

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | |
|--|-----------------------|-----------------------------------|--|---------------------|----------|
| Customer : | | | | | |
| Product line | | : ODP High Efficiency Three-Phase | Product code : | 13659279 | |
| Frame | : 254TC | Cooling method | : IC01 - ODP | | |
| Insulation class | : F | Mounting | : F-1 | | |
| Duty cycle | : Cont.(S1) | Rotation ¹ | : Both (CW and CCW) | | |
| Ambient temperature | : -20°C to +40°C | Starting method | : Direct On Line | | |
| Altitude | : 1000 m.a.s.l. | Approx. weight ³ | : 94.3 kg | | |
| Protection degree | : IP23 | Moment of inertia (J) | : 0.0338 kgm ² | | |
| Design | : B | | | | |
| Output [HP] | 20 | 20 | 20 | 20 | |
| Poles | 2 | 2 | 2 | 2 | |
| Frequency [Hz] | 60 | 50 | 50 | 50 | |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 | |
| Rated current [A] | 48.6/24.3 | 30.3 | 29.4 | 28.7 | |
| L. R. Amperes [A] | 282/141 | 127 | 135 | 144 | |
| LRC [A] | 5.8x(Code G) | 4.2x(Code D) | 4.6x(Code E) | 5.0x(Code F) | |
| No load current [A] | 16.4/8.20 | 8.63 | 10.4 | 12.1 | |
| Rated speed [RPM] | 3525 | 2890 | 2905 | 2920 | |
| Slip [%] | 2.08 | 3.67 | 3.17 | 2.67 | |
| Rated torque [kgfm] | 4.12 | 5.02 | 5.00 | 4.97 | |
| Locked rotor torque [%] | 160 | 130 | 140 | 160 | |
| Breakdown torque [%] | 250 | 200 | 210 | 229 | |
| Service factor | 1.15 | 1.00 | 1.15 | 1.15 | |
| Temperature rise | 105 K | 105 K | 105 K | 105 K | |
| Locked rotor time | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) | 16s (cold) 9s (hot) | 16s (cold) 9s (hot) | |
| Noise level ² | 66.0 dB(A) | | | | |
| Efficiency (%) | 25% | | | | |
| | 50% | 89.5 | 86.5 | 87.5 | |
| | 75% | 90.2 | 87.5 | 87.5 | |
| | 100% | 90.2 | 86.5 | 87.5 | |
| Power Factor | 25% | | | | |
| | 50% | 0.74 | 0.77 | 0.66 | |
| | 75% | 0.83 | 0.85 | 0.78 | |
| | 100% | 0.86 | 0.87 | 0.83 | |
| Bearing type | : Drive end 6309 Z C3 | Non drive end 6209 Z C3 | Foundation loads | | |
| Sealing | : Without | Without | Max. traction | : 132 kgf | |
| | Bearing Seal | Bearing Seal | Max. compression | : 227 kgf | |
| Lubrication interval | : 20000 h | 20000 h | | | |
| Lubricant amount | : 13 g | 9 g | | | |
| Lubricant type | : Mobil Polyrex EM | | | | |
| Notes USABLE @208V 53.7A SF 1.15 SFA 61.8A | | | | | |
| 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 | 11/05/2026 | | | 1 / 5 | |

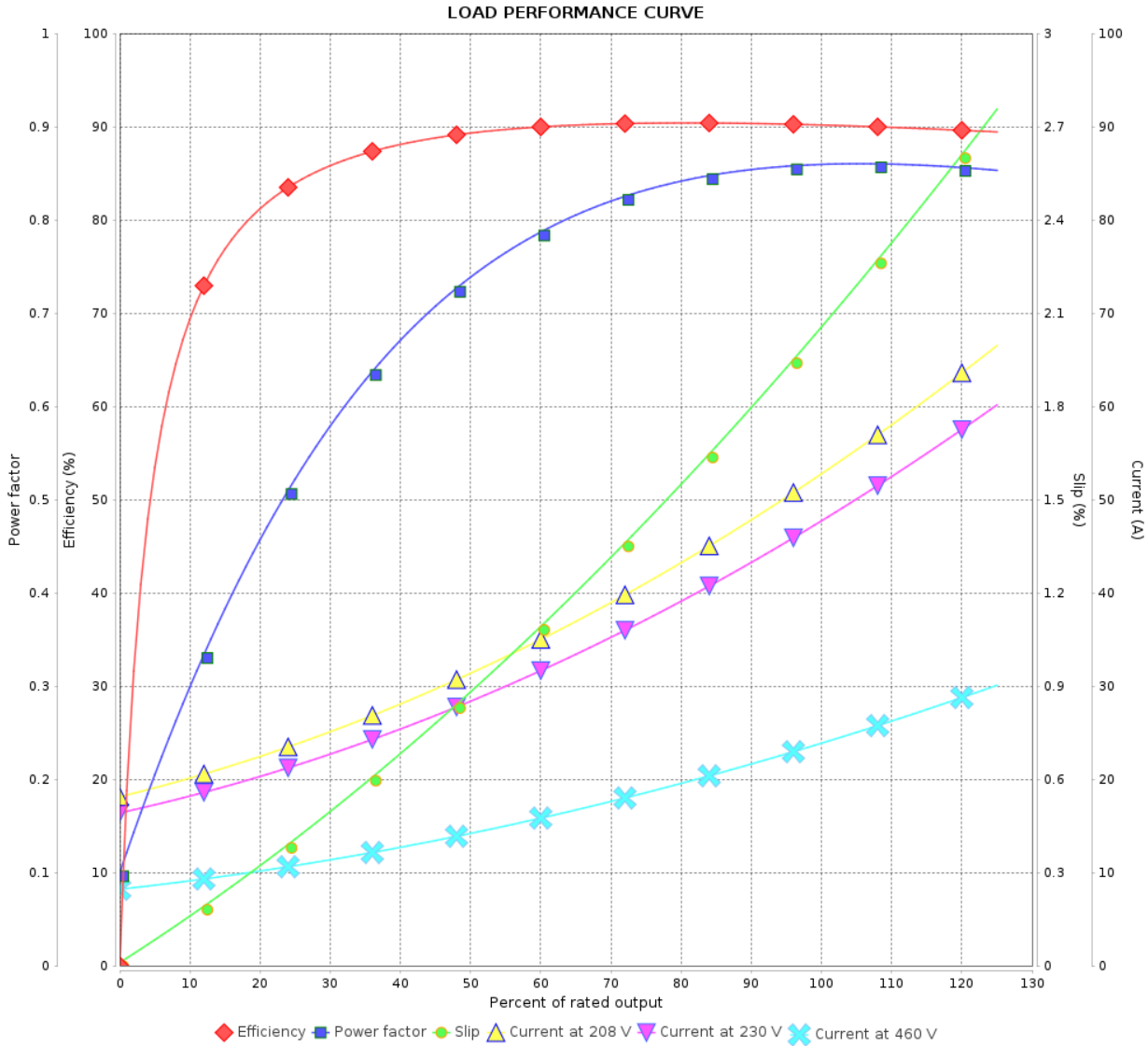
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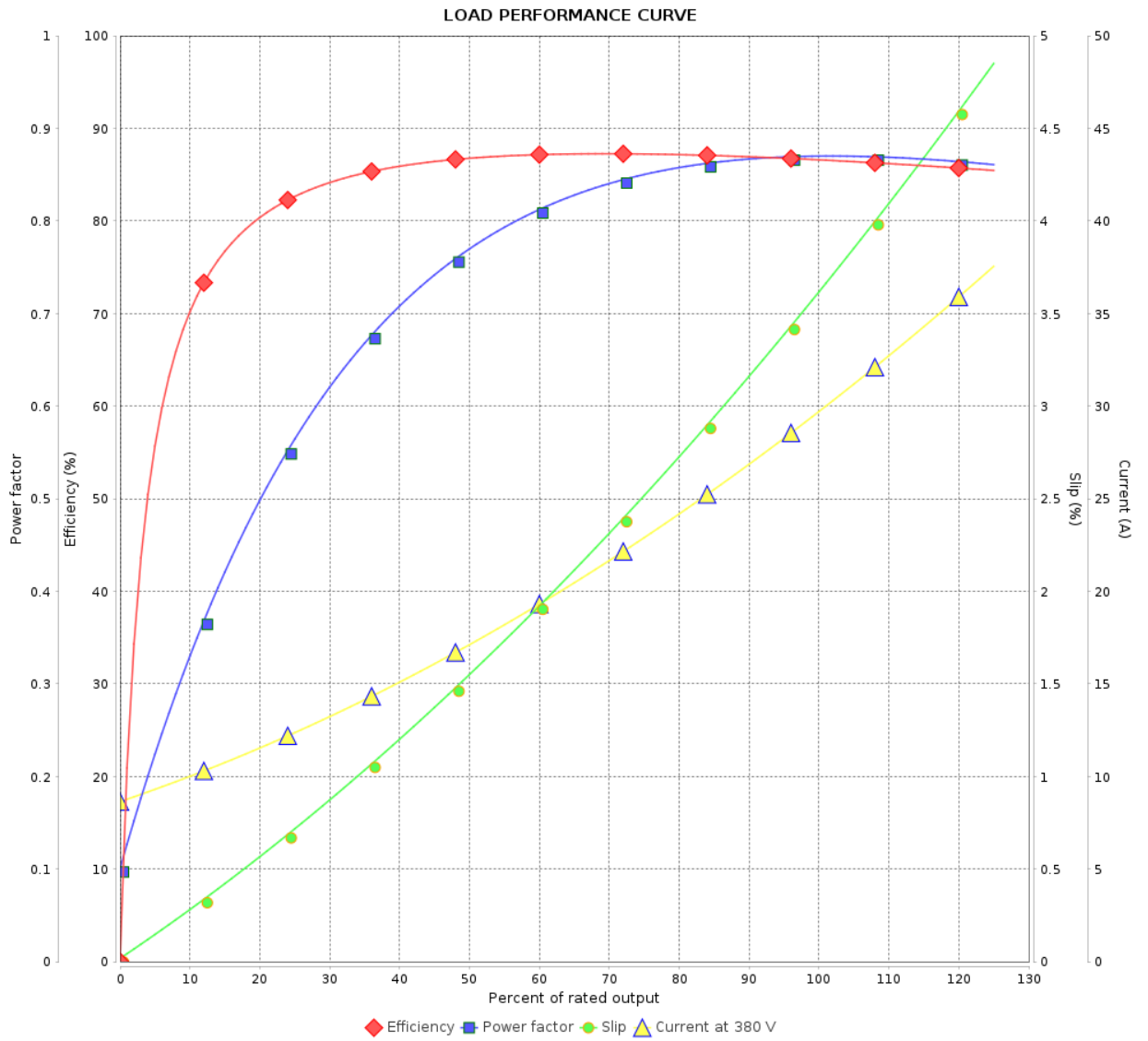
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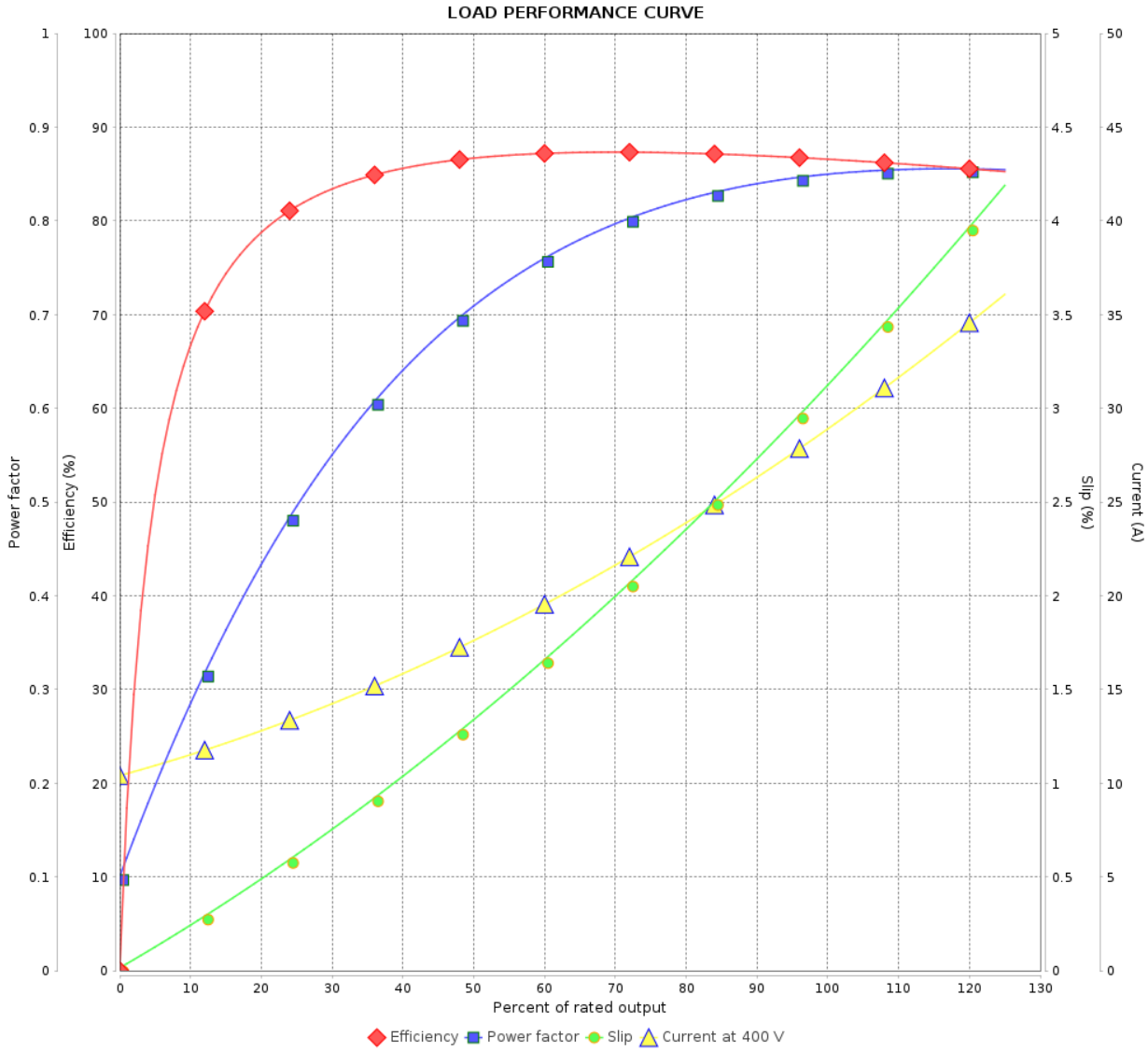
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| Date | | 11/05/2026 | | |

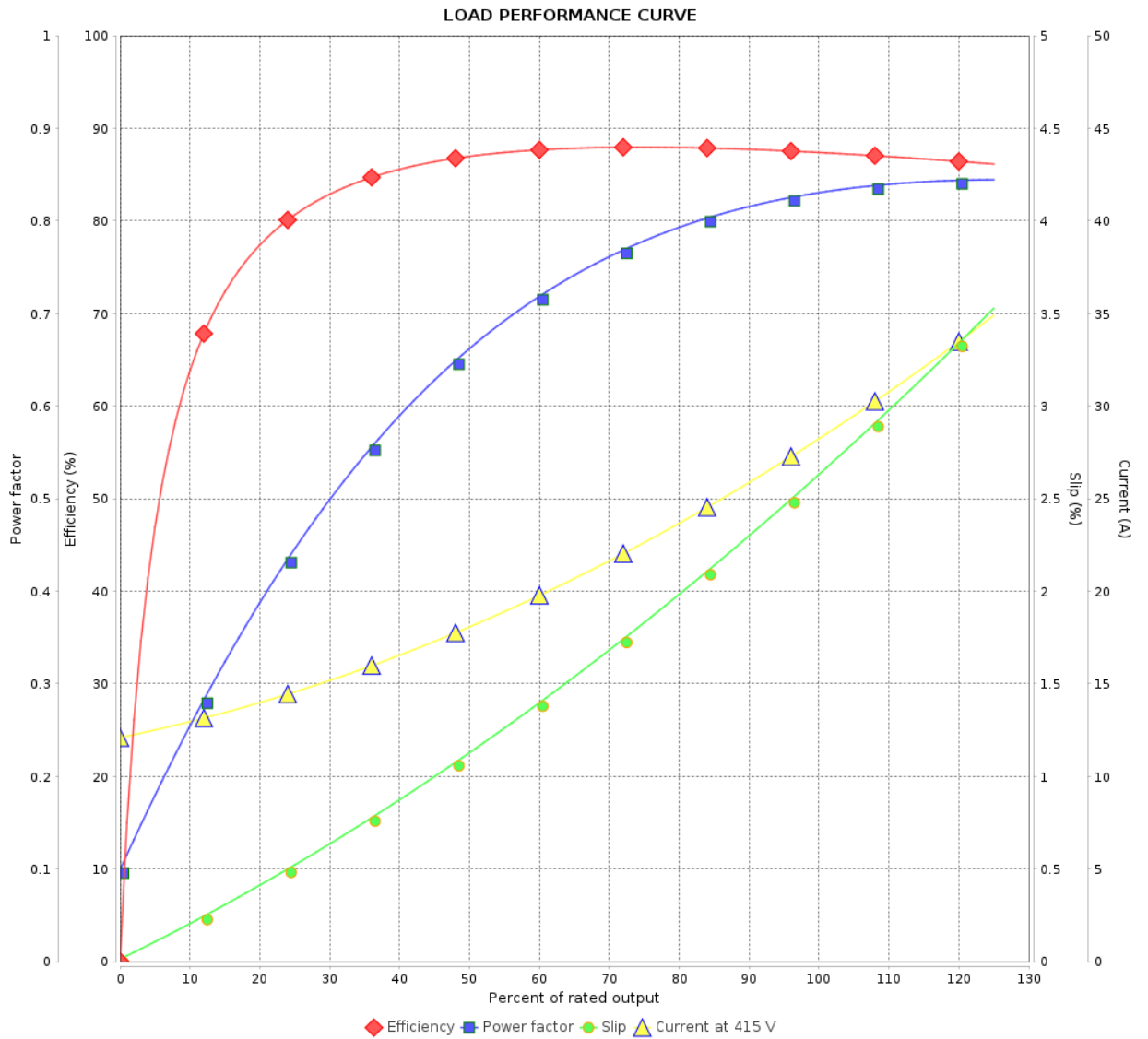
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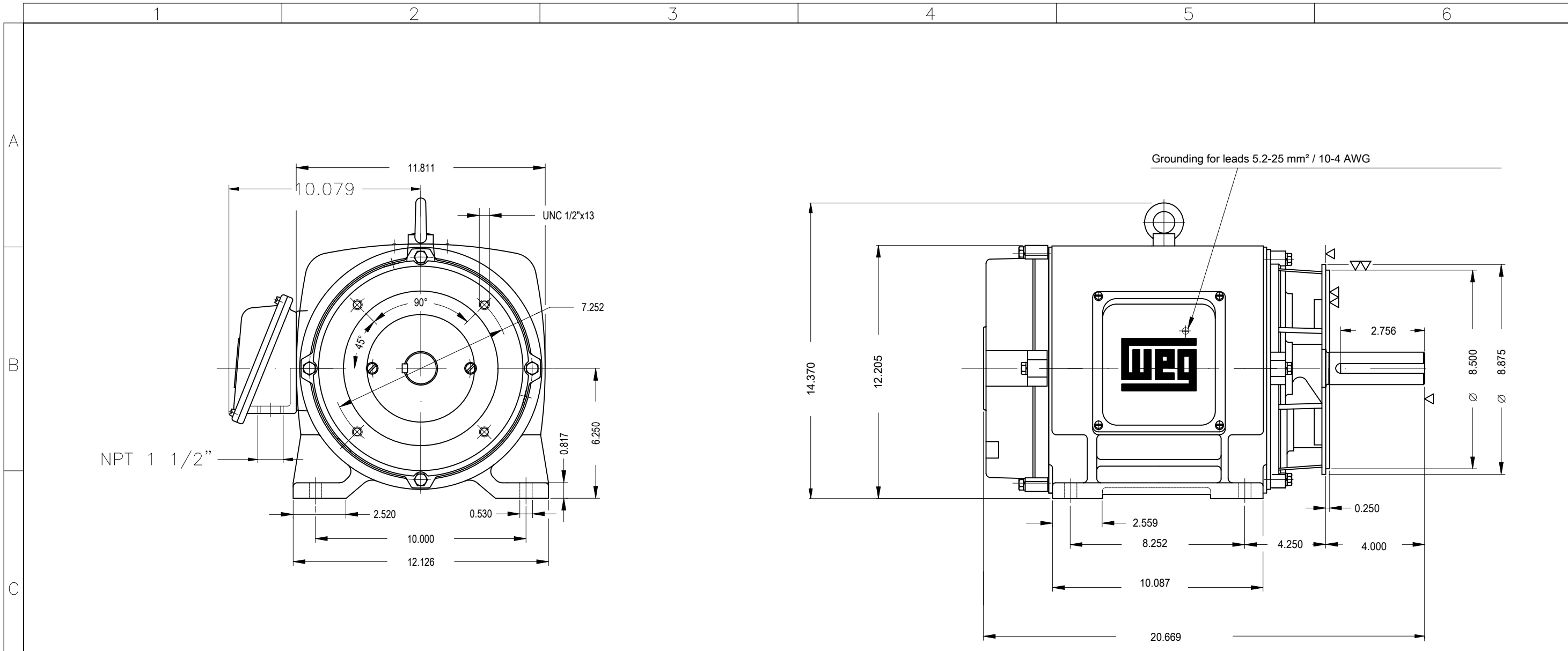


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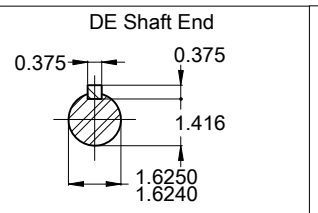
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Certification UL/FIRE PUMP
 Color RAL 5009
 Painting plan 203A
 Mounting NEMA F-1
 Mounting B34D



20 HP 02 Poles 60 Hz A

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|-----------|------------|-----------------------------------|----------|---------|----------|------|-----|
| EXECUTED | HYBRISUSER | THREE PH. MOTOR GENERAL HIGH EFF. | | | | | |
| CHECKED | | FRAME 254TC IP23 ODP | | | | | |
| RELEASED | | | | | | | |
| REL. DATE | | WMO Jaragua do Sul | | | | | |

| | | | | | |
|------------|--|-------|--|----|----|
| HYBRISUSER | | | | | 00 |
| PREVIEW | | WDD | | 00 | |
| SHEET | | 1 / 1 | | | |

Dimensions in inches XME A3