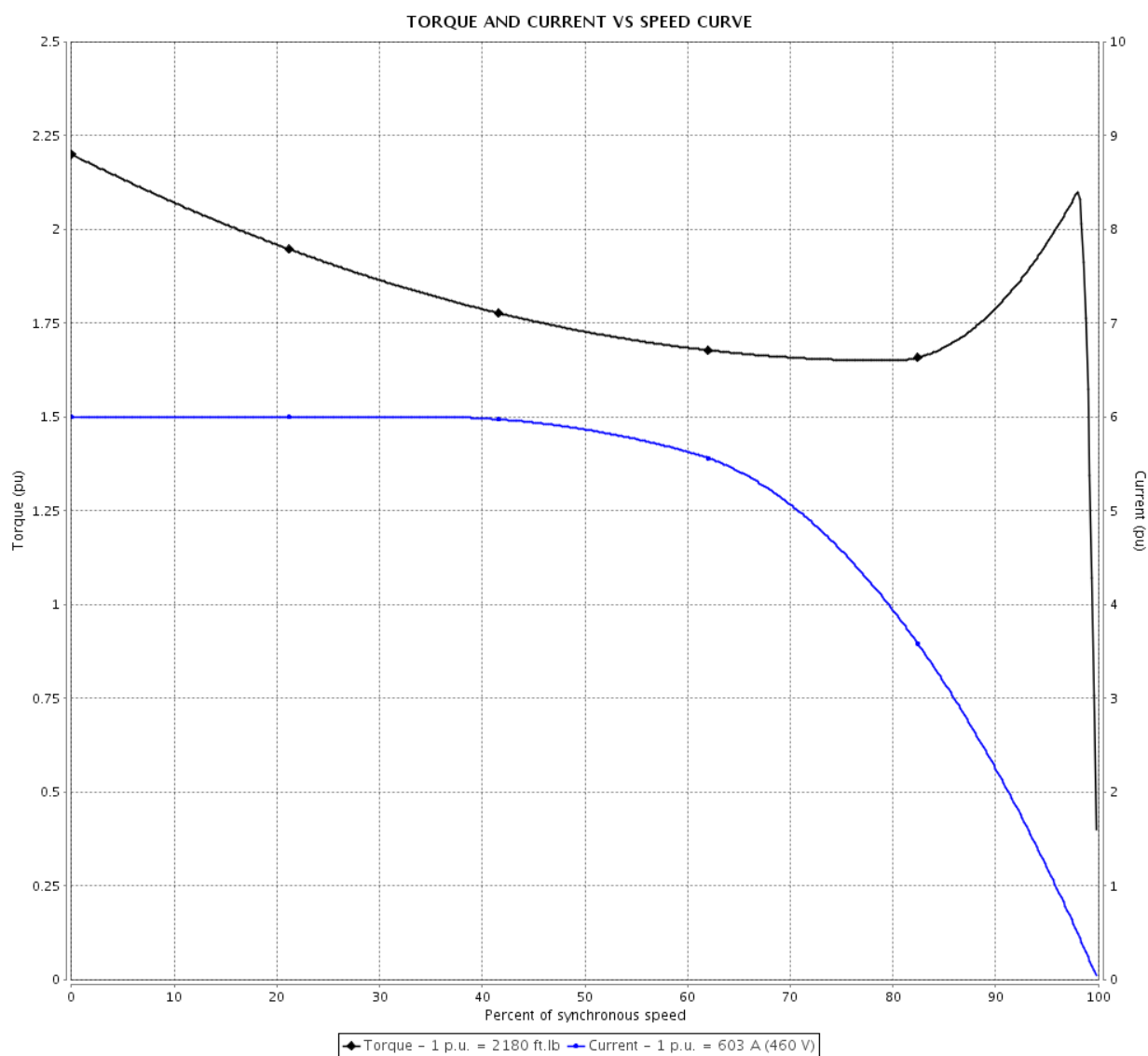


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12182294

Catalog # : 50012ET3G586/7-W22



Performance : 460 V 60 Hz 6P

Rated current	: 603 A	Moment of inertia (J)	: 368 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 2180 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	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 / 5		
Checked by				
Date	02/02/2018			
		Revision		

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

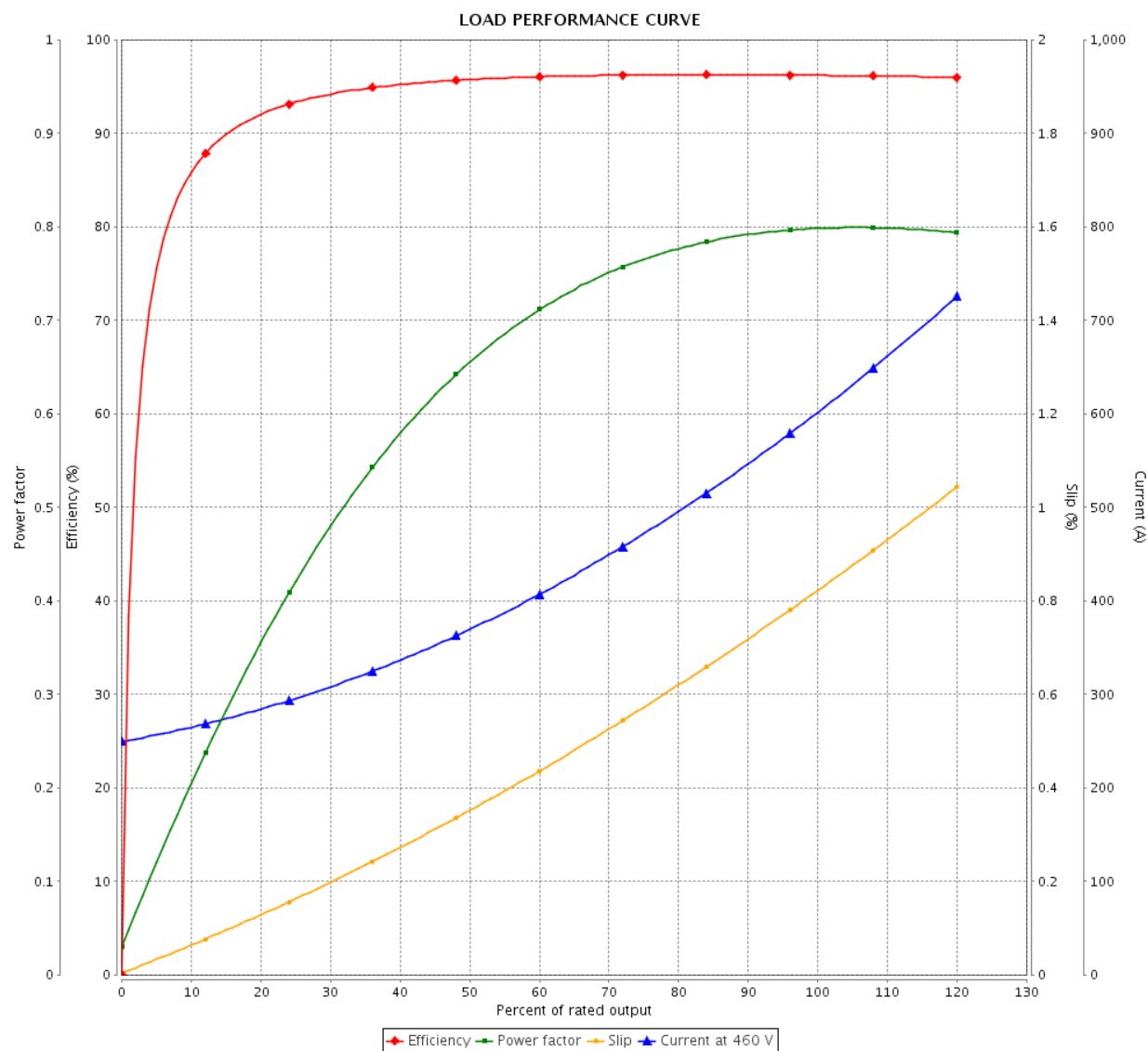


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12182294

Catalog # : 50012ET3G586/7-W22



Performance : 460 V 60 Hz 6P

Rated current : 603 A  
LRC : 6.0  
Rated torque : 2180 ft.lb  
Locked rotor torque : 220 %  
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 / 5Revision		
Checked by				
Date	02/02/2018			

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

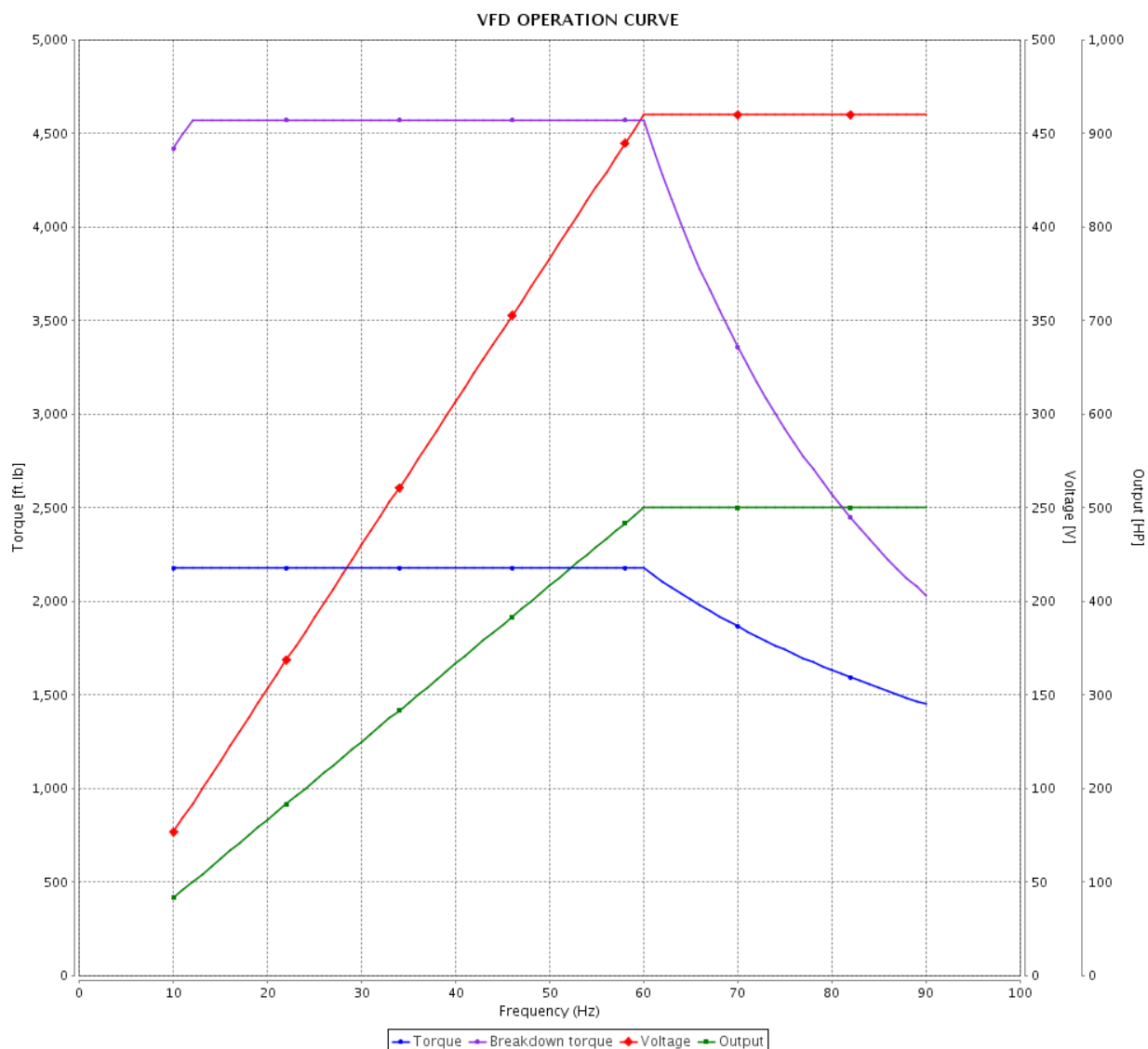


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12182294

Catalog # : 50012ET3G586/7-W22

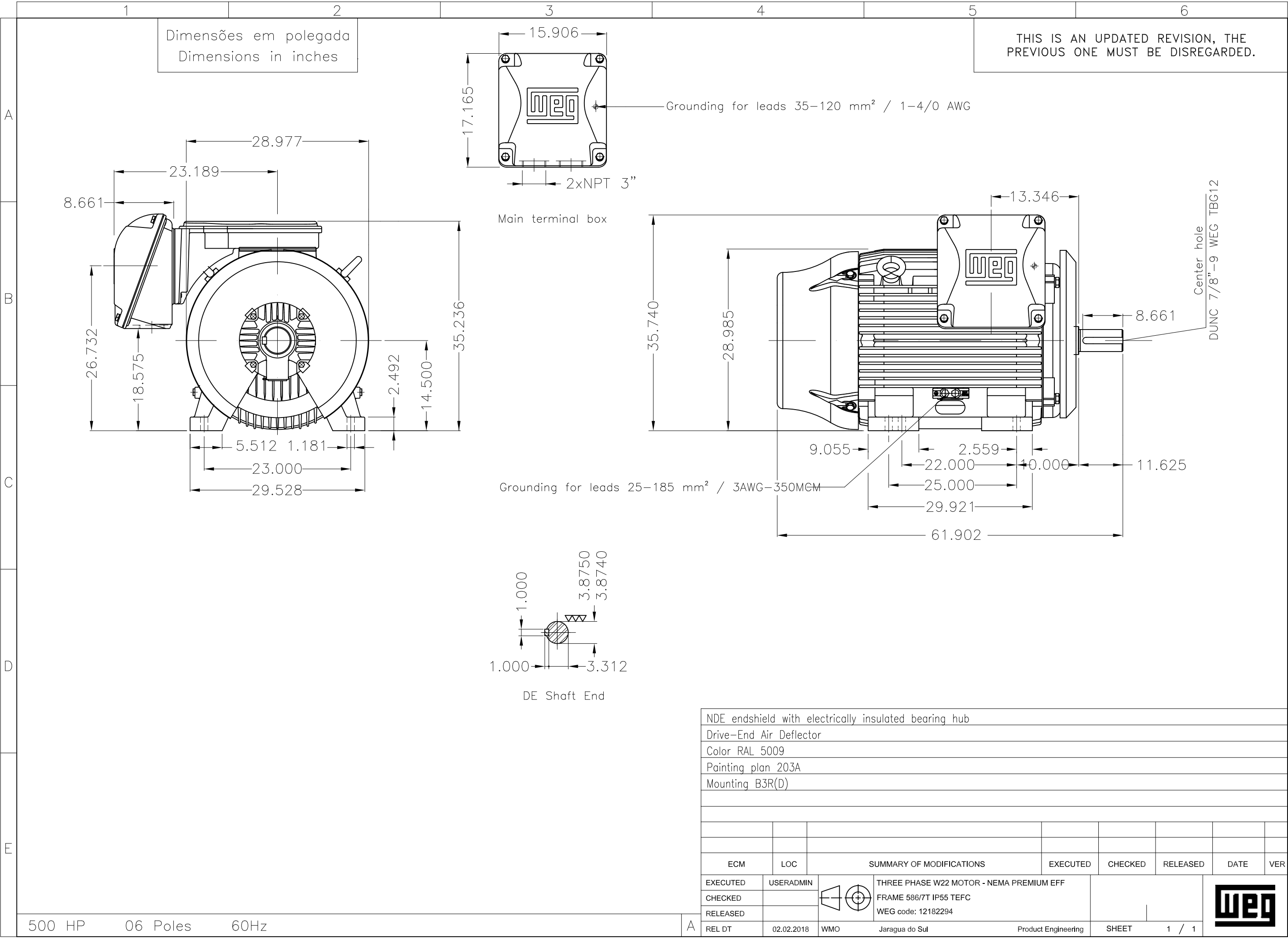


Performance : 460 V 60 Hz 6P

Rated current : 603 A  
LRC : 6.0  
Rated torque : 2180 ft.lb  
Locked rotor torque : 220 %  
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 5 / 5		
Checked by				
Date	02/02/2018			



# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

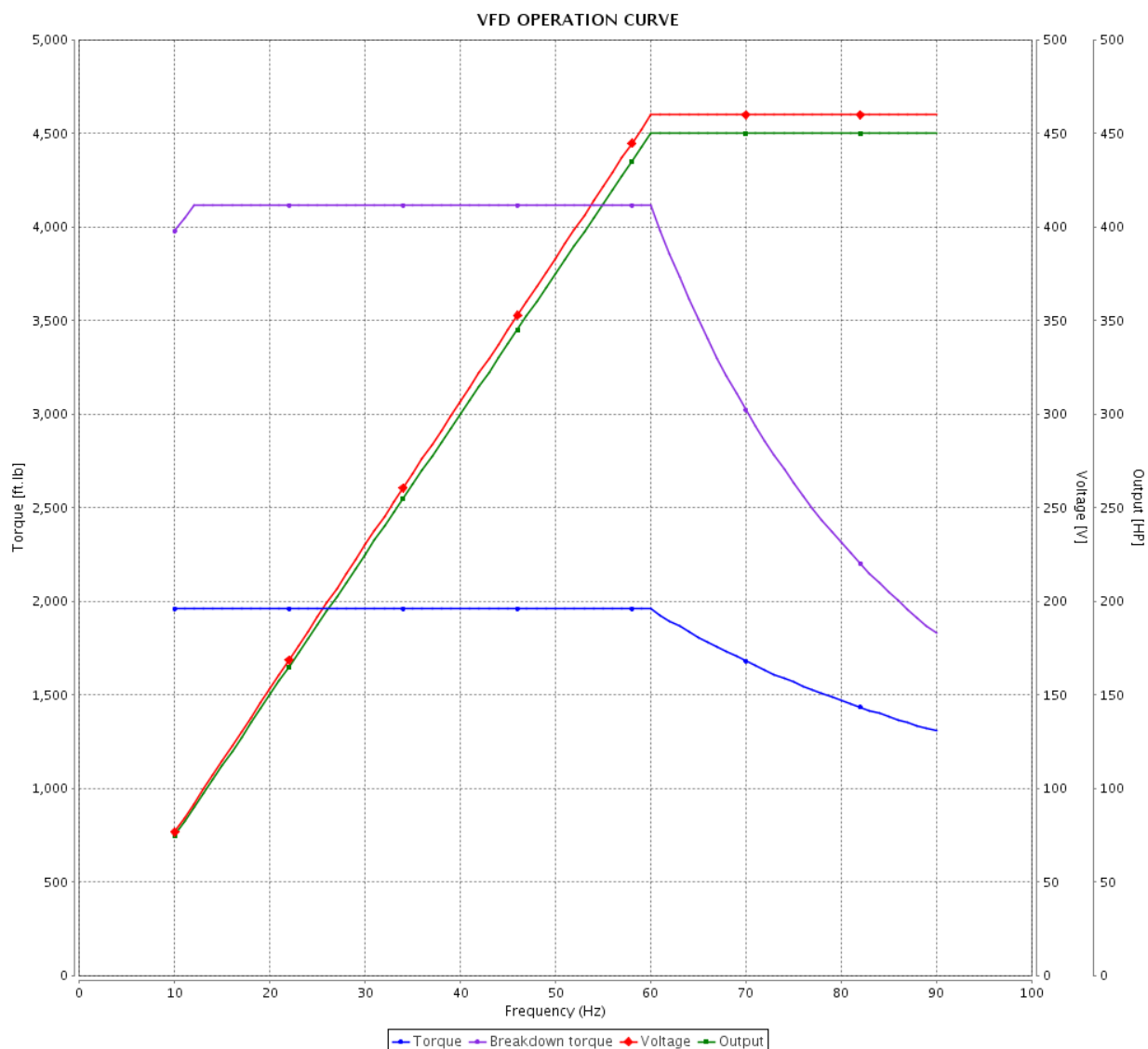


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12052653

Catalog # : 45012ET3G586/7-W22



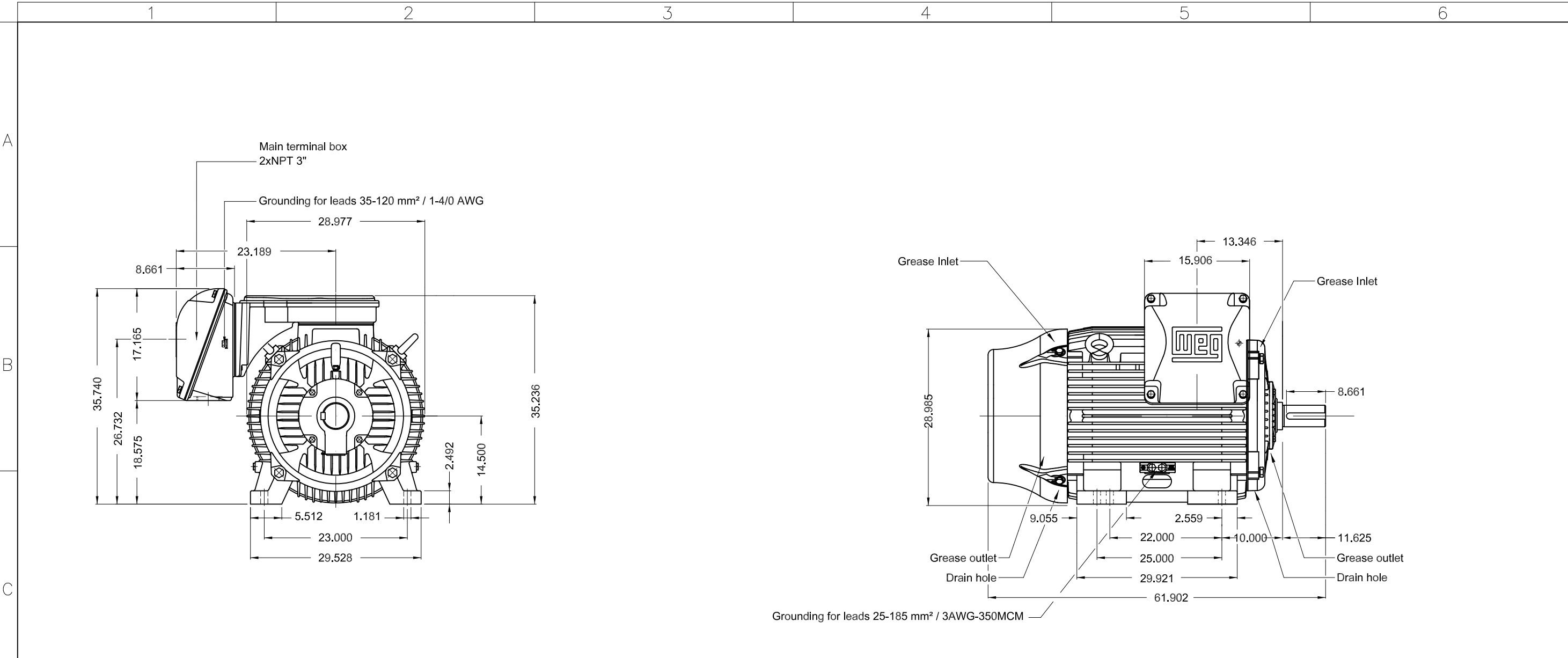
Performance : 460 V 60 Hz 6P

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 Revision		
Checked by				
Date	17/07/2018			





D										
E										