### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : JM Pump NEMA Premium Product code: 14375577 Efficiency Three-Phase Catalog #: 00156OT3H143JM-SG Frame : 143/5JM Locked rotor time : 34s (cold) 19s (hot) Output : 1.5 HP (1.1 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Frequency : 60 Hz Rated voltage : 575 V Altitude : 1000 m.a.s.l. Cooling method Rated current : 1.48 A : IC01 - ODP L. R. Amperes : 12.7 A Mounting : F-1 : Both (CW and CCW) LRC : 8.6x(Code K) Rotation<sup>1</sup> No load current : 0.647 A Noise level<sup>2</sup> : 62.0 dB(A) Rated speed : 3510 rpm Starting method : Direct On Line Slip : 2.50 % Approx. weight<sup>3</sup> : 29.3 lb Rated torque : 2.24 ft.lb Locked rotor torque : 210 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.0835 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 84.0 84.0 : 49 lb Efficiency (%) 81.1 81.5 Max. traction Power Factor 0.83 0.89 : 79 lb 0.45 0.73 Max. compression Drive end Non drive end Bearing type 6206 ZZ 6203 ZZ Sealing Without Bearing Seal 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.

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			1/6	

### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



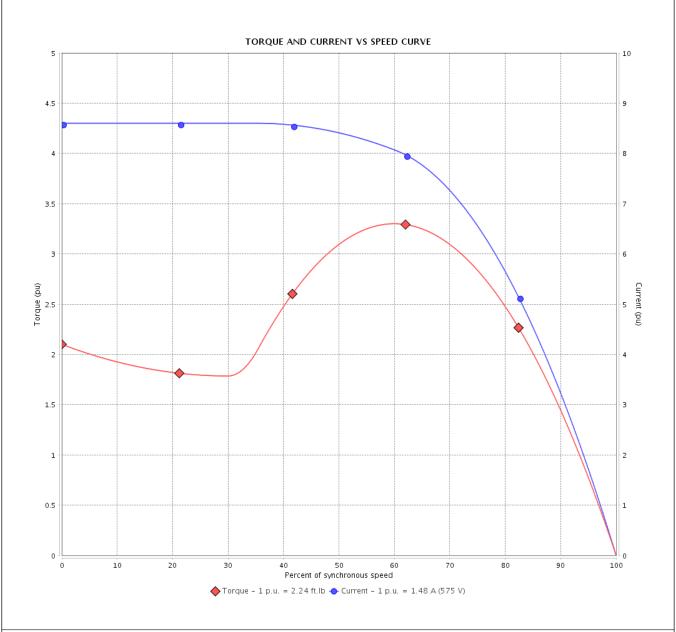
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14375577

Catalog #: 00156OT3H143JM-SG



Performance : 575 V 60 Hz 2P Rated current : 1.48 A Moment of inertia (J) : 0.0835 sq.ft.lb **LRC** : 8.6 Duty cycle : Cont.(S1) : F : 2.24 ft.lb Insulation class Rated torque : 210 % Service factor Locked rotor torque : 1.15 Breakdown torque : 330 % Temperature rise : 80 K Rated speed : 3510 rpm Design : B

Locked rotor time : 34s (cold) 19s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			2/6	

## LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



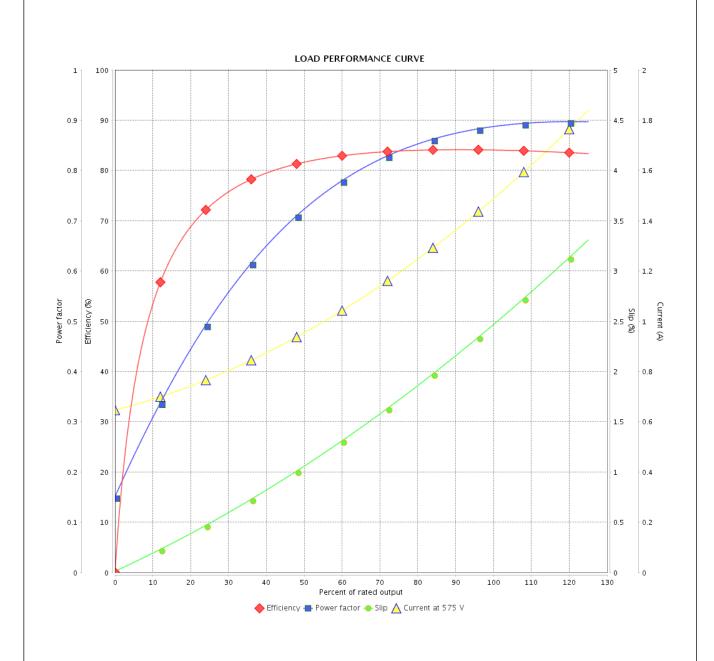
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14375577

Catalog #: 00156OT3H143JM-SG



Performance		: 575 V 60 Hz 2P					
Rated current		: 1.48 A	8 A Moment of inertia (J)		: 0.0835 sq.ft.lb		
LRC		: 8.6	Duty cycle	Duty cycle		: Cont.(S1)	
Rated torque		: 2.24 ft.lb	Insulation class		:F		
Locked rotor torque		: 210 %	Service fa	Service factor		: 1.15	
Breakdown torqu	ue	: 330 %	Temperati	Temperature rise			
Rated speed		: 3510 rpm	510 rpm Design		: B		
Rev.		Changes Summa	ry	Performed	Checked	Date	
Performed by							
Checked by					Page	Revision	
Date	12/04/2022				3/6		

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



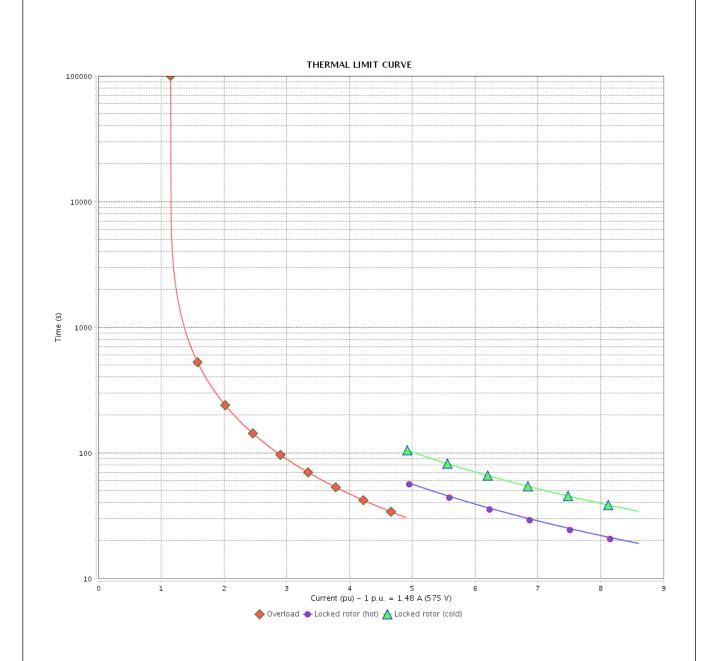
Customer		:				
Product line		: JM Pump NEMA Premium Efficiency Three-Phase		Product code :	14375577	
		Ellicities Tillee-i Hase		Catalog # :	00156OT3H	143JM-SG
Performance		: 575 V 60 Hz 2P				
Rated current	:	: 1.48 A	Moment o	f inertia (J)	: 0.0835 sq.ft.l	b
LRC Rated torque		: 8.6 : 2.24 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord		: 2.24 ILID : 210 %	Service fa		: 1.15	
Breakdown torqu	ue :	: 330 %	Temperati		: 80 K	
Rated speed		: 3510 rpm	Design		: B	
Heating constant						
Cooling constant	t	Changes Commercial		Dorfower	Charles -	Data
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				4/6	22.3

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			5/6	

## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



Customer :

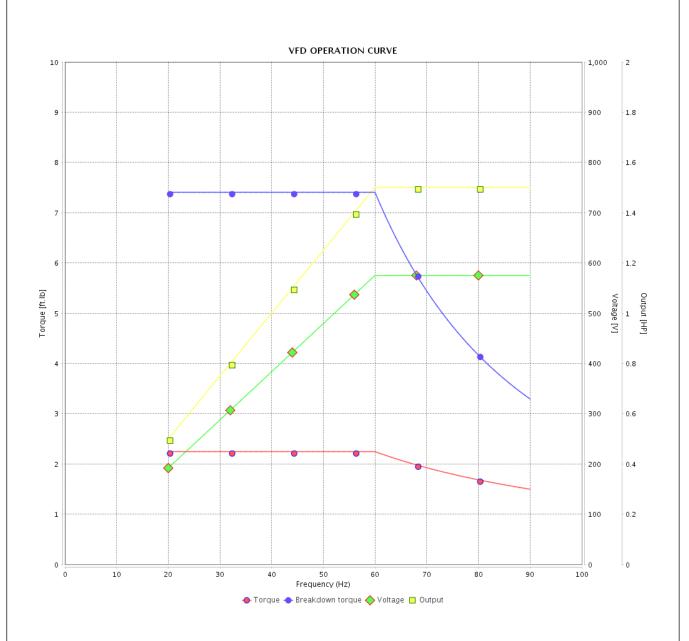
Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14375577

Catalog #: 00156OT3H143JM-SG

6/6



Performance	: 575 V 60 Hz 2P							
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.48 A : 8.6 : 2.24 ft.lb : 210 % : 330 % : 3510 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0835 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B				
Rev.	Changes Summary		Performed	Checked	Date			
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12/04/2022

Date

