

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12011329
Catalog # : 60012ET3G588/9-W22

Frame	: 588/9T	Locked rotor time	: 55s (cold) 31s (hot)
Output	: 600 HP (440 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	: 727 A	Protection degree	: IP55
L. R. Amperes	: 4580 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 330 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1190 rpm	Noise level ²	: 77.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 2610 ft.lb	Approx. weight ³	: 5828 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 449 sq.ft.lb		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	95.2	95.4	96.1	96.2	Max. traction	: 12026 lb
Power Factor	0.38	0.63	0.74	0.79	Max. compression	: 17855 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	09/01/2018			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

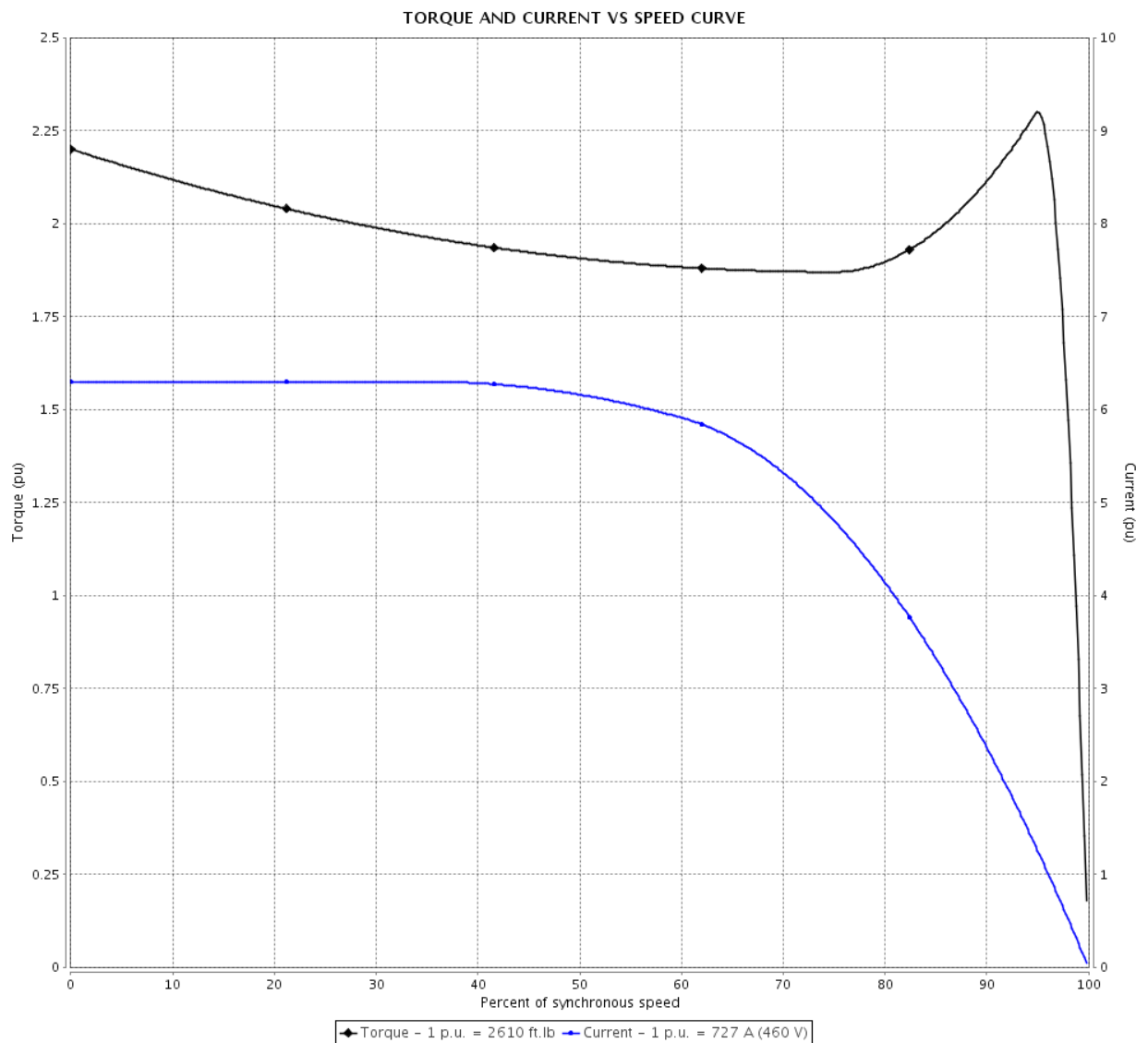


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12011329

Catalog # : 60012ET3G588/9-W22



Performance : 460 V 60 Hz 6P

Rated current	: 727 A	Moment of inertia (J)	: 449 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 2610 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1190 rpm		

Locked rotor time : 55s (cold) 31s (hot)

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		Revision		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

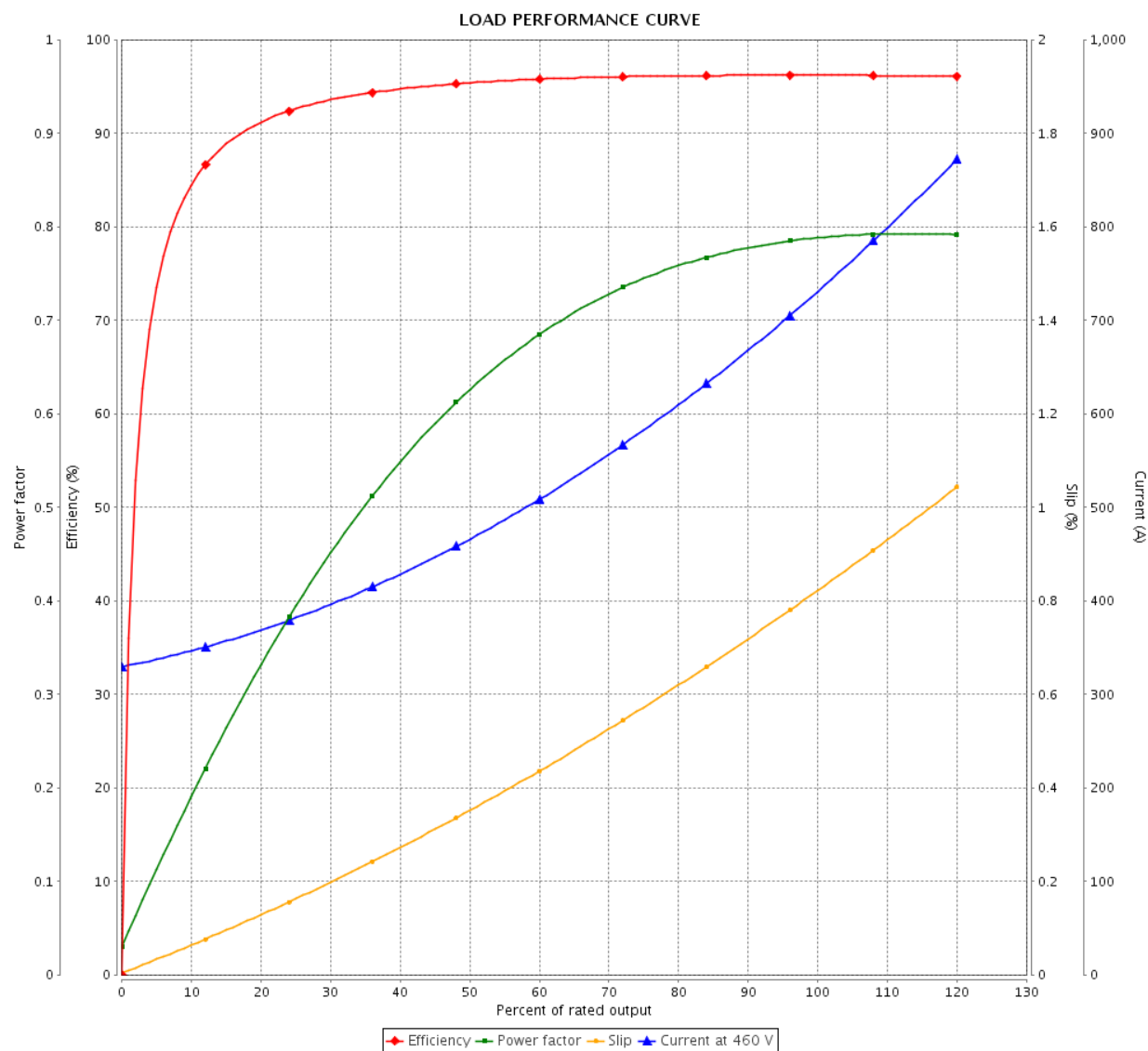


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12011329

Catalog # : 60012ET3G588/9-W22



Performance : 460 V 60 Hz 6P

Rated current : 727 A
LRC : 6.3
Rated torque : 2610 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 229 %
Rated speed : 1190 rpm

Moment of inertia (J) : 449 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K

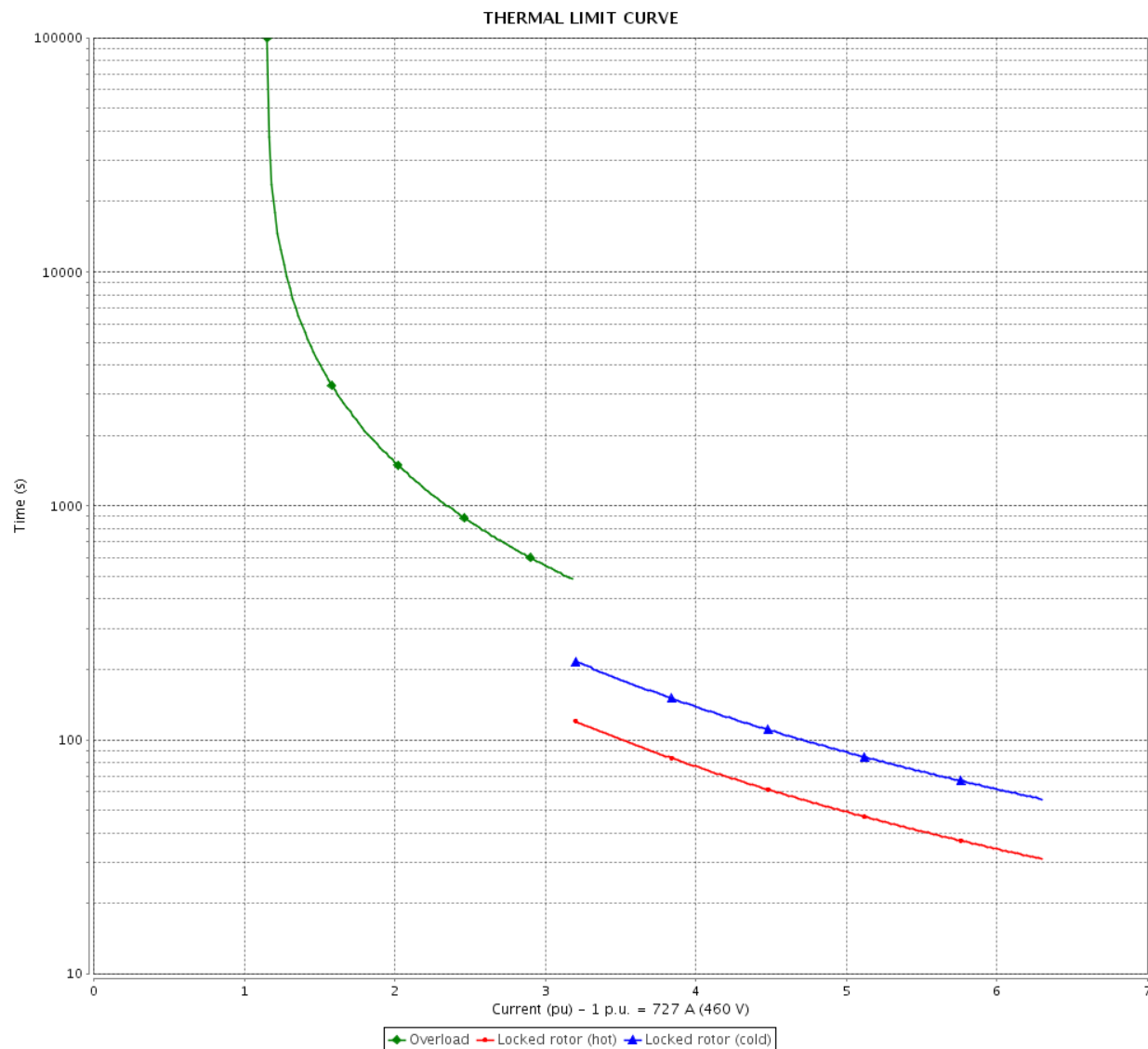
Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 4 / 7Revision		
Checked by				
Date	09/01/2018			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



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Date	09/01/2018				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

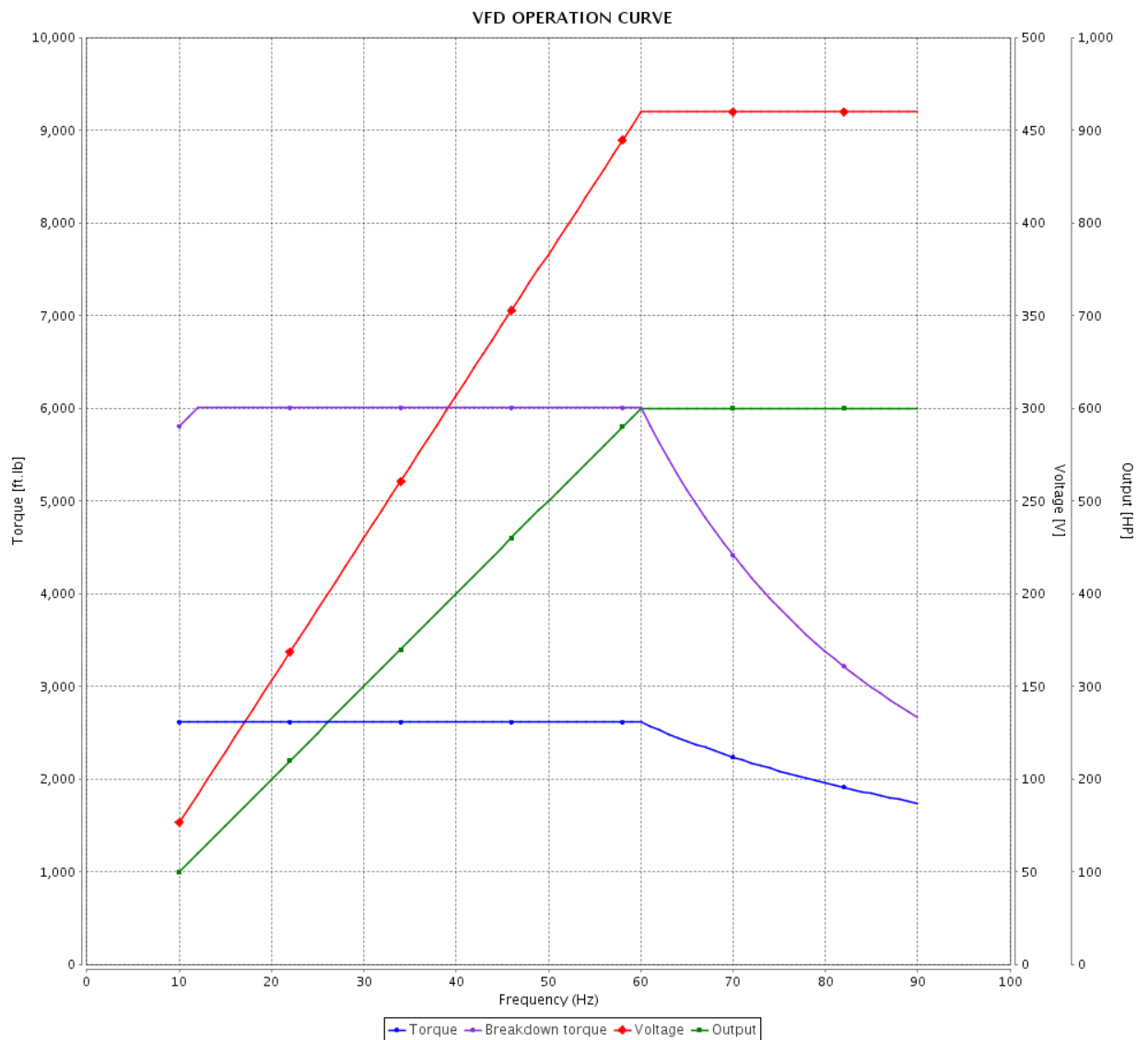


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12011329

Catalog # : 60012ET3G588/9-W22

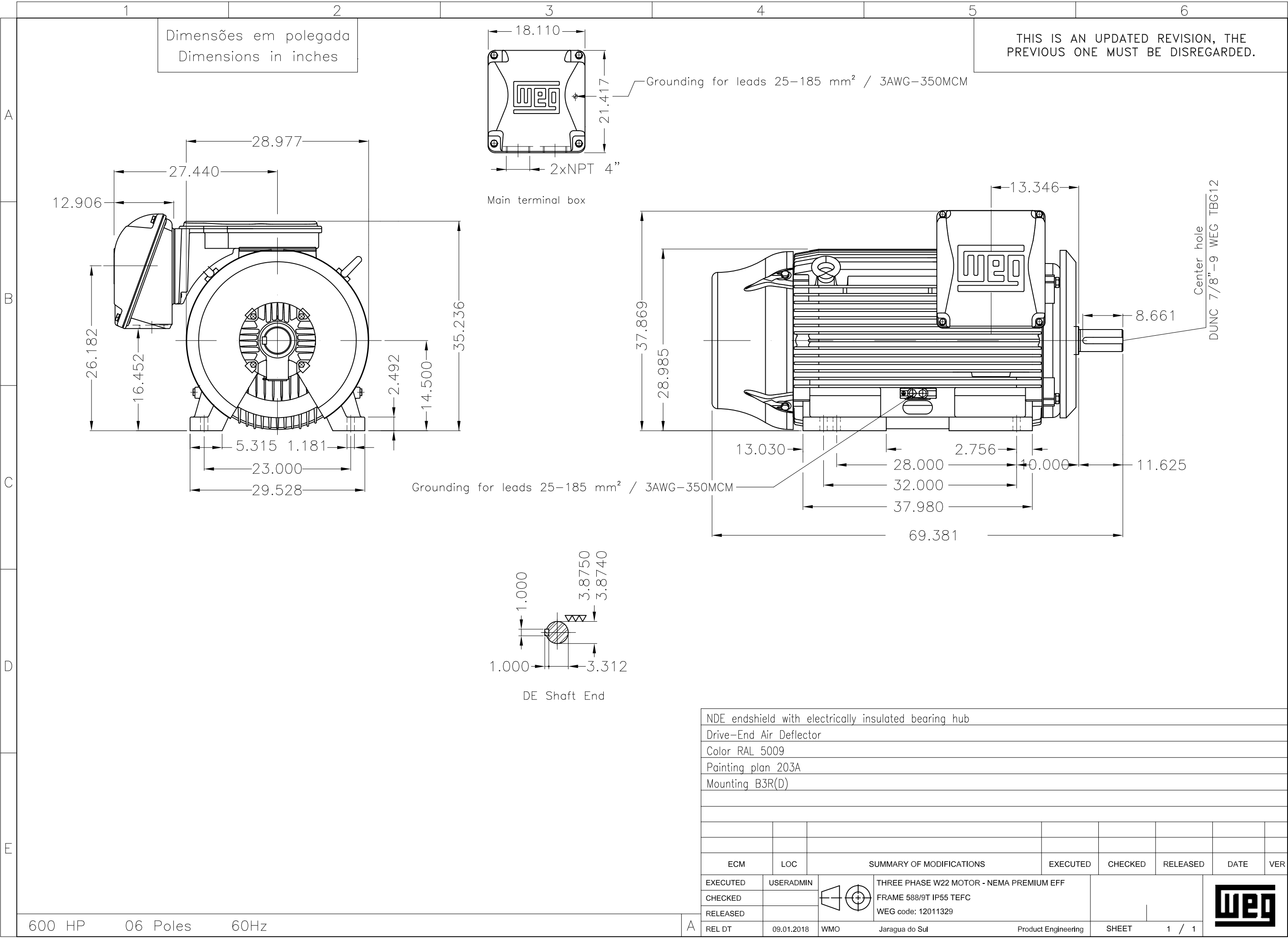


Performance : 460 V 60 Hz 6P

Rated current : 727 A
LRC : 6.3
Rated torque : 2610 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 229 %
Rated speed : 1190 rpm

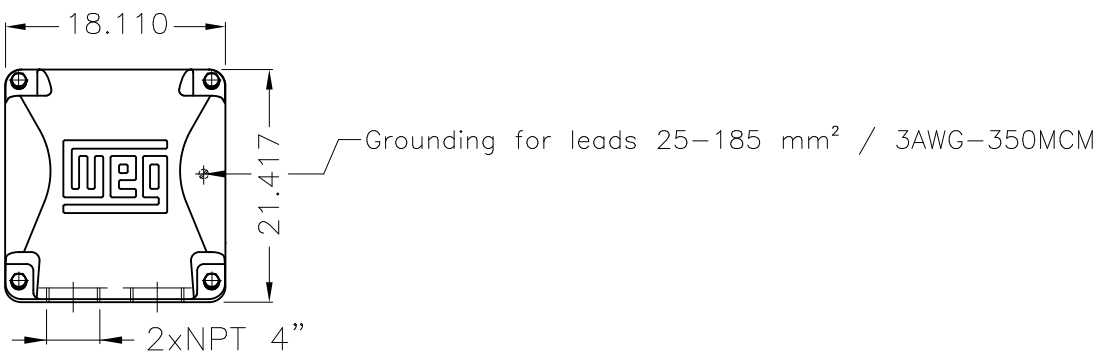
Moment of inertia (J) : 449 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
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Date	09/01/2018			

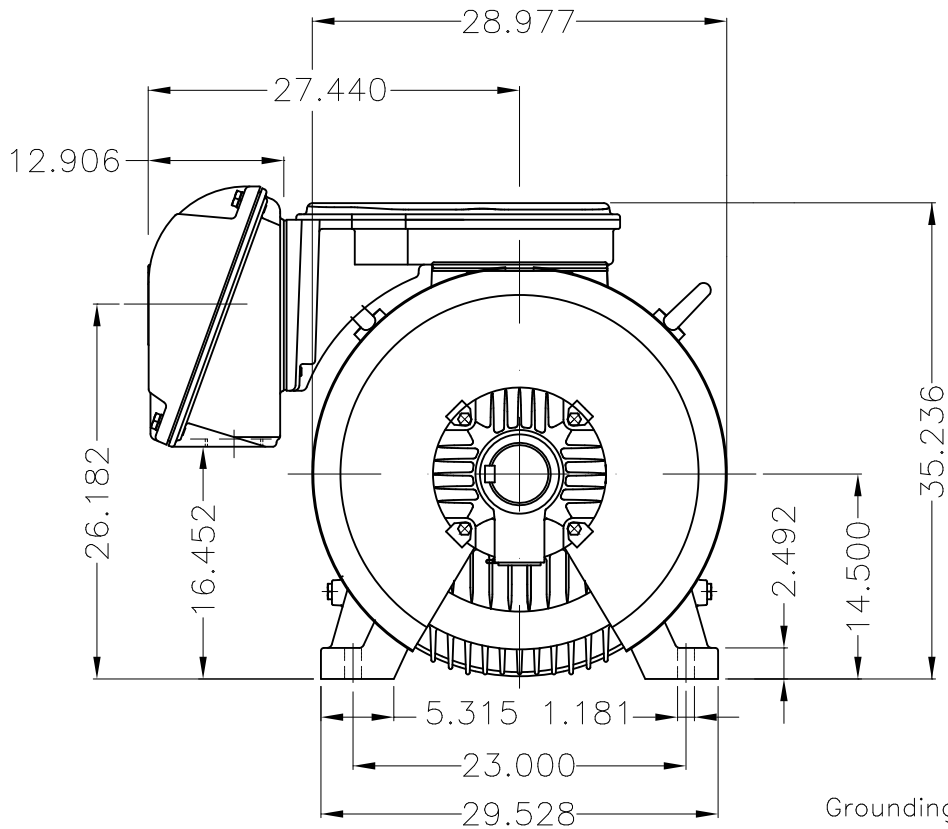


Dimensões em polegada
Dimensions in inches

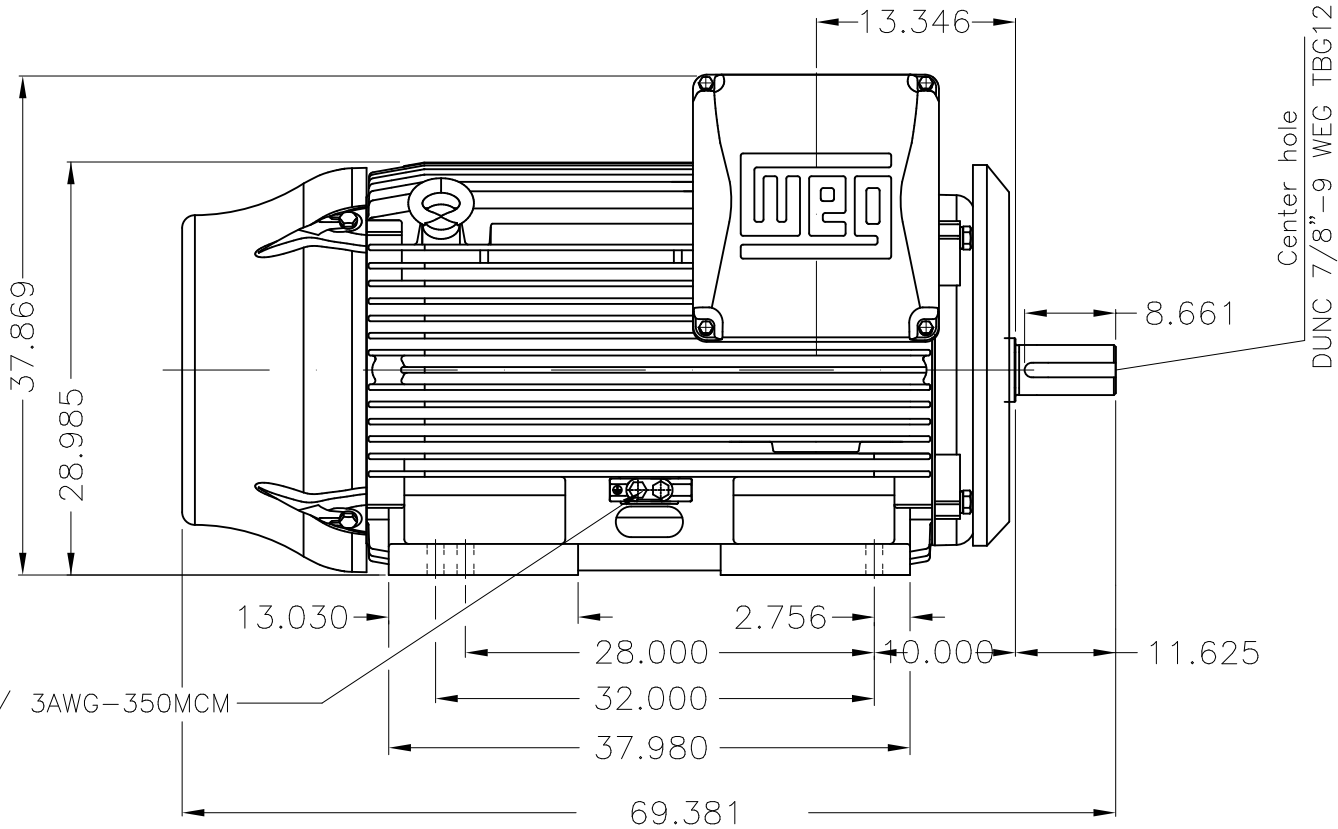
THIS IS AN UPDATED REVISION, THE
PREVIOUS ONE MUST BE DISREGARDED.



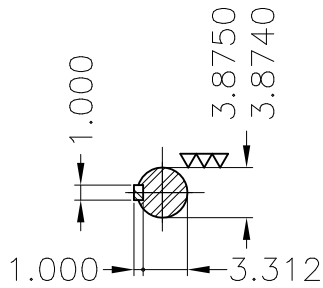
Main terminal box



Grounding for leads 25-185 mm² / 3AWG-350MCM



Center hole
DUNC 7/8"-9 WEG TBG12



DE Shaft End

NDE endshield with electrically insulated bearing hub
Drive-End Air Deflector
Color RAL 5009
Painting plan 203A
Mounting B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF							
CHECKED		FRAME 588/9T IP55 TEFC							
RELEASED		WEG code: 12011329							
REL DT	09.01.2018	WMO	Jaragua do Sul	Product Engineering	SHEET	1	/	1	



VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

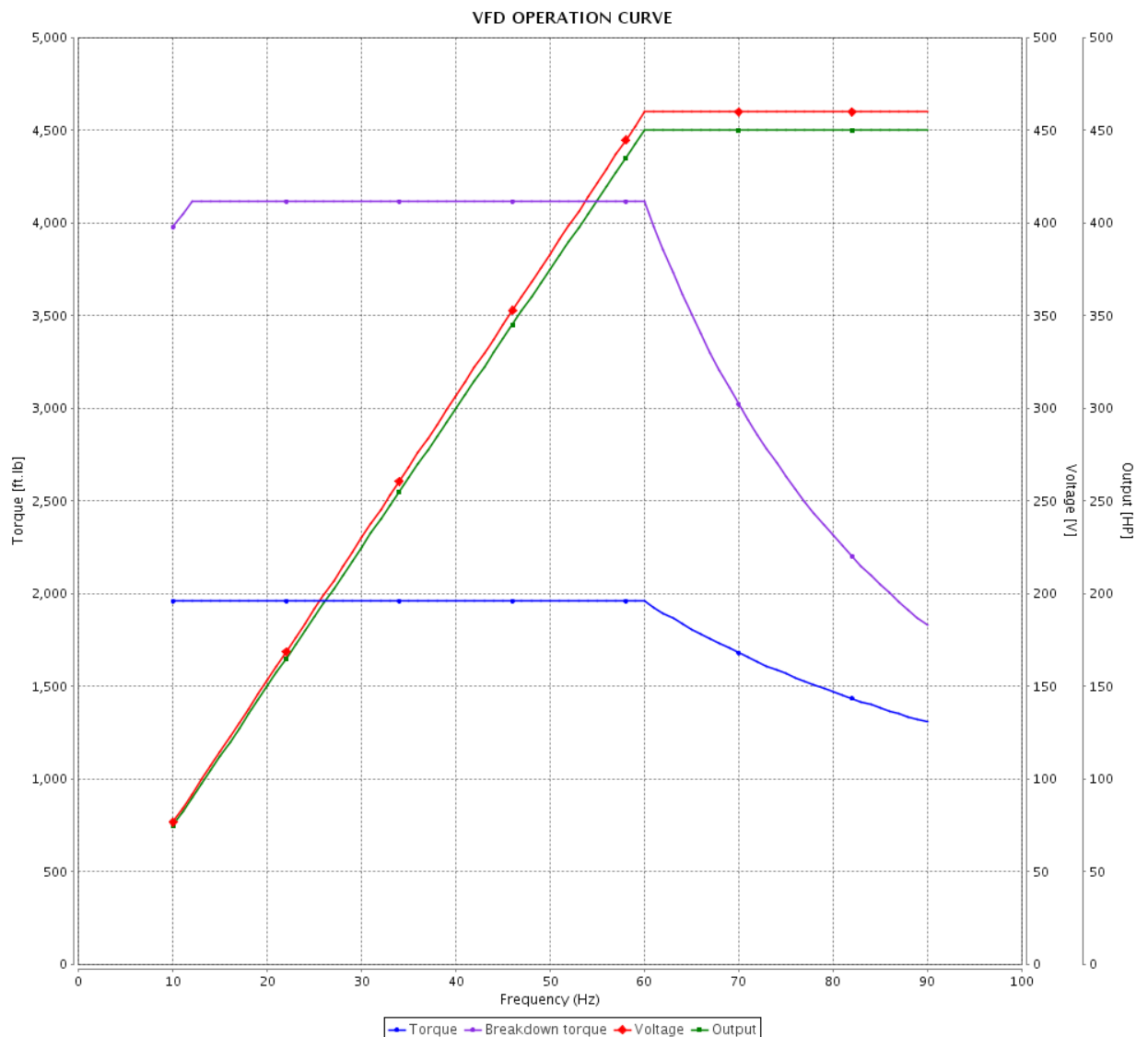


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12052653

Catalog # : 45012ET3G586/7-W22

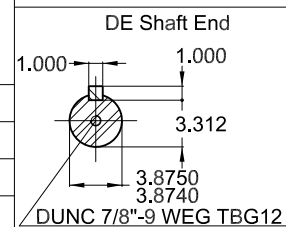
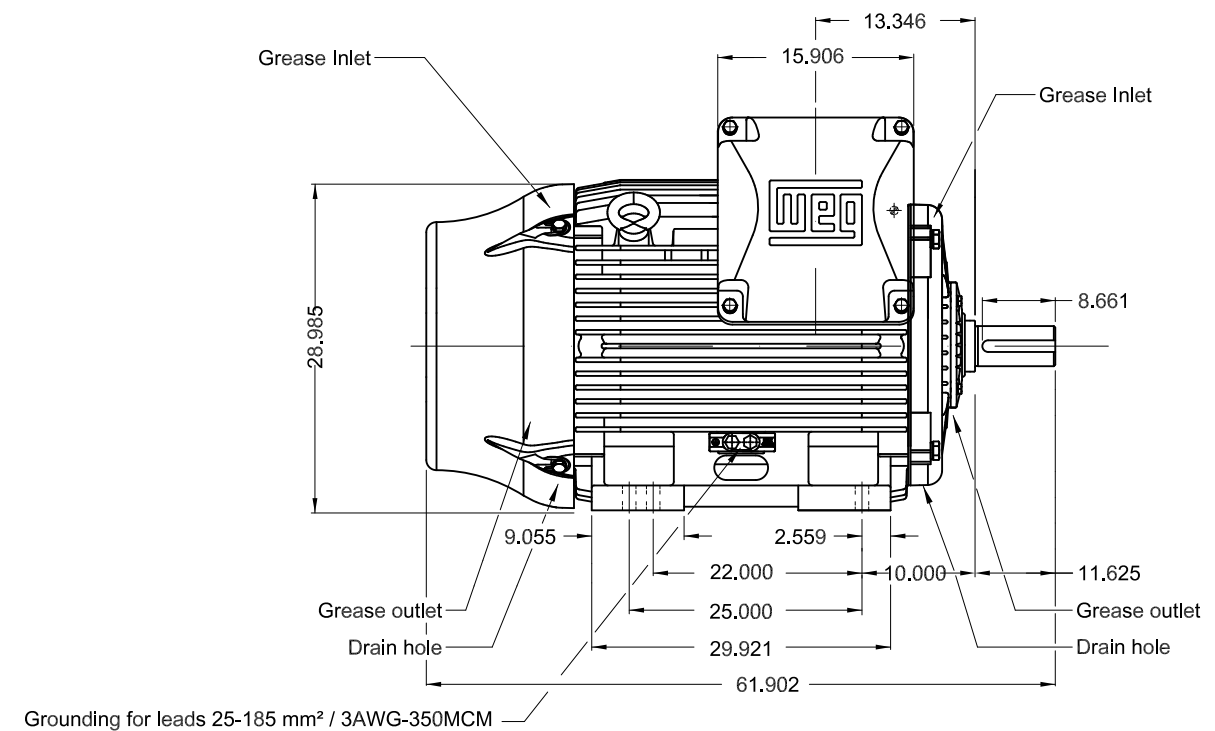
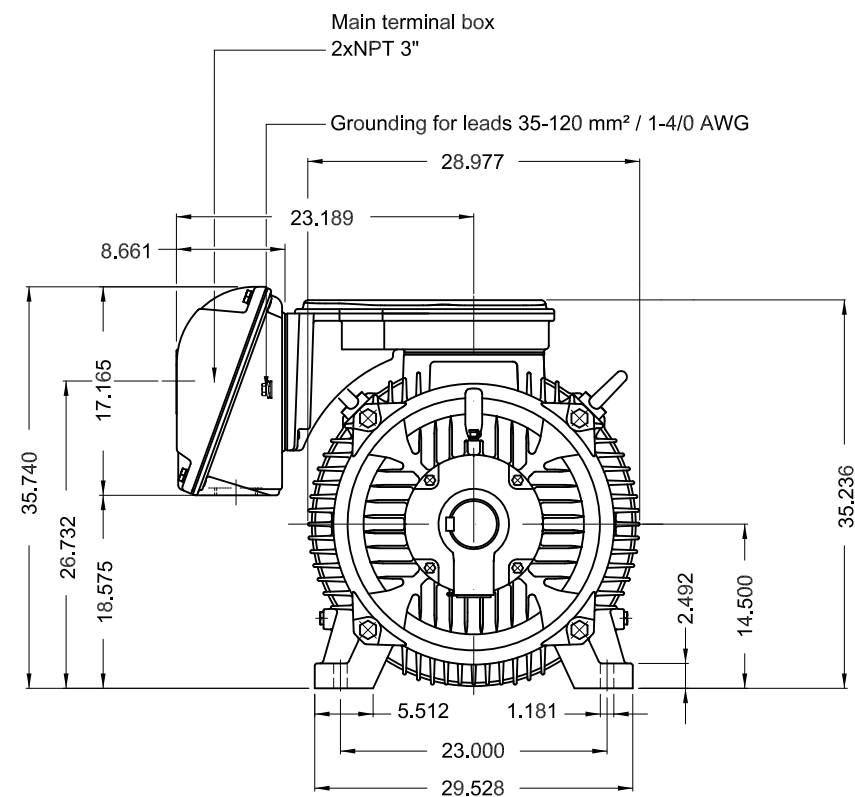


Performance : 460 V 60 Hz 6P


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		
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			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
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	
					