

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | | | | | | | | | | | | | | |
|---|---|----------------------|------------------|----------------------|--------------|-----------|---------|---------|----------|--------|----------------------|-----------|---------|------------------|--------|-----|----------------|--------------------|--|
| Customer : | | | | | | | | | | | | | | | | | | | |
| Product line | : NEMA Premium Efficiency Three-Phase | | | | | | | | | | | | | | | | | | |
| Product code : | 13469269 | | | | | | | | | | | | | | | | | | |
| Catalog # : | 00712ET3E254JP-W22 | | | | | | | | | | | | | | | | | | |
| Frame : 254/6JP Output : 7.5 HP (5.5 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 208-230/460 V Rated current : 21.0-19.0/9.48 A L. R. Amperes : 143-129/64.5 A LRC : 6.8x(Code H) No load current : 0.000-9.00/4.50 A Rated speed : 1175 rpm Slip : 2.08 % Rated torque : 33.5 ft.lb Locked rotor torque : 250 % Breakdown torque : 300 % Insulation class : F Service factor : 1.25 Design : B | Locked rotor time : 54s (cold) 30s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 59.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 278 lb | | | | | | | | | | | | | | | | | | |
| Output | 25% 50% 75% 100% | | | | | | | | | | | | | | | | | | |
| Efficiency (%) | 0.000 89.5 90.2 91.0 | | | | | | | | | | | | | | | | | | |
| Power Factor | 0.00 0.63 0.74 0.80 | | | | | | | | | | | | | | | | | | |
| Foundation loads | | | | | | | | | | | | | | | | | | | |
| Max. traction | : 343 lb | | | | | | | | | | | | | | | | | | |
| Max. compression | : 621 lb | | | | | | | | | | | | | | | | | | |
| | <table border="0"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type</td> <td>: 6309 C3</td> <td>6209 C3</td> </tr> <tr> <td>Sealing</td> <td>: V'Ring</td> <td>V'Ring</td> </tr> <tr> <td>Lubrication interval</td> <td>: 20000 h</td> <td>20000 h</td> </tr> <tr> <td>Lubricant amount</td> <td>: 13 g</td> <td>9 g</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2">: Mobil Polyrex EM</td> </tr> </table> | | <u>Drive end</u> | <u>Non drive end</u> | Bearing type | : 6309 C3 | 6209 C3 | Sealing | : V'Ring | V'Ring | Lubrication interval | : 20000 h | 20000 h | Lubricant amount | : 13 g | 9 g | Lubricant type | : Mobil Polyrex EM | |
| | <u>Drive end</u> | <u>Non drive end</u> | | | | | | | | | | | | | | | | | |
| Bearing type | : 6309 C3 | 6209 C3 | | | | | | | | | | | | | | | | | |
| Sealing | : V'Ring | V'Ring | | | | | | | | | | | | | | | | | |
| Lubrication interval | : 20000 h | 20000 h | | | | | | | | | | | | | | | | | |
| Lubricant amount | : 13 g | 9 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 | 13/04/2022 | | 1 / 6 | | | | | | | | | | | | | | | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



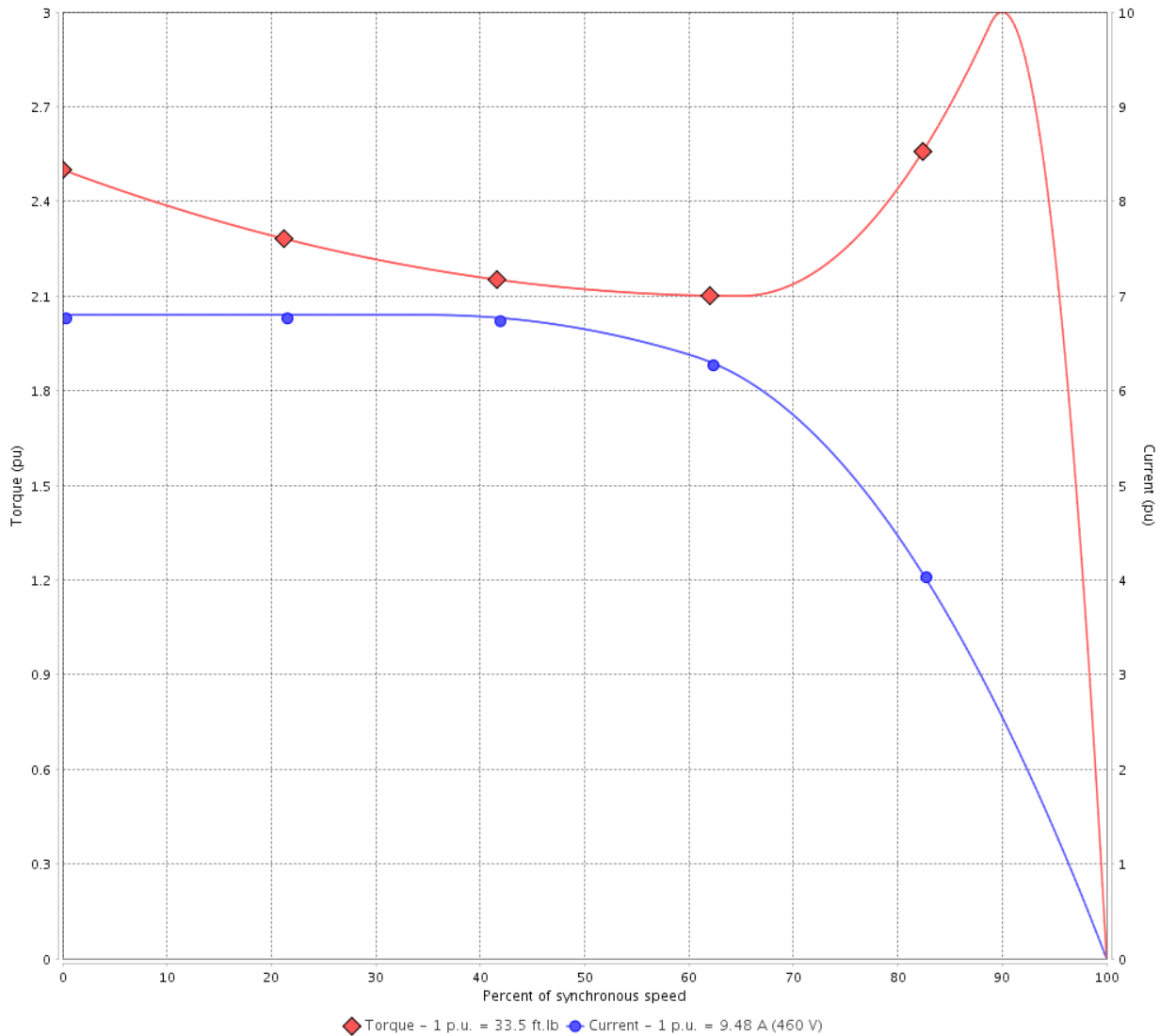
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13469269

Catalog # : 00712ET3E254JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 208-230/460 V 60 Hz 6P

| | | | |
|---------------------|--------------------|-----------------------|-------------|
| Rated current | : 21.0-19.0/9.48 A | Moment of inertia (J) | |
| LRC | : 6.8 | Duty cycle | : Cont.(S1) |
| Rated torque | : 33.5 ft.lb | Insulation class | : F |
| Locked rotor torque | : 250 % | Service factor | : 1.25 |
| Breakdown torque | : 300 % | Temperature rise | : 80 K |
| Rated speed | : 1175 rpm | Design | : B |

Locked rotor time : 54s (cold) 30s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 2 / 6 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

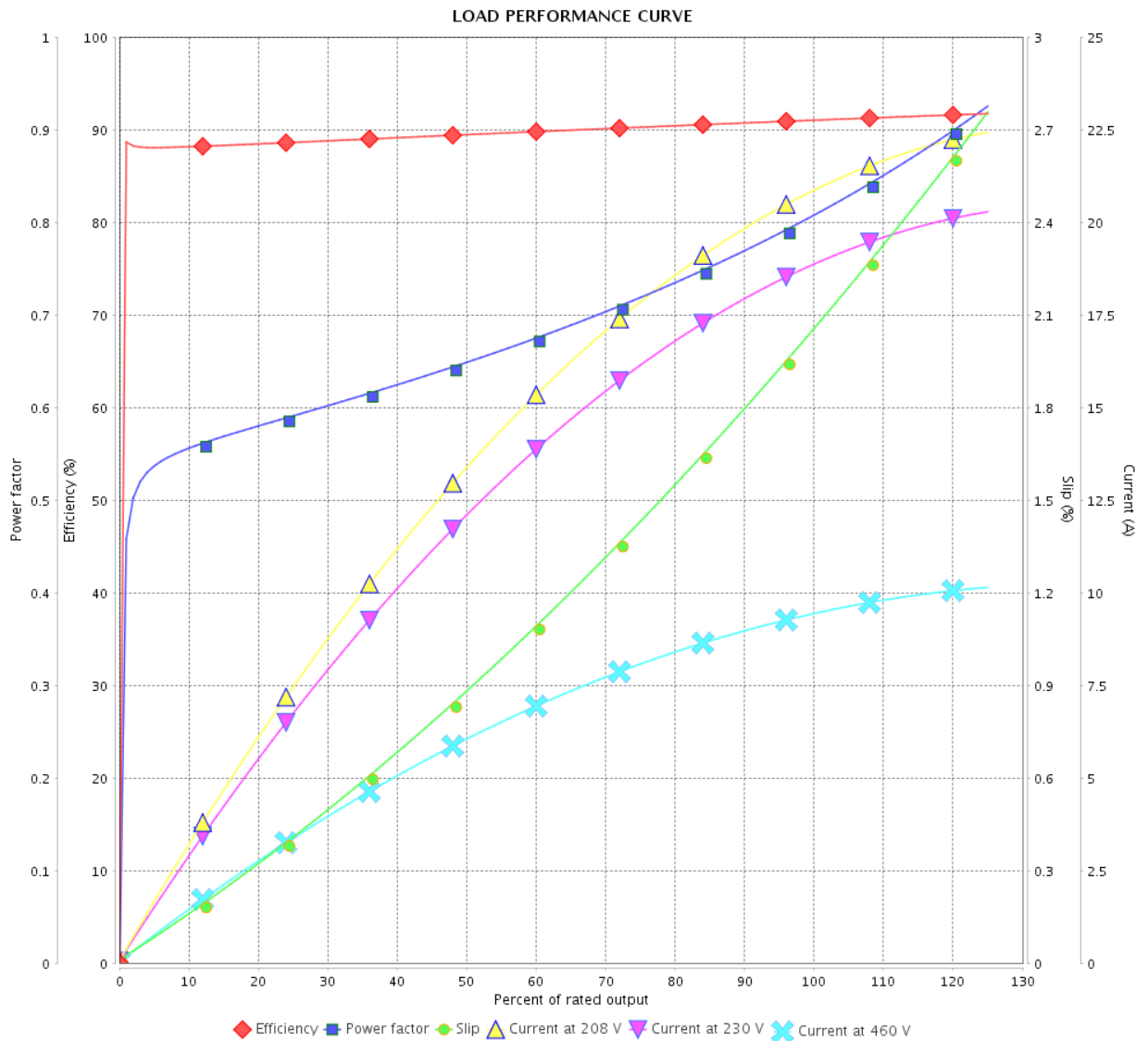


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13469269

Catalog # : 00712ET3E254JP-W22



Performance : 208-230/460 V 60 Hz 6P

Rated current : 21.0-19.0/9.48 A
 LRC : 6.8
 Rated torque : 33.5 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 1175 rpm

Moment of inertia (J)
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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| Breakdown torque : 300 % | Temperature rise : 80 K |
| Rated speed : 1175 rpm | Design : B |

Heating constant

Cooling constant

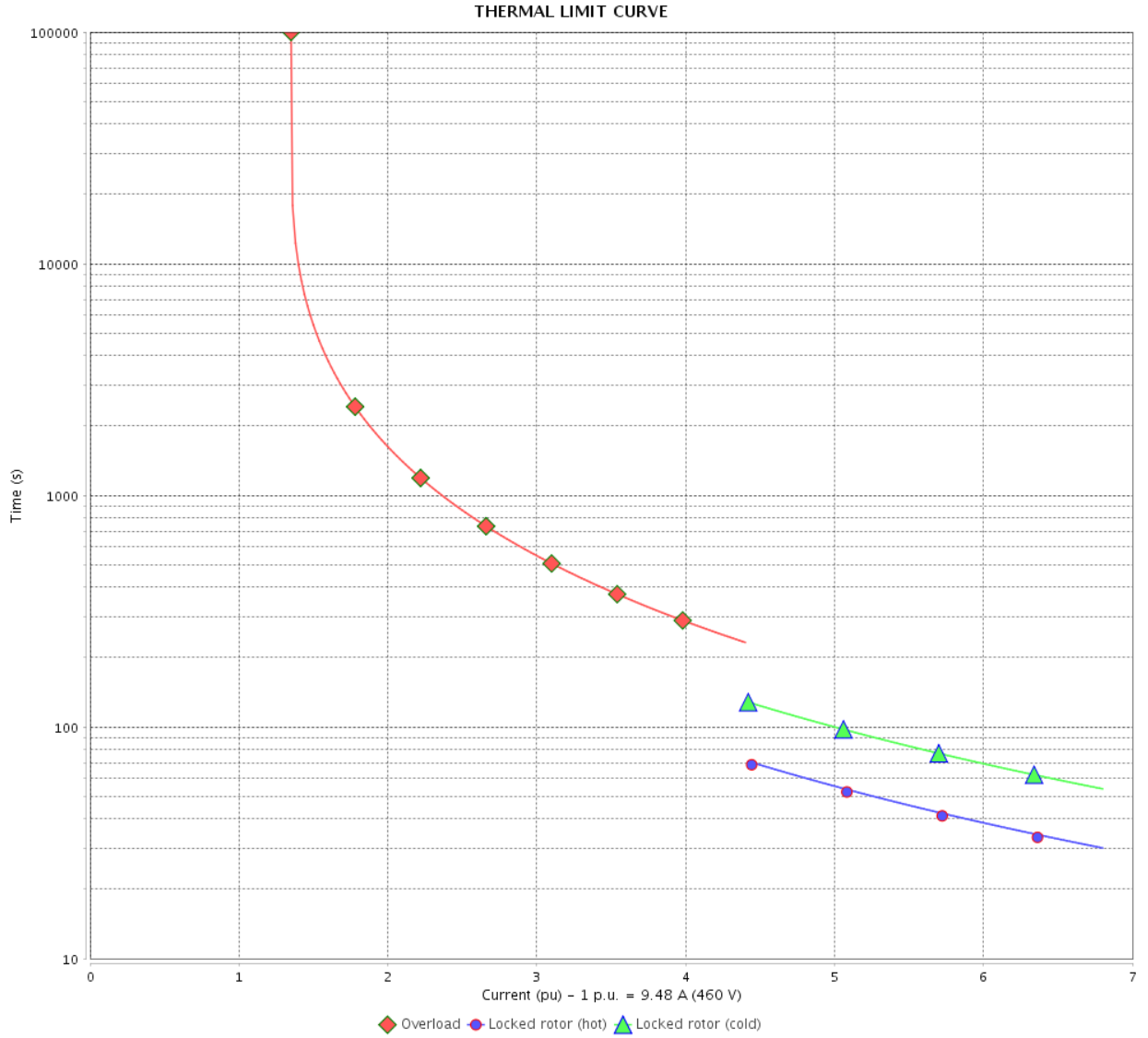
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| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 4 / 6 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

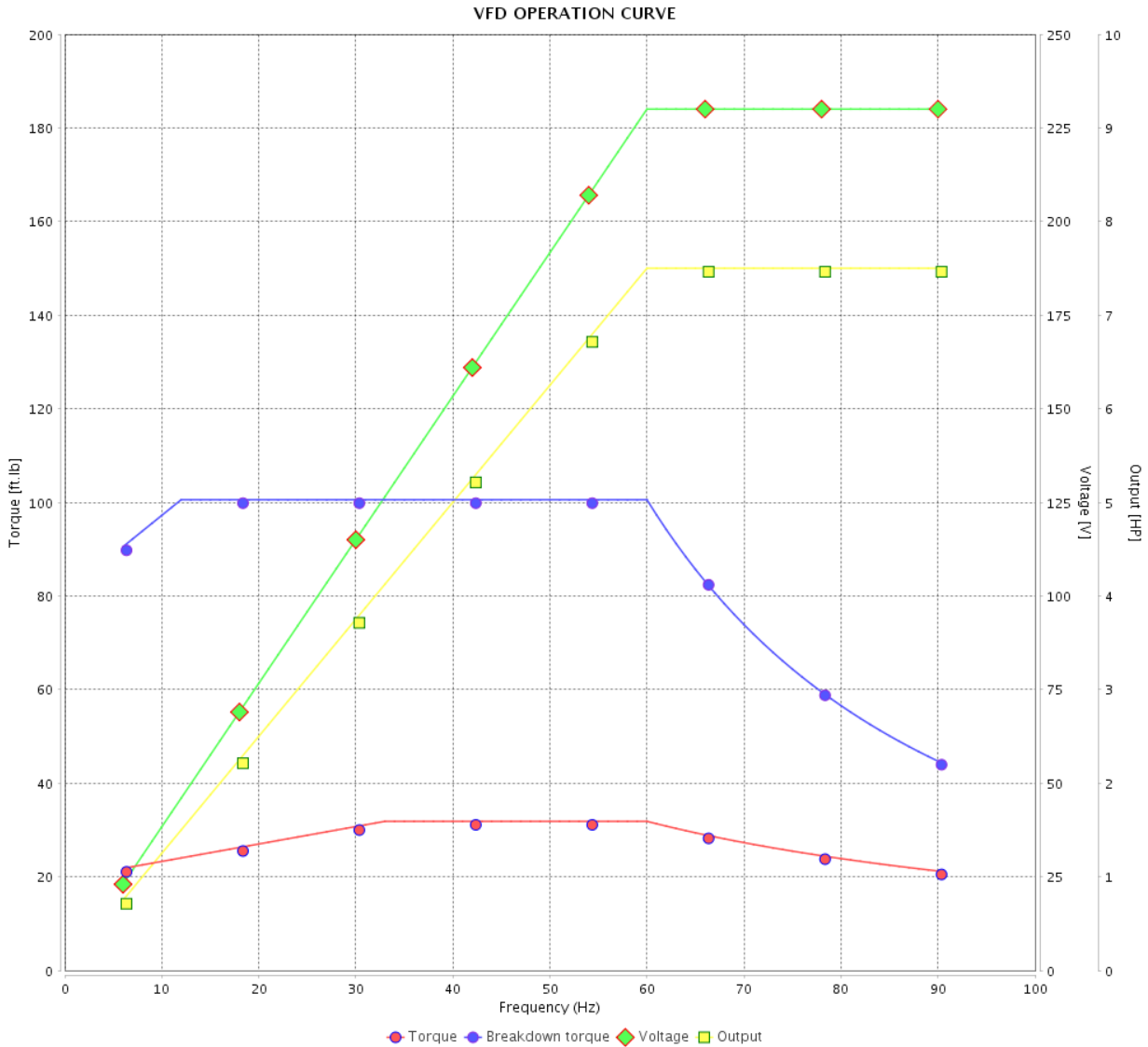


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Product line : NEMA Premium Efficiency Three-Phase

Product code : 13469269

Catalog # : 00712ET3E254JP-W22



Performance : 208-230/460 V 60 Hz 6P

Rated current : 21.0-19.0/9.48 A
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Moment of inertia (J)
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 Insulation class : F
 Service factor : 1.25
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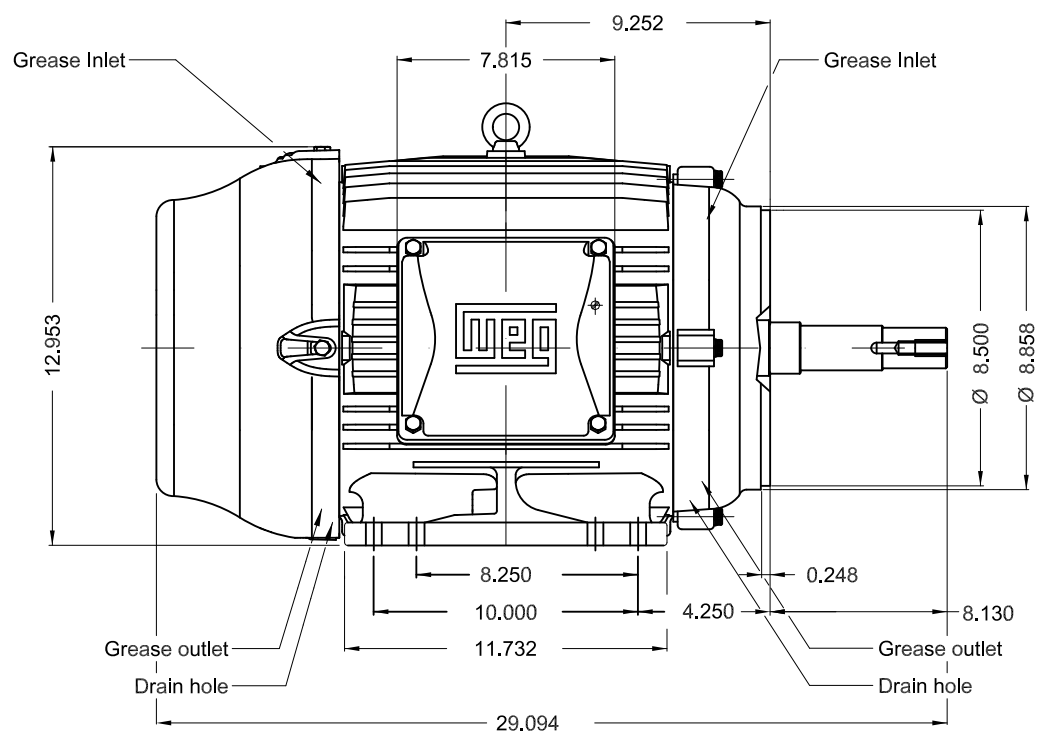
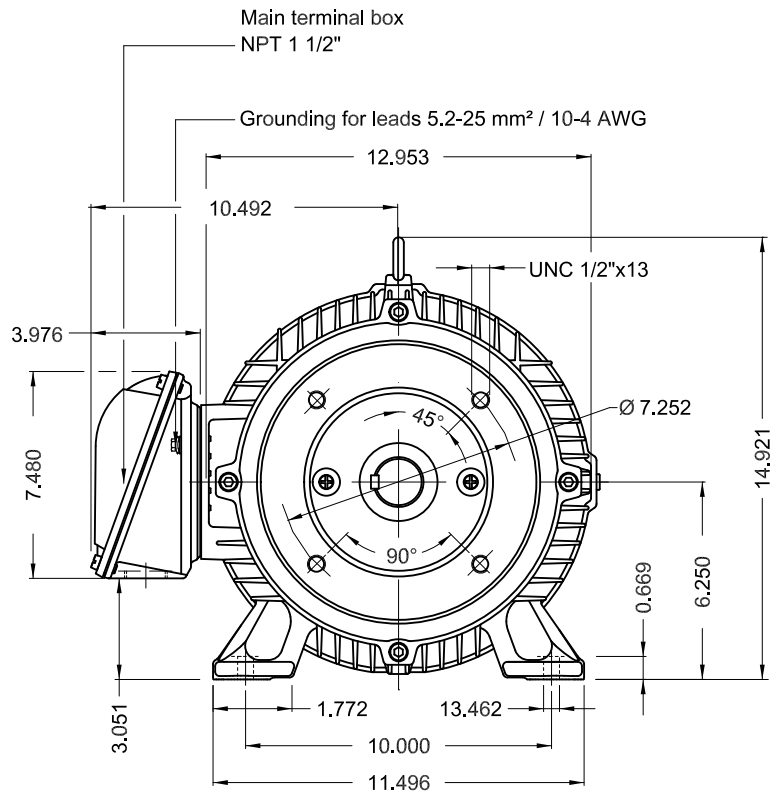
| Rev. | Changes Summary | Performed | Checked | Date |
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| Performed by | | | Page 6 / 6 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

1 2 3 4 5 6

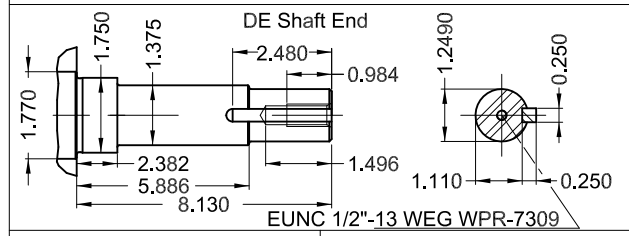
A

B

C



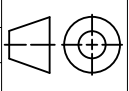

D



E

Without vertical jackscrews
 Color RAL 5009
 Painting plan 203A
 Mounting NEMA F-1
 Mounting B34R(D)

7.5 HP 06 Poles 60 Hz A

| ECM | LOC | SUMMARY OF MODIFICATIONS | | | EXECUTED | CHECKED | RELEASED | DATE | VER |
|----------|-----------|--|-----------------------|--|---|----------------|---------------------|-------|-------|
| EXECUTED | PIRWBUSER |  THREE PH. MOTOR JM/JP/JET PUMP W22 PREM. EFF. FRAME 254/6JP IP55 TEFC | PREVIEW WDD | |  | | | | |
| CHECKED | | | | | | | | | |
| RELEASED | | | | | | | | | |
| REL DT. | WMO | | | | | Jaragua do Sul | Product Engineering | SHEET | 1 / 1 |

WEG **W22 NEMA**
CC029A Premium

*Inverter Duty Motor
 Severe Duty*



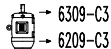
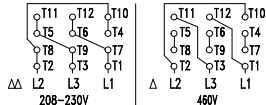
FOR SAFE AREA
 MOD.TE1BFOXON



Class I, Div 2, Gr. A, B, C and D - T3
 Class I, Zone 2, IIC - T3
 Class II, Div 2, Gr. F and G - T4
 For use on PWM, Gr. A, B, C, D and F,
 VT 1000:1, CT 20:1, 1.0SF, T3A

MODEL 00712ET3E254JP-W22
 MADE IN BRAZIL
 13469269

| | | | |
|---------------------|----------------------------|-----------------|---------------|
| PH 3 | FR 254/6JP | HP(kW) 7.5(5.5) | Hz 60 |
| V 230/460 | A 19.0/9.48 | RPM 1175 | DES B |
| NEMA NOM EFF 91.0 % | INS. CL. F Δ T 80 K | IP55 | |
| ENCL TEFC | DUTY CONT. | AMB. 40°C | |
| CODE H | PF 0.80 | SF 1.25 | SFA 23.8/11.9 |
| USABLE @208V | 21.0 A | SF 1.15 | SFA 24.1 |
| ALT 1000 m.a.s.l. | | | 300 Lbs |



MOBIL POLYREX EM
 13 g 20000 h