

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | |
|--|---------------------------------------|------------------|--|------------------------|---------|----------|
| Customer | : | | | | | |
| Product line | : NEMA Premium Efficiency Three-Phase | | Product code : | 11708306 | | |
| | | | Catalog # : | 01536ET3H215JM-W22 | | |
| Frame | : 213/5JM | | Locked rotor time | : 25s (cold) 14s (hot) | | |
| Output | : 15 HP (11 kW) | | Temperature rise | : 80 K | | |
| Poles | : 2 | | 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 | : 13.6 A | | Protection degree | : IP55 | | |
| L. R. Amperes | : 103 A | | Cooling method | : IC411 - TEFC | | |
| LRC | : 7.6x(Code J) | | Mounting | : F-1 | | |
| No load current | : 4.00 A | | Rotation ¹ | : Both (CW and CCW) | | |
| Rated speed | : 3510 rpm | | Noise level ² | : 68.0 dB(A) | | |
| Slip | : 2.50 % | | Starting method | : Direct On Line | | |
| Rated torque | : 22.4 ft.lb | | Approx. weight ³ | : 178 lb | | |
| Locked rotor torque | : 240 % | | | | | |
| Breakdown torque | : 280 % | | | | | |
| Insulation class | : F | | | | | |
| Service factor | : 1.25 | | | | | |
| Moment of inertia (J) | : 0.6362 sq.ft.lb | | | | | |
| Design | : A | | | | | |
| Output | 25% | 50% | 75% | 100% | | |
| Efficiency (%) | 90.0 | 90.2 | 91.0 | 91.0 | | |
| Power Factor | 0.53 | 0.76 | 0.85 | 0.89 | | |
| | Foundation loads | | | | | |
| | | | Max. traction | : 265 lb | | |
| | | | Max. compression | : 443 lb | | |
| | | <u>Drive end</u> | | <u>Non drive end</u> | | |
| Bearing type | : | 6309 Z C3 | | 6207 ZZ | | |
| Sealing | : | V'Ring | | V'Ring | | |
| Lubrication interval | : | 19000 h | | 40000 h | | |
| Lubricant amount | : | 13 g | | 0 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



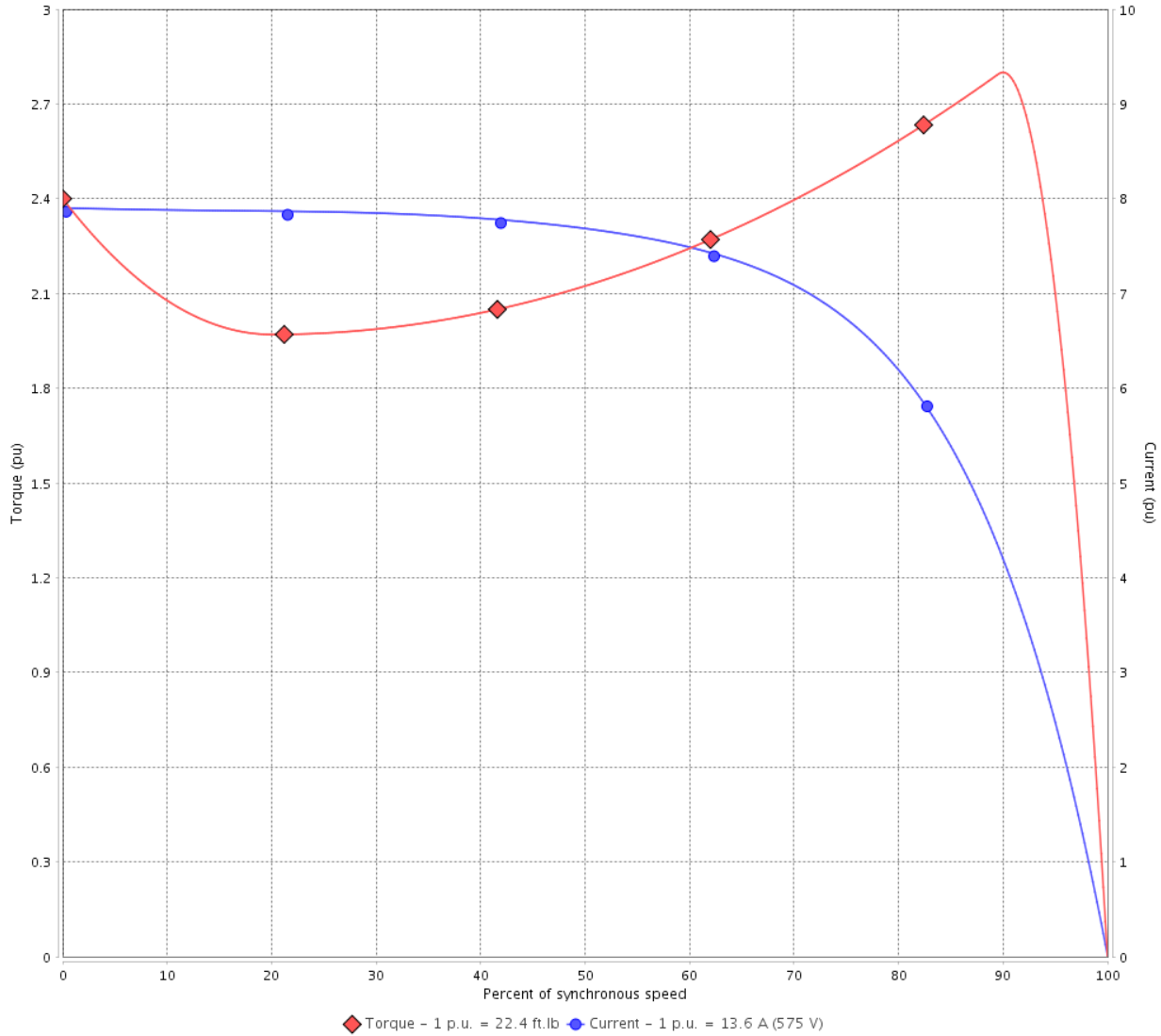
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11708306

Catalog # : 01536ET3H215JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

| | | | |
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| Rated current | : 13.6 A | Moment of inertia (J) | : 0.6362 sq.ft.lb |
| LRC | : 7.6 | Duty cycle | : Cont.(S1) |
| Rated torque | : 22.4 ft.lb | Insulation class | : F |
| Locked rotor torque | : 240 % | Service factor | : 1.25 |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 3510 rpm | Design | : A |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 2 / 6 | Revision |
| Checked by | | | | |
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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

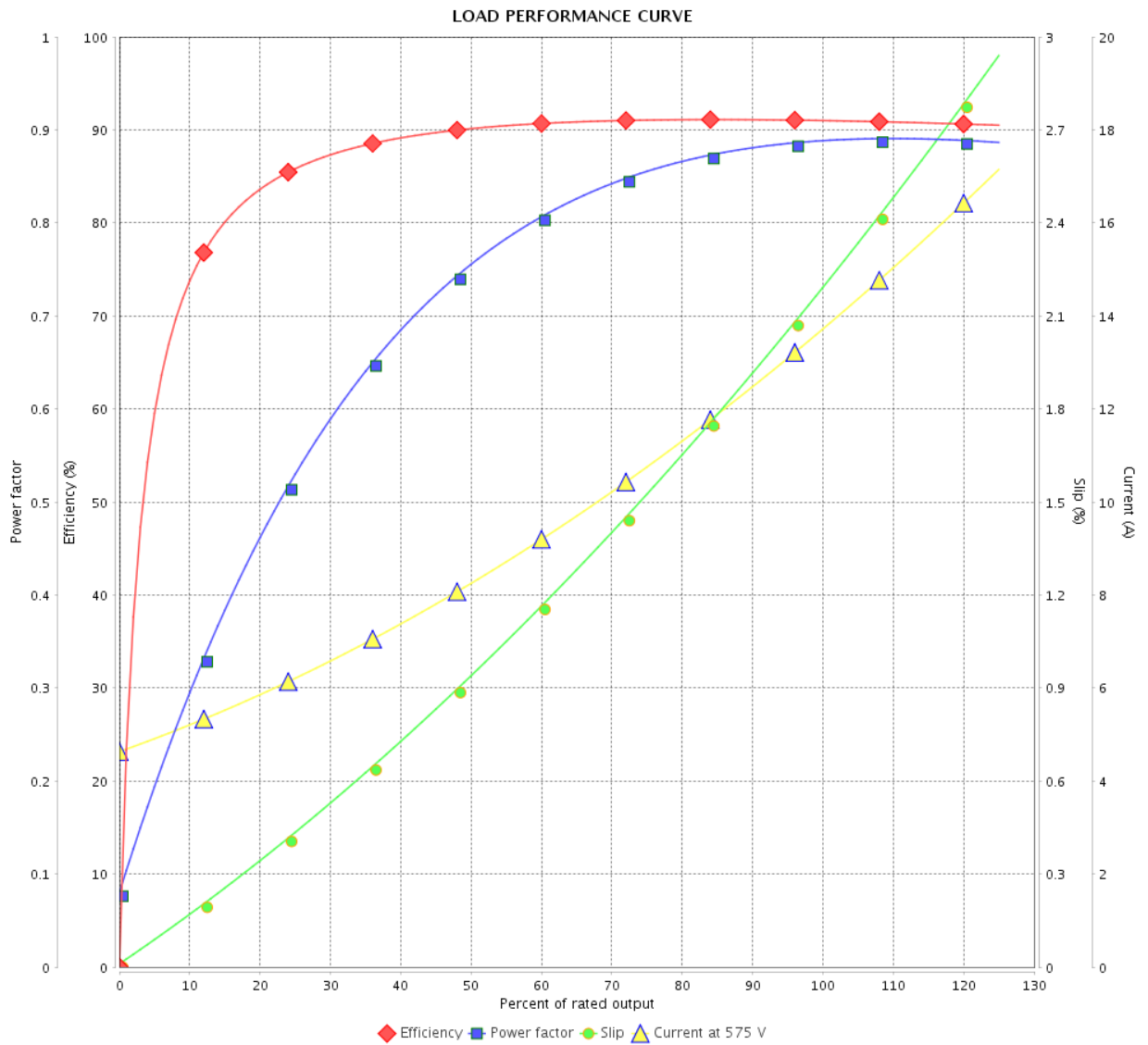


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Product line : NEMA Premium Efficiency Three-Phase

Product code : 11708306

Catalog # : 01536ET3H215JM-W22



Performance : 575 V 60 Hz 2P

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 Breakdown torque : 280 %
 Rated speed : 3510 rpm

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 Service factor : 1.25
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 Design : A

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| Performed by | | Page | | Revision |
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

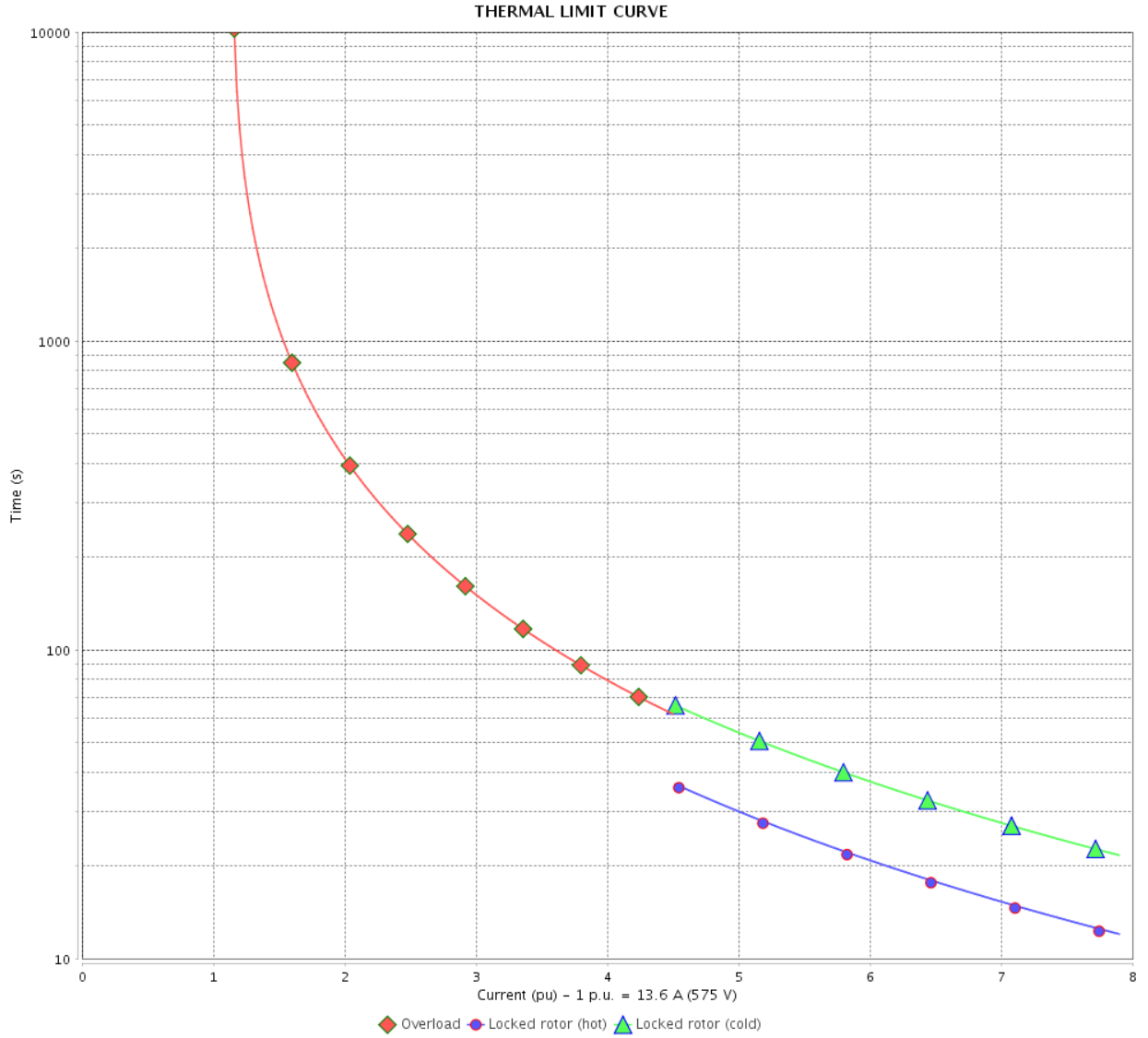
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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| | | | | |
| Performed by | | Page 5 / 6 | | Revision |
| Checked by | | | | |
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



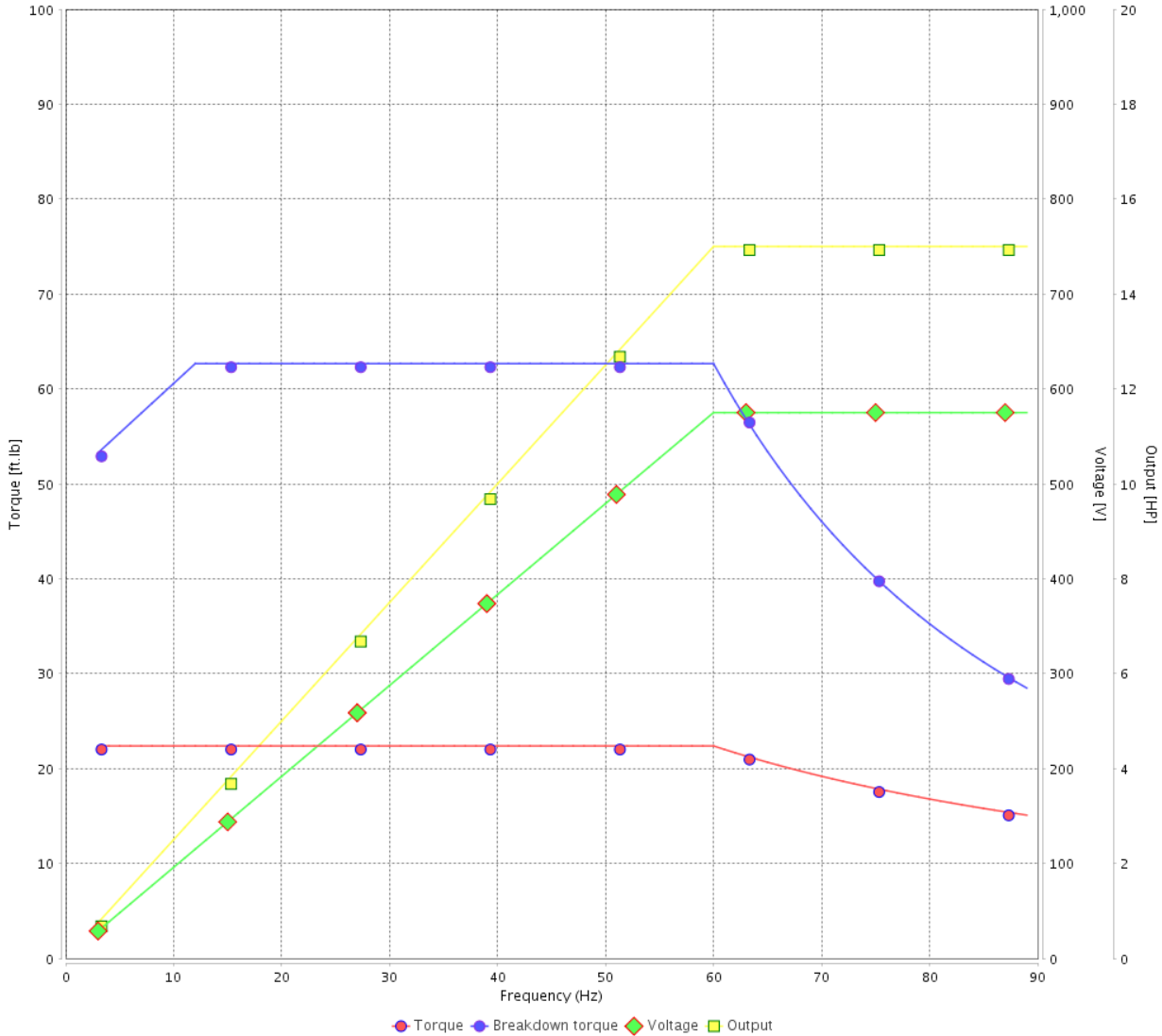
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VFD OPERATION CURVE



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Moment of inertia (J) : 0.6362 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : A

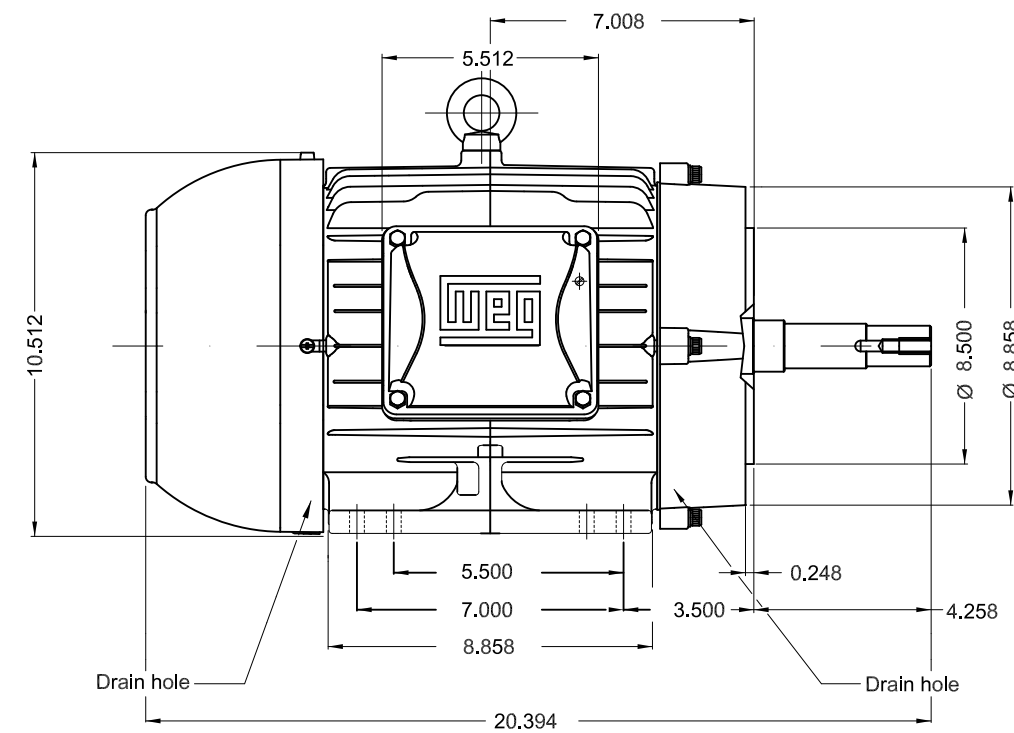
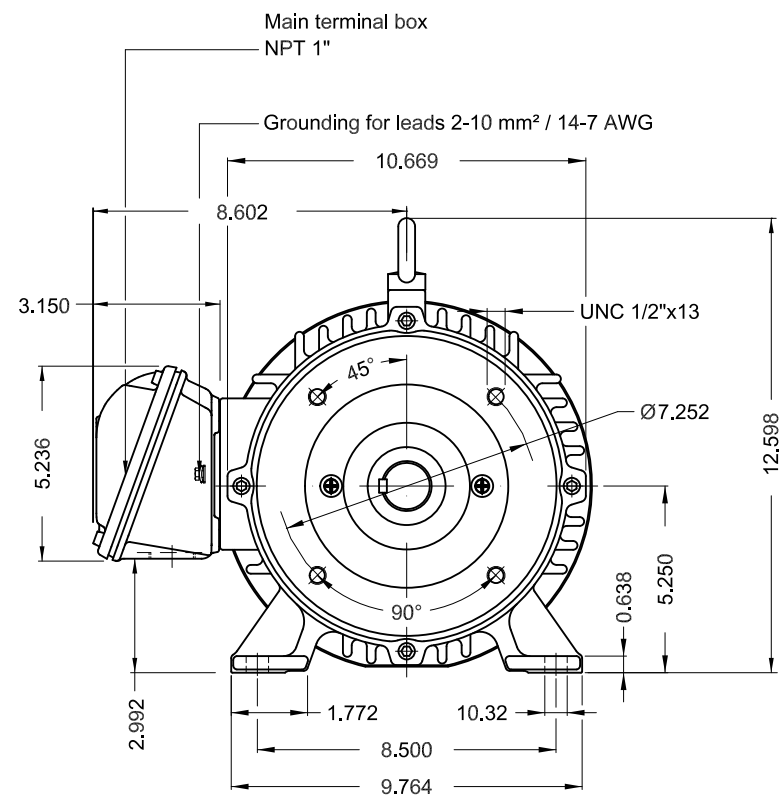
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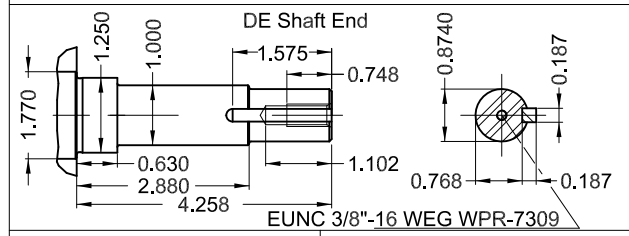
A

B

C



D



E

Color RAL 5009
 Painting plan 207A
 Mounting B34R(D)

15 HP 02 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 213/5JM IP55 TEFC | | | | | |
| CHECKED | | | | | | | |
| RELEASED | | | | | | | |
| REL DT. | WMO | | Jaragua do Sul | Product Engineering | SHEET | 1 / 1 | |

PREVIEW
 WDD



Dimensions in inches XME A3

**W22**

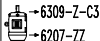
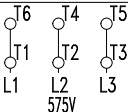
CC029A

® Inverter Duty Motor
Severe Duty

11708306

MADE IN BRAZIL MODEL 01536ET3H215JM-W22

| | | | | | | |
|---------------------|------------|---------------|-----------|-----------------|-------------------|----------|
| PH 3 | FR 213/5JM | HP(kW) 15(11) | Hz 60 | SF 1.25 | PF 0.89 | |
| V 575 | A 13.6 | RPM 3520 | INS. CL.F | ΔT 80 K | | |
| NEMA NOM EFF 91.0 % | | | | DES A | DUTY CONT. | AMB 40°C |
| ENCL TEFC | IP55 | SFA 17.0 | | | ALT 1000 m.a.s.l. | |
| | | | | | CODE J | |



MOBIL POLYREX EM
13 g 19000 h

176 Lbs

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



FOR SAFE AREA
MOD.TE1BFOXON