

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | |
|--|-----------------|---------------------------------------|--|-------------------------|----------|
| Customer : | | | | | |
| Product line | | : NEMA Premium Efficiency Three-Phase | | Product code : 12727233 | |
| | | | Catalog # : | 01518OT3H254T-S | |
| Frame | : 254/6T | | Locked rotor time | : 30s (cold) 17s (hot) | |
| Output | : 15 HP (11 kW) | | Temperature rise | : 80 K | |
| Poles | : 4 | | Duty cycle | : Cont.(S1) | |
| Frequency | : 60 Hz | | Ambient temperature | : -20°C to +40°C | |
| Rated voltage | : 575 V | | Altitude | : 1000 m.a.s.l. | |
| Rated current | : 14.9 A | | Cooling method | : IC01 - ODP | |
| L. R. Amperes | : 100 A | | Mounting | : F-1 | |
| LRC | : 6.7x(Code H) | | Rotation ¹ | : Both (CW and CCW) | |
| No load current | : 7.60 A | | Noise level ² | : 64.0 dB(A) | |
| Rated speed | : 1775 rpm | | Starting method | : Direct On Line | |
| Slip | : 1.39 % | | Approx. weight ³ | : 188 lb | |
| Rated torque | : 44.4 ft.lb | | | | |
| Locked rotor torque | : 240 % | | | | |
| Breakdown torque | : 300 % | | | | |
| Insulation class | : F | | | | |
| Service factor | : 1.15 | | | | |
| Moment of inertia (J) | : 1.82 sq.ft.lb | | | | |
| Design | : B | | | | |
| Output | 25% | 50% | 75% | 100% | |
| Efficiency (%) | 91.0 | 91.7 | 92.4 | 93.0 | |
| Power Factor | 0.36 | 0.62 | 0.73 | 0.80 | |
| Foundation loads | | | | | |
| Max. traction | | | | : 544 lb | |
| Max. compression | | | | : 733 lb | |
| | | <u>Drive end</u> | <u>Non drive end</u> | | |
| Bearing type | : | 6309 Z C3 | 6208 Z C3 | | |
| Sealing | : | Without Bearing Seal | Without Bearing Seal | | |
| Lubrication interval | : | 20000 h | 20000 h | | |
| Lubricant amount | : | 13 g | 8 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 |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 14/04/2022 | | | 1 / 6 | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



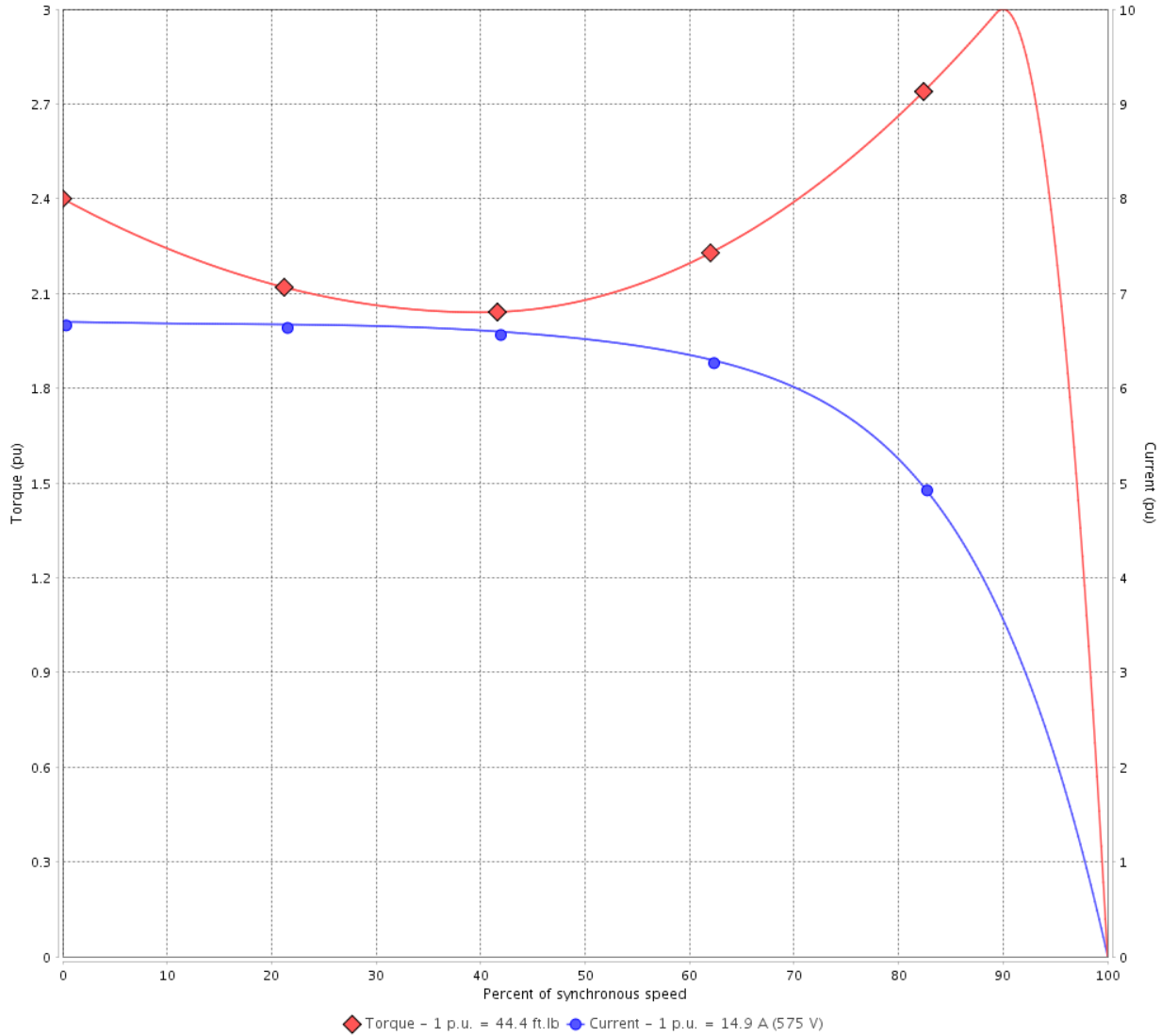
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12727233

Catalog # : 01518OT3H254T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

| | | | |
|---------------------|--------------|-----------------------|-----------------|
| Rated current | : 14.9 A | Moment of inertia (J) | : 1.82 sq.ft.lb |
| LRC | : 6.7 | Duty cycle | : Cont.(S1) |
| Rated torque | : 44.4 ft.lb | Insulation class | : F |
| Locked rotor torque | : 240 % | Service factor | : 1.15 |
| Breakdown torque | : 300 % | Temperature rise | : 80 K |
| Rated speed | : 1775 rpm | Design | : B |

Locked rotor time : 30s (cold) 17s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 2 / 6 | Revision |
| Checked by | | | | |
| Date | 14/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

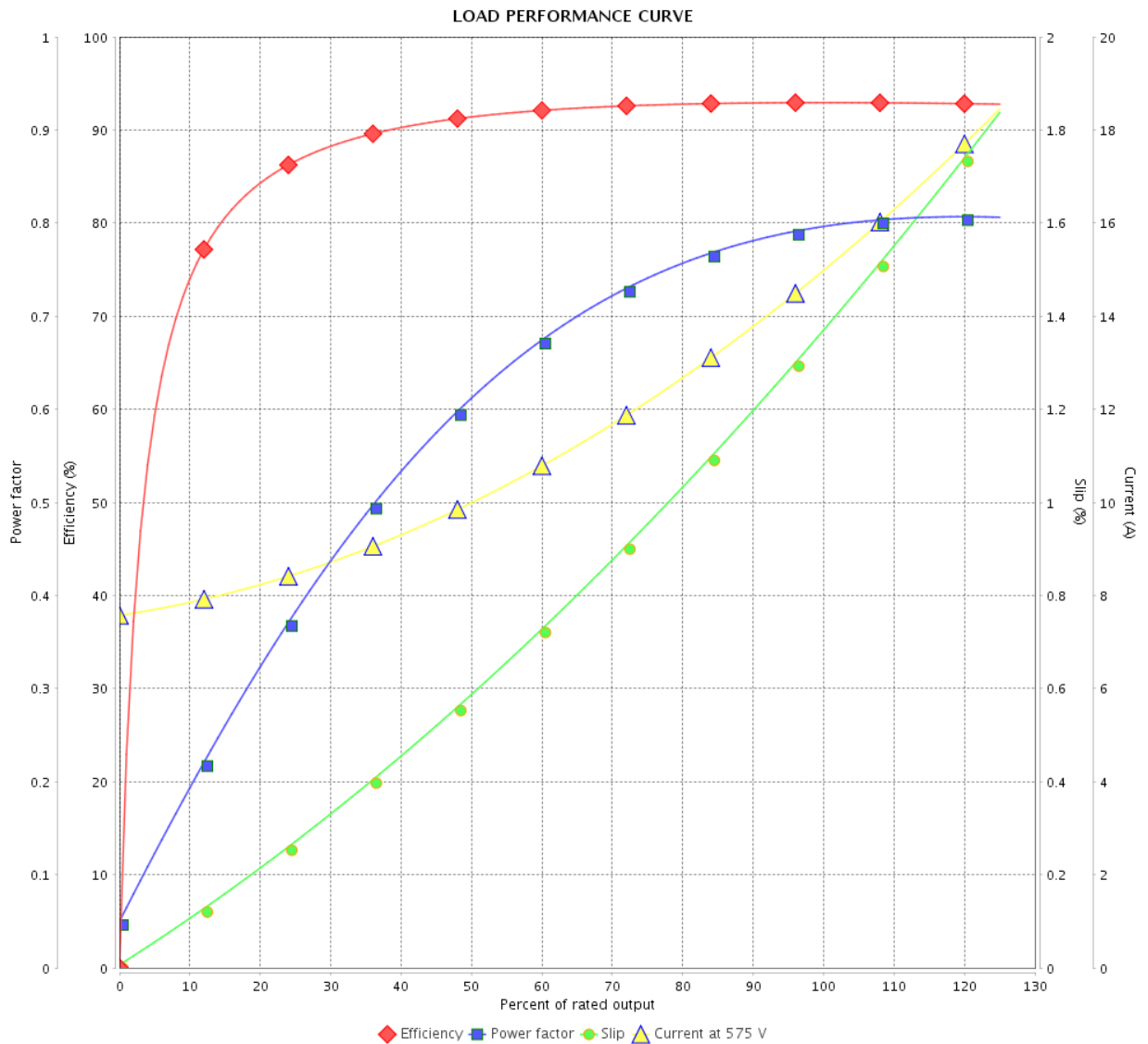


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12727233

Catalog # : 01518OT3H254T-S



Performance : 575 V 60 Hz 4P

Rated current : 14.9 A
 LRC : 6.7
 Rated torque : 44.4 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 1.82 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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| Performed by | | Page | | Revision |
| Checked by | | 3 / 6 | | |
| Date | | 14/04/2022 | | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 12727233
Catalog # : 01518OT3H254T-S

Performance : 575 V 60 Hz 4P

| | | | |
|---------------------|--------------|-----------------------|-----------------|
| Rated current | : 14.9 A | Moment of inertia (J) | : 1.82 sq.ft.lb |
| LRC | : 6.7 | Duty cycle | : Cont.(S1) |
| Rated torque | : 44.4 ft.lb | Insulation class | : F |
| Locked rotor torque | : 240 % | Service factor | : 1.15 |
| Breakdown torque | : 300 % | Temperature rise | : 80 K |
| Rated speed | : 1775 rpm | Design | : B |

Heating constant

Cooling constant

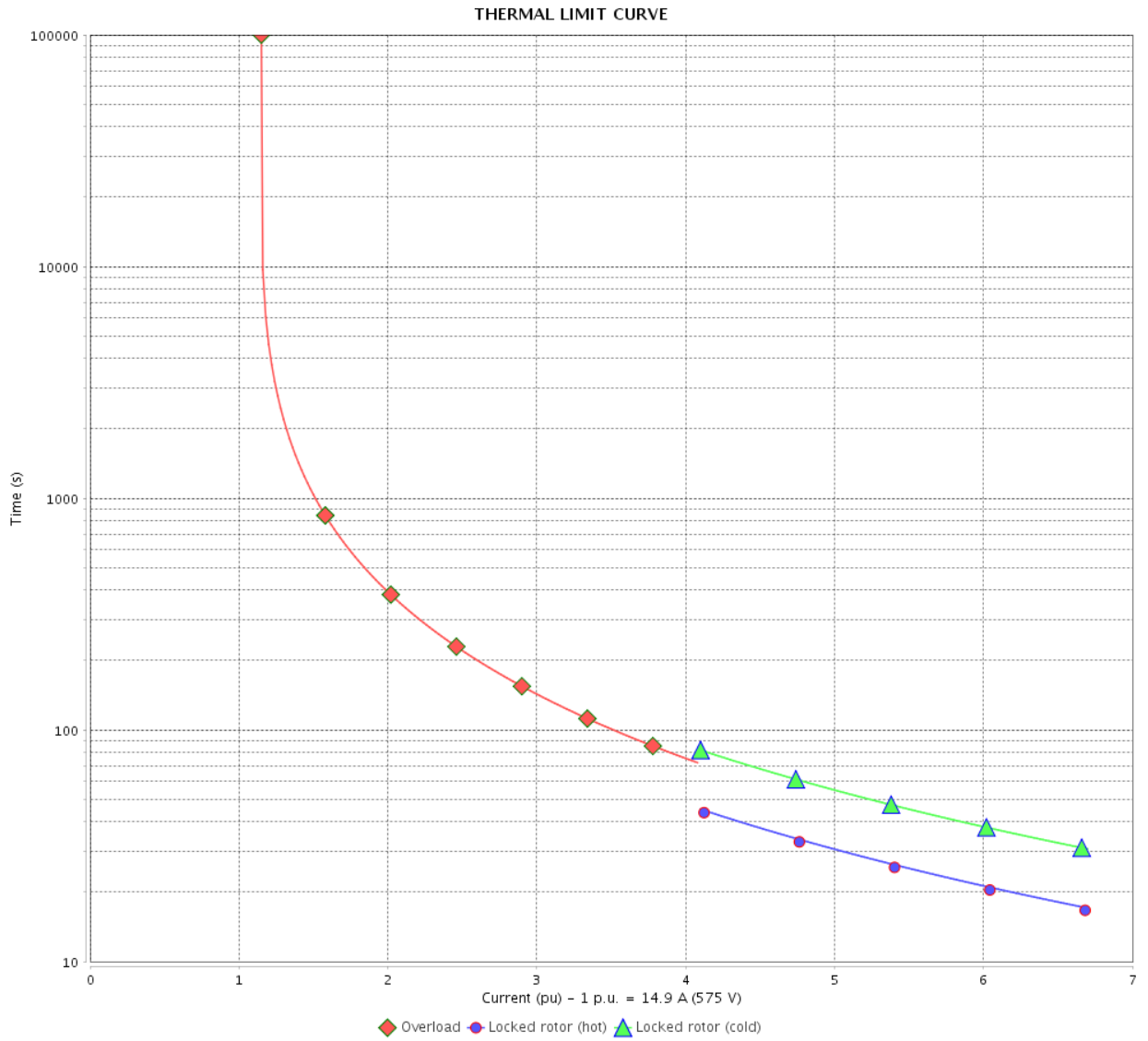
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
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| Performed by | | | | |
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| Date | 14/04/2022 | | 4 / 6 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|--------------------------|---------|------|
| | | | | |
| Performed by | | Page 5 / 6 Revision | | |
| Checked by | | | | |
| Date | | | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



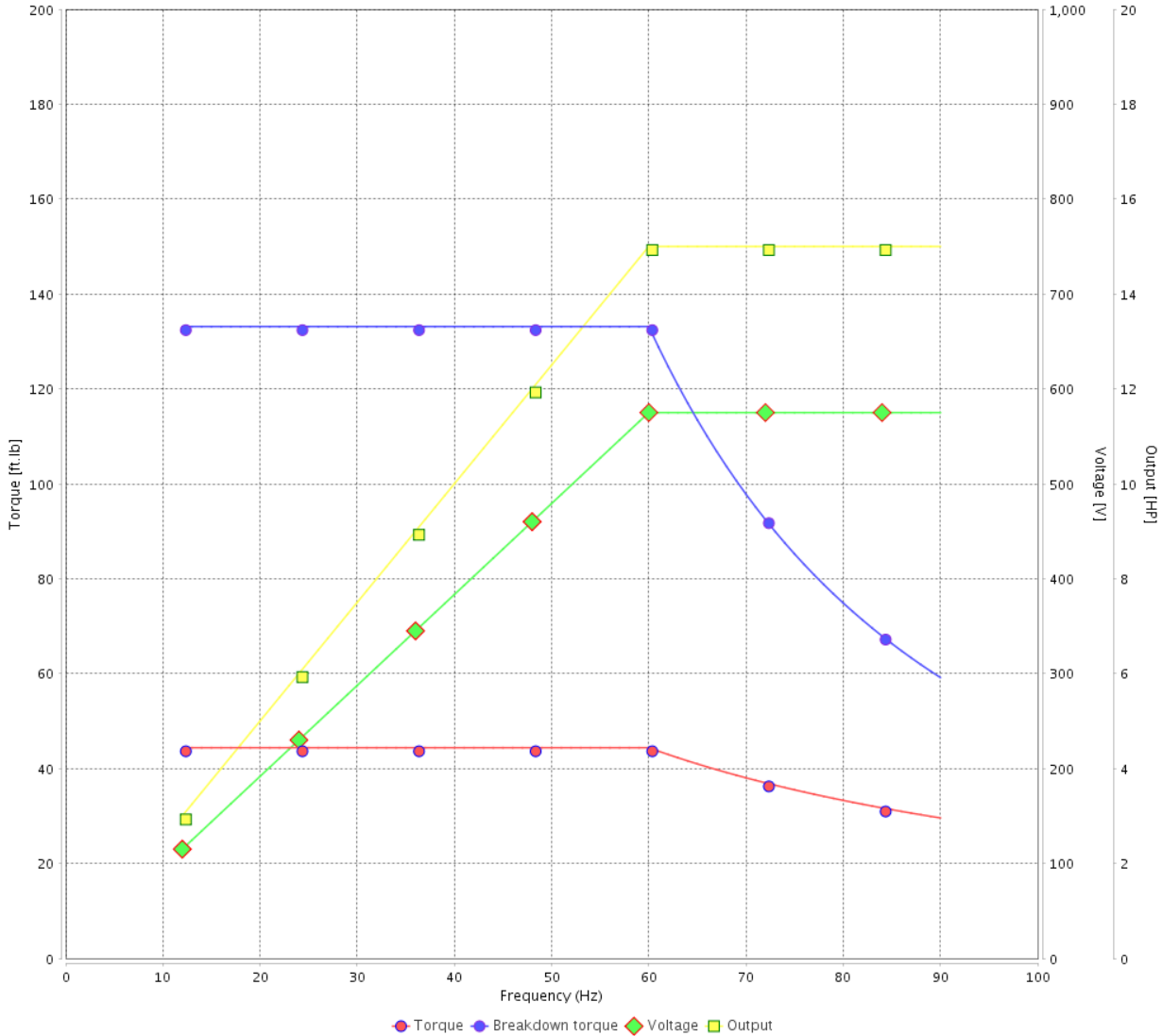
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12727233

Catalog # : 01518OT3H254T-S

VFD OPERATION CURVE



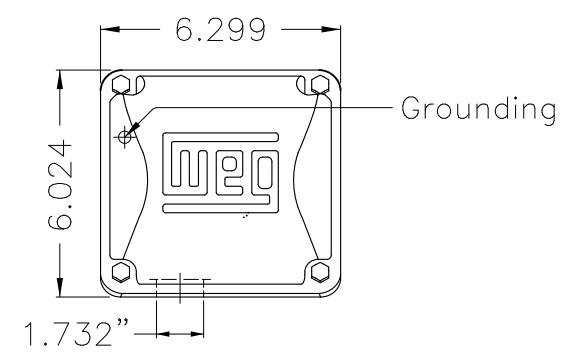
Performance : 575 V 60 Hz 4P

Rated current : 14.9 A
 LRC : 6.7
 Rated torque : 44.4 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1775 rpm

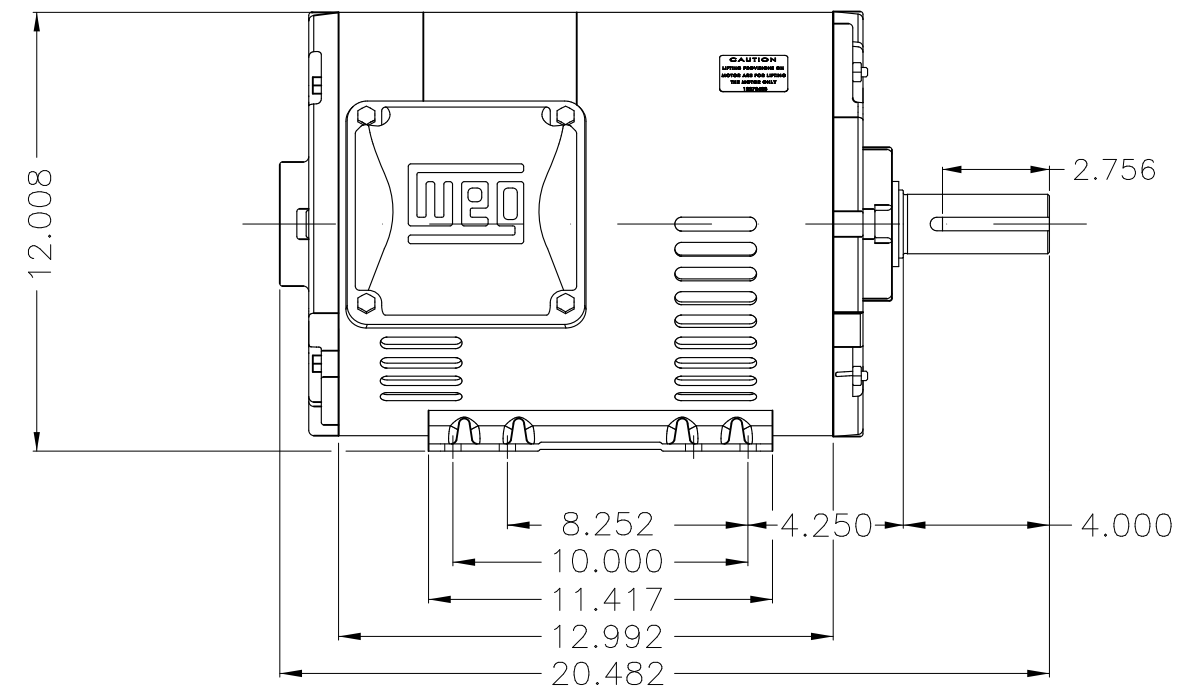
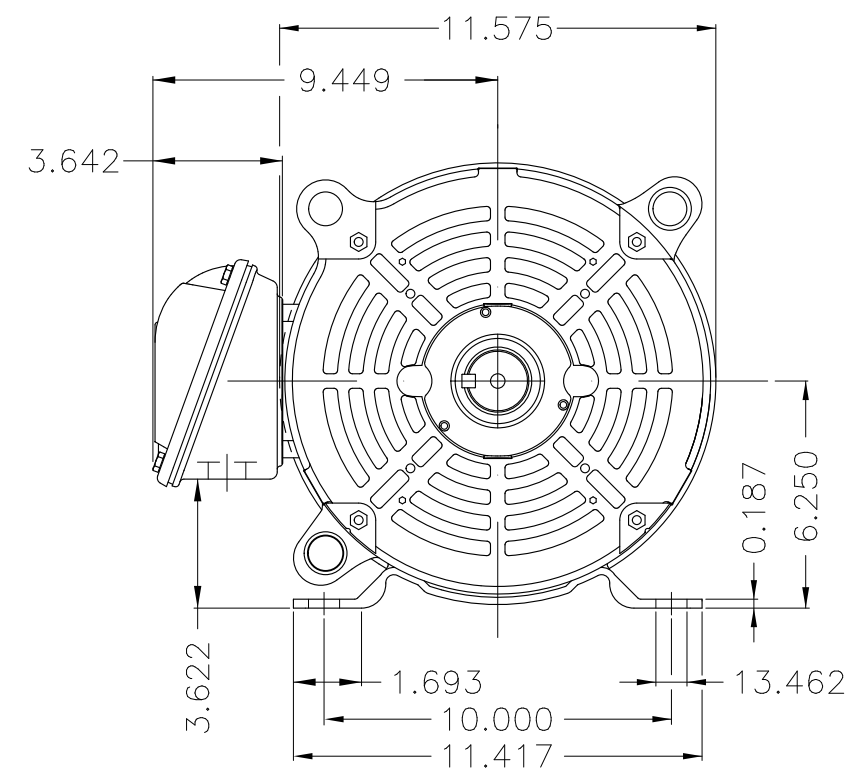
Moment of inertia (J) : 1.82 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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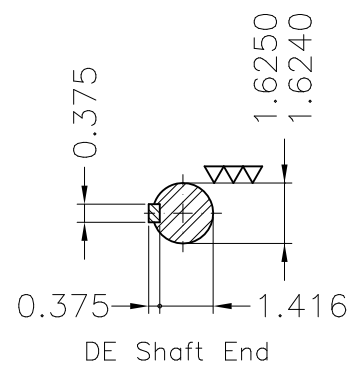
A



B



C



D

E

Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B3R(D)

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|----------|-----------|--|---------------------|---------|----------|-------|-----|
| EXECUTED | PIRWBUSER | THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 254/6T IP21 ODP | | | | | |
| CHECKED | | | | | | | |
| RELEASED | | | | | | | |
| REL DT. | WMO | Jaragua do Sul | Product Engineering | SHEET | | 1 / 1 | |

15 HP 04 Poles 60 Hz

A

PREVIEW
WDD



**NEMA**
Premium

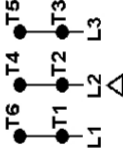
MADE IN MEXICO

MAT: 12727233 CC029A
W01.T00IC0X0N
MODEL 015180T3H254T-S
22FEB2022 S/N:

| | | |
|------------------|--------|------------------------|
| PH 3 | Hz 60 | HP 15 |
| FR 254/6T | | KW 11 |
| DUTY CONT. | | V 575 |
| ALT 1000 m.a.s.l | | A 14.9 |
| INS CL F AT 80K | | SFA 17.1 |
| AMB 40°C | DES B | SF 1.15 |
| ENCL ODP | CODE H | PF 0.80 |
| | | RPM 1775 |
| | | NEMA NOM. EFF 93.0% |

Inverter duty motor For use on VPWM 1000:1 VT, 5:1 CT

| | | | |
|--------------|---------------|------------------|--------|
| DE 6309-Z-C3 | ODE 6208-Z-C3 | MOBIL POLYREX EM | 20000h |
|--------------|---------------|------------------|--------|



T1-BLU
 T2-WHT
 T3-ORG
 T4-YEL
 T5-BLK
 T6-GRY

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

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.

