

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase			
Product code :	14329645			
Catalog # :	02018ET3H256JM-SG			
Frame : 254/6JM Output : 20 HP (15 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 19.8 A L. R. Amperes : 132 A LRC : 6.7x(Code H) No load current : 8.89 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 59.5 ft.lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 2.64 sq.ft.lb Design : B	Locked rotor time : 28s (cold) 16s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 257 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	91.0 91.7 92.4 93.0			
Power Factor	0.40 0.66 0.77 0.82			
Foundation loads				
Max. traction : 728 lb				
Max. compression : 985 lb				
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3			
Sealing	: V'Ring Without Bearing Seal			
Lubrication interval	: 20000 h 20000 h			
Lubricant amount	: 13 g 8 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				
Checked by			Page	Revision
Date	14/04/2022		1 / 6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



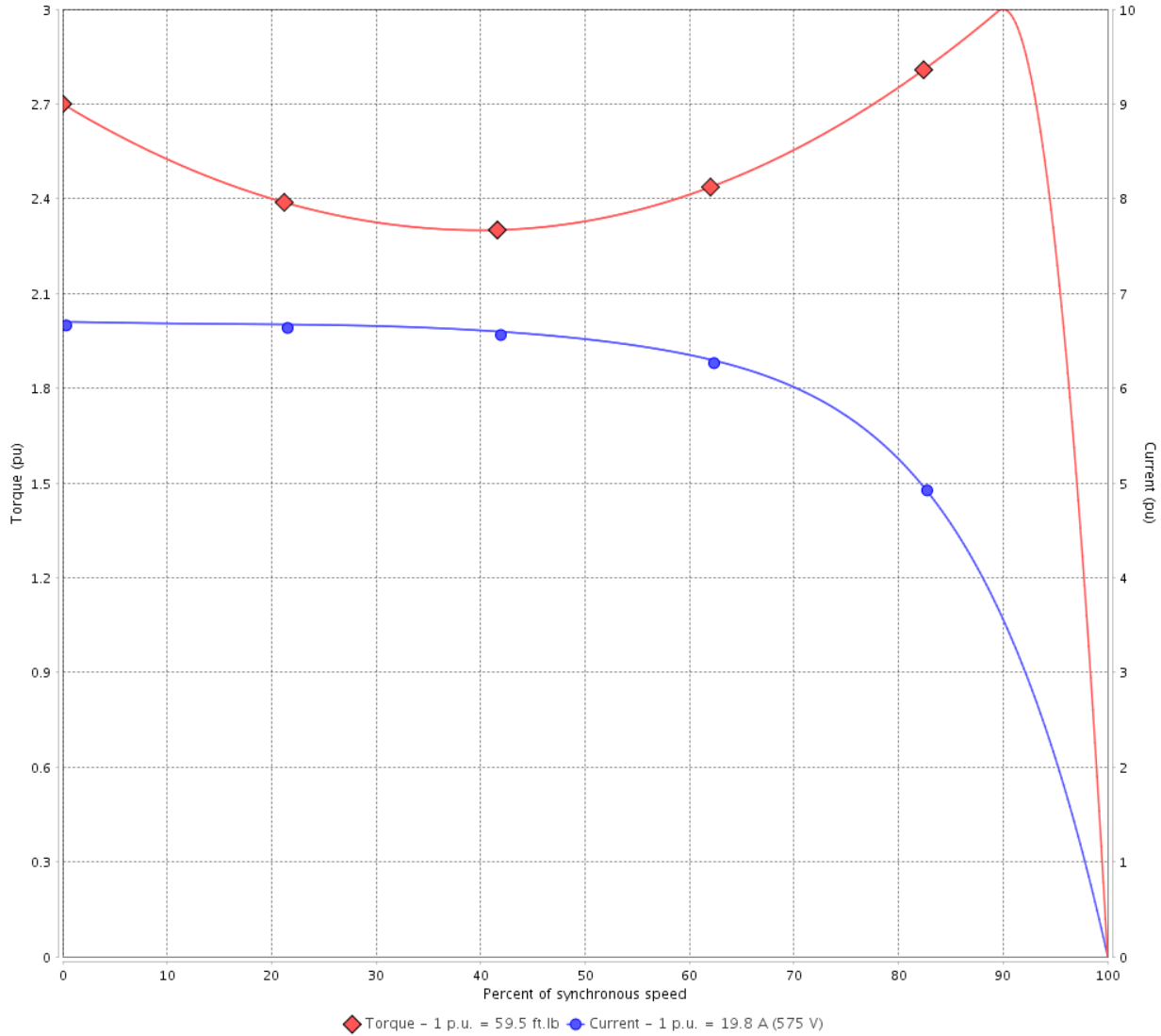
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14329645

Catalog # : 02018ET3H256JM-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 19.8 A	Moment of inertia (J)	: 2.64 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 59.5 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		2 / 6		
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

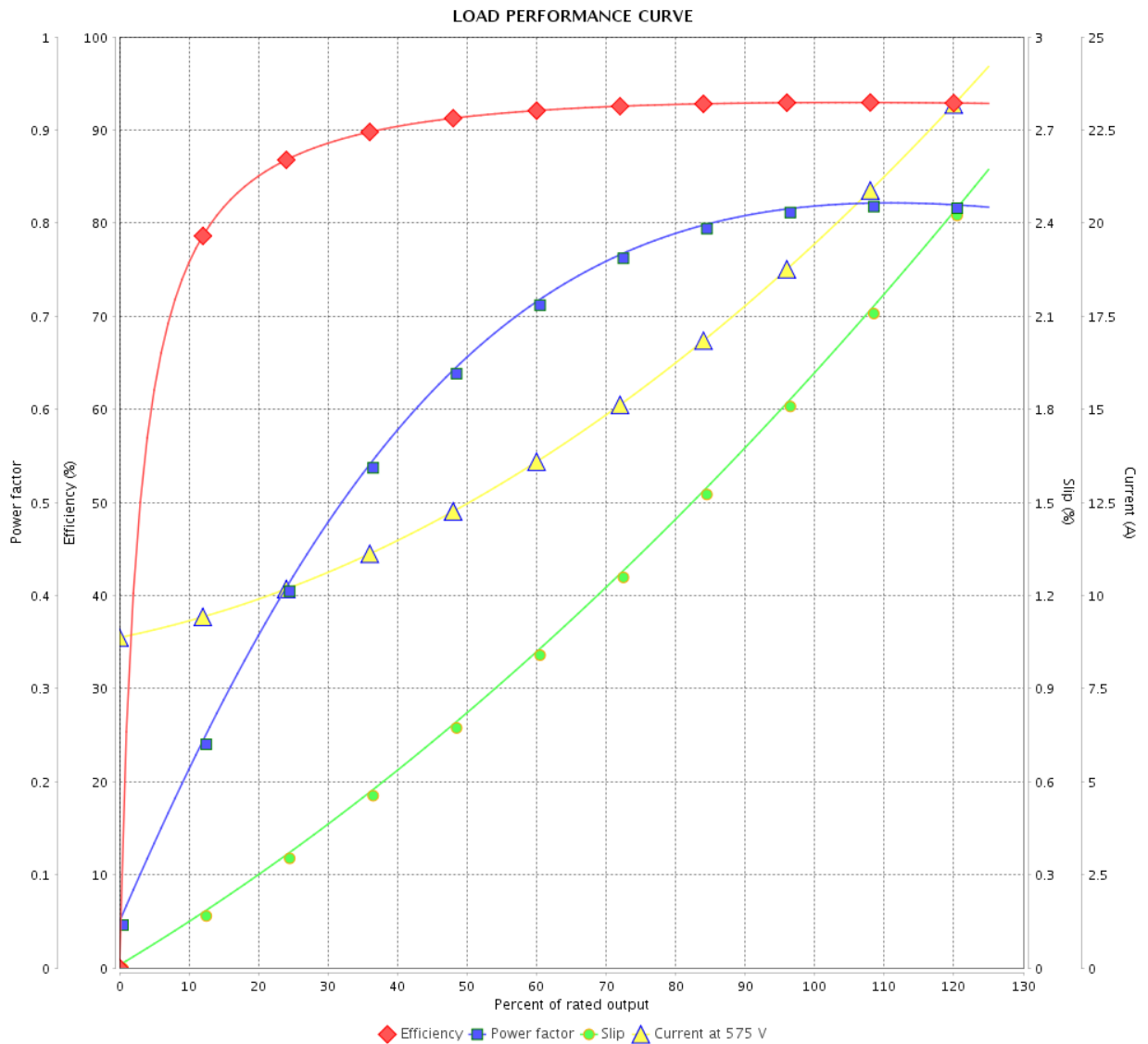


Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14329645

Catalog # : 02018ET3H256JM-SG



Performance : 575 V 60 Hz 4P

Rated current : 19.8 A
 LRC : 6.7
 Rated torque : 59.5 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 2.64 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
			3 / 6	

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 14329645

Catalog # : 02018ET3H256JM-SG

Performance : 575 V 60 Hz 4P

Rated current	: 19.8 A	Moment of inertia (J)	: 2.64 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 59.5 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Heating constant

Cooling constant

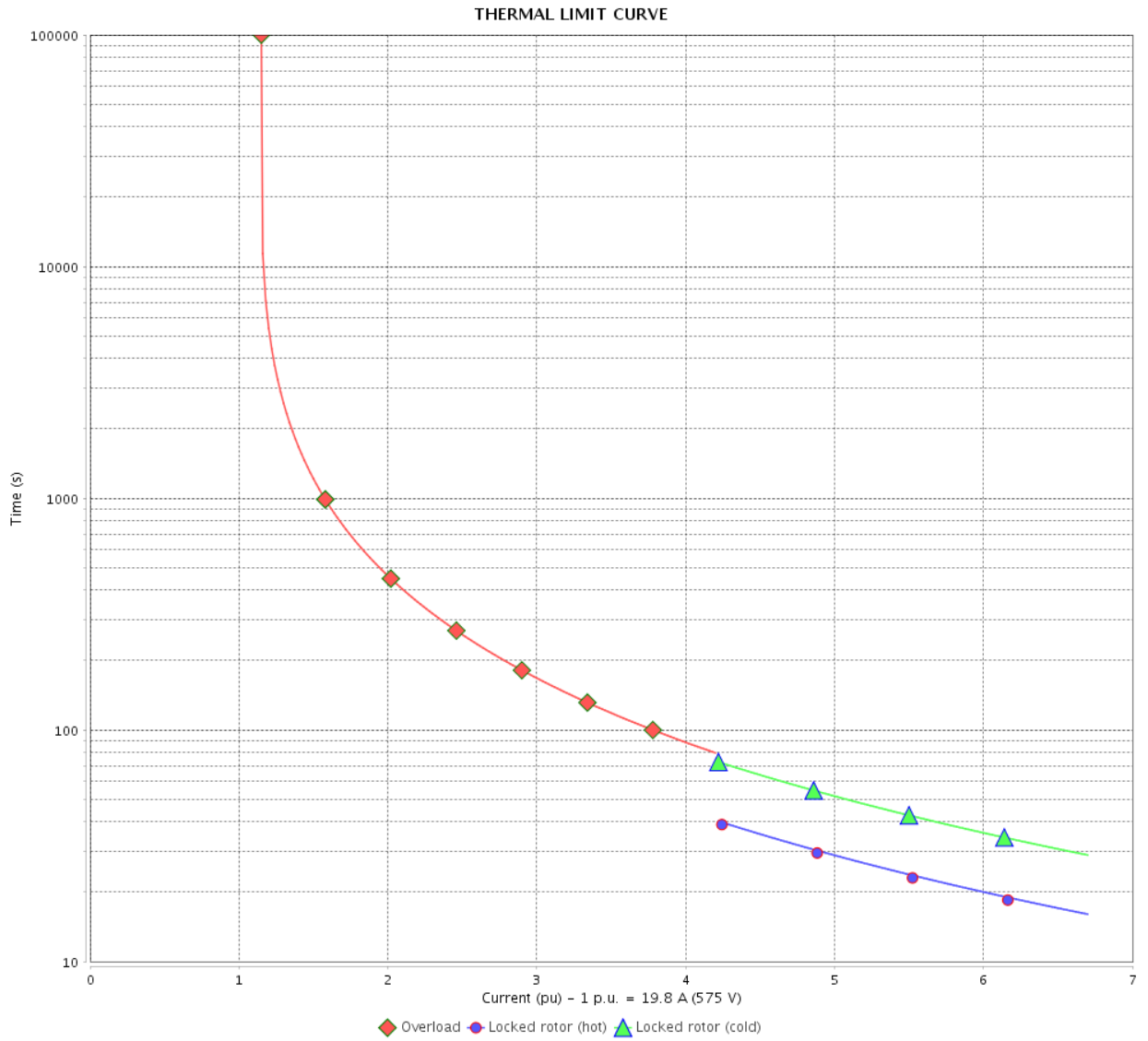
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		4 / 6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



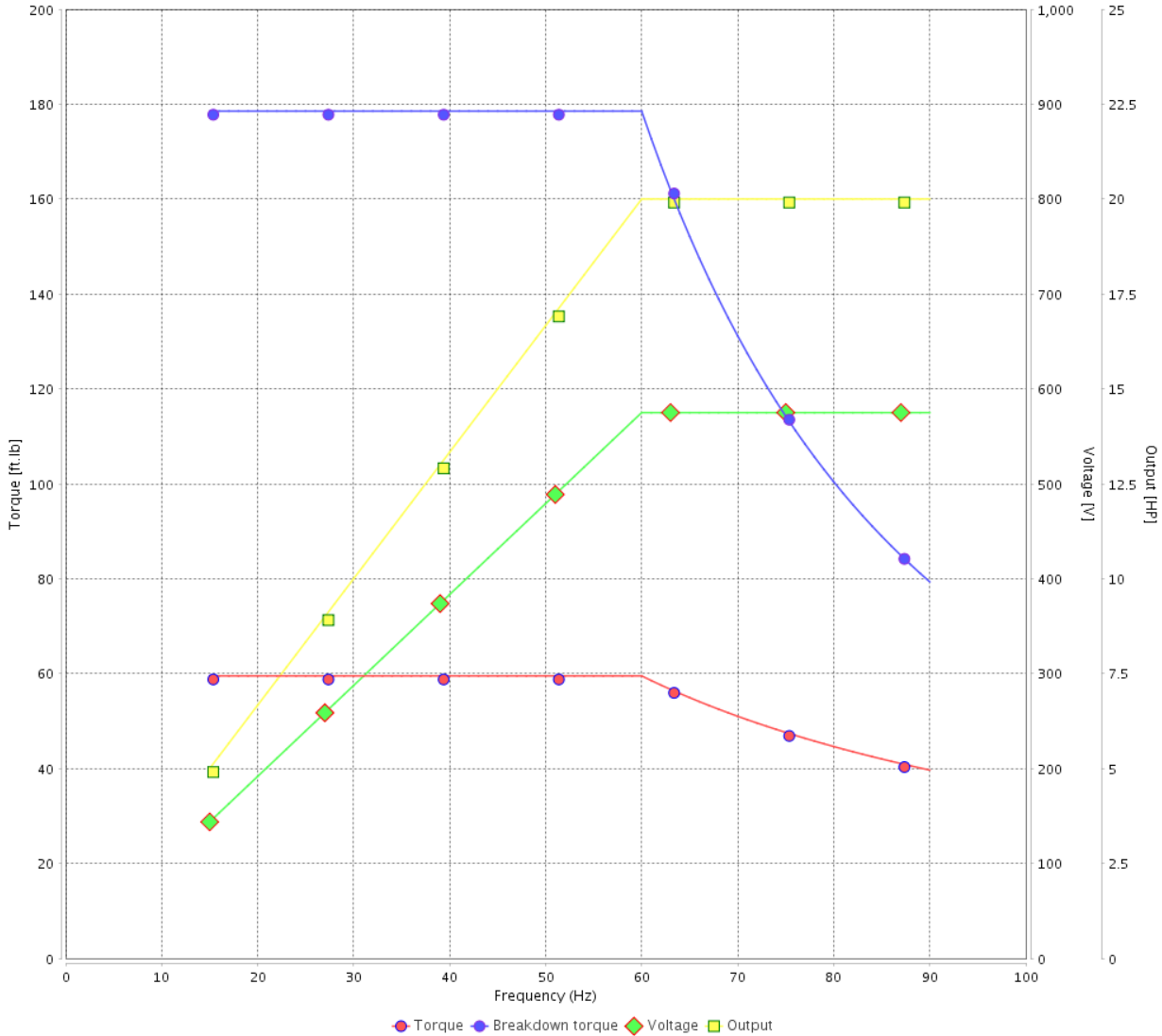
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14329645

Catalog # : 02018ET3H256JM-SG

VFD OPERATION CURVE



Performance : 575 V 60 Hz 4P

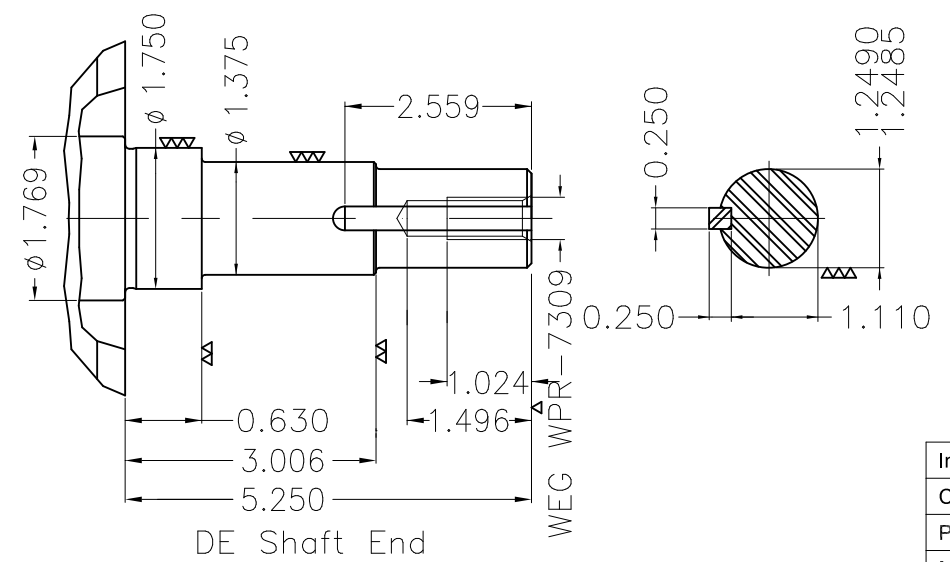
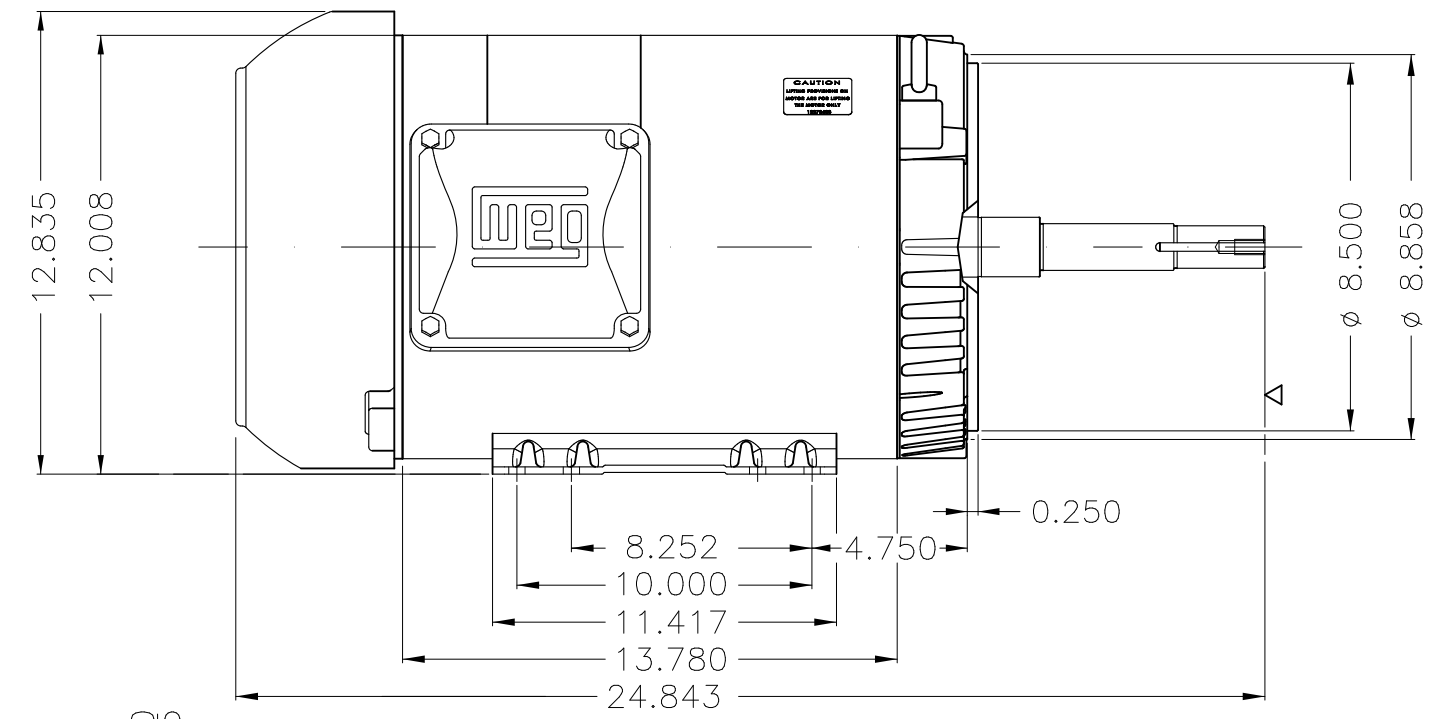
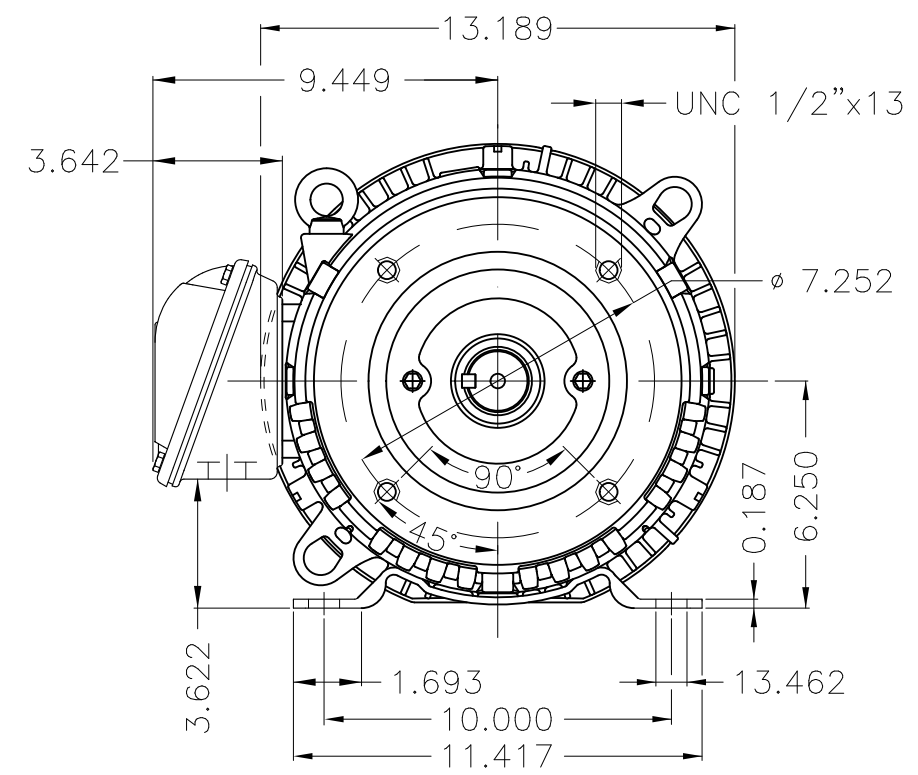
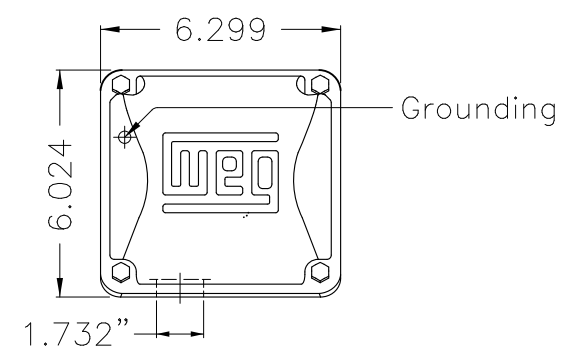
Rated current : 19.8 A
 LRC : 6.7
 Rated torque : 59.5 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 2.64 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		6 / 6		
Date	14/04/2022			

1 2 3 4 5 6

A
B
C
D
E



EUNC 1/2"-13 WEG WPR-7309

Internal AEGIS ground ring on the DE
 Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 500					
CHECKED		FRAME 254/6JM IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD			

20 HP 04 Poles 60 Hz

A SHEET 1 / 1



Dimensions in inches XME A3

WEG
NEMA
Premium3PT9
C US LISTED

Energy Verified

MADE IN MEXICO

MAT: 14329645 CC029A

W01.TE0IC0X0N

JM020504NPW01GR

04OUT2019 S/N:

PH 3 FR 254/6JM |HP(kW) 20(15)

Hz 60

V 575

RPM 1765

A 19.8

DUTY CONT.

SFA 22.8

IP55

SF 1.15

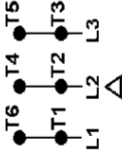
AMB 40°C

ENCL

TEFC

ALT 1000 m.a.s.l. NEMA NOM.EFF. 93.0% PF 0.82

ALTERNATE RATING:

T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT

DE: 6309-Z-C3 ODE: 6208-Z-C3 MOBIL POLYREX EM 20000h

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.

AVERTISSEMENT: Le moteur doit être mis à la terre conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

