

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 11554522	
				Catalog # : 00158ET3H145JM-W22	
Frame	: 143/5JM		Locked rotor time	: 25s (cold) 14s (hot)	
Output	: 1.5 HP (1.1 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	: 1.62 A		Protection degree	: IP55	
L. R. Amperes	: 13.6 A		Cooling method	: IC411 - TEFC	
LRC	: 8.4x(Code L)		Mounting	: F-1	
No load current	: 0.880 A		Rotation <sup>1</sup>	: Both (CW and CCW)	
Rated speed	: 1755 rpm		Noise level <sup>2</sup>	: 51.0 dB(A)	
Slip	: 2.50 %		Starting method	: Direct On Line	
Rated torque	: 4.49 ft.lb		Approx. weight <sup>3</sup>	: 53.6 lb	
Locked rotor torque	: 290 %				
Breakdown torque	: 350 %				
Insulation class	: F				
Service factor	: 1.25				
Moment of inertia (J)	: 0.1431 sq.ft.lb				
Design	: B				
Output	25%	50%	75%	100%	
Efficiency (%)	81.3	82.5	85.5	86.5	
Power Factor	0.35	0.60	0.70	0.79	
Foundation loads					
Max. traction : 110 lb					
Max. compression : 163 lb					
		<u>Drive end</u>	<u>Non drive end</u>		
Bearing type	:	6206 ZZ	6204 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



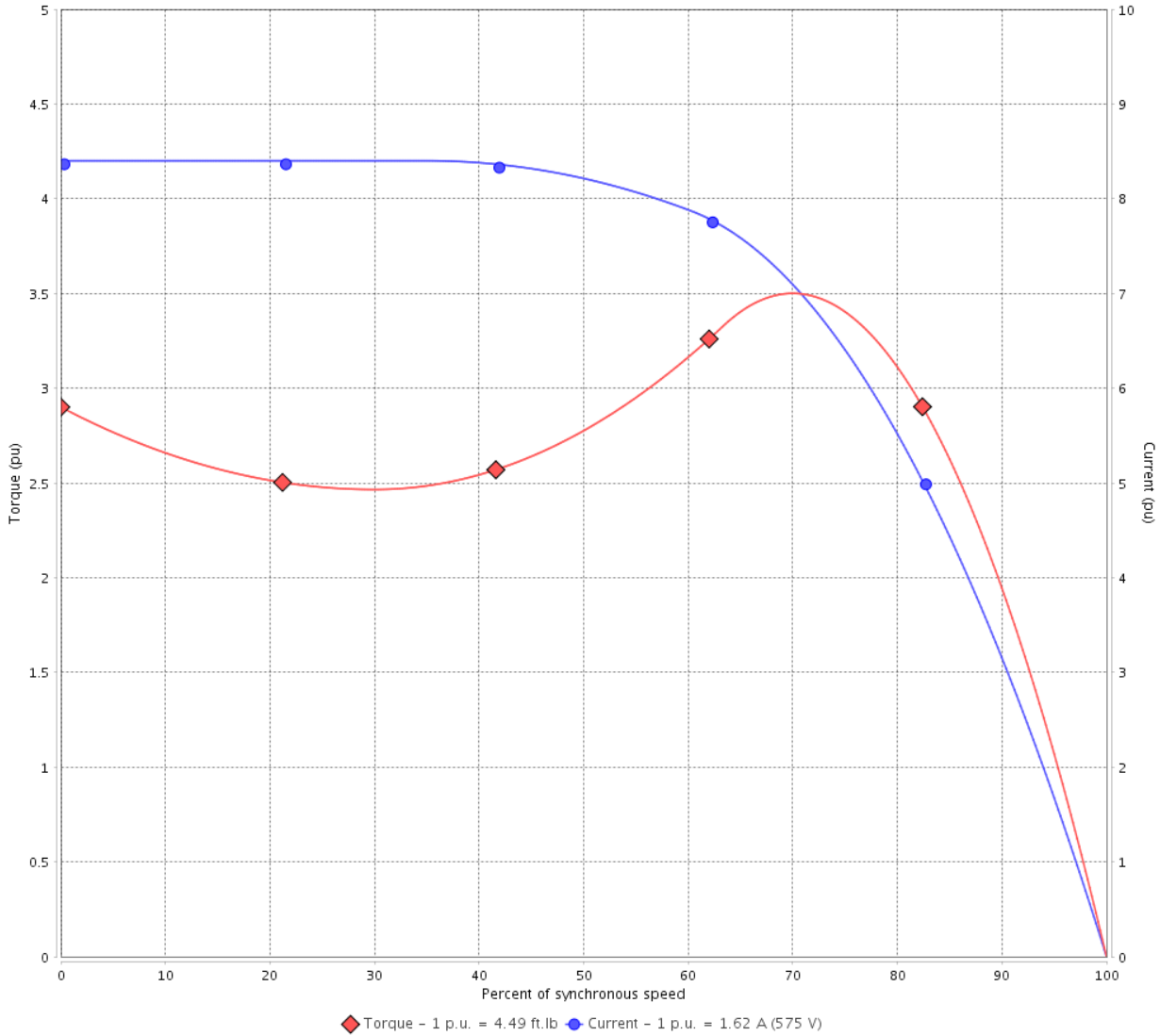
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11554522

Catalog # : 00158ET3H145JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.62 A	Moment of inertia (J)	: 0.1431 sq.ft.lb
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 4.49 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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Date	14/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

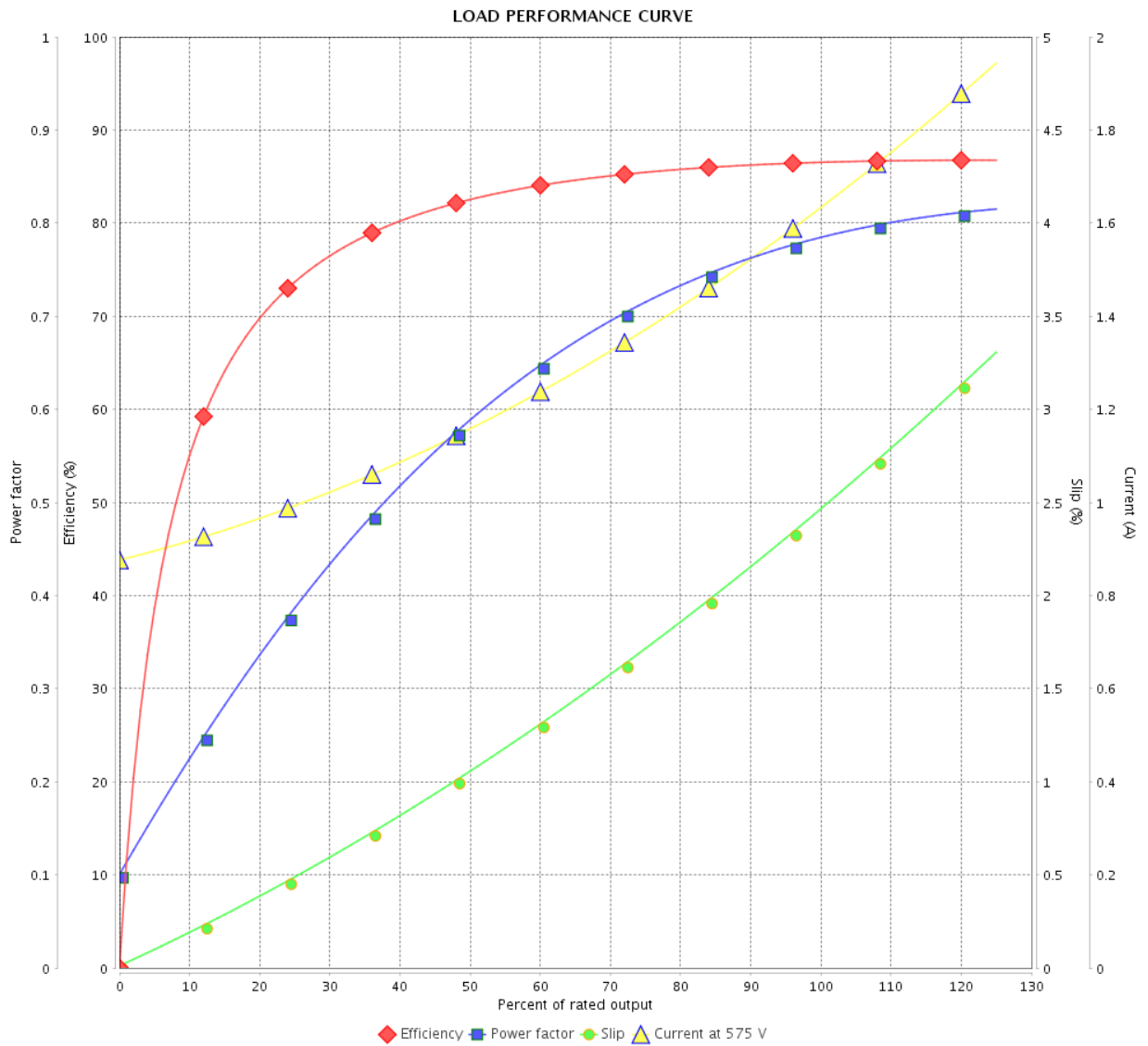


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11554522

Catalog # : 00158ET3H145JM-W22



Performance : 575 V 60 Hz 4P

Rated current : 1.62 A  
 LRC : 8.4  
 Rated torque : 4.49 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.1431 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

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 11554522  
Catalog # : 00158ET3H145JM-W22

Performance : 575 V 60 Hz 4P

Rated current	: 1.62 A	Moment of inertia (J)	: 0.1431 sq.ft.lb
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 4.49 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Heating constant

Cooling constant

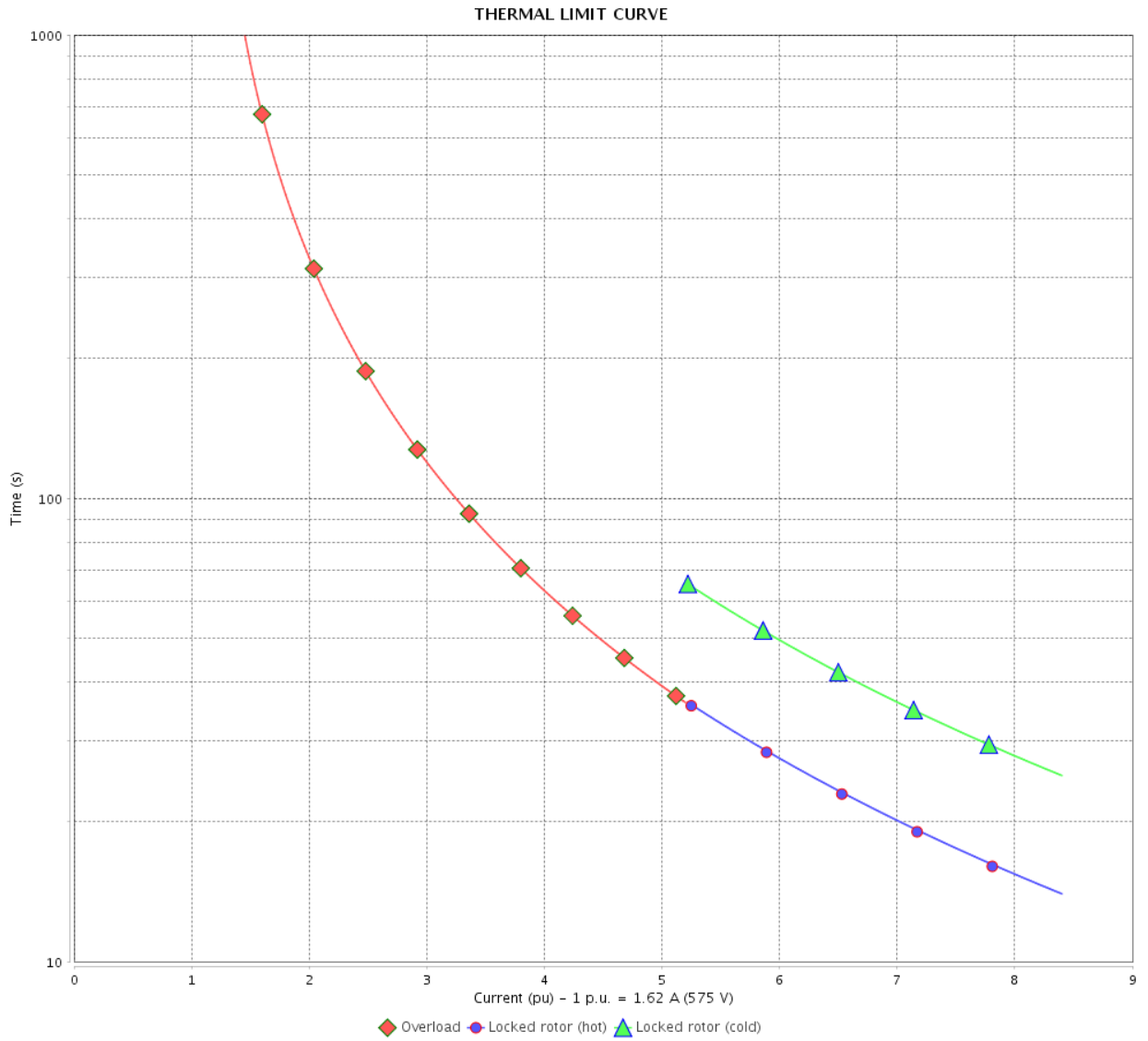
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



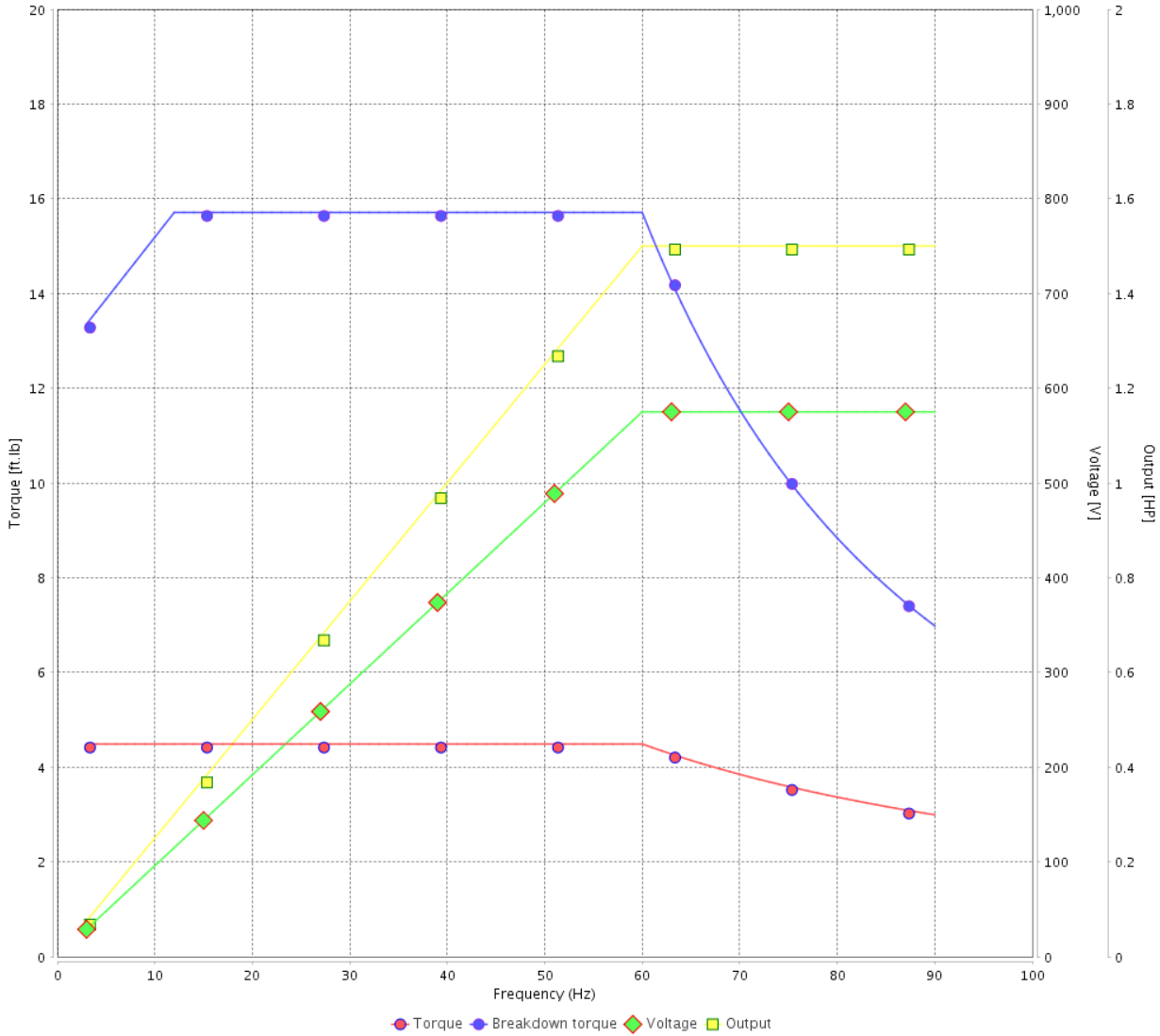
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11554522

Catalog # : 00158ET3H145JM-W22

VFD OPERATION CURVE

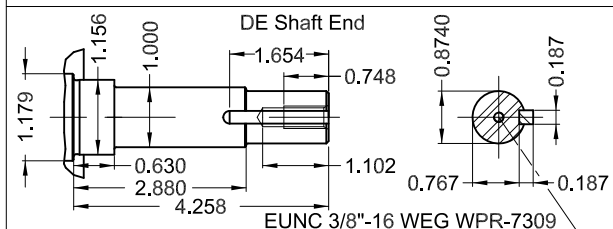
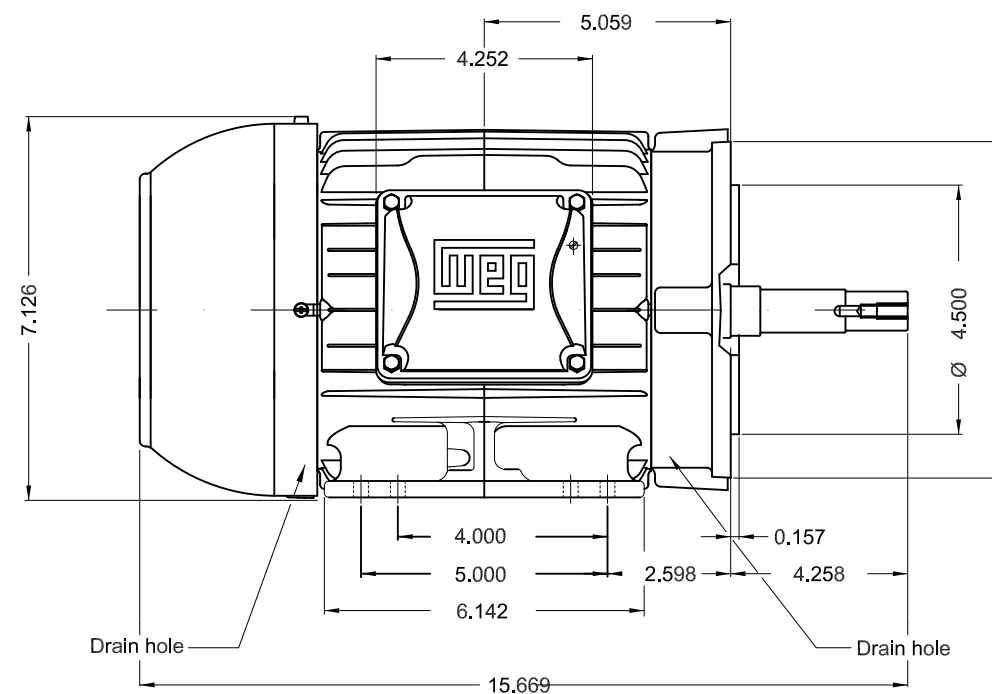
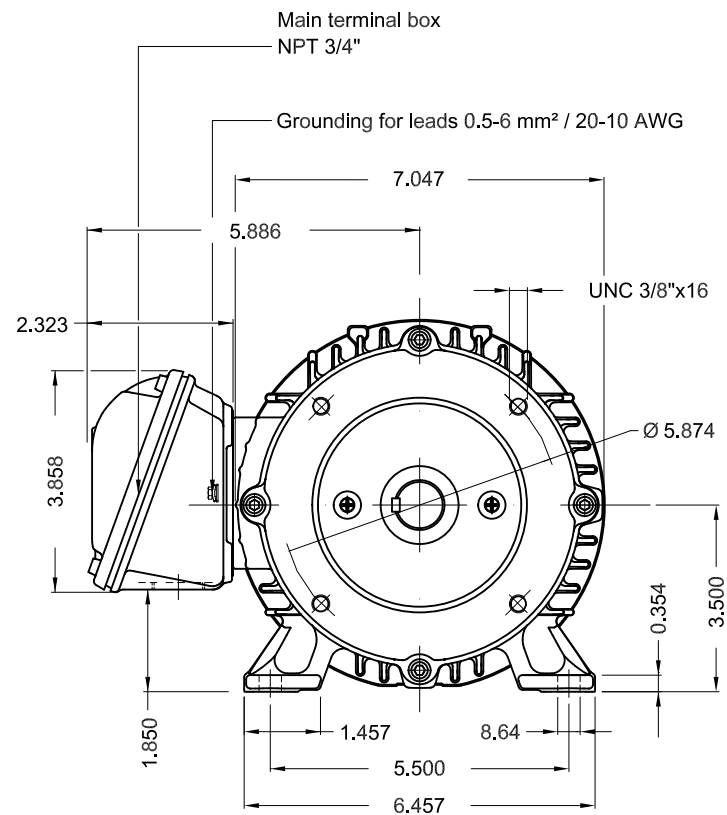


Performance : 575 V 60 Hz 4P

Rated current : 1.62 A  
 LRC : 8.4  
 Rated torque : 4.49 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1755 rpm

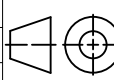
Moment of inertia (J) : 0.1431 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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1.5 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 143/5JM IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

Color RAL 5009  
 Painting plan 207A  
 Mounting B34R(D)

PREVIEW  
 WDD



Dimensions in inches

XME A3

**W22**

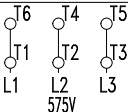
CC029A

® Inverter Duty Motor  
Severe Duty

11554522

MADE IN MEXICO MODEL 00158ET3H145JM-W22

PH 3	FR 143/5JM	HP(kW) 1.5(1.1)	Hz 60	SF 1.25	PF 0.79
V 575	A 1.62	RPM 1755	INS. CL.F $\Delta$ T 80 K		
NEMA NOM EFF 86.5 %				DES B DUTY CONT.	
ENCL TEFC			IP55		SFA 2.03
					ALT 1000 m.a.s.l.
					CODE L



MOBIL POLYREX EM

55 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