# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage

| | |
|---|---|
| Customer | : |

| | | | |
|---|---|---|---|
| Product line | : JM Pump NEMA Premium Efficiency Three-Phase | Product code : | 13500441 |
| | | Catalog # : | 01036OT3V213JMV-S |

| | | | |
|---|---|---|---|
| Frame | : 213/5JM | Locked rotor time | : 19s (cold) 11s (hot) |
| Output | : 10 HP (7.5 kW) | Temperature rise | : 80 K |
| Poles | : 2 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 200/400 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 27.6/13.8 A | Cooling method | : IC01 - ODP |
| L. R. Amperes | : 188/93.8 A | Mounting | : W-6 |
| LRC | : 6.8x(Code H) | Rotation[1] | : Both (CW and CCW) |
| No load current | : 10.7/5.36 A | Noise level[2] | : 66.0 dB(A) |
| Rated speed | : 3535 rpm | Starting method | : Direct On Line |
| Slip | : 1.81 % | Approx. weight[3] | : 122 lb |
| Rated torque | : 14.9 ft.lb | | |
| Locked rotor torque | : 200 % | | |
| Breakdown torque | : 280 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 0.4651 sq.ft.lb | | |
| Design | : B | | |

| Output | 25% | 50% | 75% | 100% |
|---|---|---|---|---|
| Efficiency (%) | 88.3 | 88.5 | 89.5 | 89.5 |
| Power Factor | 0.47 | 0.74 | 0.84 | 0.88 |

| Foundation loads | |
|---|---|
| Max. traction | : 173 lb |
| Max. compression | : 295 lb |

| | | Drive end | Non drive end |
|---|---|---|---|
| Bearing type | : | 6209 ZZ | 6206 ZZ |
| Sealing | : | Without Bearing Seal | Without Bearing Seal |
| Lubrication interval | : | - | - |
| Lubricant amount | : | - | - |
| 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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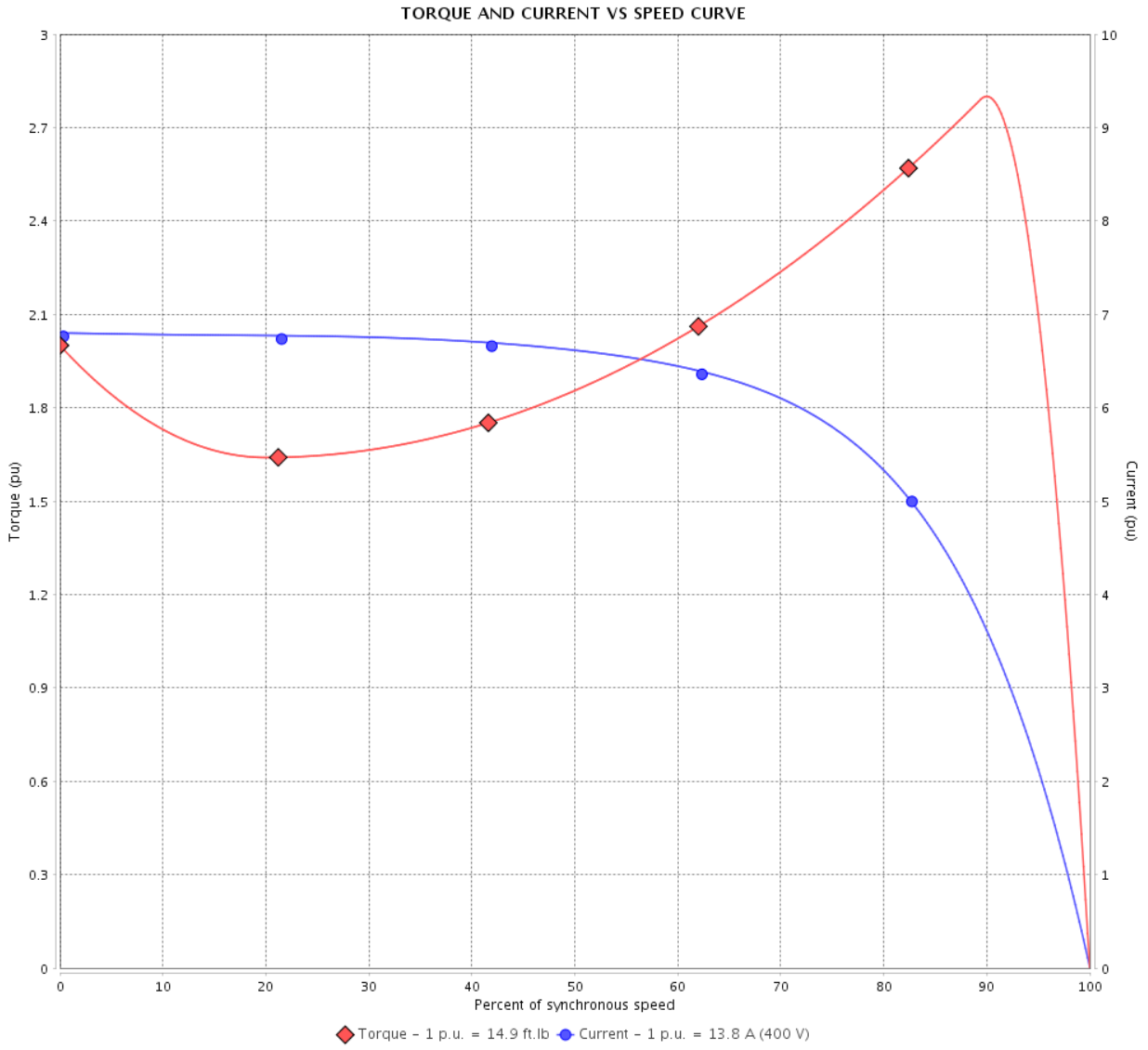
|---|---|---|---|---|
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 12/04/2022 | | 1 / 6 | |

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

| | |
|---|---|
| Customer | : |

| | | | |
|---|---|---|---|
| Product line | : JM Pump NEMA Premium Efficiency Three-Phase | Product code : | 13500441 |
| | | Catalog # : | 01036OT3V213JMV-S |




| | |
|---|---|
| Performance | : 200/400 V 60 Hz 2P |

| | | | |
|---|---|---|---|
| Rated current | : 27.6/13.8 A | Moment of inertia (J) | : 0.4651 sq.ft.lb |
| LRC | : 6.8 | Duty cycle | : Cont.(S1) |
| Rated torque | : 14.9 ft.lb | Insulation class | : F |
| Locked rotor torque | : 200 % | Service factor | : 1.15 |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 3535 rpm | Design | : B |

| | |
|---|---|
| Locked rotor time | : 19s (cold) 11s (hot) |

| Rev. | Changes Summary | Performed | Checked | Date |
|---|---|---|---|---|
| | | | | |

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|---|---|---|---|---|
| Performed by | | | | |
| Checked by | | | Page | Revision |
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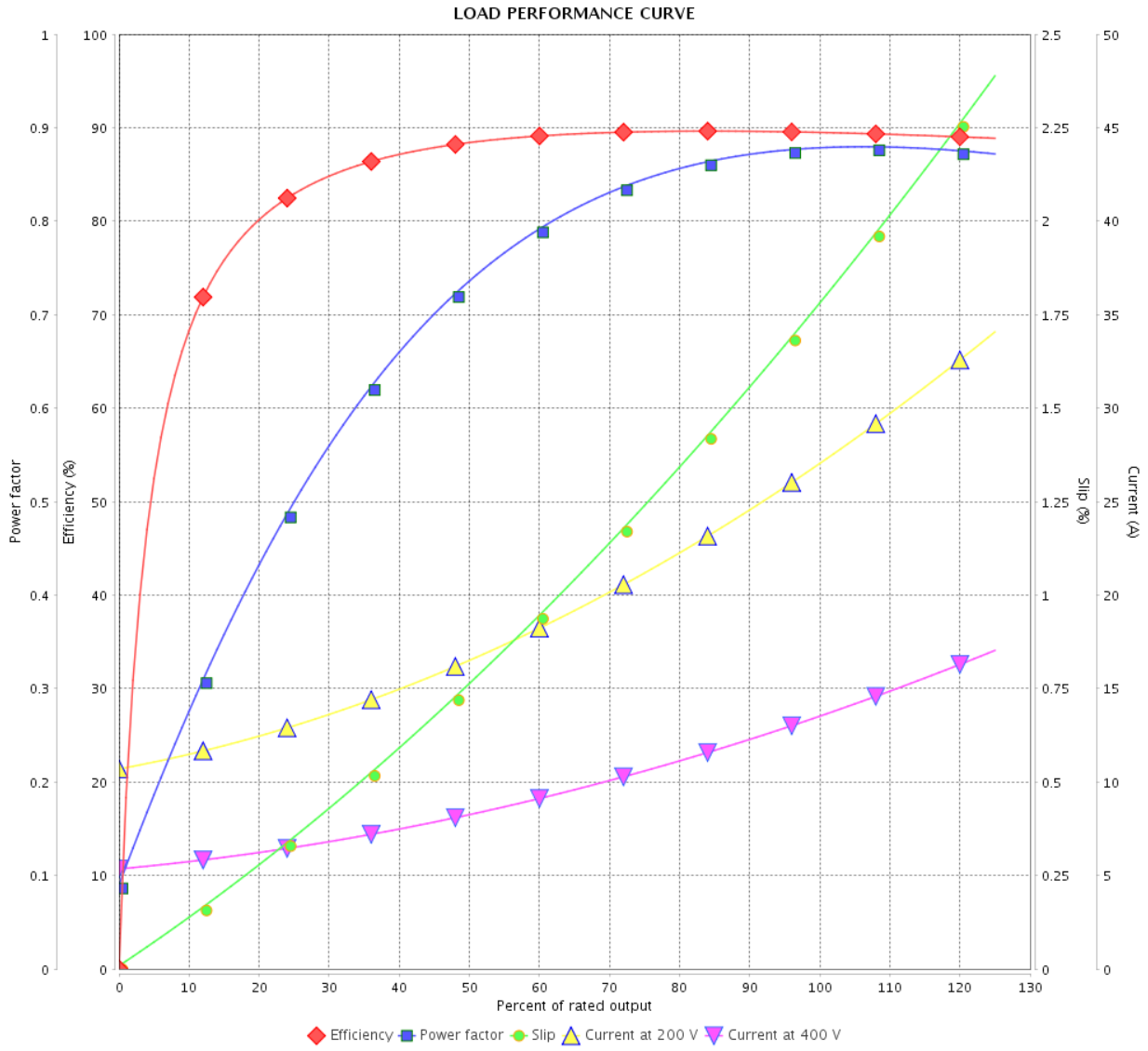
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

| | |
|---|---|
| Customer | : |

| | | | |
|---|---|---|---|
| Product line | : JM Pump NEMA Premium Efficiency Three-Phase | Product code : | 13500441 |
| | | Catalog # : | 01036OT3V213JMV-S |




| | |
|---|---|
| Performance | : 200/400 V 60 Hz 2P |

| | | | |
|---|---|---|---|
| Rated current | : 27.6/13.8 A | Moment of inertia (J) | : 0.4651 sq.ft.lb |
| LRC | : 6.8 | Duty cycle | : Cont.(S1) |
| Rated torque | : 14.9 ft.lb | Insulation class | : F |
| Locked rotor torque | : 200 % | Service factor | : 1.15 |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 3535 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
|---|---|---|---|---|
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|---|---|---|---|---|
| Performed by | | | | |
| Checked by | | | Page | Revision |
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage

| | | | |
|---|---|---|---|
| Customer | : | | |
| Product line | : JM Pump NEMA Premium Efficiency Three-Phase | Product code : | 13500441 |
| | | Catalog # : | 01036OT3V213JMV-S |

| | | | |
|---|---|---|---|
| Performance | : 200/400 V 60 Hz 2P | | |
| Rated current | : 27.6/13.8 A | Moment of inertia (J) | : 0.4651 sq.ft.lb |
| LRC | : 6.8 | Duty cycle | : Cont.(S1) |
| Rated torque | : 14.9 ft.lb | Insulation class | : F |
| Locked rotor torque | : 200 % | Service factor | : 1.15 |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 3535 rpm | Design | : B |
| Heating constant | | | |
| Cooling constant | | | |

| Rev. | Changes Summary | Performed | Checked | Date |
|---|---|---|---|---|
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| | | | | |
|---|---|---|---|---|
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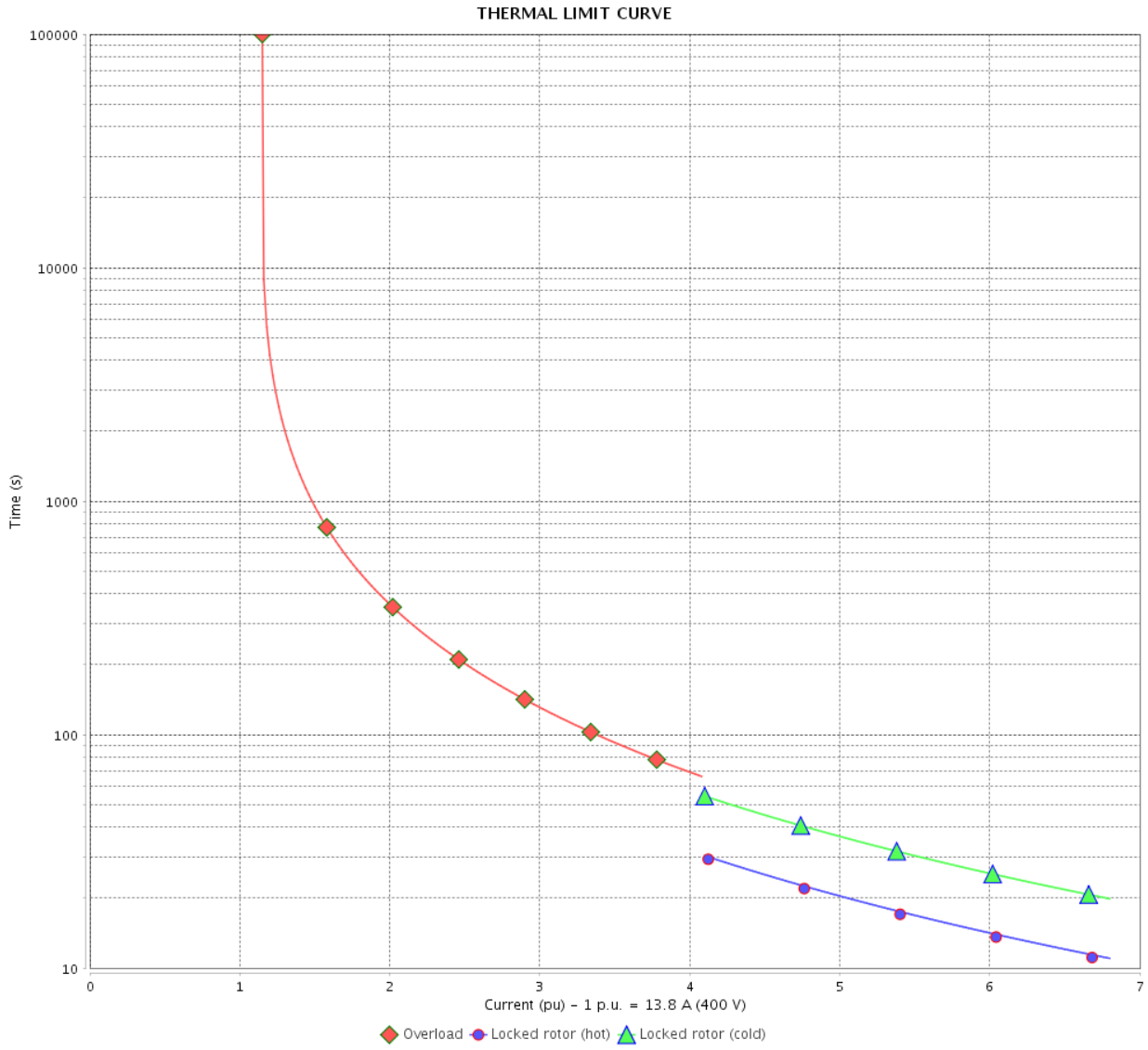
# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage

Customer :




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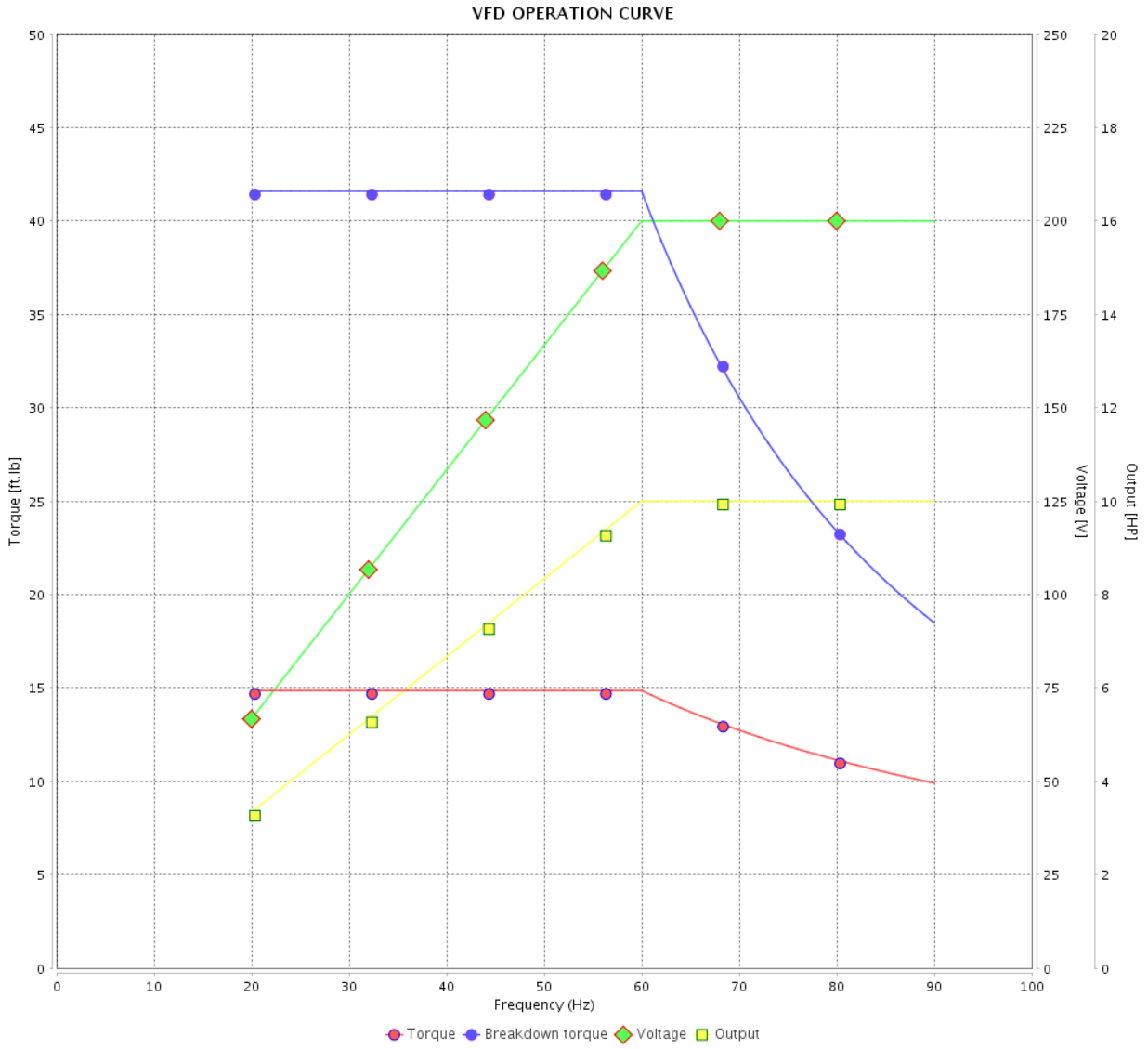
# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

| | | | |
|---|---|---|---|
| Customer | : | | |
| Product line | : JM Pump NEMA Premium Efficiency Three-Phase | Product code : | 13500441 |
| | | Catalog # : | 01036OT3V213JMV-S |




| | | | |
|---|---|---|---|
| Performance | : 200/400 V 60 Hz 2P | | |
| Rated current | : 27.6/13.8 A | Moment of inertia (J) | : 0.4651 sq.ft.lb |
| LRC | : 6.8 | Duty cycle | : Cont.(S1) |
| Rated torque | : 14.9 ft.lb | Insulation class | : F |
| Locked rotor torque | : 200 % | Service factor | : 1.15 |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 3535 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
|---|---|---|---|---|
| | | | | |

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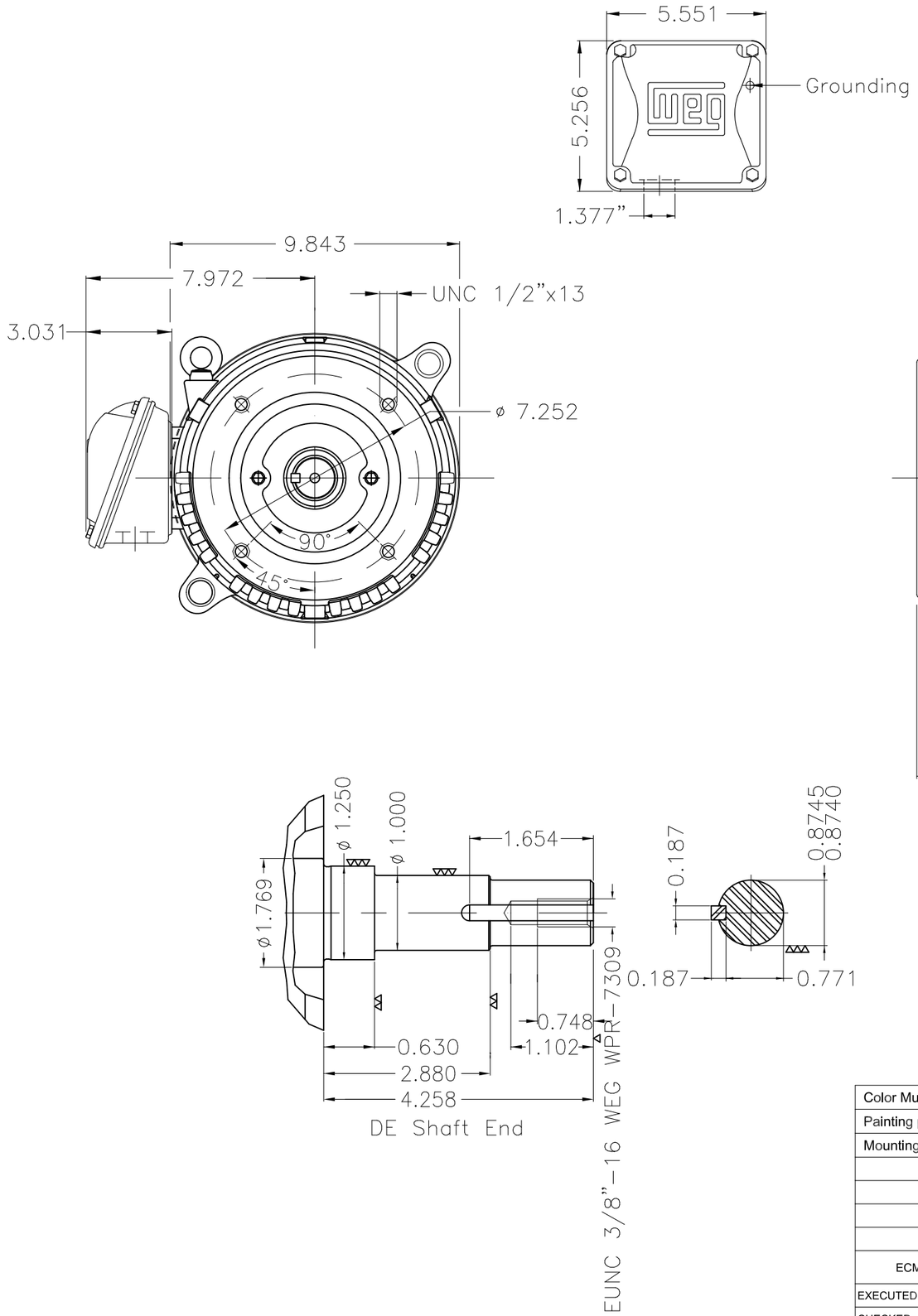



Color Munsell N 1 matte black

Painting plan 207N

Mounting W-6/V18R(D)

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |

| | | | |
|---|---|---|---|
| EXECUTED | PIRWBUSER | THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JM TYPE FRAME FFF | PREVIEW |
| CHECKED | | FRAME 213/5JM IP21 ODP | WDD |
| RELEASED | | | |
| REL DT. | | WMO Jaragua do Sul Product Engineering | SHEET 1 / 1 |

10 HP 02 Poles 60 Hz

A

Dimensions in inches

XME A3

NEMA Premium®

3PT9

C UL US LISTED

C SP US Energy Verified

CE

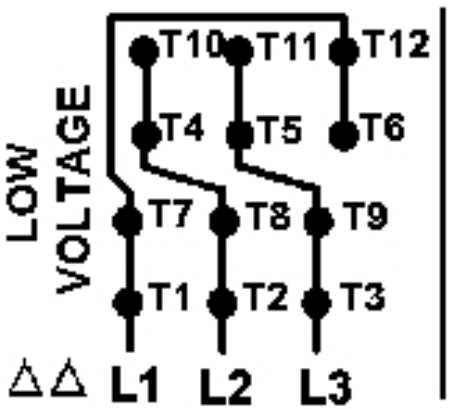
MADE IN MÉXICO

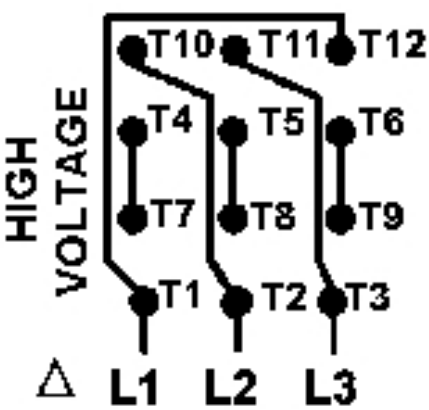
**MAT: 13500441 CC029A**
**W01.TO0IC0X0N**
**MODEL 01036OT3V213JMV-S**
**09JUL2018 S/N:**

| | | | | |
|---|---|---|---|---|
| PH 3 | FR 213/5JM | HP(kW) 10(7.5) | | Hz 60 |
| V 200/400 | | | RPM 3535 | |
| A 27.6/13.8 | | | DUTY CONT. | |
| SFA 31.7/15.9 | | | CODE H | DES B |
| SF 1.15 | INS CL F ΔT 80K | AMB 40°C | ENCL ODP | |
| ALT 1000 m.a.s.l. | NEMA NOM.EFF. 89.5% | PF 0.88 | | |

**ALTERNATE RATING:**

**SIN** IEC 60034-1




T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-BRK RED
T10-CURRY
T11-GRN T12-VLT

**INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION**

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

| | | | |
|---|---|---|---|
| DE: 6209-ZZ | ODE: 6206-ZZ | MOBIL POLYREX EM | |

**WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.**

**AVERTISSEMENT: Le moteur doit être mis à la terre conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.**