### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 JM Pump NEMA Premium Product code: 14484575 Efficiency Three-Phase Catalog #: 02518OT3H284JM-W40 Frame : 284JM Locked rotor time : 64s (cold) 36s (hot) Output : 25 HP (18.5 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 : 23.6 A Protection degree : IP23 : 149 A L. R. Amperes Cooling method : IC01 - ODP LRC : 6.3x(Code G) Mounting : F-1 No load current : 8.80 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1765 rpm Noise level<sup>2</sup> : 64.0 dB(A) Starting method Slip : 1.94 % : Direct On Line Rated torque : 74.2 ft.lb Approx. weight<sup>3</sup> : 400 lb Locked rotor torque : 250 % Breakdown torque : 270 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 3.71 sq.ft.lb Design 25% 50% 75% 100% Output Foundation loads Efficiency (%) 92.8 93.0 93.6 93.6 Max. traction Power Factor 0.84 0.45 0.69 0.80 Max. compression Non drive end Drive end Bearing type 6311 Z C3 6211 Z C3 Sealing Without Bearing Seal Without Bearing Seal Lubrication interval 20000 h 20000 h Lubricant amount 18 g 11 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.

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			1/6	

### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



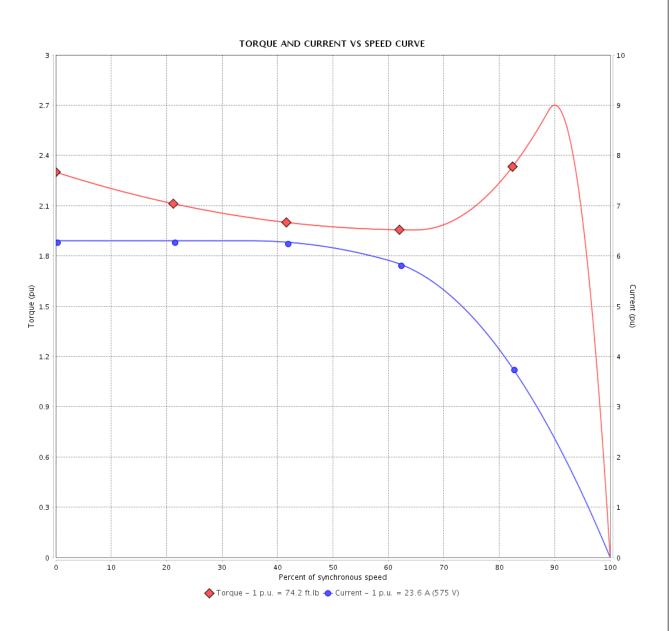
Customer :

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14484575

Catalog #: 02518OT3H284JM-W40



Performance : 575 V 60 Hz 4P Rated current : 23.6 A Moment of inertia (J) : 3.71 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) : 74.2 ft.lb Insulation class Rated torque : F Locked rotor torque : 250 % Service factor : 1.25 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B

Locked rotor time : 64s (cold) 36s (hot)

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			2/6	

## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



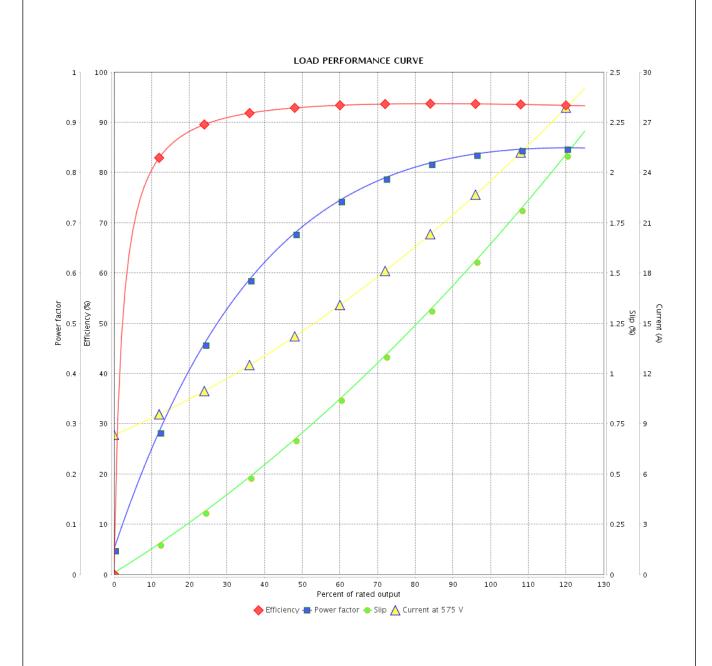
Customer

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14484575

Catalog #: 02518OT3H284JM-W40



Performance		: 575 V 60 Hz 4P					
Rated current		23.6 A	3.6 A Moment of inertia (J)		: 3.71 sq.ft.lb		
LRC		6.3	Duty cycle		: Cont.(S1)		
Rated torque		: 74.2 ft.lb Insulatio		class	: F		
Locked rotor torque		250 %	Service factor		: 1.25		
Breakdown torque	e :	: 270 % Temperature rise Design		ıre rise	: 80 K		
Rated speed	:			: B			
Rev.		Changes Summar	у	Performed	Checked	Date	
Performed by							
Checked by					Page	Revision	
Date	13/04/2022				3/6		

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



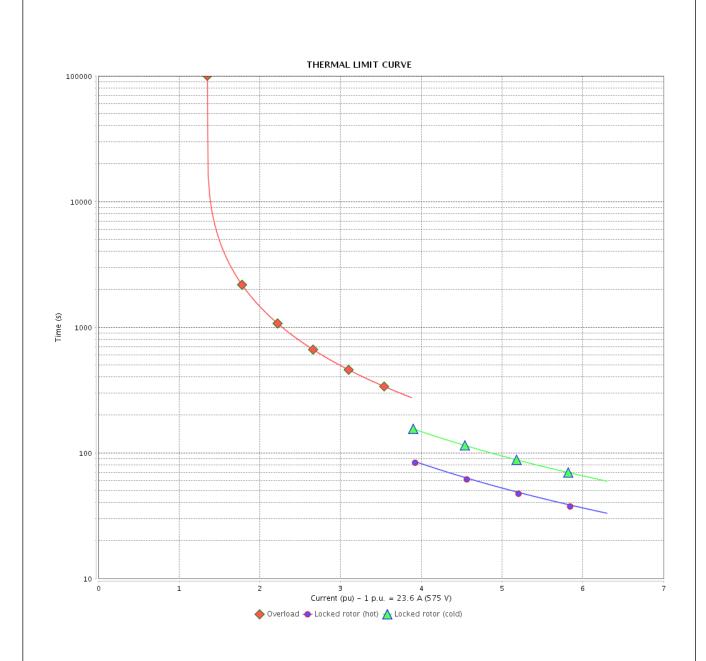
Customer		:				
Product line		: W40 JM Pump NEMA Prem Efficiency Three-Phase		Product code : Catalog # :	14484575 02518OT3H28	34JM-W40
Performance		575 V 60 Hz 4P				
Rated current		23.6 A	Moment o	f inertia (J)	: 3.71 sq.ft.lb	
LRC	:	6.3	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	:	74.2 ft.lb	Insulation	class	: F	
Locked rotor tord		250 % 270 %	Service fa		: 1.25 : 80 K	
Breakdown torqu Rated speed		1270 % 1765 rpm	Temperatu Design	ire rise	: 80 K : B	
Heating constant						
Rev.	•	Changes Summary		Performed	Checked	Date
		zagoo oaniinary			2551.64	
Performed by						
Checked by					Page	Revision
Date	13/04/2022				4/6	IZEAISIOH

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer



Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			5/6	

## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



Revision

Page 6 / 6

Customer :

Checked by

Date

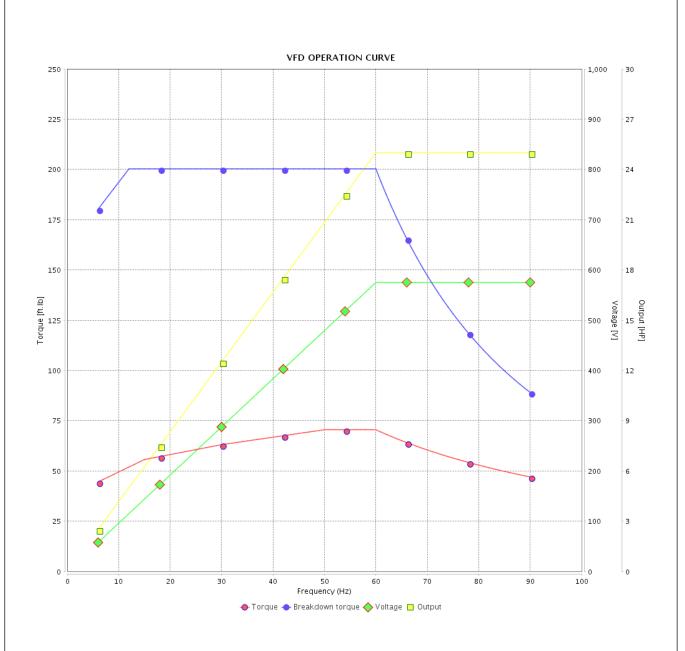
13/04/2022

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14484575

Catalog #: 02518OT3H284JM-W40



Performance : 575 V 60 Hz 4P Rated current : 23.6 A Moment of inertia (J) : 3.71 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) : 74.2 ft.lb Insulation class : F Rated torque Locked rotor torque : 250 % Service factor : 1.25 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

