### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : JM Pump NEMA Premium Product code: 14218356 Efficiency Three-Phase Catalog #: 00118ET3H143JM-SG Frame : 143/5JM Locked rotor time : 34s (cold) 19s (hot) Output : 1 HP (0.75 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 575 V : 1000 m.a.s.l. Altitude Rated current : 1.18 A Protection degree : IP55 L. R. Amperes : 10.1 A Cooling method : IC411 - TEFC : 8.6x(Code M) LRC Mounting : F-1 No load current : 0.712 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1765 rpm Noise level<sup>2</sup> : 52.0 dB(A) Starting method Slip : 1.94 % : Direct On Line Rated torque : 2.98 ft.lb Approx. weight<sup>3</sup> : 40.3 lb Locked rotor torque : 280 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1232 sq.ft.lb Design 25% 50% 75% 100% Output Foundation loads 84.0 85.5 : 57 lb Efficiency (%) 81.0 82.5 Max. traction Power Factor 0.30 0.52 0.66 0.75 : 98 lb Max. compression Drive end Non drive end Bearing type 6206 ZZ 6203 ZZ Sealing V'Ring Without Bearing Seal 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



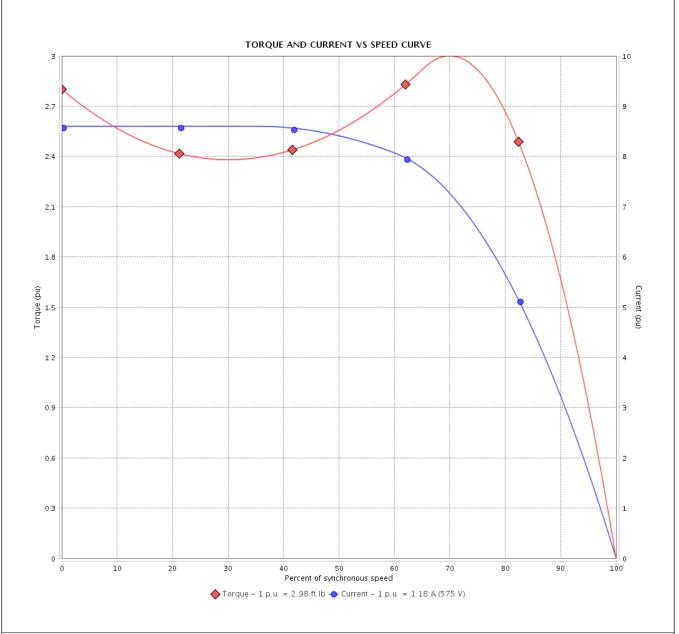
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14218356

Catalog #: 00118ET3H143JM-SG



Performance	: 575 V 60 Hz 4P			
Rated current LRC	: 1.18 A : 8.6	Moment of inertia (J) Duty cycle	: 0.1232 sq.ft.lb : Cont.(S1)	
Rated torque	: 2.98 ft.lb	Insulation class	: F	
Locked rotor torque	: 280 %	Service factor	: 1.15	
Breakdown torque Rated speed	: 300 % : 1765 rpm	Temperature rise Design	: 80 K : B	
rated speed	. 1700 грпі	Design		
Locked rotor time	: 34s (cold) 19s (hot)			

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# LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



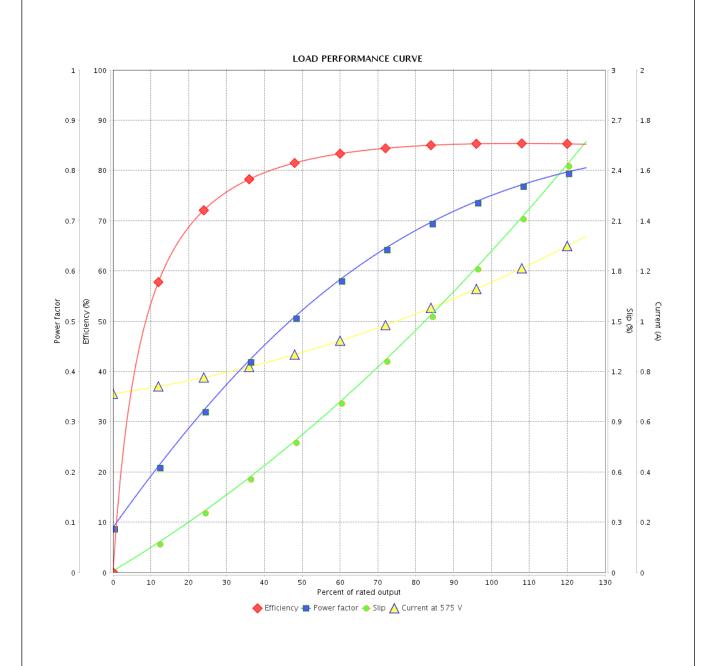
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14218356

Catalog #: 00118ET3H143JM-SG



Performance	: 5	575 V 60 Hz 4P				
Rated current	: ′	1.18 A Moment of inertia (J)		f inertia (J)	: 0.1232 sq.ft.lb	
LRC		3.6	Duty cycle	Duty cycle		
Rated torque	: 2	2.98 ft.lb	Insulation class		:F	
Locked rotor torqu	e : 2	280 % Service factor		ctor	: 1.15 : 80 K	
Breakdown torque	: 3	300 %	7 Temperature rise			
Rated speed	: 1765 rpm		Design	Design		
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



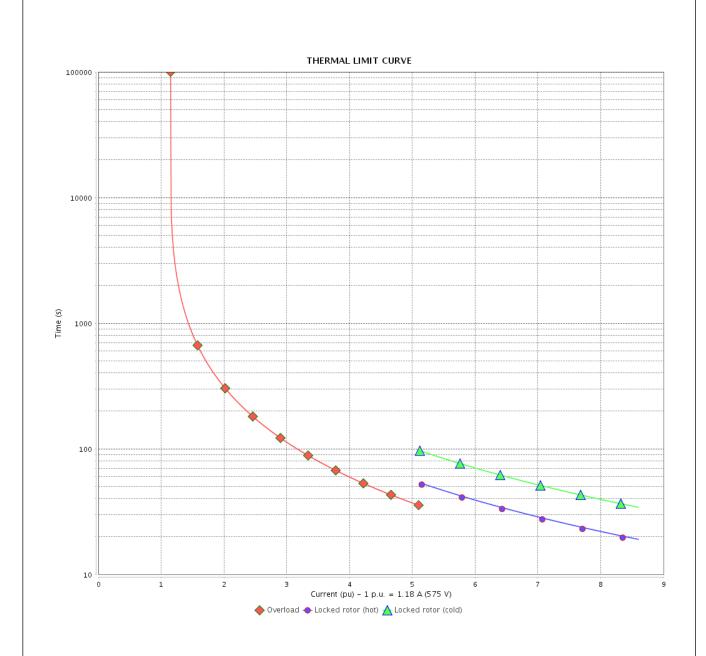
Customer	:			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase		14218356	
		Catalog # :	00118ET3H14	I3JM-SG
Performance	: 575 V 60 Hz 4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.18 A : 8.6 : 2.98 ft.lb : 280 % : 300 % : 1765 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.1232 sq.ft.lk : Cont.(S1) : F : 1.15 : 80 K : B	)
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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



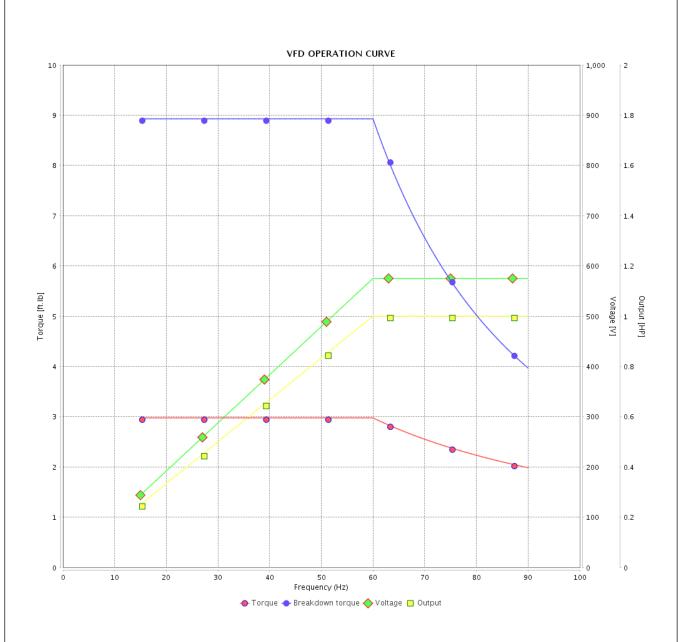
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14218356

Catalog #: 00118ET3H143JM-SG

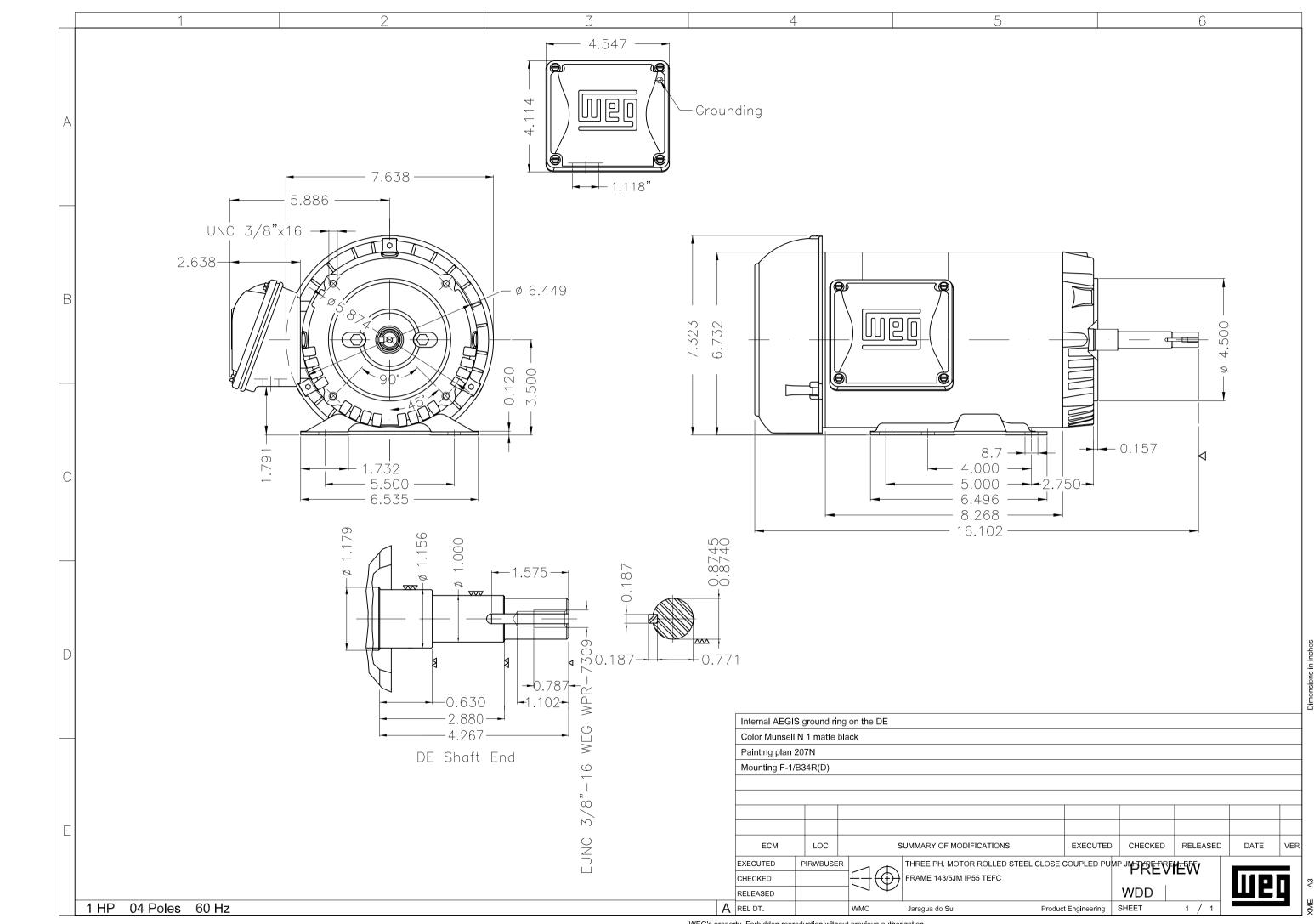


Performance	: 575 V 60 Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.18 A : 8.6 : 2.98 ft.lb : 280 % : 300 % : 1765 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1232 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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Date









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1.18 1.15 0.75

> P55 CODE DES

1000 m.a.s.l

CONT

F AT 80K

NS CL INC. WB

TEFC 2°04

575 1.36

Energy Verifi

**&** 

T3-0RG T2-WHT

T1-BLU

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

85.5%

HAM MON NEMA ZPM 3FA 냃 쌆

MOBIL POLYREX EM

8203-ZZ

ODE

8206-ZZ

牌

NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION WARNING: Motor must be grounded in accordance with local choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine

conformément aux codes électriques locaux et nationaux afin d'éviter tout

shocks. Disconnect power source before servicing unit. AVERTISSEMENT: Le moteur doit être mis à la terre

ind national electrical codes to prevent serious electrical



