### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 JM Pump NEMA Premium Product code: 14837654 Efficiency Three-Phase Catalog #: 07536OT3H364JMV-W40 Frame : 364/5JM Locked rotor time : 34s (cold) 19s (hot) Output : 75 HP (55 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 : 67.8 A Protection degree : IP23 L. R. Amperes : 448 A Cooling method : IC01 - ODP LRC : 6.6x(Code G) Mounting : W-6 No load current : 17.2 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 3555 rpm Noise level<sup>2</sup> : 84.0 dB(A) Starting method Slip : 1.25 % : Direct On Line Rated torque : 111 ft.lb Approx. weight<sup>3</sup> : 685 lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 6.40 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads : 607 lb Efficiency (%) 91.0 91.7 93.0 93.6 Max. traction Power Factor 0.87 : 1291 lb 0.56 0.77 0.84 Max. compression Non drive end Drive end

Bearing type : 6314 C3 6212 Z C3
Sealing : Without Bearing Seal
Lubrication interval : 7209 h 12143 h

Lubricant amount : 27 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.

| Rev.         |            | Changes Summary | Performed | Checked | Date     |
|--------------|------------|-----------------|-----------|---------|----------|
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| Date         | 13/04/2022 |                 |           | 1/6     |          |

### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



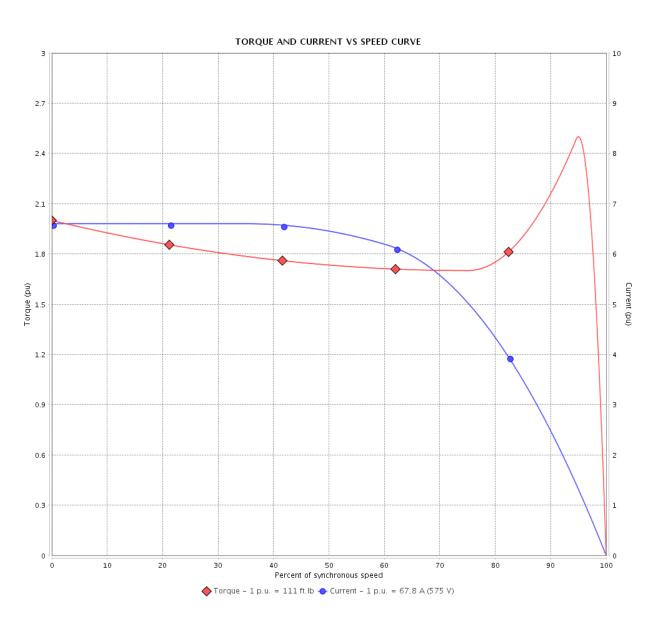
Customer :

Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14837654

Catalog #: 07536OT3H364JMV-W40



Performance : 575 V 60 Hz 2P Rated current : 67.8 A Moment of inertia (J) : 6.40 sq.ft.lb **LRC** : 6.6 Duty cycle : Cont.(S1) Insulation class Rated torque : 111 ft.lb : F Locked rotor torque : 200 % Service factor : 1.25 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 3555 rpm Design : B

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

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
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## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer

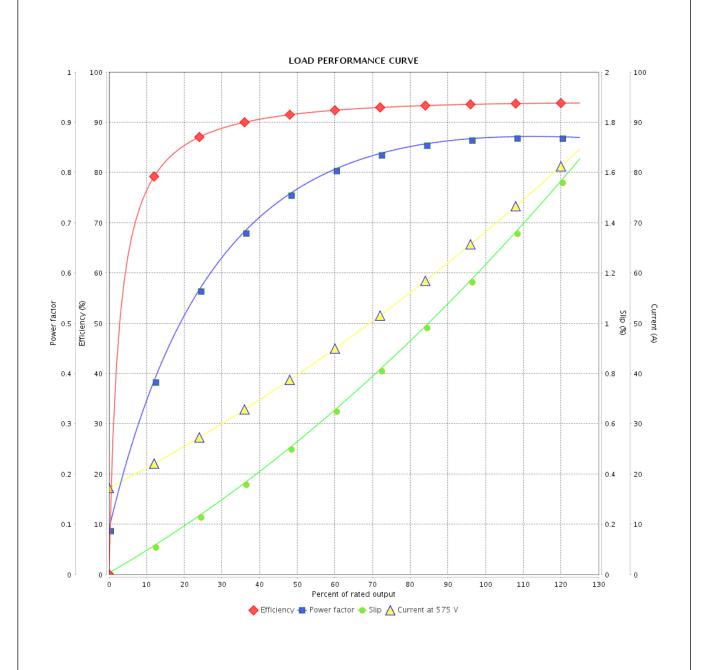
Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14837654

Catalog #: 07536OT3H364JMV-W40

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| Performance  | : 575 V 60 Hz 2P   | : 575 V 60 Hz 2P   |           |  |          |  |  |
|--|--|--|-----------|--|----------|--|--|
| Rated current<br>LRC<br>Rated torque<br>Locked rotor torque<br>Breakdown torque<br>Rated speed | : 67.8 A<br>: 6.6<br>: 111 ft.lb<br>: 200 %<br>: 250 %<br>: 3555 rpm | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design |           | : 6.40 sq.ft.lb<br>: Cont.(S1)<br>: F<br>: 1.25<br>: 80 K<br>: B |          |  |  |
| Rev.   | Changes Summary  |  | Performed | Checked  | Date     |  |  |
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13/04/2022

Date

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



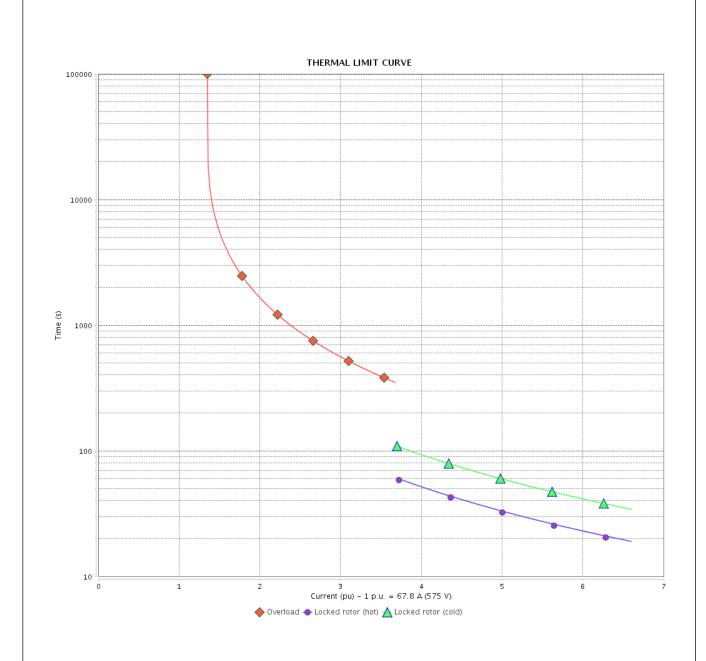
| Customer             |            | :   |                      |                |                                |           |
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| Product line         |            |   |                      | Duadout and a  | 4.4007054                      |           |
|                      |            | : W40 JM Pump NEMA Prer<br>Efficiency Three-Phase | nium                 | Product code : | 14837654                       |           |
|                      |            |   |                      | Catalog # :    | 07536OT3H3                     | 64JMV-W40 |
|                      |            |   |                      |                |                                |           |
|                      |            |   |                      |                |                                |           |
| Performance          |            | : 575 V 60 Hz 2P                                  | 1                    |                |                                |           |
| Rated current<br>LRC |            | : 67.8 A<br>: 6.6                                 | Moment of Duty cycle | of inertia (J) | : 6.40 sq.ft.lb<br>: Cont.(S1) |           |
| Rated torque         | :          | : 111 ft.lb                                       | Insulation           | class          | : F                            |           |
| Locked rotor torg    |            | : 200 %   | Service fa           |                | : 1.25                         |           |
|                      |            | : 250 %<br>: 3555 rpm                             | Temperati<br>Design  | ure rise       | : 80 K<br>: B                  |           |
|                      |            |   | 2001911              |                |                                |           |
| Heating constant     |            |   |                      |                |                                |           |
| Cooling constant     |            | Change - O.                                       |                      | Douf           | Obl !                          | Data      |
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer



| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
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## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Date

13/04/2022

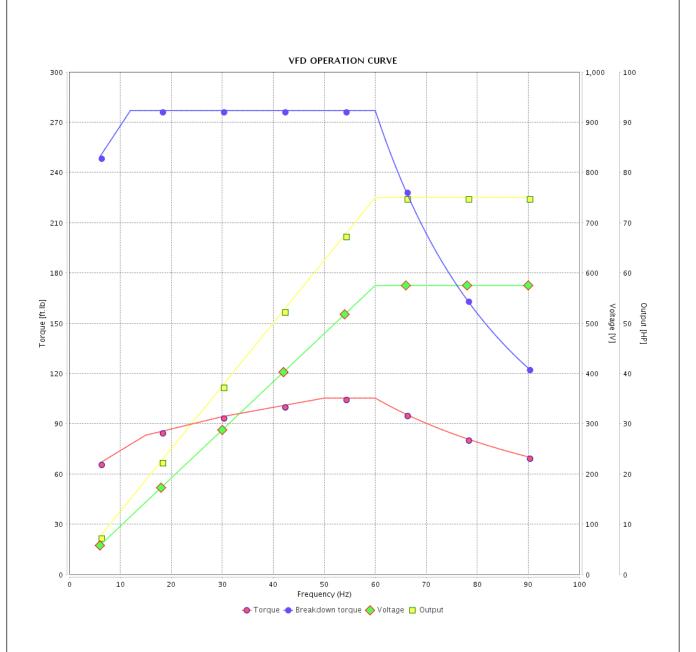
Product line : W40 JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 14837654

Catalog #: 07536OT3H364JMV-W40

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Performance : 575 V 60 Hz 2P Rated current : 67.8 A Moment of inertia (J) : 6.40 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.6 Insulation class Rated torque : 111 ft.lb : F Locked rotor torque : 200 % Service factor : 1.25 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 3555 rpm Design : B Rev. Performed Checked **Changes Summary** Date Performed by Checked by Revision Page

