

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | |
|--|--|
| Customer : | |
| Product line | : NEMA Premium Efficiency Three-Phase |
| Product code : | 12182291 |
| Catalog # : | 00709ST3HIE256TC-W22 |
| Frame : 254/6TC Output : 7.5 HP (5.5 kW) Poles : 8 Frequency : 60 Hz Rated voltage : 575 V Rated current : 8.88 A L. R. Amperes : 47.1 A LRC : 5.3x(Code G) No load current : 5.20 A Rated speed : 880 rpm Slip : 2.22 % Rated torque : 44.8 ft.lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 4.43 sq.ft.lb Design : B | Locked rotor time : 59s (cold) 33s (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 : 54.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 286 lb |
| Output | 25% 50% 75% 100% |
| Efficiency (%) | 85.2 85.5 87.5 87.5 |
| Power Factor | 0.29 0.50 0.63 0.71 |
| Foundation loads | |
| Max. traction : 394 lb | |
| Max. compression : 679 lb | |
| Bearing type | : <u>Drive end</u> 6309 C3 <u>Non drive end</u> 6209 C3 |
| Sealing | : Inpro/Seal Inpro/Seal |
| 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 by | Performed |
| Checked by | Checked |
| Date | Date |
| 01/06/2022 | |
| Page | Revision |
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



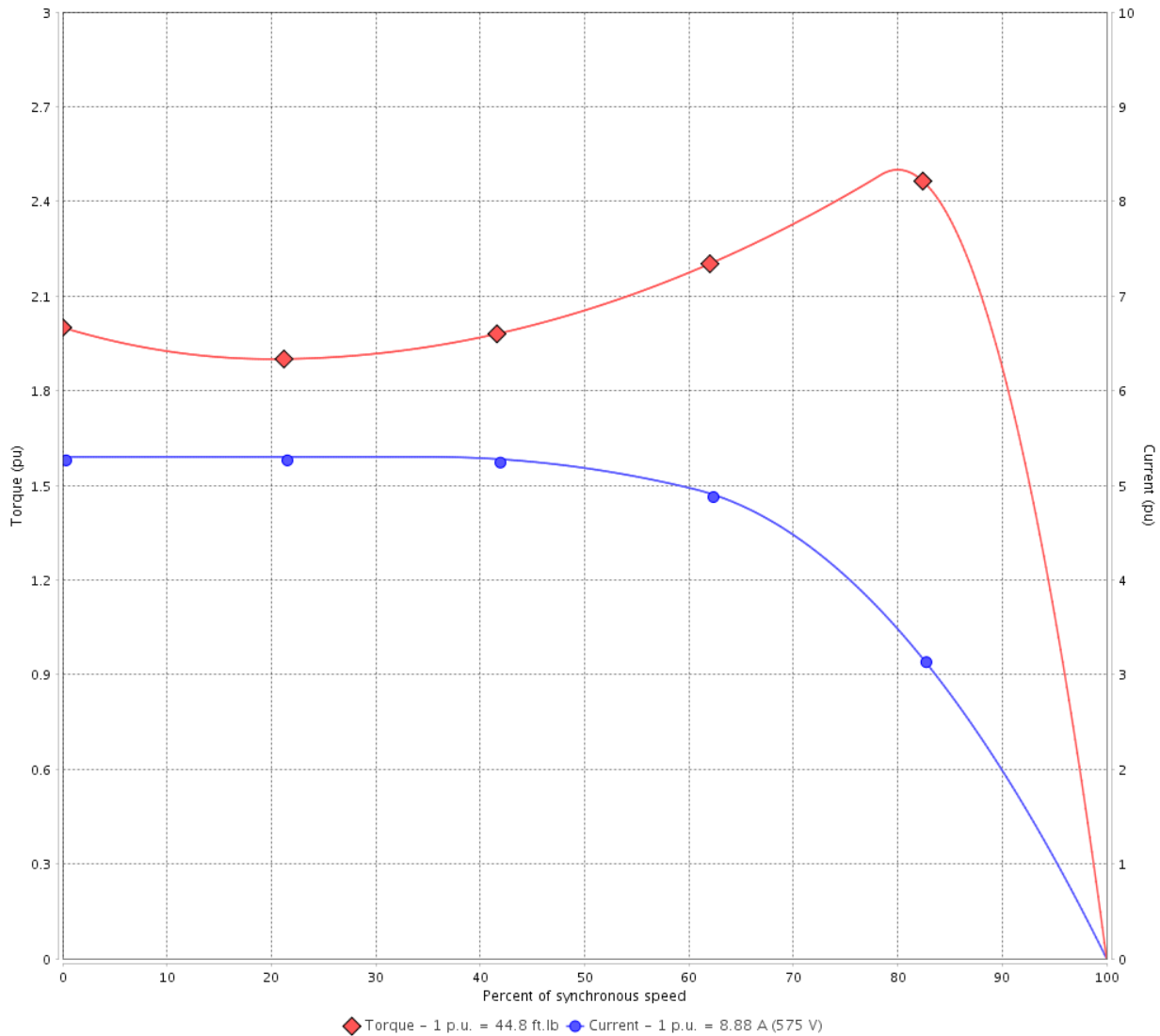
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 8P

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| LRC | : 5.3 | Duty cycle | : Cont.(S1) |
| Rated torque | : 44.8 ft.lb | Insulation class | : F |
| Locked rotor torque | : 200 % | Service factor | : 1.25 |
| Breakdown torque | : 250 % | Temperature rise | : 80 K |
| Rated speed | : 880 rpm | Design | : B |

Locked rotor time : 59s (cold) 33s (hot)

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| Checked by | | | | |
| Date | 01/06/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

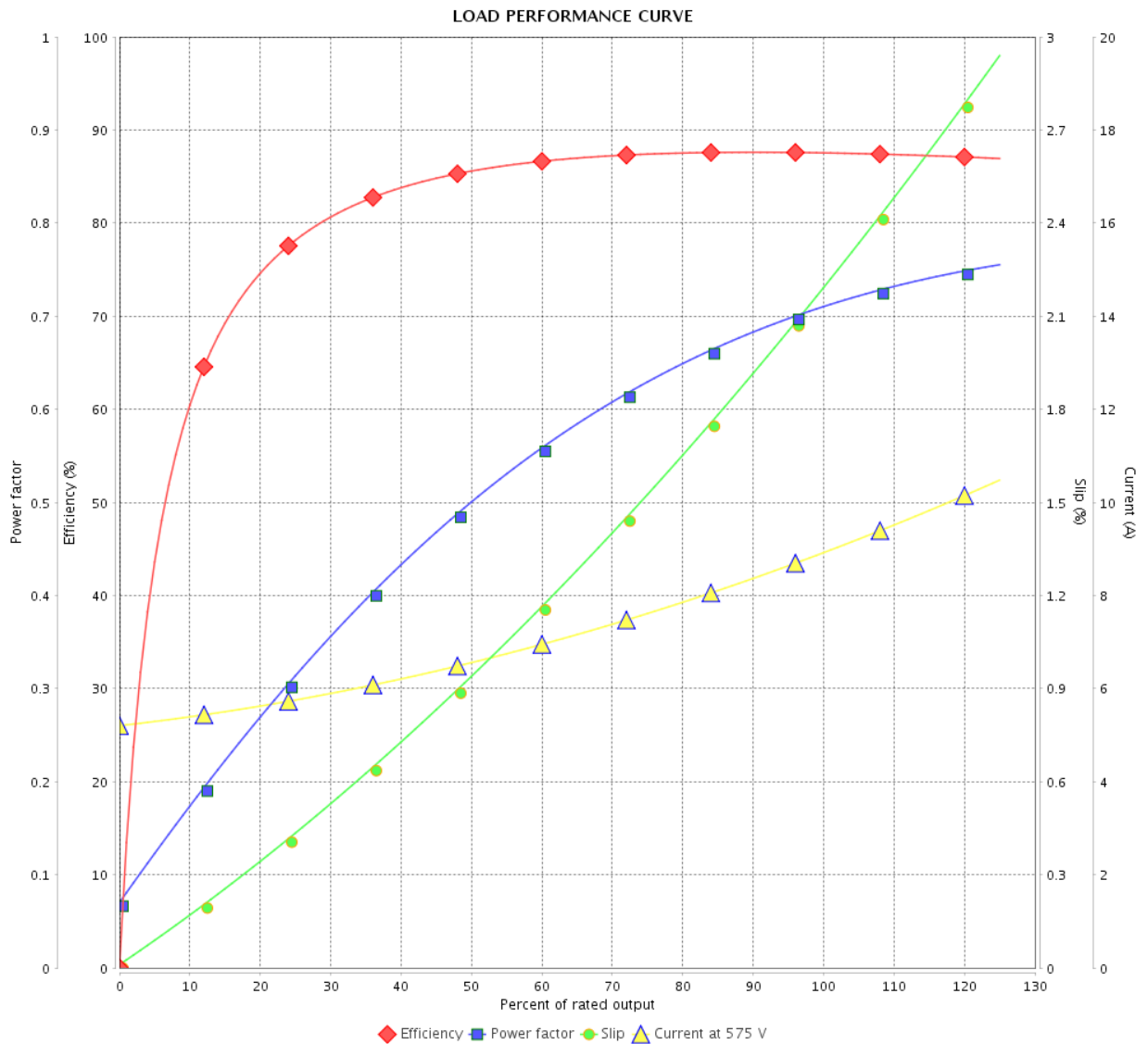


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

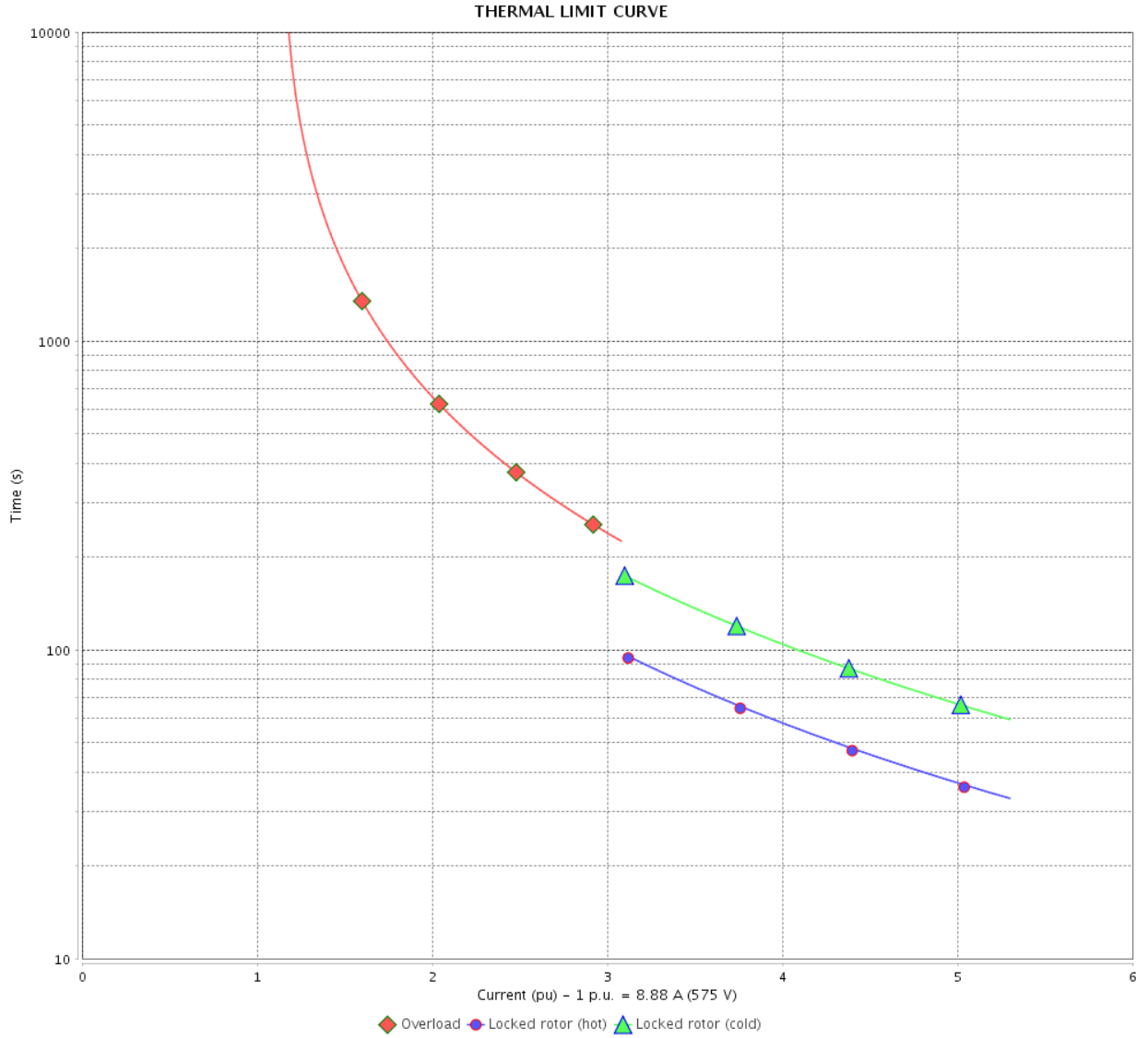
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



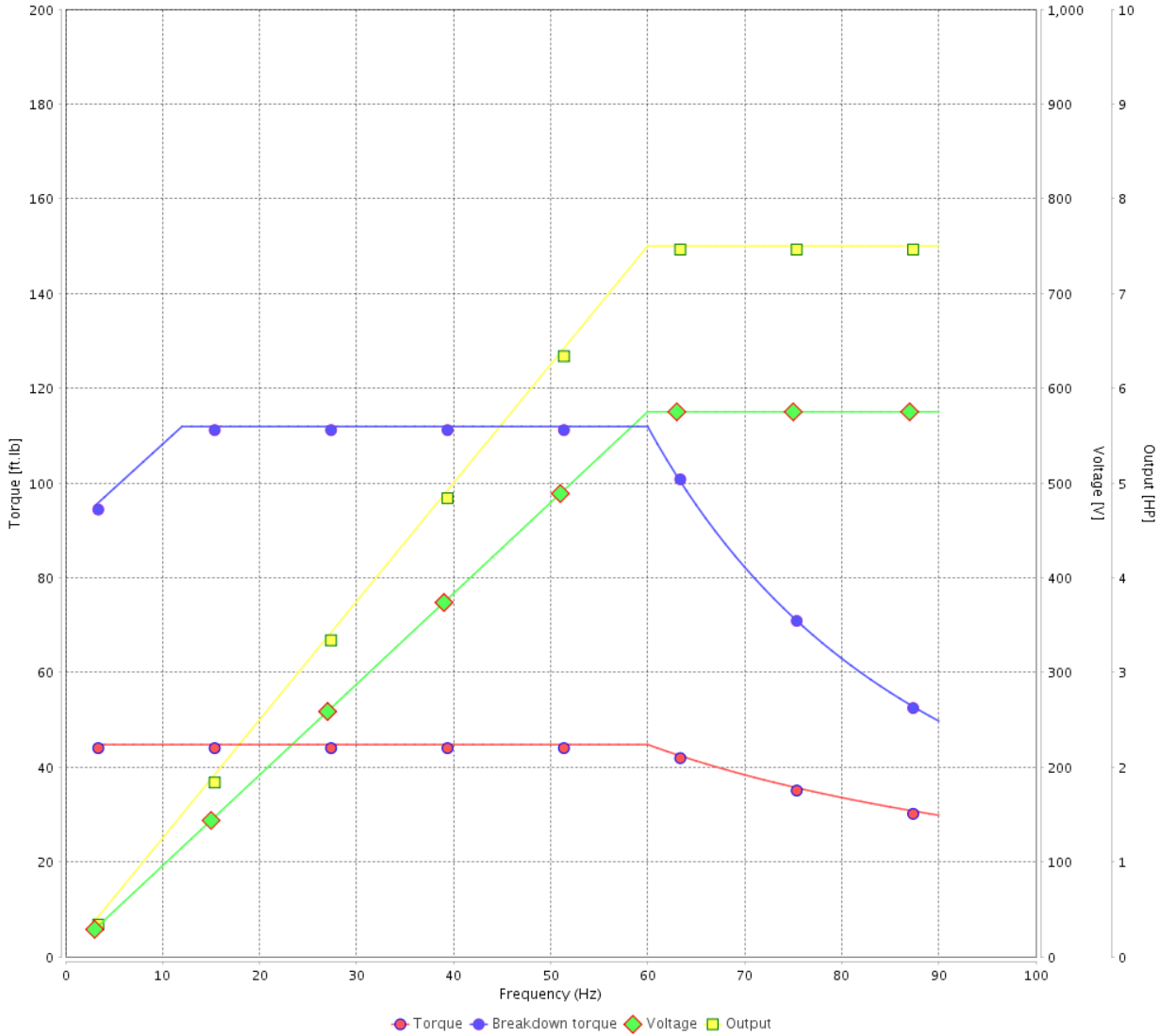
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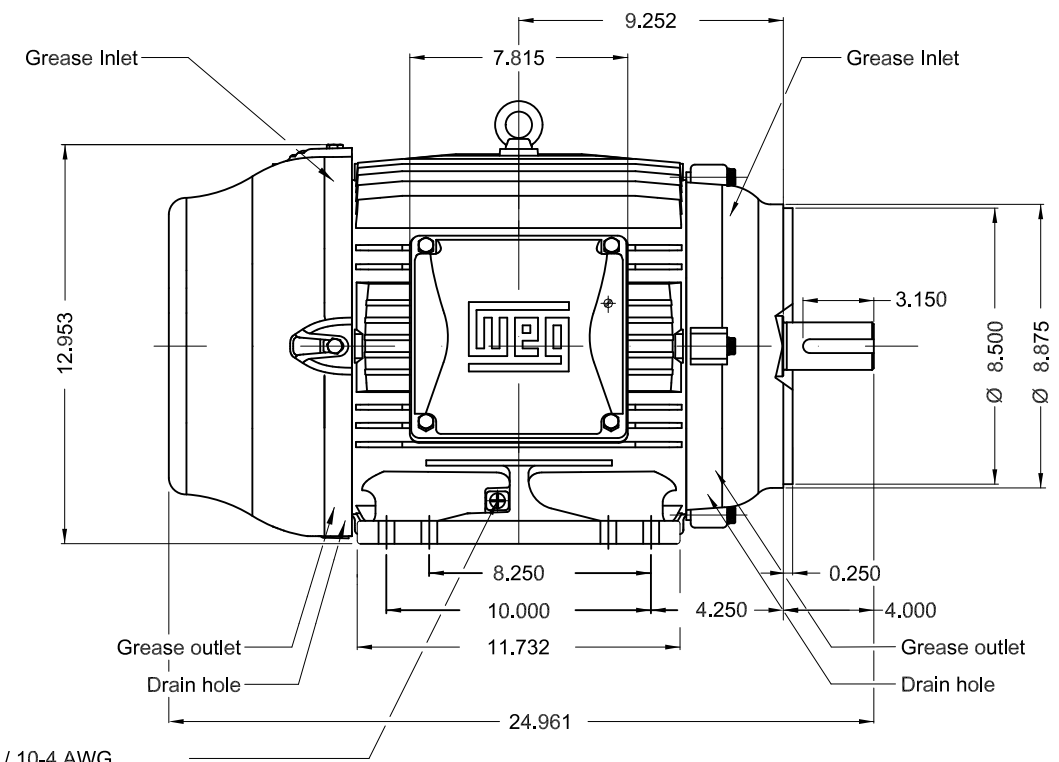
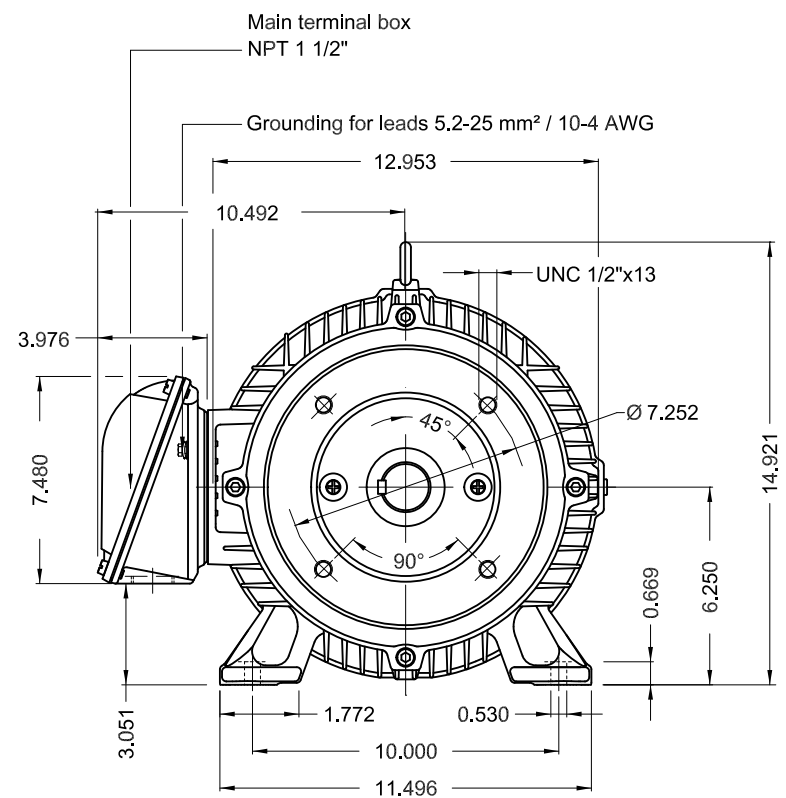


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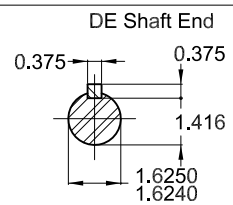
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 Design : B

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Grounding for leads 5.2-25 mm² / 10-4 AWG

Color RAL 5009
 Painting plan 202E
 Mounting B34R(D)



7.5 HP 08 Poles 60 Hz A

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|----------|------------|---|---------------------|---------|----------|------|-----|
| EXECUTED | HYBRISUSER | THREE PH. MOTOR IEEE 841 W22 PREM. EFF. | | | | | |
| CHECKED | | FRAME 254/6TC IP55 TEFC | | | | | |
| RELEASED | | | | | | | |
| REL DT. | WMO | Jaragua do Sul | Product Engineering | | | | |

PREVIEW
 WDD



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