### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 JM Pump NEMA Premium Product code: 14483248 Efficiency Three-Phase Catalog #: 01518OT3H254JM-W40 Frame : 254JM Locked rotor time : 61s (cold) 34s (hot) Output : 15 HP (11 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 : 14.0 A Protection degree : IP23 L. R. Amperes : 89.6 A Cooling method : IC01 - ODP LRC : 6.4x(Code G) Mounting : F-1 No load current : 5.44 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1775 rpm Noise level<sup>2</sup> : 62.0 dB(A) Starting method Slip : 1.39 % : Direct On Line Rated torque : 44.4 ft.lb Approx. weight<sup>3</sup> : 267 lb Locked rotor torque : 220 % Breakdown torque : 260 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 2.72 sq.ft.lb Design 25% 50% 75% 100% Output Foundation loads Efficiency (%) 91.0 91.7 92.4 93.0 Max. traction Power Factor 0.66 0.43 0.78 0.85 Max. compression Non drive end Drive end Bearing type 6309 Z C3 6209 Z C3 Sealing Without Bearing Seal Without Bearing Seal Lubrication interval 20000 h 20000 h Lubricant amount 9 g 13 g

Mobil Polyrex EM

Notes

Lubricant type

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



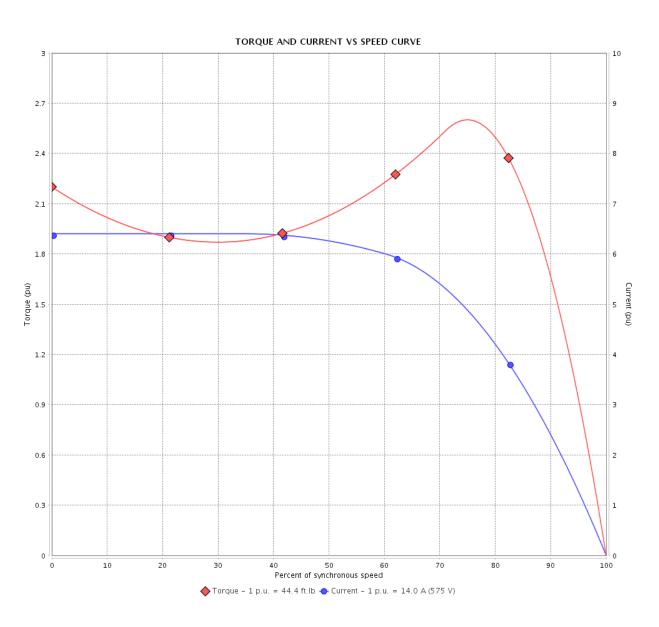
Customer :

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14483248

Catalog #: 01518OT3H254JM-W40



Performance : 575 V 60 Hz 4P Rated current : 14.0 A Moment of inertia (J) : 2.72 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) : 44.4 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 220 % : 1.25 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 1775 rpm Design : B

Locked rotor time : 61s (cold) 34s (hot)

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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer

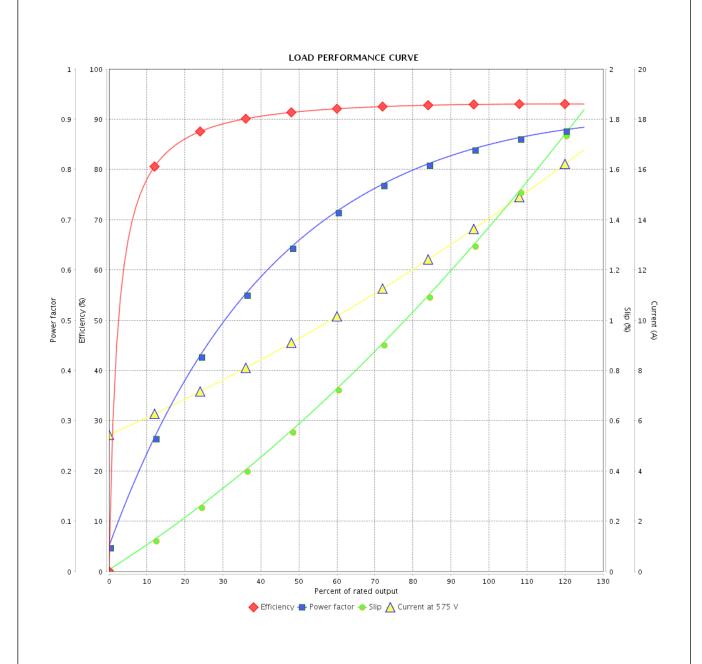
Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14483248

Catalog #: 01518OT3H254JM-W40

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Performance	: 575 V 60 Hz 4P					
Rated current	: 14.0 A	Moment of inertia (J)		: 2.72 sq.ft.lb		
LRC	: 6.4	44.4 ft.lb Insulation class		: Cont.(S1)		
Rated torque	: 44.4 ft.lb			: F : 1.25		
Locked rotor torque	: 220 %					
Breakdown torque	: 260 %	Temperature ri	Temperature rise			
Rated speed	: 1775 rpm Design			: B		
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



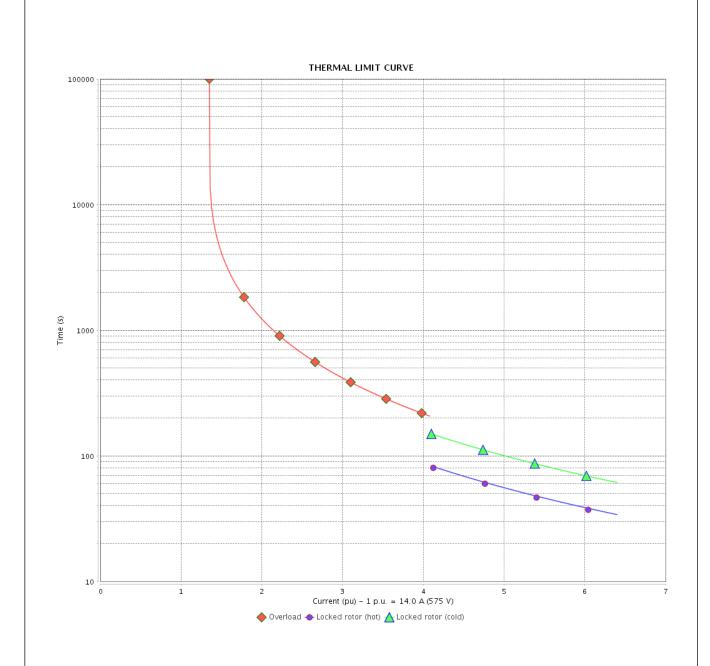
Customer	:					
Product line		MAO IM Duma NEMA Du	aium	Droduot sod -	4.4.4000.40	
		W40 JM Pump NEMA Prem Efficiency Three-Phase		Product code :	14483248	
		•		Catalog # :	01518OT3H2	54JM-W40
Performance	· E	575 V 60 Hz 4P				
Rated current				f inertia (J)	: 2.72 sq.ft.lb	
LRC	: 6	: 6.4 Duty cy		<b>;</b>	: Cont.(S1)	
		: 44.4 ft.lb Insulation : 220 % Service f			: F : 1.25	
Breakdown torque		260 % Temperatu			: 80 K	
Rated speed	: 1 	1775 rpm	Design		: B	
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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



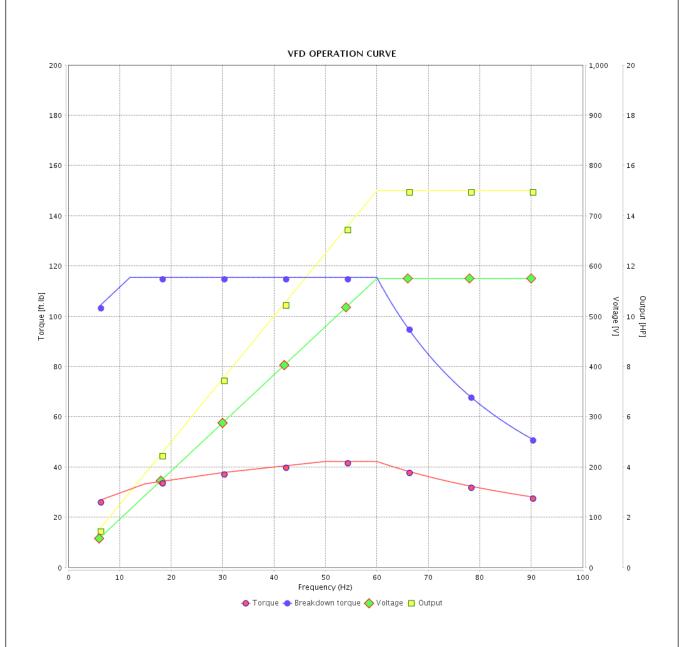
Customer :

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14483248

Catalog #: 01518OT3H254JM-W40



Performance : 575 V 60 Hz 4P : 14.0 A Rated current Moment of inertia (J) : 2.72 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.4 : 44.4 ft.lb Insulation class : F Rated torque Locked rotor torque : 220 % Service factor : 1.25 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 1775 rpm Design : B Rev. Performed Checked Date **Changes Summary** 

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