

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12588463  
Catalog # : 00518ET3H184JP-W22

Frame	: 182/4JP	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 5 HP (3.7 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 5.16 A	Protection degree	: IP55
L. R. Amperes	: 38.7 A	Cooling method	: IC411 - TEFC
LRC	: 7.5x(Code J)	Mounting	: F-1
No load current	: 2.56 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1755 rpm	Noise level <sup>2</sup>	: 56.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 15.0 ft.lb	Approx. weight <sup>3</sup>	: 103 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 320 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.4003 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	88.2	88.5	89.5	89.5	Max. traction	: 254 lb
Power Factor	0.37	0.62	0.74	0.80	Max. compression	: 357 lb

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	: 6307 ZZ	: 6206 ZZ
Sealing	: V'Ring	: V'Ring
Lubrication interval	: -	: -
Lubricant amount	: -	: -
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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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



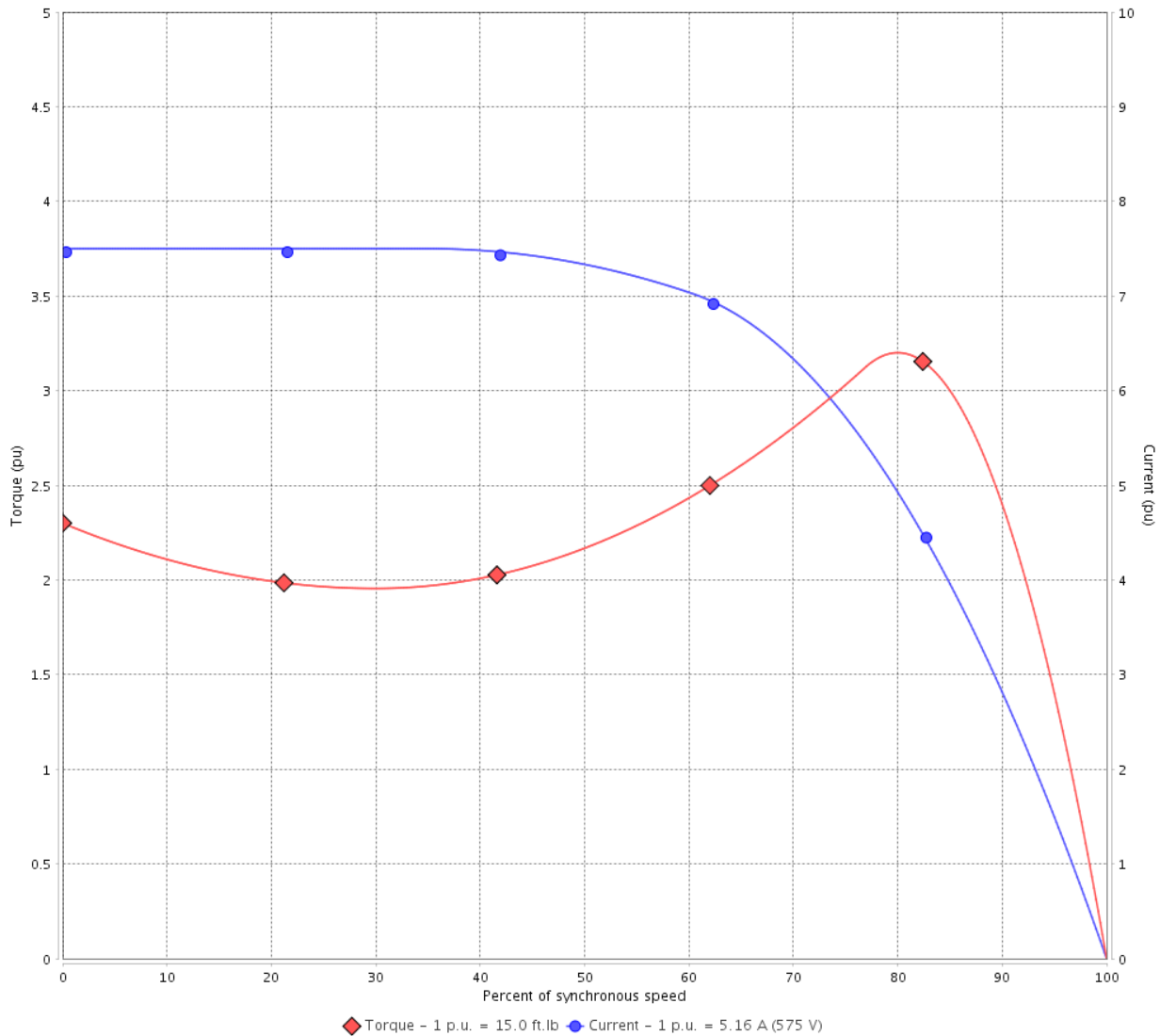
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12588463

Catalog # : 00518ET3H184JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 5.16 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

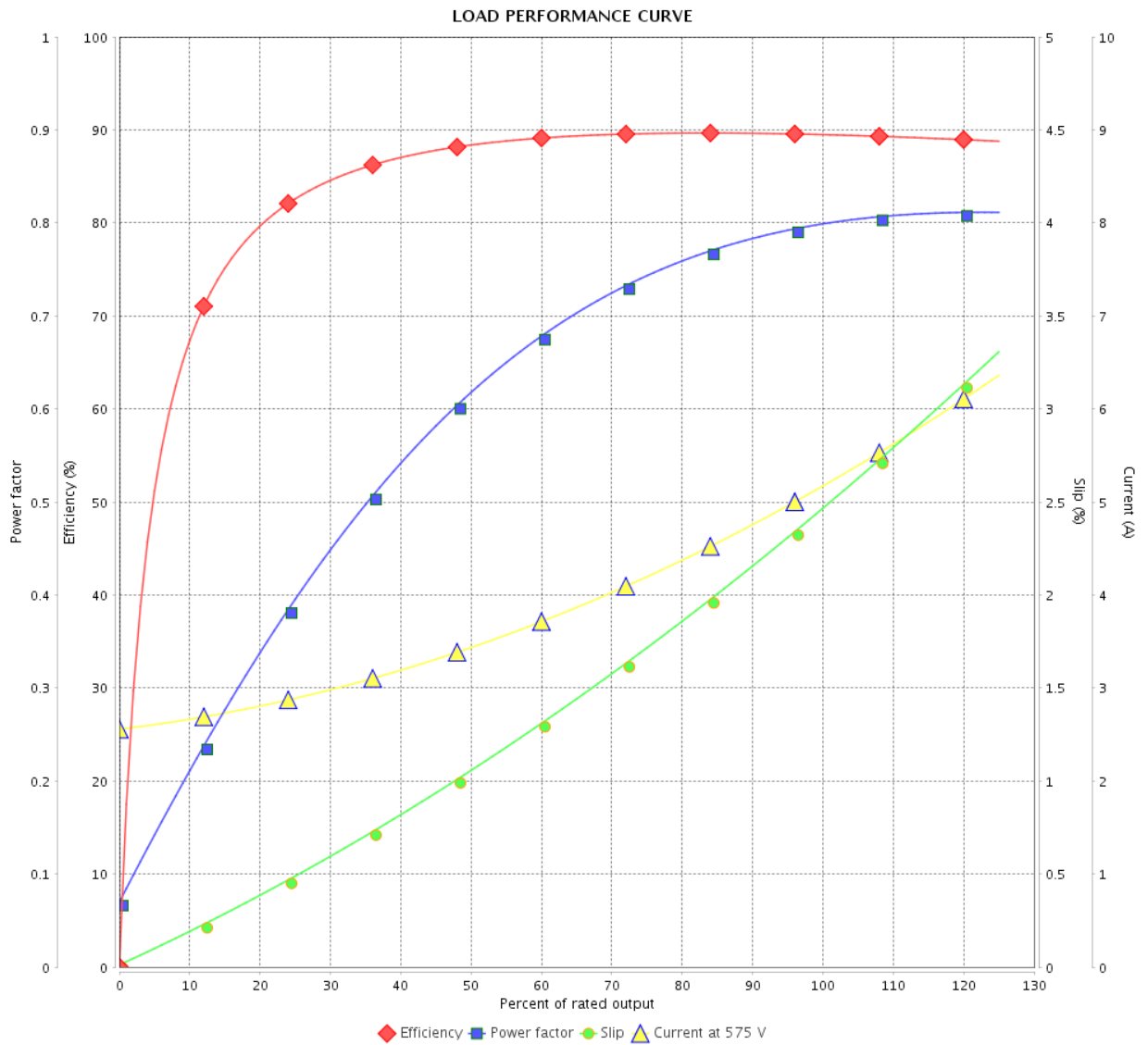


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12588463

Catalog # : 00518ET3H184JP-W22



Performance : 575 V 60 Hz 4P

Rated current : 5.16 A  
 LRC : 7.5  
 Rated torque : 15.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 320 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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Product code : 12588463  
Catalog # : 00518ET3H184JP-W22

Performance : 575 V 60 Hz 4P

Rated current	: 5.16 A	Moment of inertia (J)	: 0.4003 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Heating constant

Cooling constant

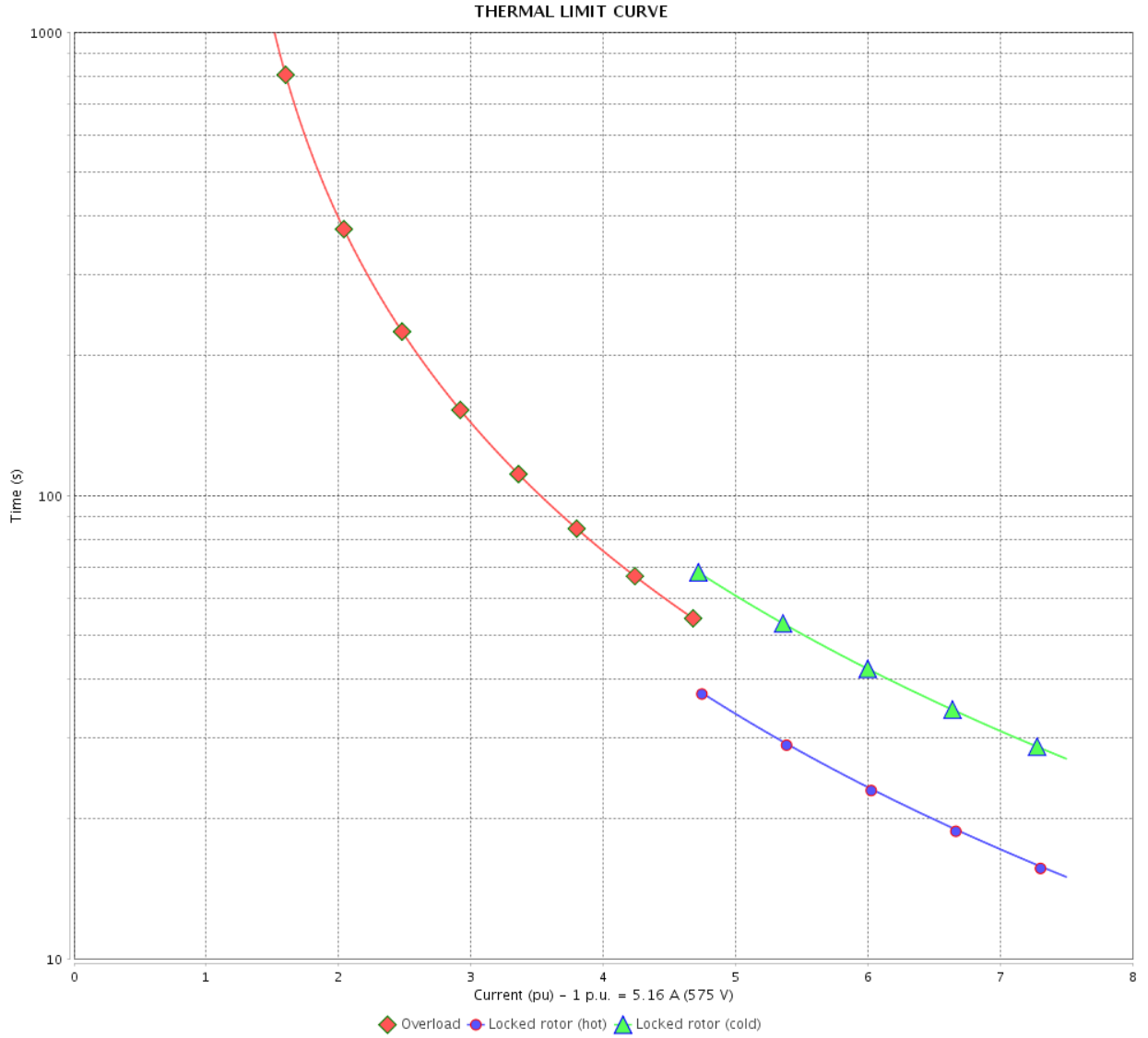
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

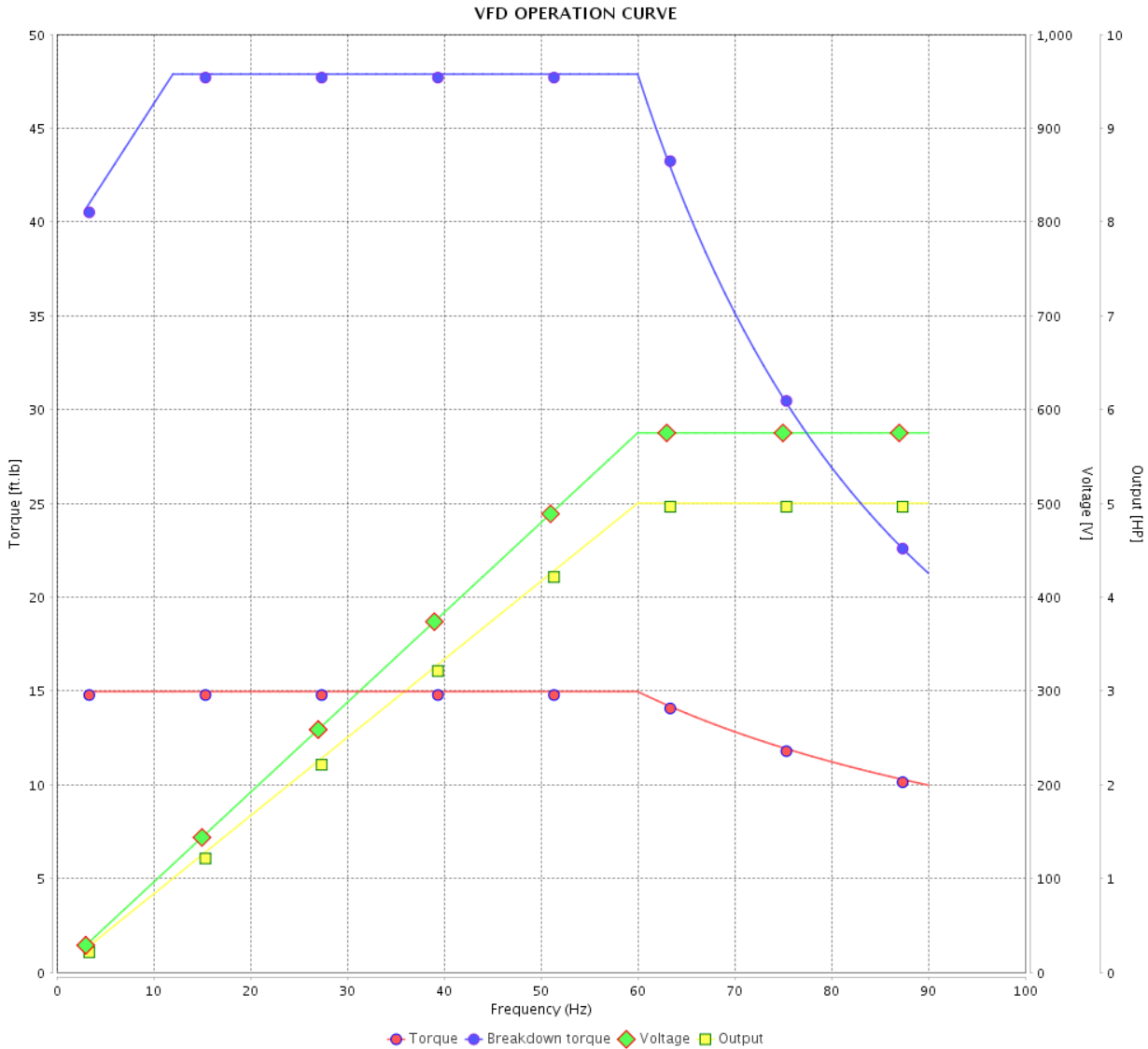


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12588463

Catalog # : 00518ET3H184JP-W22



Performance : 575 V 60 Hz 4P

Rated current : 5.16 A  
 LRC : 7.5  
 Rated torque : 15.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 320 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

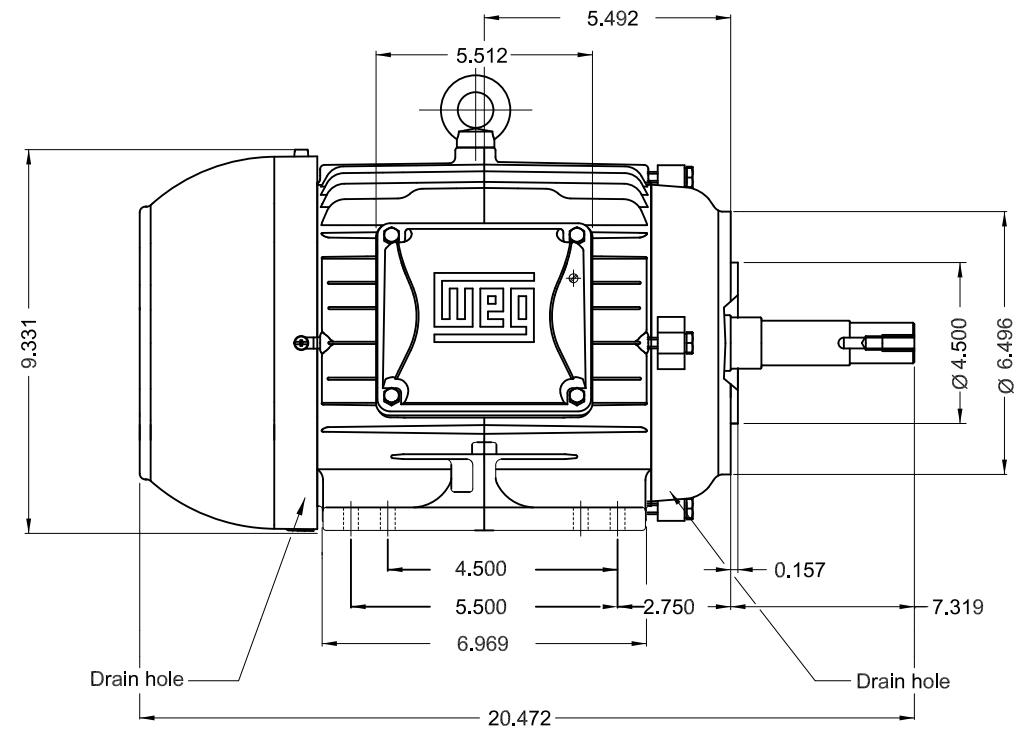
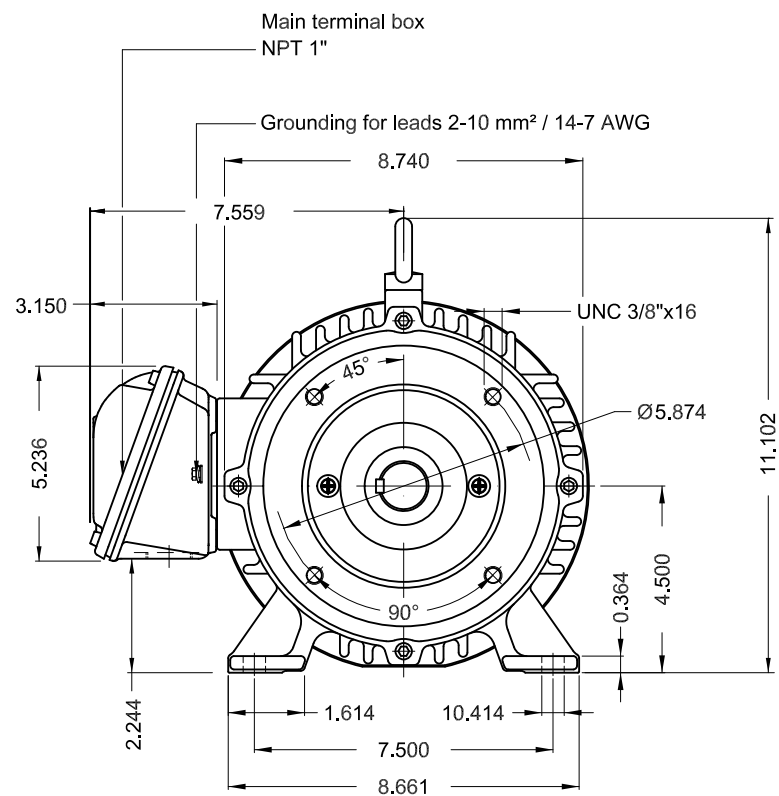
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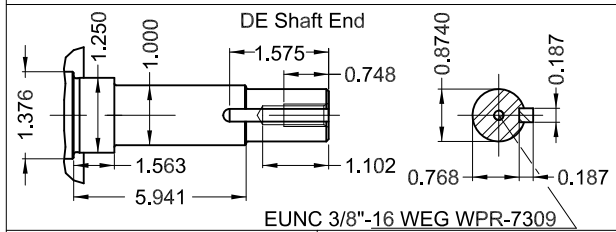
A

B

C



D

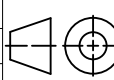


E

Color RAL 5009  
 Painting plan 207A  
 Mounting NEMA F-1  
 Mounting B34R(D)

5 HP 04 Poles 60 Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR JM/JP/JET PUMP W22 PREM. EFF. FRAME 182/4JP IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW  
 WDD



**W22**

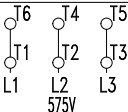
CC029A

® Inverter Duty Motor  
Severe Duty

12588463

MADE IN BRAZIL JP005504NPW22

PH 3	FR 182/4JP	HP(kw) 5.0(3.7)	Hz 60	SF 1.25	PF 0.8
V 575	A 5.16	RPM 1755	INS. CL.F $\Delta$ T 80 K		
NEMA NOM EFF 89.5 %				DES B DUTY CONT.	
ENCL TEFC			IP55	SFA 6.45	ALT 1000 m.a.s.l.
					CODE J



MOBIL POLYREX EM

101 Lbs

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 - T5

For use on PWM, Gr. A, B, C, D, F and G

VT1000:1, CT20:1, 1.0SF, T4A

FOR SAFE AREA  
MOD.TE1BFOXON