### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : JM Pump NEMA Premium Product code: 14382702 Efficiency Three-Phase Catalog #: 00236ET3H145JM-SG Frame : 143/5JM Locked rotor time : 23s (cold) 13s (hot) Output : 2 HP (1.5 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 : 1.98 A Protection degree : IP55 L. R. Amperes : 19.6 A Cooling method : IC411 - TEFC LRC : 9.9x(Code L) Mounting : F-1 No load current : 0.850 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 3520 rpm Noise level<sup>2</sup> : 68.0 dB(A) Starting method Slip : 2.22 % : Direct On Line Rated torque : 2.98 ft.lb Approx. weight<sup>3</sup> : 40.1 lb Locked rotor torque : 250 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1279 sq.ft.lb Design 25% 50% 75% 100% Output Foundation loads 85.5 85.5 : 58 lb Efficiency (%) 82.1 82.5 Max. traction Power Factor 0.83 0.89 : 98 lb 0.45 0.73 Max. compression Drive end Non drive end 6203 ZZ Bearing type 6206 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



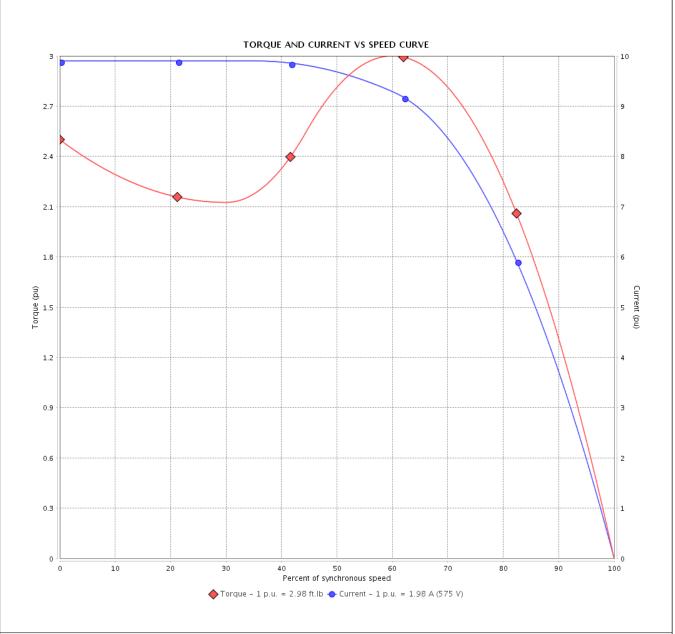
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14382702

Catalog #: 00236ET3H145JM-SG



Performance	: 575 V 60 Hz 2P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.98 A : 9.9 : 2.98 ft.lb : 250 % : 300 % : 3520 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.1279 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
Looked reter time	: 22a (aald) 12a (bat)	Doorgin		

Locked rotor time : 23s (cold) 13s (hot)

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## LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



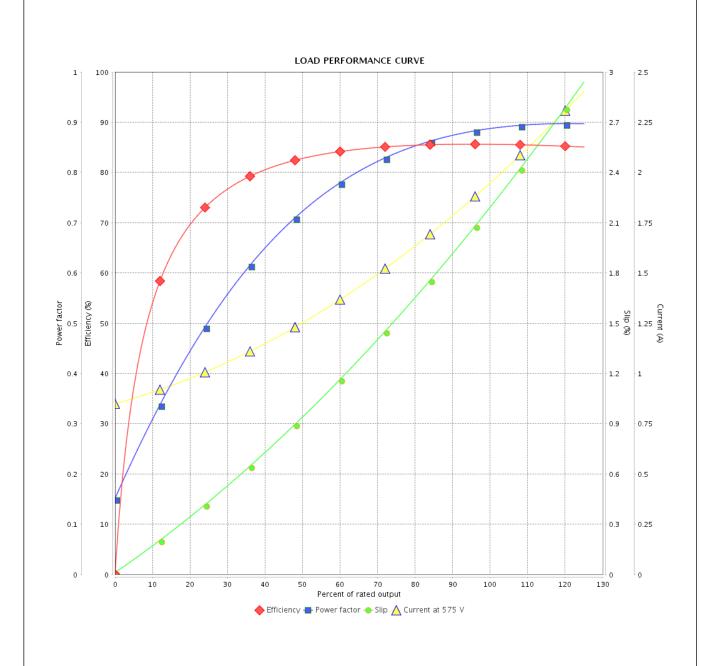
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14382702

Catalog #: 00236ET3H145JM-SG



Performance : 5		75 V 60 Hz 2P					
Rated current : 1		.98 A	Moment o	Moment of inertia (J)		.lb	
LRC : 9.9		.9	Duty cycle	Duty cycle			
Rated torque : 2.		.98 ft.lb	Insulation	Insulation class			
•		50 %	Service fa	ctor	: 1.15		
Breakdown torque	: 3	00 %	Temperati	Temperature rise		: 80 K	
Rated speed	: 3	520 rpm	Design	Design			
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



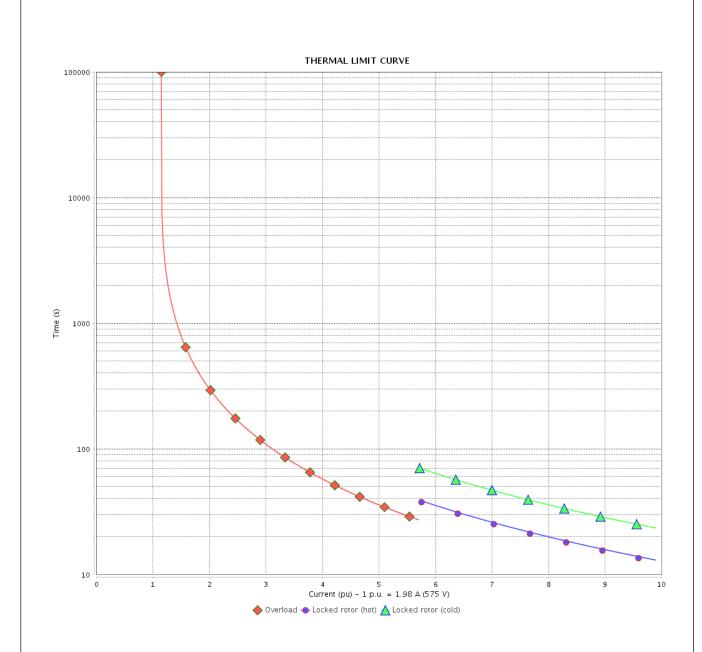
Customer		:				
Product line		: JM Pump NEMA Premium Efficiency Three-Phase		Product code :	14382702	
		Linciency Three-i hase		Catalog # :	00236ET3H1	45JM-SG
Performance	:	: 575 V 60 Hz 2P				
Rated current		: 1.98 A	Moment o	of inertia (J)	: 0.1279 sq.ft.l	b
LRC Rated torque		: 9.9 : 2.98 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord		: 250 %	Service fa		. г : 1.15	
Breakdown torqu	ue :	: 300 %	Temperat		: 80 K	
Rated speed	:	: 3520 rpm	Design		: B	
Heating constan						
Cooling constant	t	Observe O		D	Ob 1 1	Б.:
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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



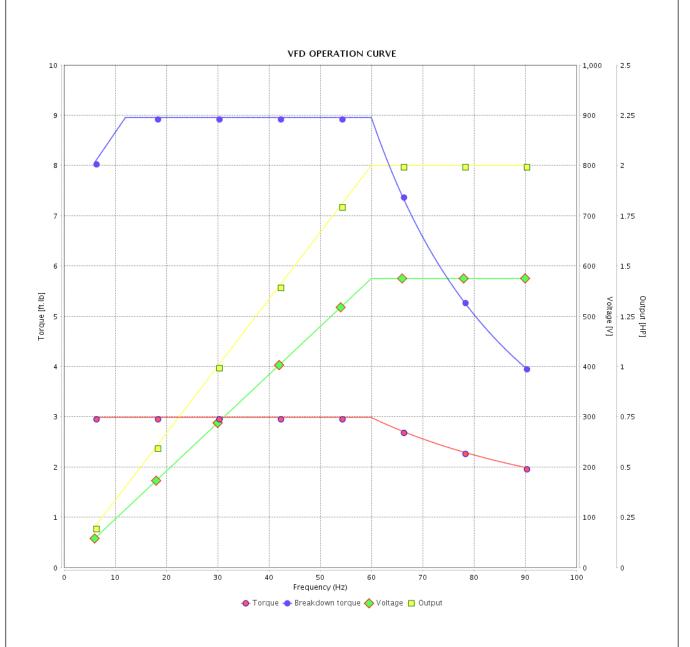
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14382702

Catalog #: 00236ET3H145JM-SG



Performance	:	575 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	iue :	1.98 A 9.9 2.98 ft.lb 250 % 300 % 3520 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		lb
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Date

