

DATA SHEET



Single Phase Induction Motor - Squirrel Cage

| | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------|----------|
| Customer : | | | | | |
| Product line | | : Explosion Proof Single-Phase | | Product code : 15861200 | |
| Frame | : B56EX | | Locked rotor time | : 10s (cold) 6s (hot) | |
| Output | : 0.5 HP (0.37 kW) | | Temperature rise | : 80 K | |
| Poles | : 4 | | Duty cycle | : Cont.(S1) | |
| Frequency | : 60 Hz | | Ambient temperature | : -20°C to +40°C | |
| Rated voltage | : 115/208-230 V | | Altitude | : 1000 m.a.s.l. | |
| Rated current | : 7.40/3.60-3.70 A | | Protection degree | : IP44 | |
| L. R. Amperes | : 44.4/21.6-22.2 A | | Cooling method | : IC411 - TEFC | |
| LRC | : 6.0x(Code M) | | Mounting | : F-1 | |
| No load current | : 6.00/2.59-3.00 A | | Rotation ¹ | : Both (CW and CCW) | |
| Rated speed | : 1750 rpm | | Starting method | : Direct On Line | |
| Slip | : 2.78 % | | Approx. weight ³ | : 16.6 kg | |
| Rated torque | : 0.207 kgfm | | | | |
| Locked rotor torque | : 280 % | | | | |
| Breakdown torque | : 220 % | | | | |
| Insulation class | : B | | | | |
| Service factor | : 1.15 | | | | |
| Moment of inertia (J) | : 0.0041 kgm ² | | | | |
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 57.0 | 64.0 | 68.6 | Max. traction : 6 kgf | |
| Power Factor | 0.44 | 0.55 | 0.63 | Max. compression : 23 kgf | |
| | | <u>Drive end</u> | <u>Non drive end</u> | | |
| Bearing type | : | 6203 ZZ | 6203 ZZ | | |
| Sealing | : | Without Bearing Seal | Without Bearing Seal | | |
| Lubrication interval | : | - | - | | |
| Lubricant amount | : | - | - | | |
| 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 | 26/10/2024 | | | 1 / 2 | |

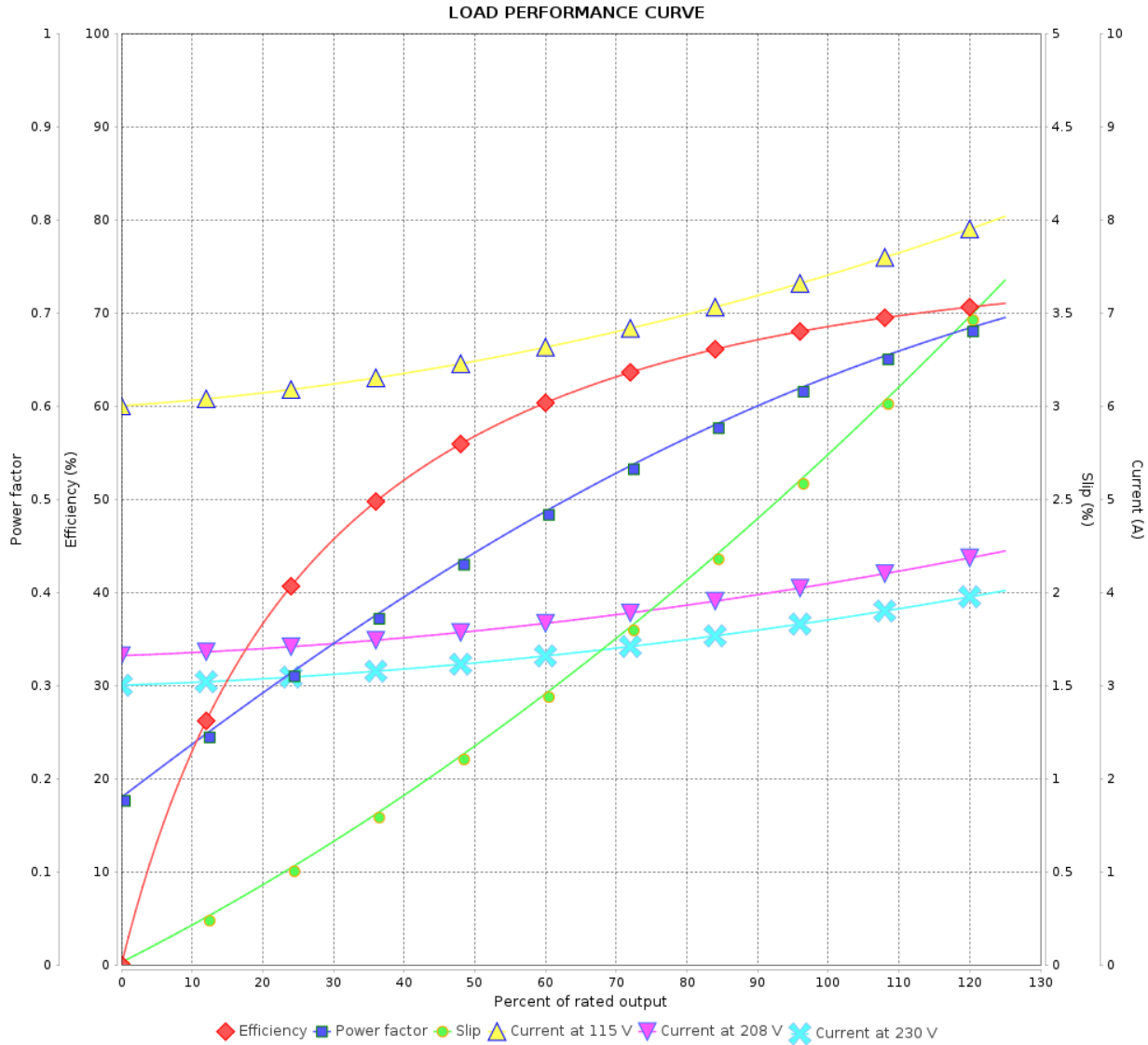
LOAD PERFORMANCE CURVE

Single Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Explosion Proof Single-Phase Product code : 15861200

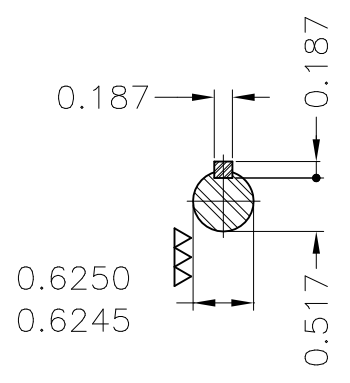
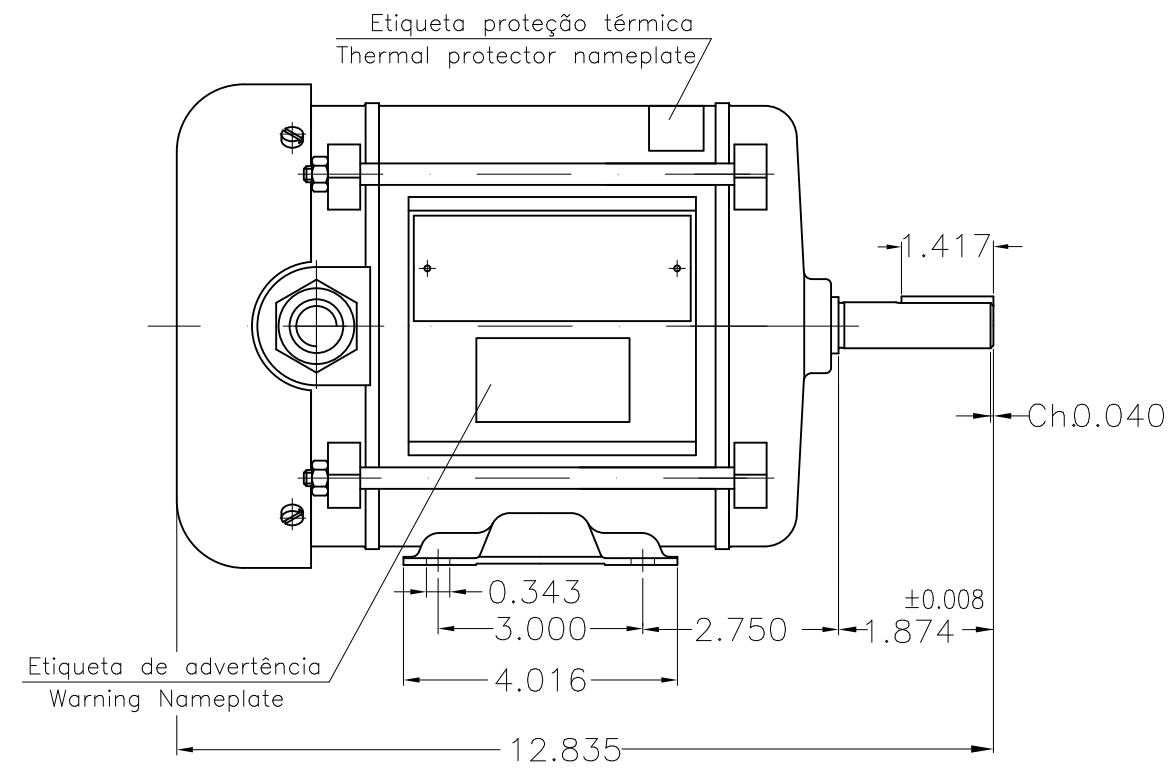
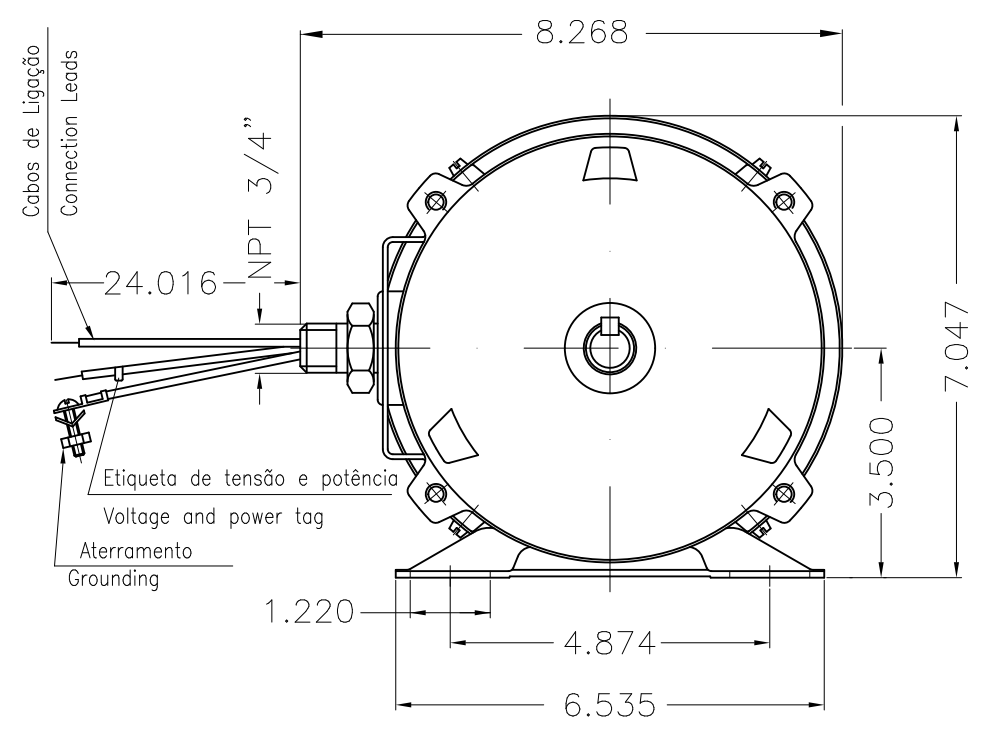


Performance : 115/208-230 V 60 Hz 4P

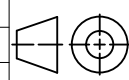

| | | | |
|---------------------|--------------------|-----------------------|---------------------------|
| Rated current | : 7.40/3.60-3.70 A | Moment of inertia (J) | : 0.0041 kgm ² |
| LRC | : 6.0 | Duty cycle | : Cont.(S1) |
| Rated torque | : 0.207 kgfm | Insulation class | : B |
| Locked rotor torque | : 280 % | Service factor | : |
| Breakdown torque | : 220 % | Temperature rise | : 80 K |
| Rated speed | : 1750 rpm | | |

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 2 / 2 | Revision |
| Checked by | | | | |
| Date | 26/10/2024 | | | |

A
B
C
D
E



Sealing cement in the leads outlet special
Rotation CW and CCW
Mounting NEMA F-1
Mounting B3R(D)

| | | | | | | | | | | | | | |
|-----------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------|--|------------|---------|----------|------|---------------------------------------------------------------------------------------|--|----|--|
| | | | | | | HYBRISUSER | | | | | | 00 | |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | | | EXECUTED | CHECKED | RELEASED | DATE | VER | | | |
| EXECUTED | HYBRISUSER |  SINGLE PH. MOTOR EXPLOSION PROOF FRAME B56EX IP44 TEFC | | | | PREVIEW | | | |  | | | |
| CHECKED | | | | | | WDD | | 00 | | | | | |
| RELEASED | | | | | | SHEET | | 1 / 1 | | | | | |
| REL. DATE | | WMO | Jaragua do Sul | Product Engineering | | | | | | | | | |

1/2 HP 04 Poles 60 Hz

A