## **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : JP Pump NEMA Premium Product code: 14329713

Efficiency Three-Phase

Catalog #: 00518ET3E184JP-SG

Frame : 182/4JP Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW) : -20°C to +40°C Ambient temperature Starting method : Direct On Line

: 1000 m.a.s.l. Approx. weight<sup>3</sup> : 71.4 lb Altitude

Protection degree : IP55 Moment of inertia (J) : 0.3080 sq.ft.lb

| Design                   |      | : B                  |                    | ·                  |
|--------------------------|------|----------------------|--------------------|--------------------|
| Output [HP]              |      | 5                    | 5                  | 5                  |
| Poles                    |      | 4                    | 4                  | 4                  |
| Frequency [Hz]           |      | 60                   | 50                 | 50                 |
| Rated voltage [V]        |      | 230/460              | 190/380            | 220/415            |
| Rated current [A]        |      | 13.0/6.49            | 15.8/7.88          | 14.3/7.59          |
| L. R. Amperes [A]        |      | 90.9/45.4            | 91.4/45.7          | 91.6/48.6          |
| LRC [A]                  |      | 7.0x(Code J)         | 5.8x(Code G)       | 6.4x(Code H)       |
| No load current [A]      |      | 6.89/3.44            | 6.74/3.37          | 7.10/3.77          |
| Rated speed [RPM         | 1]   | 1750                 | 1425               | 1435               |
| Slip [%]                 |      | 2.78                 | 5.00               | 4.33               |
| Rated torque [ft.lb]     |      | 15.0                 | 18.4               | 18.3               |
| Locked rotor torque [%]  |      | 220                  | 170                | 200                |
| Breakdown torque         | [%]  | 300                  | 229                | 260                |
| Service factor           |      | 1.15                 | 1.00               | 1.00               |
| Temperature rise         |      | 80 K                 | 105 K              | 105 K              |
| Locked rotor time        |      | 28s (cold) 16s (hot) | 0s (cold) 0s (hot) | 0s (cold) 0s (hot) |
| Noise level <sup>2</sup> |      | 56.0 dB(A)           | 53.0 dB(A)         | 53.0 dB(A)         |
|                          | 25%  | 88.2                 | 89.7               | 88.2               |
| Efficiency (%)           | 50%  | 88.5                 | 87.9               | 87.2               |
| Efficiency (70)          | 75%  | 89.5                 | 87.2               | 87.3               |
|                          | 100% | 89.5                 | 84.9               | 85.8               |
|                          | 25%  | 0.35                 | 0.42               | 0.37               |
| Power Factor             | 50%  | 0.60                 | 0.68               | 0.63               |
| I OWEI FACIOI            | 75%  | 0.73                 | 0.80               | 0.76               |
|                          | 100% | 0.80                 | 0.84               | 0.82               |

Drive end Non drive end Foundation loads

Bearing type 6207 ZZ 6205 ZZ Max. traction : 268 lb Sealing V'Ring Without Max. compression : 340 lb

Bearing Seal

Lubrication interval Lubricant amount Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 14.4A SF 1.00 SFA 14.4A

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



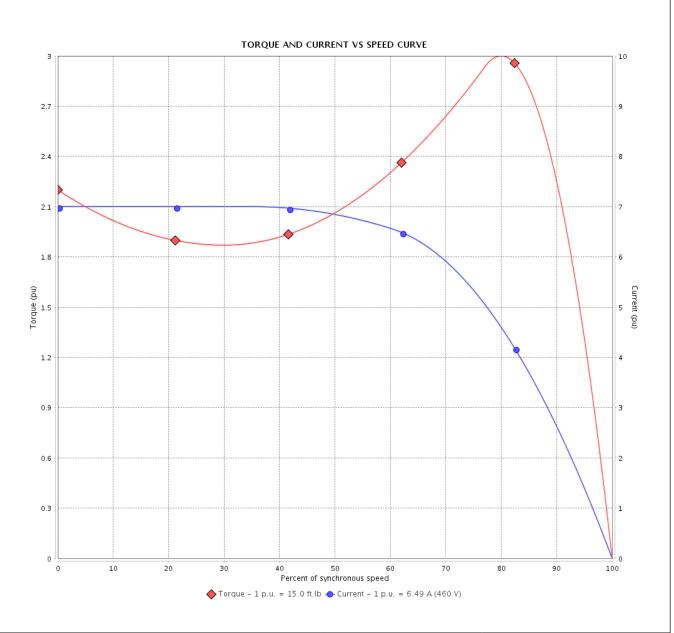
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14329713

Catalog #: 00518ET3E184JP-SG



Performance : 230/460 V 60 Hz 4P Rated current : 13.0/6.49 A Moment of inertia (J) : 0.3080 sq.ft.lb **LRC** : 7.0 Duty cycle : Cont.(S1) : F : 15.0 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 220 % : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1750 rpm Design : B

Locked rotor time : 28s (cold) 16s (hot)

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## TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage

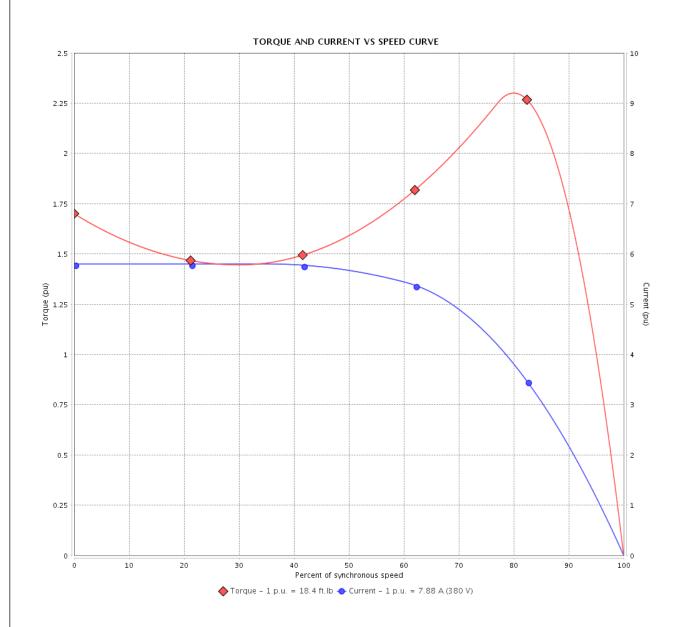


Customer

Product line : JP Pump NEMA Premium Product code: 14329713

Efficiency Three-Phase

Catalog #: 00518ET3E184JP-SG



Performance : 190/380 V 50 Hz 4P Rated current : 15.8/7.88 A Moment of inertia (J) : 0.3080 sq.ft.lb **LRC** : 5.8 Duty cycle : Cont.(S1) : 18.4 ft.lb Insulation class : F Rated torque : 170 % : 1.00 Locked rotor torque Service factor Breakdown torque : 229 % Temperature rise : 105 K : B Rated speed : 1425 rpm Design Locked rotor time

: 0s (cold) 0s (hot)

| Rev.         |            | Changes Summary | Performed | Checked | Date     |
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## TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage



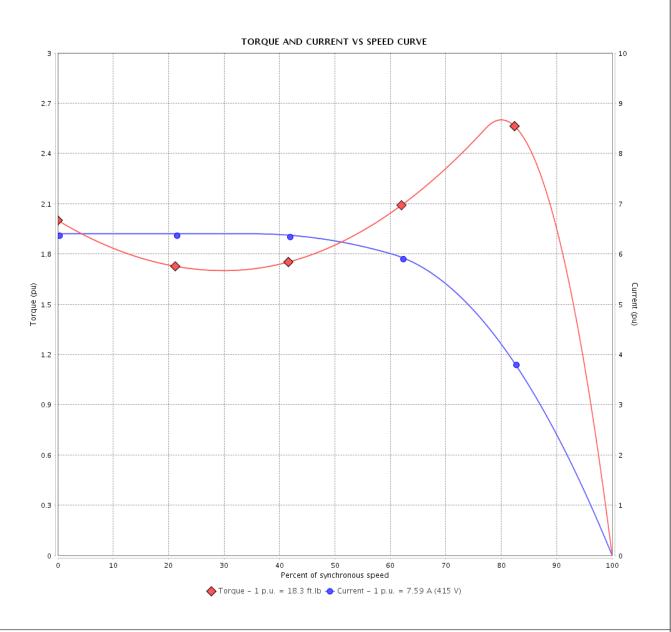
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14329713

Catalog #: 00518ET3E184JP-SG



Performance : 220/415 V 50 Hz 4P Rated current : 14.3/7.59 A Moment of inertia (J) : 0.3080 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) : 18.3 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 200 % : 1.00 Breakdown torque : 260 % Temperature rise : 105 K Rated speed : 1435 rpm Design : B

Locked rotor time : 0s (cold) 0s (hot)

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## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



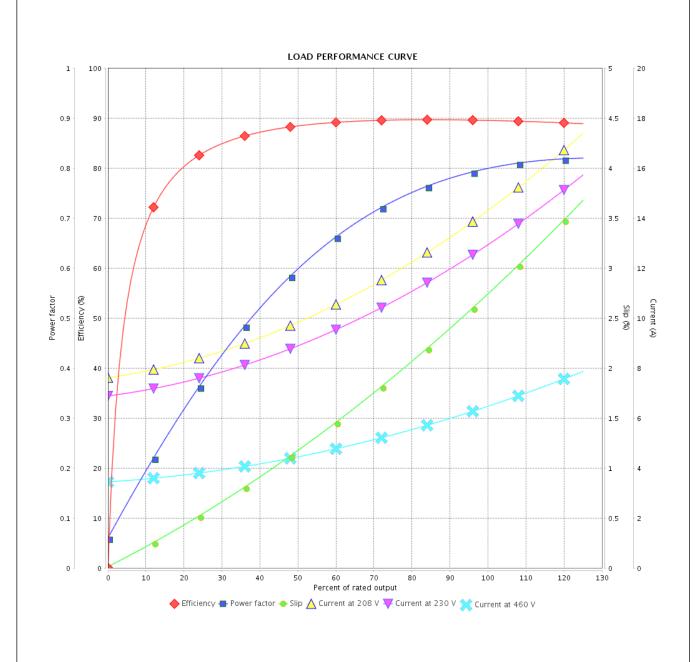
Customer

Product line : JP Pump NEMA Premium Product code :

Efficiency Three-Phase

roduct code: 14329713

Catalog #: 00518ET3E184JP-SG



| Performance   | : 230/460 V 60 Hz 4P   |   |  |   |          |
|---|--|---|--|---|----------|
| Rated current<br>LRC<br>Rated torque<br>Locked rotor torque<br>Breakdown torque | : 13.0/6.49 A<br>: 7.0<br>: 15.0 ft.lb<br>: 220 %<br>: 300 % | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise |  | : 0.3080 sq.ft.<br>: Cont.(S1)<br>: F<br>: 1.15<br>: 80 K | lb       |
| Rated speed Rev.  | : 1750 rpm  Changes Summary                                  | Design  | ormed                                  | : B<br>Checked  | Date     |
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## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Revision

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Customer :

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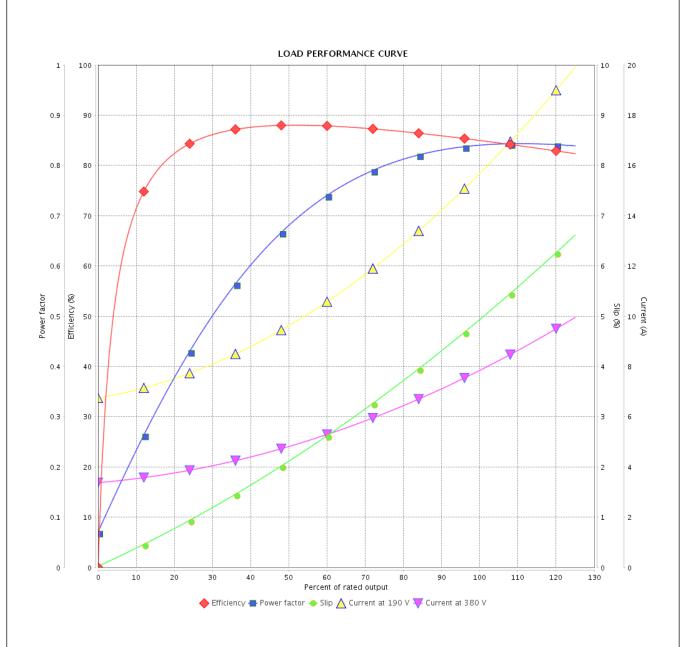
13/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14329713

Catalog #: 00518ET3E184JP-SG



Performance : 190/380 V 50 Hz 4P : 15.8/7.88 A Rated current Moment of inertia (J) : 0.3080 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 5.8 : 18.4 ft.lb Insulation class Rated torque : F Locked rotor torque : 170 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 105 K Rated speed : 1425 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



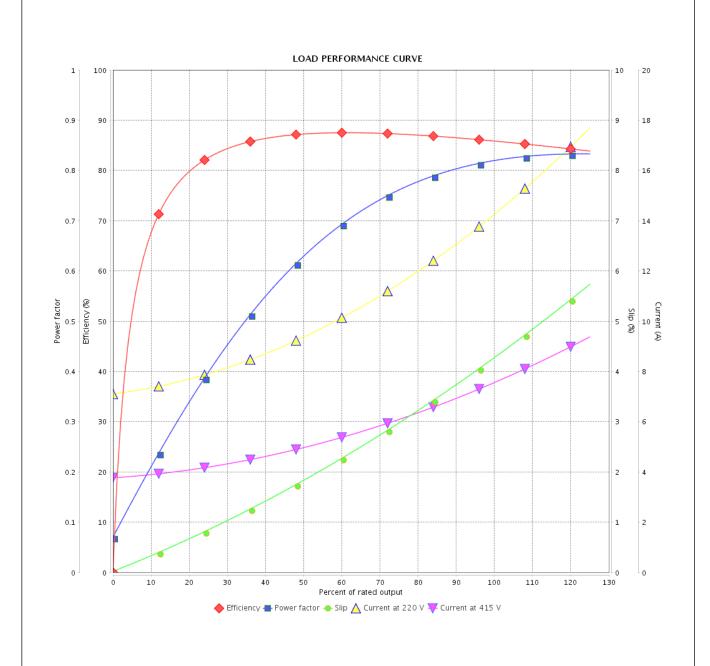
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14329713

Catalog #: 00518ET3E184JP-SG



| Performance             | : 2                         | : 220/415 V 50 Hz 4P |            |                  |                |          |
|-------------------------|-----------------------------|----------------------|------------|------------------|----------------|----------|
| Rated current           | Rated current : 14.3/7.59 A |                      | Moment o   | f inertia (J)    | : 0.3080 sq.ft | .lb      |
| LRC                     | : 6                         | 6.4                  | Duty cycle | )                | : Cont.(S1)    |          |
| Rated torque            | : 1                         | 8.3 ft.lb            | Insulation | class            | : F            |          |
| Locked rotor torque : 2 |                             | 200 %                | Service fa | ctor             | : 1.00         |          |
| Breakdown torque        |                             | 260 %                | Temperati  | Temperature rise |                |          |
| Rated speed             |                             | 435 rpm              | Design     |                  | : B            |          |
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## Three Phase Induction Motor - Squirrel Cage

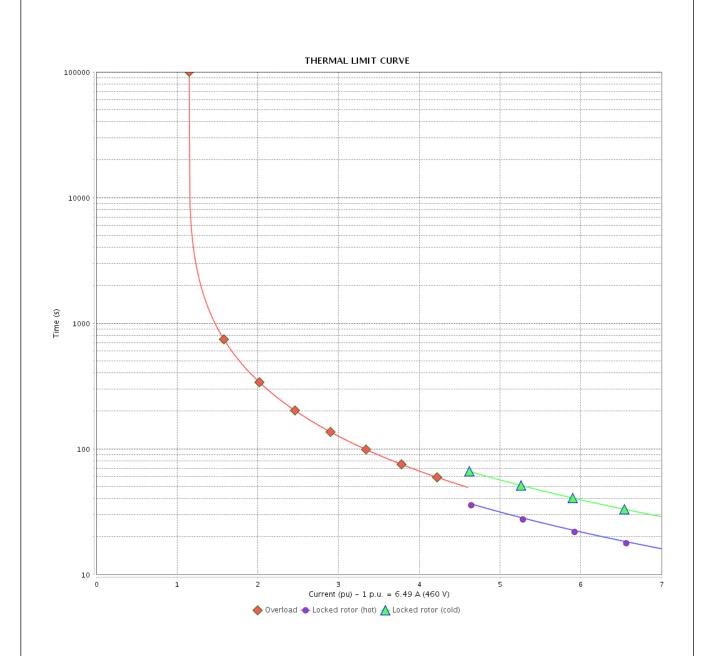


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| Product line                   | :.                       | JP Pump NEMA Premium  | 1                        | Product code : | 14329713           |          |
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| Performance                    | : 23                     | 30/460 V 60 Hz 4P     |                          |                |                    |          |
| Rated current                  |                          | 3.0/6.49 A            | Moment of                | f inertia (J)  | : 0.3080 sq.ft.l   | b        |
| LRC<br>Rated torque            | : 7.<br>: 1 <del>!</del> | 0<br>5.0 ft.lb        | Duty cycle<br>Insulation | class          | : Cont.(S1)<br>: F |          |
| Locked rotor torq              | ue : 22                  | 20 %                  | Service fa               | ctor           | : 1.15             |          |
| Breakdown torqu<br>Rated speed |                          | 00 %<br>750 rpm       | Temperatu<br>Design      | ire rise       | : 80 K<br>: B      |          |
| Heating constant               |                          |                       |                          |                |                    |          |
| Cooling constant               |                          |                       |                          |                |                    |          |
| Rev.                           |                          | Changes Summary       |                          | Performed      | Checked            | Date     |
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## Three Phase Induction Motor - Squirrel Cage



Customer



| Rev.         |            | Changes Summary | Performed | Checked | Date     |
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## Three Phase Induction Motor - Squirrel Cage

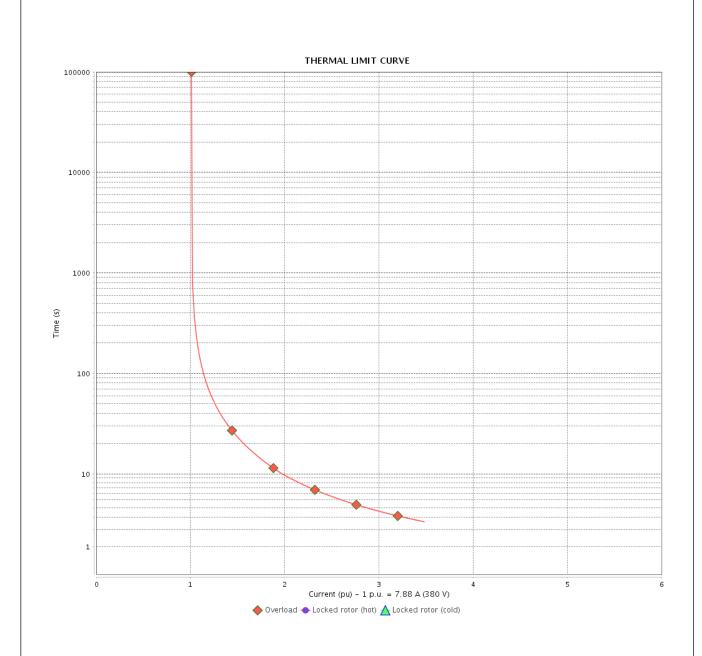


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| Product line        |            | : JP Pump NEMA Premium<br>Efficiency Three-Phase |                          | Product code : | 14329713           |          |
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|                     |            |  |                          |                |                    |          |
| Performance         |            | : 190/380 V 50 Hz 4P                             |                          |                |                    |          |
| Rated current       |            | : 15.8/7.88 A                                    | Moment of                | of inertia (J) | : 0.3080 sq.ft.l   | b        |
| LRC<br>Rated torque |            | : 5.8<br>: 18.4 ft.lb                            | Duty cycle<br>Insulation |                | : Cont.(S1)<br>: F |          |
| Locked rotor tord   |            | : 170 %  | Service fa               |                | . r<br>: 1.00      |          |
| Breakdown torqu     | ue :       | : 229 %  | Temperat                 | ure rise       | : 105 K            |          |
| Rated speed         |            | : 1425 rpm                                       | Design                   |                | : B                |          |
| Heating constant    |            |  |                          |                |                    |          |
| Cooling constant    | t          | Changes Summary                                  |                          | Performed      | Checked            | Date     |
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### Three Phase Induction Motor - Squirrel Cage



Customer



| Rev.         |            | Changes Summary | Performed | Checked | Date     |
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## Three Phase Induction Motor - Squirrel Cage

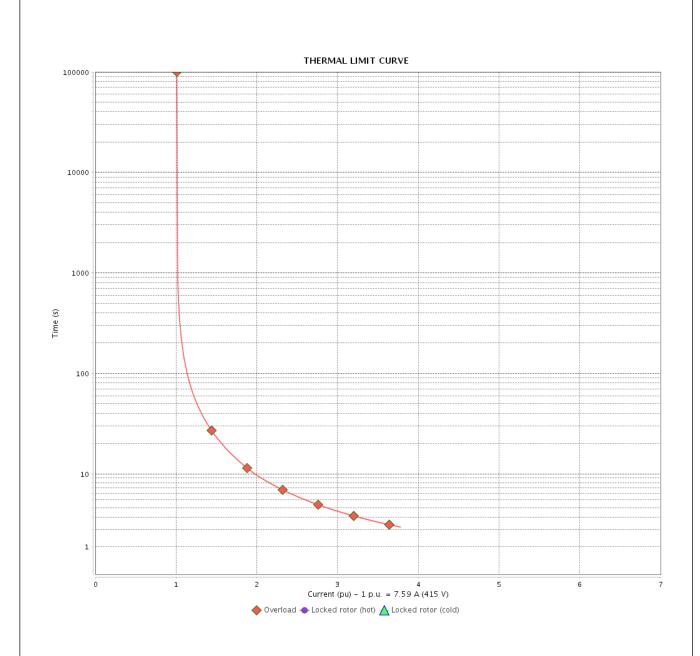


| Customer                       |            | :  |                      |                |                                 |          |
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| Product line                   |            | : JP Pump NEMA Premium<br>Efficiency Three-Phase | I                    | Product code : | 14329713                        |          |
|                                |            | Lindericy Trilee-i Hase                          |                      | Catalog # :    | 00518ET3E1                      | 84JP-SG  |
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|                                |            |  |                      |                |                                 |          |
| Performance                    | :          | : 220/415 V 50 Hz 4P                             | 1                    |                |                                 |          |
| Rated current LRC              |            | : 14.3/7.59 A<br>: 6.4                           | Moment of Duty cycle |                | : 0.3080 sq.ft.l<br>: Cont.(S1) | b        |
| Rated torque                   |            | : 18.3 ft.lb                                     | Insulation           |                | : F                             |          |
| Locked rotor tord              |            | : 200 %  | Service fa           |                | : 1.00                          |          |
| Breakdown torqu<br>Rated speed |            | : 260 %<br>: 1435 rpm                            | Temperatu<br>Design  | ire rise       | : 105 K<br>: B                  |          |
| Heating constant               |            | ·  |                      |                |                                 |          |
| Cooling constant               |            |  |                      |                |                                 |          |
| Rev.                           |            | Changes Summary                                  |                      | Performed      | Checked                         | Date     |
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### 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 :

Checked by

Date

13/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

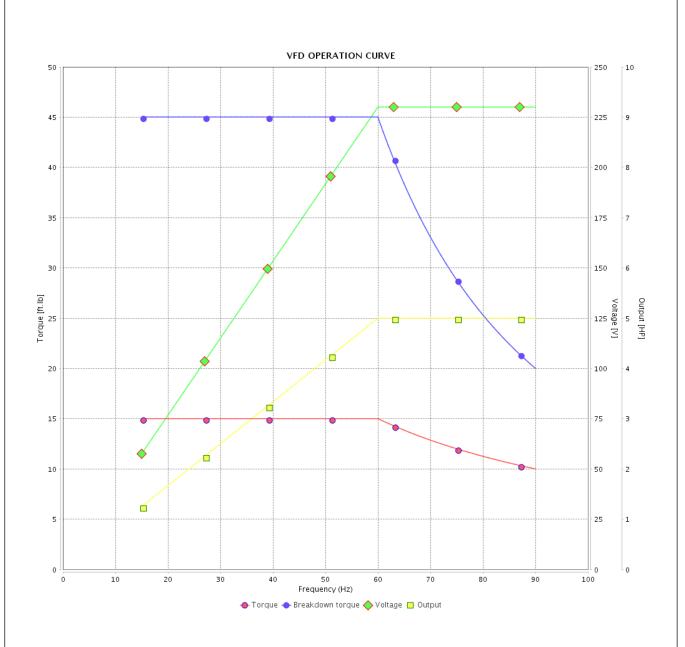
Product code: 14329713

Catalog #: 00518ET3E184JP-SG

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Revision



| Performance   | : 2             | 230/460 V 60 Hz 4P   |   |                |  |   |
|---|-----------------|--|---|----------------|--|---|
| Rated current<br>LRC<br>Rated torque<br>Locked rotor tord<br>Breakdown torqu<br>Rated speed | ine : 3         | 13.0/6.49 A<br>7.0<br>15.0 ft.lb<br>220 %<br>300 %<br>1750 rpm | Moment of Duty cycle Insulation Service fa Temperate Design | class<br>ector | : 0.3080 sq.ft.ll<br>: Cont.(S1)<br>: F<br>: 1.15<br>: 80 K<br>: B | b |
| Rev.  | Changes Summary |  | Performed   | Checked        | Date   |   |
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## VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



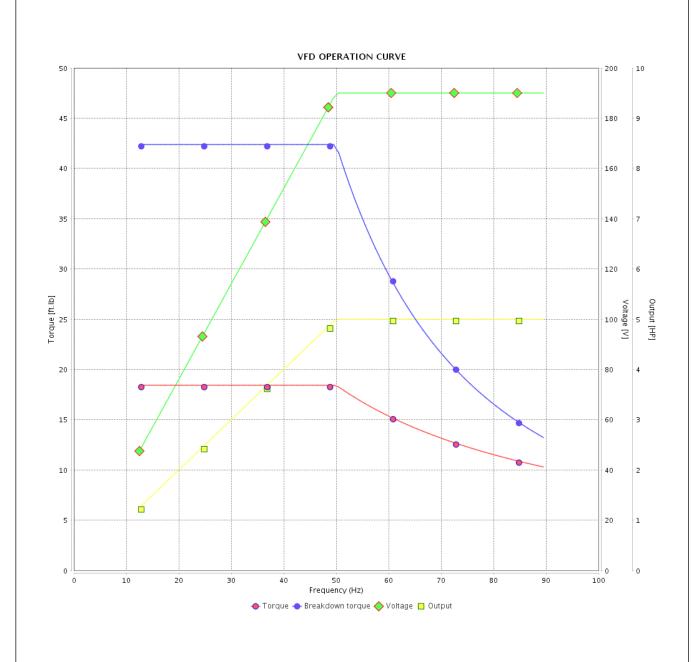
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14329713

Catalog #: 00518ET3E184JP-SG



| Performance   | : 190/380 V 50 Hz 4P   |  |           |   |          |  |  |
|---|--|--|-----------|---|----------|--|--|
| Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed | : 15.8/7.88 A<br>: 5.8<br>: 18.4 ft.lb<br>: 170 %<br>: 229 %<br>: 1425 rpm | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design |           | : 0.3080 sq.ft.lb<br>: Cont.(S1)<br>: F<br>: 1.00<br>: 105 K<br>: B |          |  |  |
| Rev.  | Changes Summary  |  | Performed | Checked   | Date     |  |  |
| Performed by  |  |  |           |   |          |  |  |
| Checked by  |  |  |           | Page  | Revision |  |  |

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13/04/2022

Date

## VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Revision

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Customer

Checked by

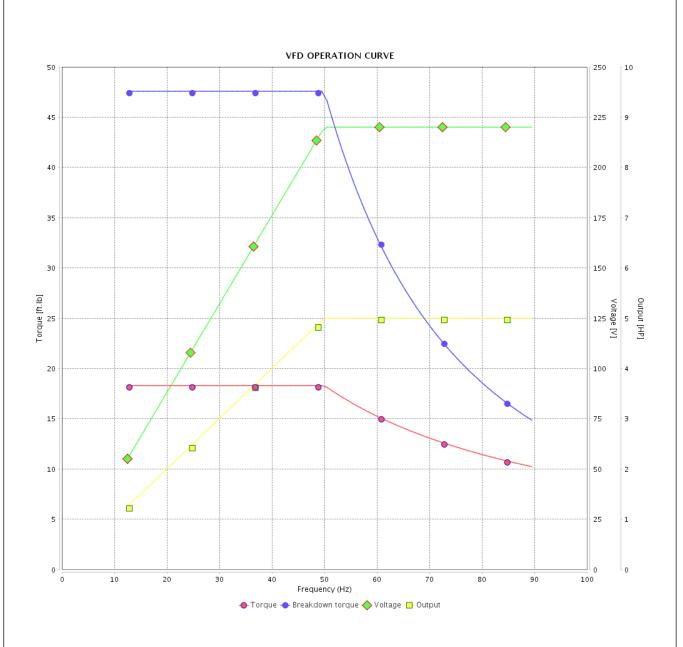
13/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14329713

Catalog #: 00518ET3E184JP-SG



Performance : 220/415 V 50 Hz 4P : 14.3/7.59 A Rated current Moment of inertia (J) : 0.3080 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.4 : 18.3 ft.lb Insulation class Rated torque : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 105 K Rated speed : 1435 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

