#### DATA SHEET

#### Three Phase Induction Motor - Squirrel Cage



89.3

87.8

0.52

0.79

0.87

0.90

Product line : JP Pump NEMA Premium Product code: 12951406 Efficiency Three-Phase 01536OT3E215JPV-S Catalog #: Frame : 213/5JP Cooling method : IC01 - ODP Insulation class Mounting : W-6 Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line Altitude : 1000 m.a.s.l. Approx. weight<sup>3</sup> : 141 lb Moment of inertia (J) Design : B : 0.5512 sq.ft.lb Output [HP] 15 15 Poles 2 2 2 60 50 Frequency [Hz] 50 Rated voltage [V] 230/460 220/415 190/380 Rated current [A] 34.4/17.2 42.0/21.0 37.9/20.1 L. R. Amperes [A] 234/117 227/113 227/121 LRC [A] 6.8x(Code G) 5.4x(Code E) 6.0x(Code F) No load current [A] 12.3/6.17 12.1/6.04 12.8/6.81 Rated speed [RPM] 3535 2905 2910 Slip [%] 1.81 3.17 3.00 Rated torque [ft.lb] 22.3 27.1 27.1 Locked rotor torque [%] 210 160 180 Breakdown torque [%] 280 200 229 Service factor 1.00 1.00 1.15 105 K Temperature rise 80 K 80 K 0s (cold) 0s (hot) 0s (cold) 0s (hot) Locked rotor time 14s (cold) 8s (hot) Noise level<sup>2</sup> 66.0 dB(A) 64.0 dB(A) 64.0 dB(A) 25% 90.1 91.3 91.3 50% 90.2 90.2 90.1 Efficiency (%)

88.9

87.6

0.57

0.83

0.89

0.91

<u>Drive end</u> <u>Non drive end</u> Foundation loads

90.2

90.2

0.50

0.77

0.86

0.89

Bearing type : 6209 ZZ 6206 ZZ Max. traction : 281 lb Sealing : Without Without Max. compression : 421 lb

Bearing Seal Bearing Seal

Lubrication interval : - - Lubricant amount : - Lubricant type : Mobil Polyrex EM

Notes

Power Factor

USABLE @208V 38.0A SF 1.00 SFA 38.0A

75%

100%

25%

50%

75%

100%

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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| Date                                    | 13/04/2022 | _               |           | 1 /     |          |

### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



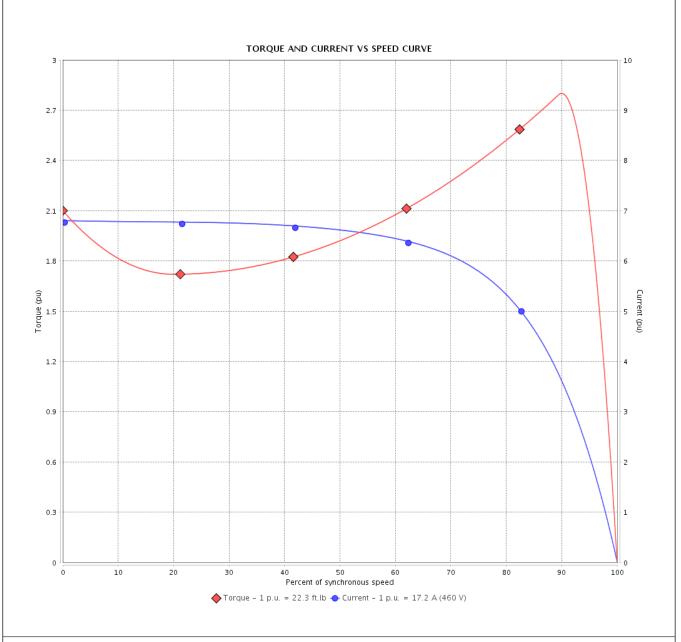
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 12951406

Catalog #: 01536OT3E215JPV-S



Performance : 230/460 V 60 Hz 2P Rated current : 34.4/17.2 A Moment of inertia (J) : 0.5512 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) : F : 22.3 ft.lb Insulation class Rated torque Service factor : 1.15 Locked rotor torque : 210 % Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 3535 rpm Design : B

Locked rotor time : 14s (cold) 8s (hot)

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



Revision

Page

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Three Phase Induction Motor - Squirrel Cage Customer Product line : JP Pump NEMA Premium Product code: 12951406 Efficiency Three-Phase Catalog #: 01536OT3E215JPV-S TORQUE AND CURRENT VS SPEED CURVE 2.25 1.75 1.5 (pd) 1.25 Current 0.5 0.25 Percent of synchronous speed ◆ Torque - 1 p.u. = 27.1 ft.lb ◆ Current - 1 p.u. = 21.0 A (380 V) Performance : 190/380 V 50 Hz 2P Rated current : 42.0/21.0 A Moment of inertia (J) : 0.5512 sq.ft.lb **LRC** : 5.4 Duty cycle : Cont.(S1) : 27.1 ft.lb Insulation class : F Rated torque Locked rotor torque : 160 % Service factor : 1.00 Breakdown torque : 200 % Temperature rise : 105 K Rated speed : 2905 rpm Design : B Locked rotor time : 0s (cold) 0s (hot) Date Rev. **Changes Summary** Performed Checked

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### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



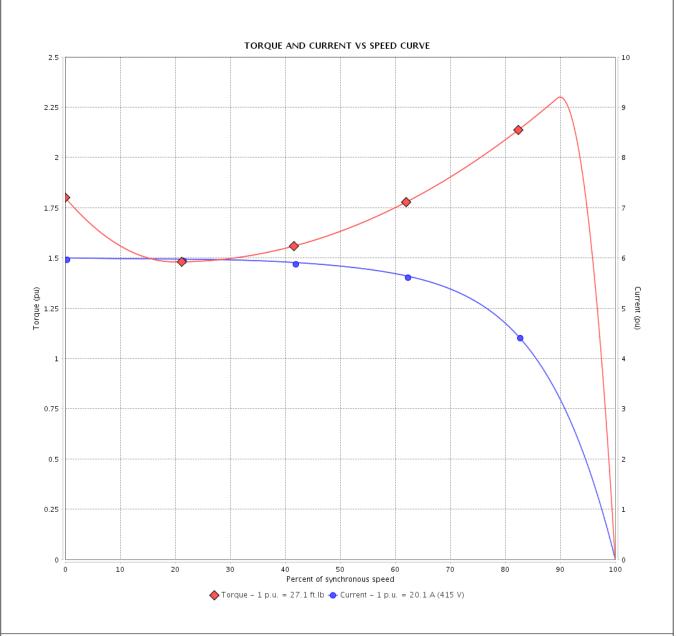
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 12951406

Catalog #: 01536OT3E215JPV-S



Performance : 220/415 V 50 Hz 2P Rated current : 37.9/20.1 A Moment of inertia (J) : 0.5512 sq.ft.lb **LRC** : 6.0 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 27.1 ft.lb Service factor Locked rotor torque : 180 % : 1.00 Breakdown torque : 229 % Temperature rise : 80 K Rated speed : B : 2910 rpm Design

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

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

#### Three Phase Induction Motor - Squirrel Cage



Customer

Date

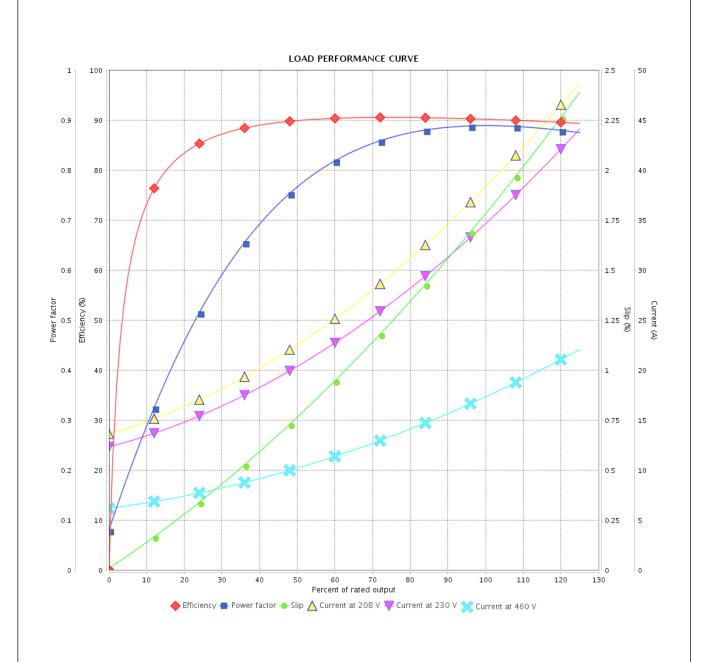
13/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 12951406

Catalog #: 01536OT3E215JPV-S



| Performance  | : 230/460 V 60 Hz 2P   |   |           |  |          |
|--|--|---|-----------|--|----------|
| Rated current<br>LRC<br>Rated torque<br>Locked rotor torque<br>Breakdown torque<br>Rated speed | : 34.4/17.2 A<br>: 6.8<br>: 22.3 ft.lb<br>: 210 %<br>: 280 %<br>: 3535 rpm | Moment of<br>Duty cycle<br>Insulation of<br>Service fact<br>Temperatu<br>Design | class     | : 0.5512 sq.ft.<br>: Cont.(S1)<br>: F<br>: 1.15<br>: 80 K<br>: B | b        |
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### LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Date

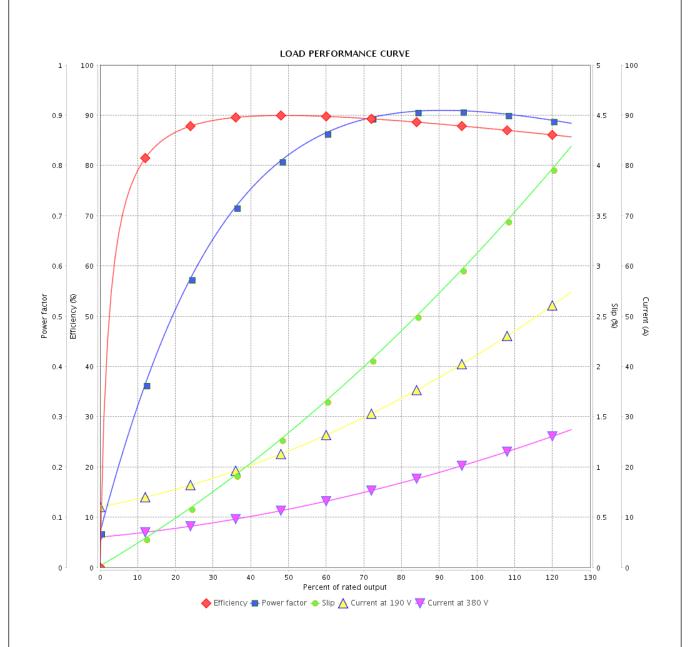
13/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 12951406

Catalog #: 01536OT3E215JPV-S



Performance : 190/380 V 50 Hz 2P Rated current : 42.0/21.0 A Moment of inertia (J) : 0.5512 sq.ft.lb **LRC** : 5.4 Duty cycle : Cont.(S1) : 27.1 ft.lb Insulation class Rated torque : F Locked rotor torque : 160 % Service factor : 1.00 Breakdown torque : 200 % Temperature rise : 105 K Rated speed : 2905 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Page Revision

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## LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



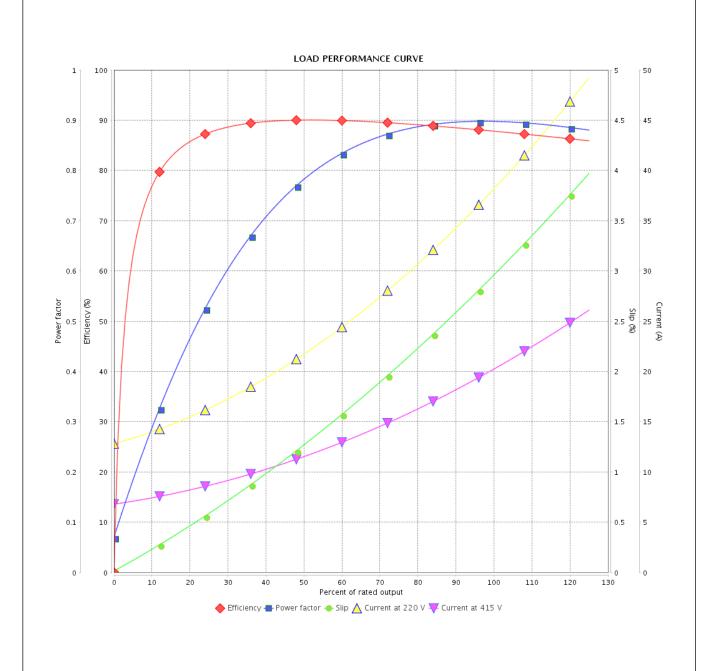
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 12951406

Catalog #: 01536OT3E215JPV-S



| Performance        | :          | 220/415 V 50 Hz 2P |            |                               |             |                       |  |     |
|--------------------|------------|--------------------|------------|-------------------------------|-------------|-----------------------|--|-----|
| Rated current      | :          | : 37.9/20.1 A M    |            | /20.1 A Moment of inertia (J) |             | Moment of inertia (J) |  | .lb |
| LRC                | :          | 6.0                | Duty cycle | ;                             | : Cont.(S1) |                       |  |     |
| Rated torque       | :          | 27.1 ft.lb         | Insulation | class                         | : F         |                       |  |     |
| Locked rotor torqu | ie :       | 180 %              | Service fa | ctor                          | : 1.00      |                       |  |     |
| Breakdown torque   | :          | 229 %              | Temperati  | ure rise                      | : 80 K      |                       |  |     |
| Rated speed        | :          | 2910 rpm           | Design     |                               | : B         |                       |  |     |
| Rev.               |            | Changes Summary    | '          | Performed                     | Checked     | Date                  |  |     |
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### Three Phase Induction Motor - Squirrel Cage

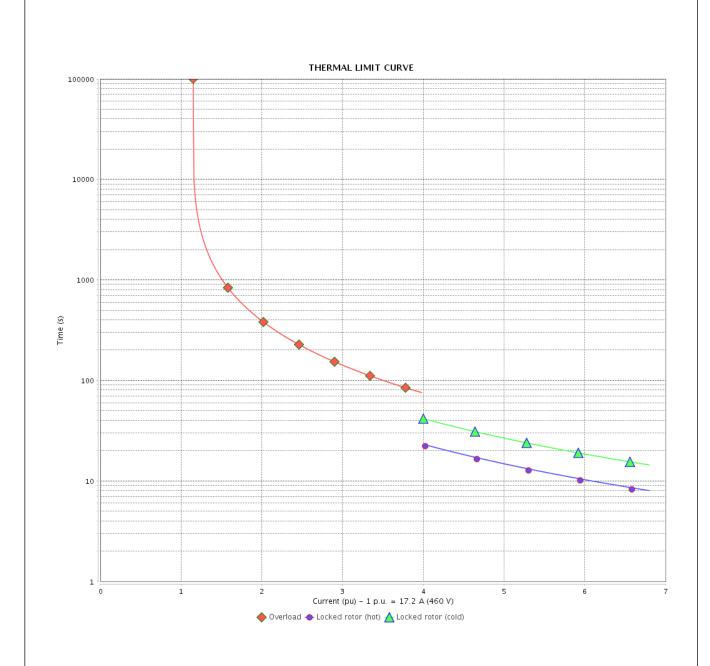


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| Product line                      | :.         | JP Pump NEMA Premium fficiency Three-Phase | ı                         | Product code : | 12951406         |          |
|                                   | _          | inciency Three-Phase                       | (                         | Catalog # :    | 01536OT3E2       | 215JPV-S |
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|                                   |            |  |                           |                |                  |          |
| Performance Rated current         |            | 30/460 V 60 Hz 2P<br>4.4/17.2 A            | Moment of                 | finertia (I)   | : 0.5512 sq.ft.l | lh       |
| LRC                               | : 6.       | .8   | Duty cycle                |                | : Cont.(S1)      |          |
| Rated torque<br>Locked rotor tord |            | 2.3 ft.lb<br>10 %                          | Insulation<br>Service fac |                | : F<br>: 1.15    |          |
| Breakdown torqu                   | ie : 28    | 80 %                                       | Temperatu                 |                | : 80 K           |          |
| Rated speed                       | : 35       | 535 rpm                                    | Design                    |                | : B              |          |
| Heating constan                   |            |  |                           |                |                  |          |
| 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

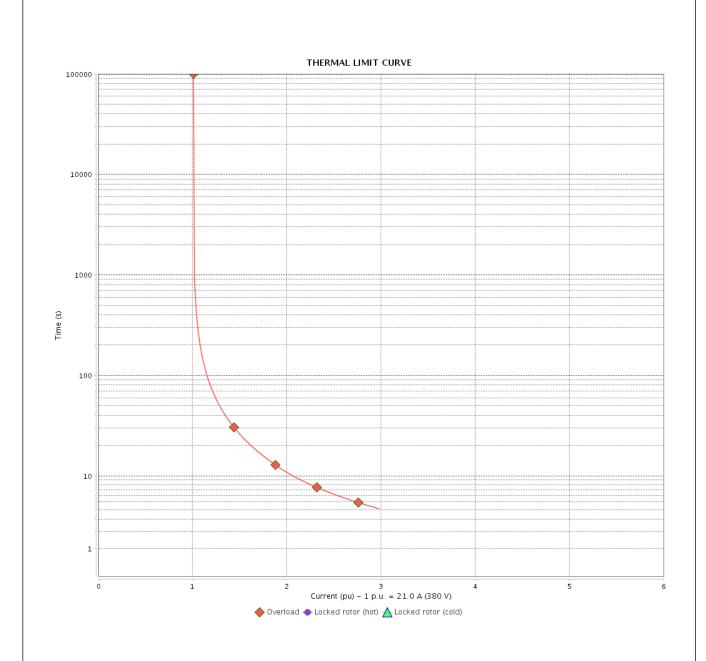


| Customer                          | :  |                                |                        |            |
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| Product line                      | : JP Pump NEMA Premium<br>Efficiency Three-Phase | Product code : Catalog # :     | 12951406<br>01536OT3E2 | 015 ID\/ S |
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|                                   |  |                                |                        |            |
| Performance                       | : 190/380 V 50 Hz 2P                             |                                |                        |            |
| Rated current                     | : 42.0/21.0 A                                    | Moment of inertia (J)          | : 0.5512 sq.ft.l       | b          |
| LRC<br>Rated torque               | : 5.4<br>: 27.1 ft.lb                            | Duty cycle<br>Insulation class | : Cont.(S1)<br>: F     |            |
| Locked rotor torque               | : 160 %  | Service factor                 | : 1.00                 |            |
| Breakdown torque<br>Rated speed   | : 200 %<br>: 2905 rpm                            | Temperature rise Design        | : 105 K<br>: B         |            |
|                                   | . 2000 τριτι                                     | Doolgii                        | . u                    |            |
| Heating constant Cooling constant |  |                                |                        |            |
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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

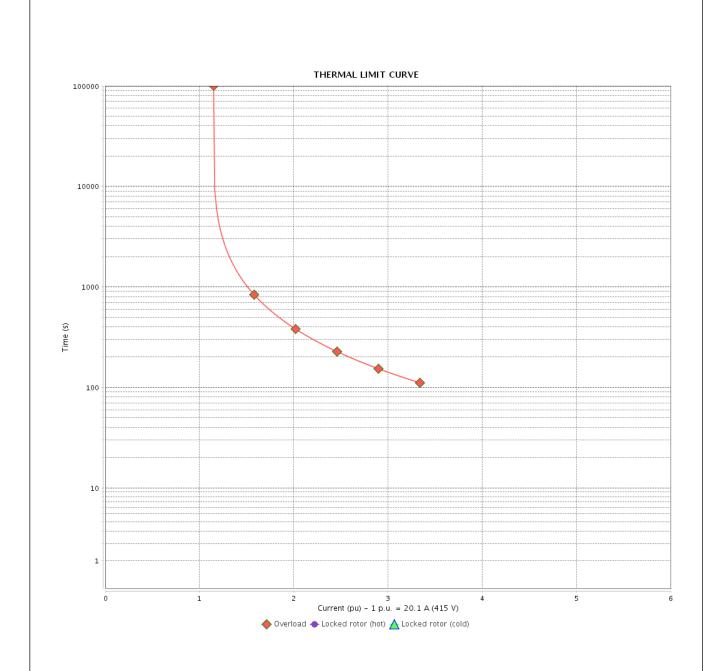


| Customer                             | :          |                                 |                          |                |                                 |          |
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| Product line                         | : .        | JP Pump NEMA Premium            | ı                        | Product code : | 12951406                        |          |
|                                      | Ei         | fficiency Three-Phase           | (                        | Catalog # :    | 01536OT3E2                      | 215JPV-S |
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| D. (                                 |            | 20/445.7/50.11.0D               |                          |                |                                 |          |
| Performance                          |            | 20/415 V 50 Hz 2P<br>7.9/20.1 A | Moment                   | finartia (I)   | : 0 5512 og ft l                | h        |
| Rated current<br>LRC                 | : 6.       | 0                               | Moment of<br>Duty cycle  |                | : 0.5512 sq.ft.l<br>: Cont.(S1) | υ        |
| Rated torque                         |            | 7.1 ft.lb                       | Insulation               | class          | : F                             |          |
| Locked rotor torq<br>Breakdown torqu |            | 30 %<br>29 %                    | Service fac<br>Temperatu |                | : 1.00<br>: 80 K                |          |
| Rated speed                          |            | 910 rpm                         | Design                   |                | : 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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| Date         | 13/04/2022 |                 |           | 13 /    |          |

## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



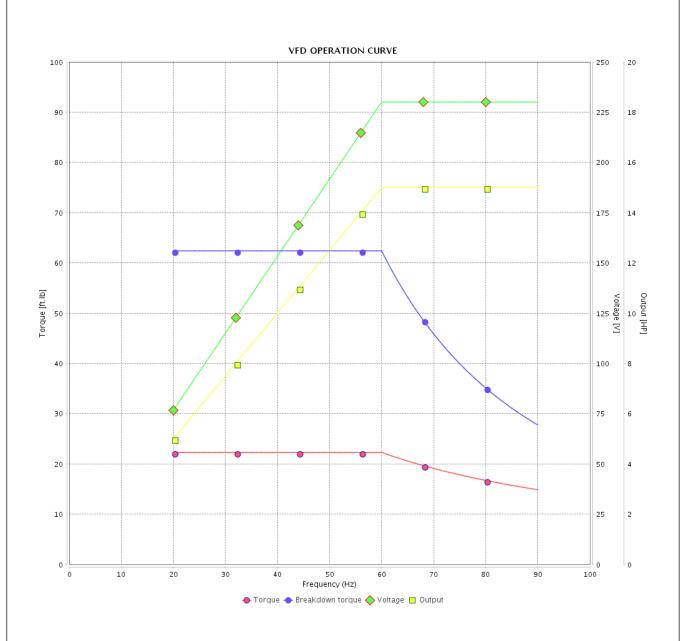
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 12951406

Catalog #: 01536OT3E215JPV-S

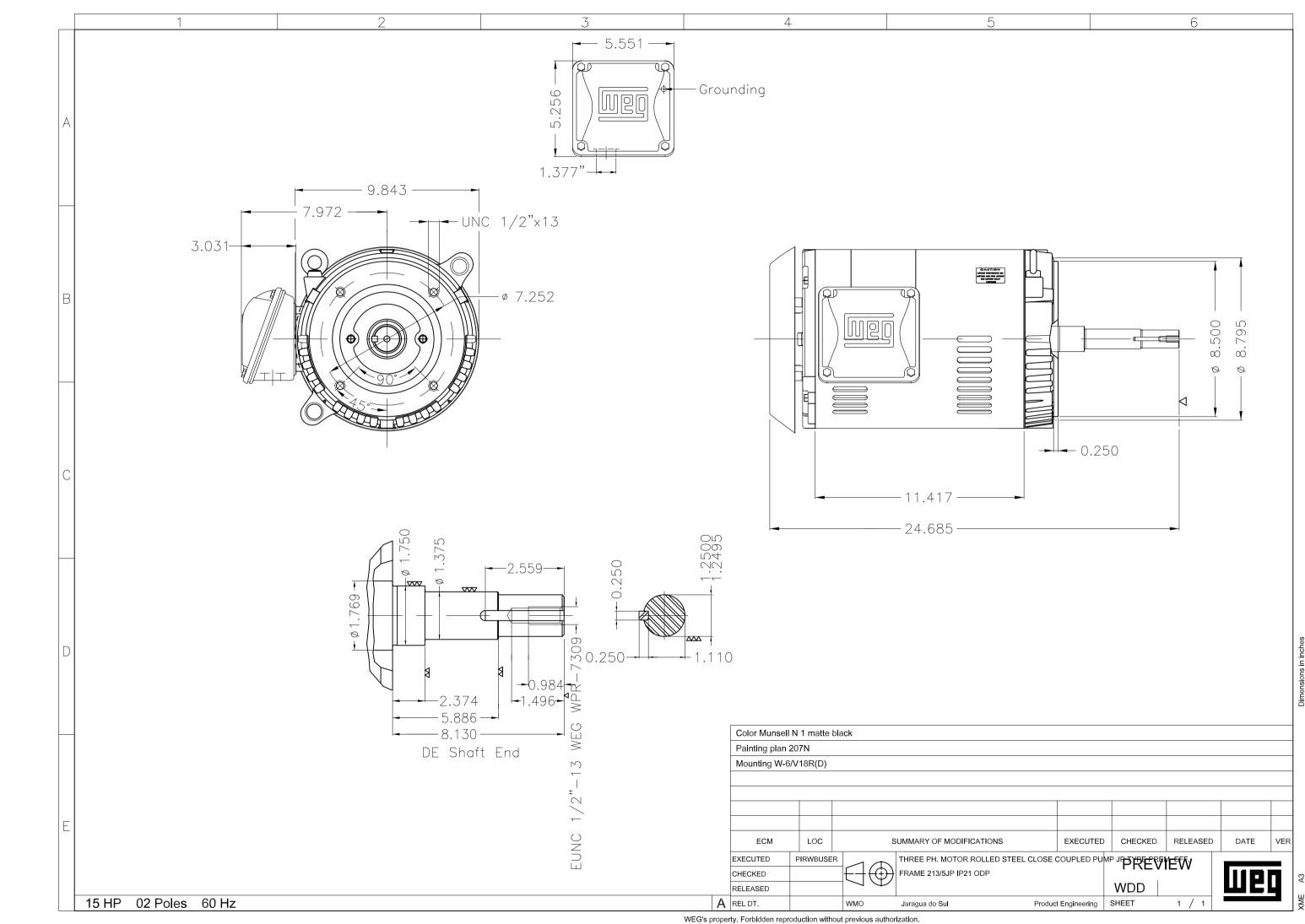


| Performance                         | : 230/460 V 60 Hz 2P    |                                 |                    |               |          |
|-------------------------------------|-------------------------|---------------------------------|--------------------|---------------|----------|
| Rated current<br>LRC                |                         |                                 | Duty cycle : Cont. |               | lb       |
| Rated torque<br>Locked rotor torque | : 22.3 ft.lb<br>: 210 % | Insulation class Service factor |                    | : F<br>: 1.15 |          |
| Breakdown torque<br>Rated speed     | : 280 %<br>: 3535 rpm   | Temperati<br>Design             | ıre rise           | : 80 K<br>: B |          |
| Rev.                                | Changes Summary         |                                 | Performed          | Checked       | Date     |
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14/

13/04/2022

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(**UL)**us usted 3PT9

15(11) HP(kW) MODEL 015360T3E215JPV-S CC029A

ř

3535 RPM

DES CONT CODE Z D D D

213/5JP

PH 3

S/N

25JUL2018 Œ 230/460

W01.TO0IC0X0N

IEC 60034-1

EFF 87.6% (IE1)

2905RPM 50Hz

42.0-36.8/21.0-19.5A

T2-WHT T4-YEL T6-GRY T8-RED

r1-BLU 15-BLK L7-PNK

1E

r3-org

RED

F9-BRK

électrique grave. Déconnectez l'allmentation avant l'entretien de la machine

WARNING: Motor must be grounded in accordance with local and national

6206-ZZ

ODE

6209-ZZ

electrical codes to prevent serious electrical shocks. Disconnect power

AVERTISSEMENT: Le moteur doit être mis à la terre conformément

source before servicing unit.

aux codes électriques locaux et nationaux afin d'éviter tout choc

MOBIL POLYREX EM

Inverter duty For 60Hz use on VPWM 1000:1 VT, 3:1 CT

ANY TWO LINE WIRES TO REVERSE THE ROTATION

NTERCHANGE

SF1.00

190-220/380-415V

SF1.00

38.0A 90.2%

USABLE @ 208V NEMA NOM.EFF.

m.a.s.l.

1000

0.89 SF 1.15

15HP

ALTERNATE RATING:

9

ENCL

40°C

80K AMB

INS CL F AT

SFA 39.6/19.8

34 4/17 2

**Energy Verified** 

9