## **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : JM Pump NEMA Premium Product code: 13413896 Efficiency Three-Phase Catalog #: 02018ET3V256JM-S Frame : 254/6JM Locked rotor time : 28s (cold) 16s (hot) Output : 20 HP (15 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 200/400 V : 1000 m.a.s.l. Altitude Rated current : 56.8/28.4 A Protection degree : IP55 L. R. Amperes : 381/190 A Cooling method : IC411 - TEFC LRC : 6.7x(Code H) Mounting : F-1 No load current : 25.6/12.8 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1765 rpm Noise level<sup>2</sup> : 68.0 dB(A) Starting method Slip : 1.94 % : Direct On Line Rated torque : 59.5 ft.lb Approx. weight<sup>3</sup> : 257 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 25% 50% 75% 100% Output Foundation loads 93.0 : 728 lb Efficiency (%) 91.0 91.7 92.4 Max. traction Power Factor 0.82 : 985 lb 0.40 0.66 0.77 Max. compression Non drive end Drive end 6208 Z C3 Bearing type 6309 Z C3 V'Ring Sealing 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



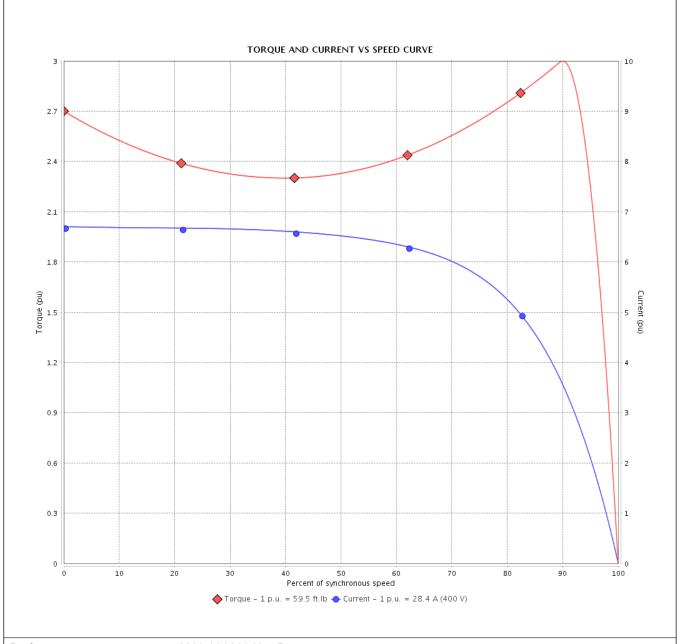
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13413896

Catalog #: 02018ET3V256JM-S



Performance : 200/400 V 60 Hz 4P Rated current : 56.8/28.4 A Moment of inertia (J) : 2.64 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : 59.5 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 270 % : 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					
Checked by				Page	Revision
Date	14/04/2022			2/6	

## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



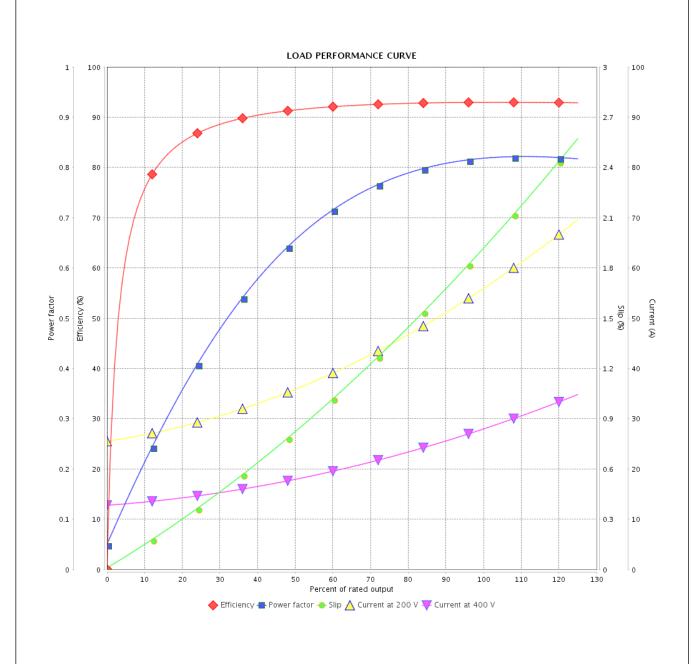
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13413896

Catalog #: 02018ET3V256JM-S



Performance		: 200/400 V 60 Hz 4P						
Rated current	:	: 56.8/28.4 A Moment of ir		f inertia (J)	: 2.64 sq.ft.lb			
LRC		6.7	Duty cycle		: Cont.(S1)			
Rated torque	:			class	:F			
Locked rotor torque	e :			Service factor : 1.15 Temperature rise : 80 K Design : B				
Breakdown torque	:							
Rated speed	:							
Rev.		Changes Summary		Performed	Checked	Date		
Performed by								
Checked by					Page	Revision		
Date	14/04/2022				3/6			

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



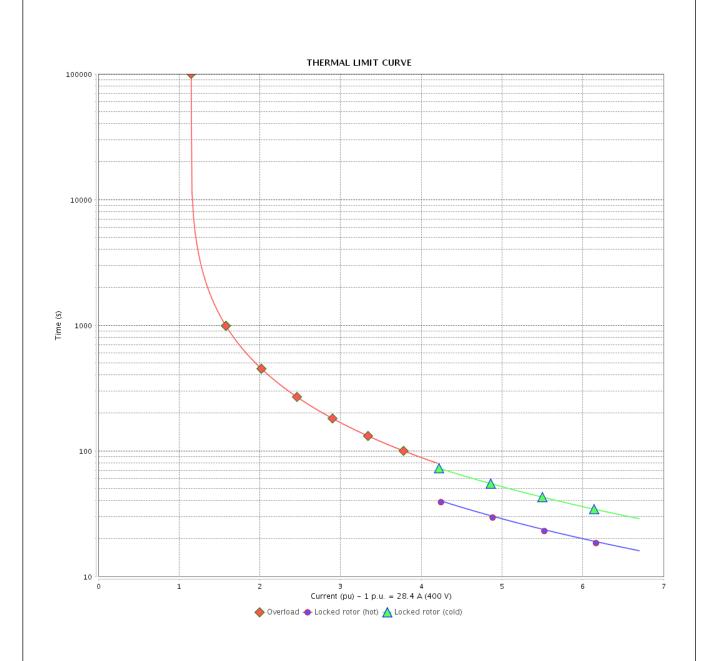
Customer	:					
Product line		: JM Pump NEMA Premium Efficiency Three-Phase		Product code :	13413896	
				Catalog # :	02018ET3V2	56JM-S
Performance	: 20	00/400 V 60 Hz 4P				
Rated current	: 56	6.8/28.4 A	Moment of	f inertia (J)	: 2.64 sq.ft.lb	
LRC Rated torque	: 6. · 50	7 9.5 ft.lb	Duty cycle Insulation	!	: Cont.(S1) : F	
Locked rotor torq	ue : 27	70 %	Service fa	ctor	: 1.15	
Breakdown torqu Rated speed		00 % 765 rpm	Temperatu Design	ıre rise	: 80 K : B	
		Тотрин			. D	
Heating constant Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer



Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			5/6	

# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



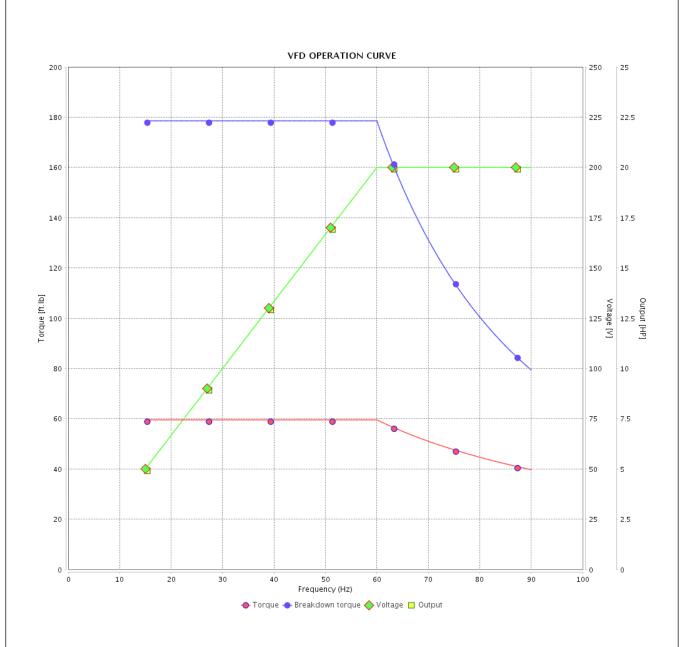
Customer :

Product line : JM Pump NEMA Premium

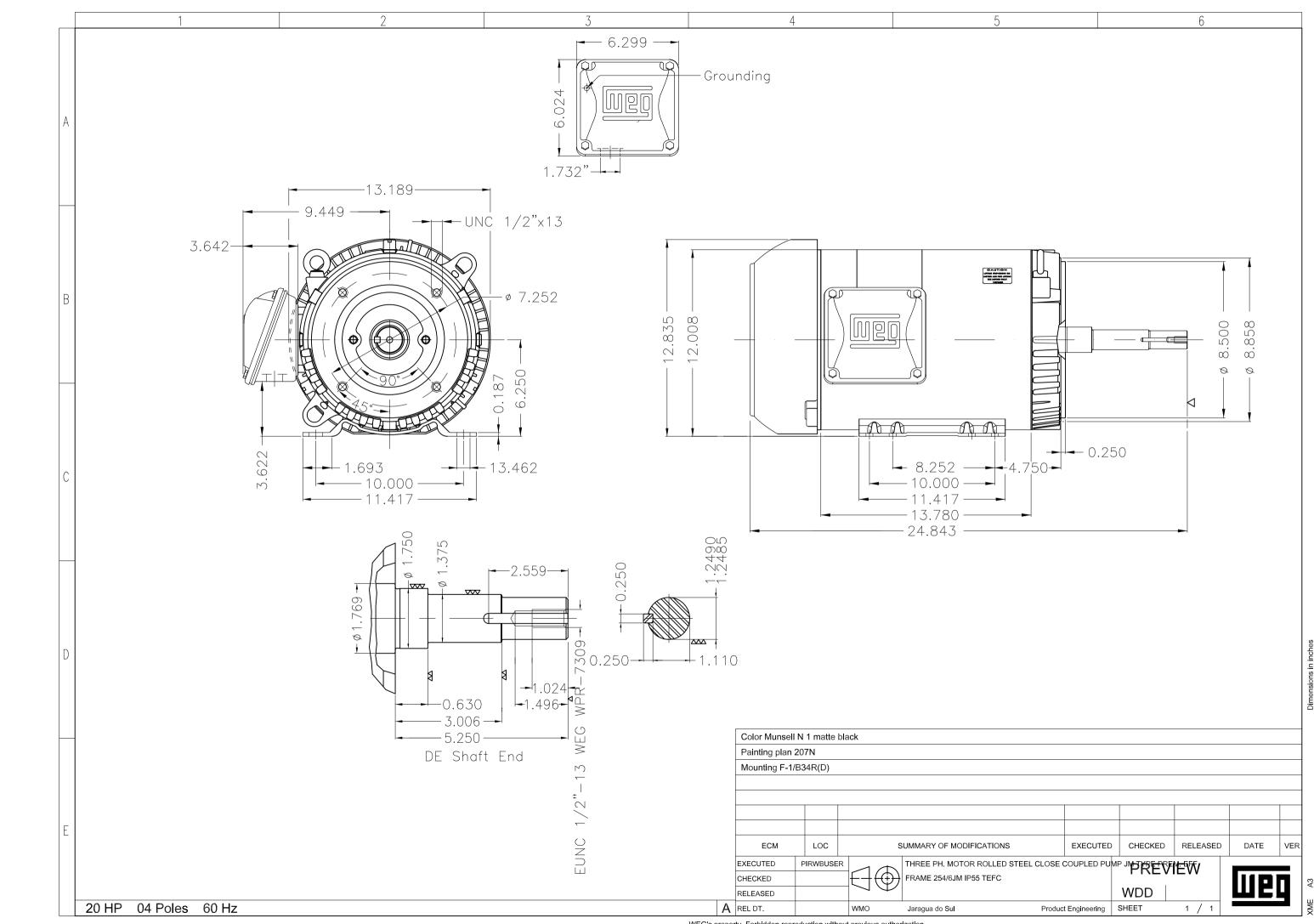
Efficiency Three-Phase

Product code: 13413896

Catalog #: 02018ET3V256JM-S



Performance : 200/400 V 60 Hz 4P Rated current : 56.8/28.4 A Moment of inertia (J) : 2.64 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : 59.5 ft.lb Insulation class : F Rated torque Locked rotor torque : 270 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by





**UL)**US LISTED 3PT9 FOR SAFE AREA

**8** Energy Verifi

Div 2 Inverter Duty (SF1.00) For 60Hz: Class I, Zone 2,

Class I, DIv.2, Gr. A,B,C,D - T3

MODEL 02018ET3V256JM-S

6JUL2021

N01.TE0IC0X0N

13413896

Hz 60 S/N

254/6JM

CONT

CT 2:1/VT 1000:1

200/400 56.8/28

1.15

3FA 냃 쌆

P55

1000 m.a.s.l

F AT 80K

NS CL NCL WB

SH

<del>0</del>

TEFC

For safe area-inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT MOBIL POLYREX EM 93.0% 111 VOM EFF NEMA ZPM CODE

2000Dh

71-BLU 13-ORG F5-BLK L7-PNK

ODE 6208-Z-C3

8309-Z-C3

HIGH

MOT

777

NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION WARNING: Motor must be grounded in accordance with local



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

choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine