### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 JM Pump NEMA Premium Product code: 14483249 Efficiency Three-Phase Catalog #: 01518OT3V254JM-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 : 200/400 V : 1000 m.a.s.l. Altitude Rated current : 40.2/20.1 A Protection degree : IP23 L. R. Amperes : 258/129 A Cooling method : IC01 - ODP LRC : 6.4x(Code G) Mounting : F-1 No load current : 15.6/7.82 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> : 273 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 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



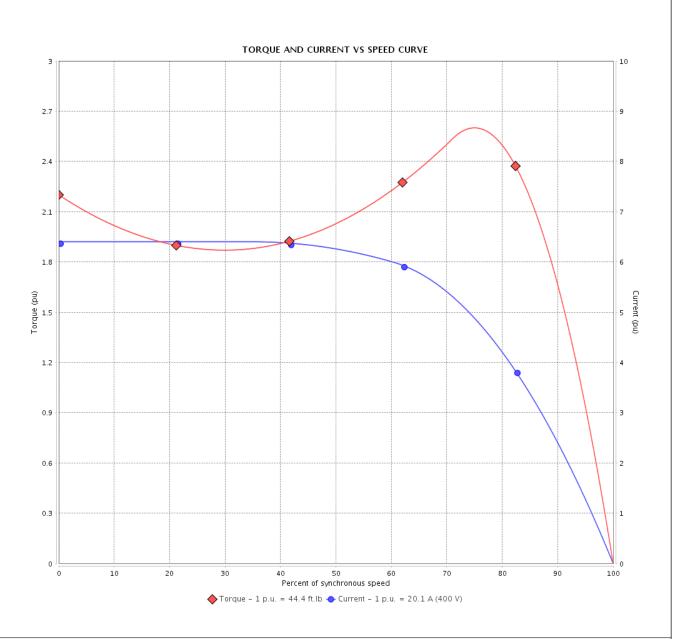
Customer :

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14483249

Catalog #: 01518OT3V254JM-W40



Performance : 200/400 V 60 Hz 4P Rated current : 40.2/20.1 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



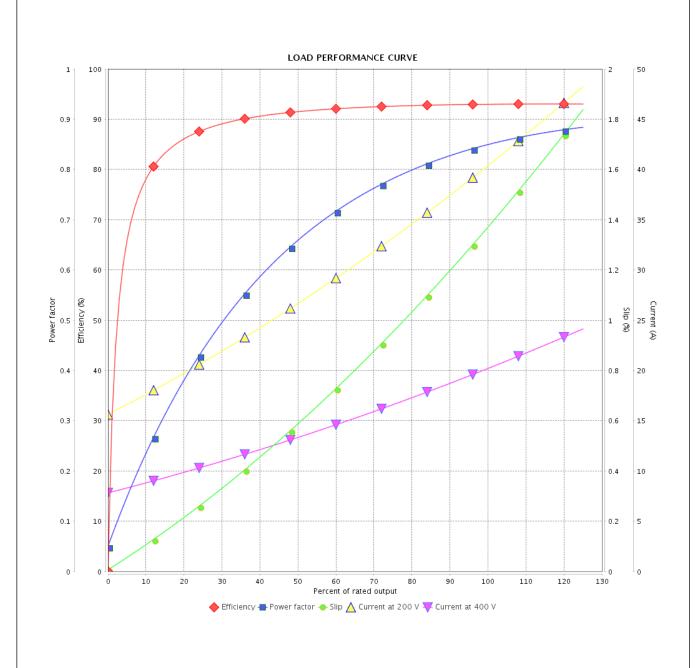
Customer

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14483249

Catalog #: 01518OT3V254JM-W40



Performance :		: 200/400 V 60 Hz 4P						
Rated current :		0.2/20.1 A	Moment of inertia (J)		: 2.72 sq.ft.lb			
LRC : 6.4		.4	Duty cycle		: Cont.(S1)			
Rated torque : 4		4.4 ft.lb	Insulation class		:F			
Locked rotor torque		20 %	Service factor		: 1.25			
Breakdown torque		60 %	Temperature rise		: 80 K			
Rated speed	: 1	775 rpm Design		: B				
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



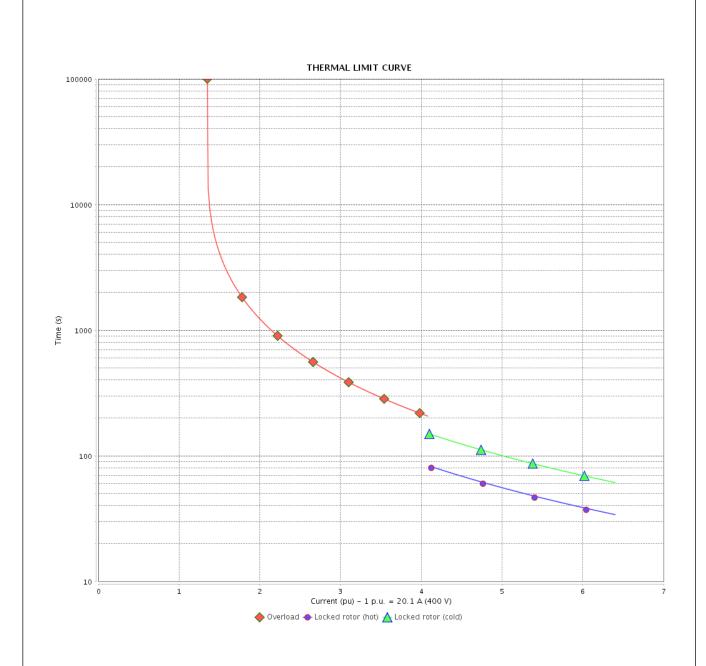
Customer		:			·	
Product line		: W40 JM Pump NEMA Pren	nium	Draduat anda :	14483249	
		Efficiency Three-Phase	nium Product code :		14403249	
		•		Catalog # :	01518OT3V254JM-W40	
Performance	:	200/400 V 60 Hz 4P				
Rated current LRC		40.2/20.1 A 6.4	Moment of Duty cycle	of inertia (J)	: 2.72 sq.ft.lb : Cont.(S1)	
Rated torque	:	44.4 ft.lb	Insulation	class	: F	
Locked rotor torc		220 %	Service fa	ctor	: 1.25	
Breakdown torqu Rated speed		260 % 1775 rpm	Temperati Design	ure rise	: 80 K : B	
		- I*	3			
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



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Date

13/04/2022

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

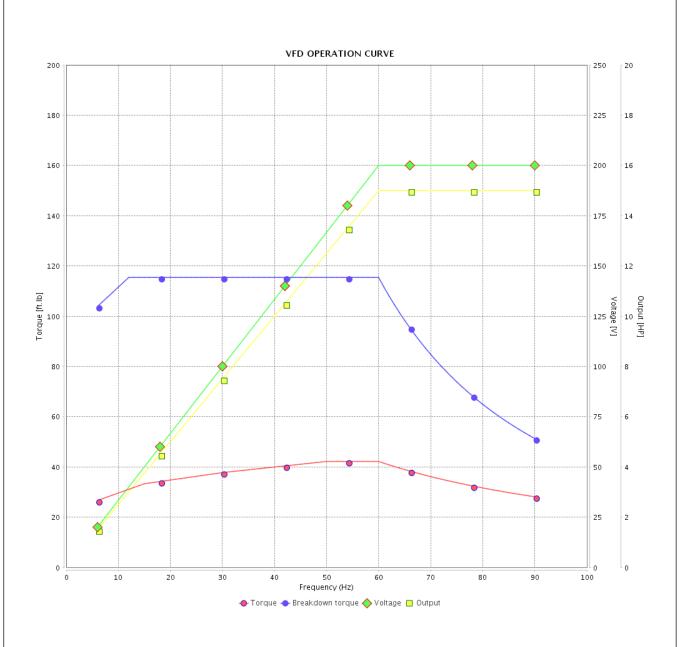
Product code: 14483249

Catalog #: 01518OT3V254JM-W40

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Revision



Performance		: 200/400 V 60 Hz	4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		: 40.2/20.1 A Moment of inertia (J) : 6.4 Duty cycle : 44.4 ft.lb Insulation class : 220 % Service factor : 260 % Temperature rise : 1775 rpm Design		class ctor	: 2.72 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
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