

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Explosion Proof Standard Efficiency Three-Phase Product code : 10796358

|                       |                           |                             |                        |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame                 | : B56EX                   | Locked rotor time           | : 27s (cold) 15s (hot) |
| Output                | : 0.75 HP (0.550 kW)      | Temperature rise            | : 80 K                 |
| Poles                 | : 4                       | 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         | : 0.928 A                 | Protection degree           | : IP44                 |
| L. R. Amperes         | : 5.29 A                  | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 5.7x(Code H)            | Mounting                    | : F-1                  |
| No load current       | : 0.560 A                 | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 1730 rpm                | Noise level <sup>2</sup>    | : 50.0 dB(A)           |
| Slip                  | : 3.89 %                  | Starting method             | : Direct On Line       |
| Rated torque          | : 0.315 kgfm              | Approx. weight <sup>3</sup> | : 16.7 kg              |
| Locked rotor torque   | : 240 %                   |                             |                        |
| Breakdown torque      | : 280 %                   |                             |                        |
| Insulation class      | : B                       |                             |                        |
| Service factor        | : 1.15                    |                             |                        |
| Moment of inertia (J) | : 0.0041 kgm <sup>2</sup> |                             |                        |

|                |      |      |      |                  |          |
|----------------|------|------|------|------------------|----------|
| Output         | 50%  | 75%  | 100% | Foundation loads |          |
| Efficiency (%) | 77.0 | 80.0 | 81.5 | Max. traction    | : 20 kgf |
| Power Factor   | 0.53 | 0.66 | 0.74 | Max. compression | : 36 kgf |

|                      | Drive end              | Non drive end          |
|----------------------|------------------------|------------------------|
| 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 |                 | Page<br>1 / 3<br>Revision |         |      |
| Checked by   |                 |                           |         |      |
| Date         | 26/10/2024      |                           |         |      |

Customer :

Thermal protection

| ID | Application | Type                 | Quantity  | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1  | Winding     | Thermostat - 2 wires | 1 x Phase | 130 °C              |

|              |                 |  |           |         |          |
|--------------|-----------------|--|-----------|---------|----------|
| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 2 / 3   |          |
| Date         | 26/10/2024      |  |           |         |          |

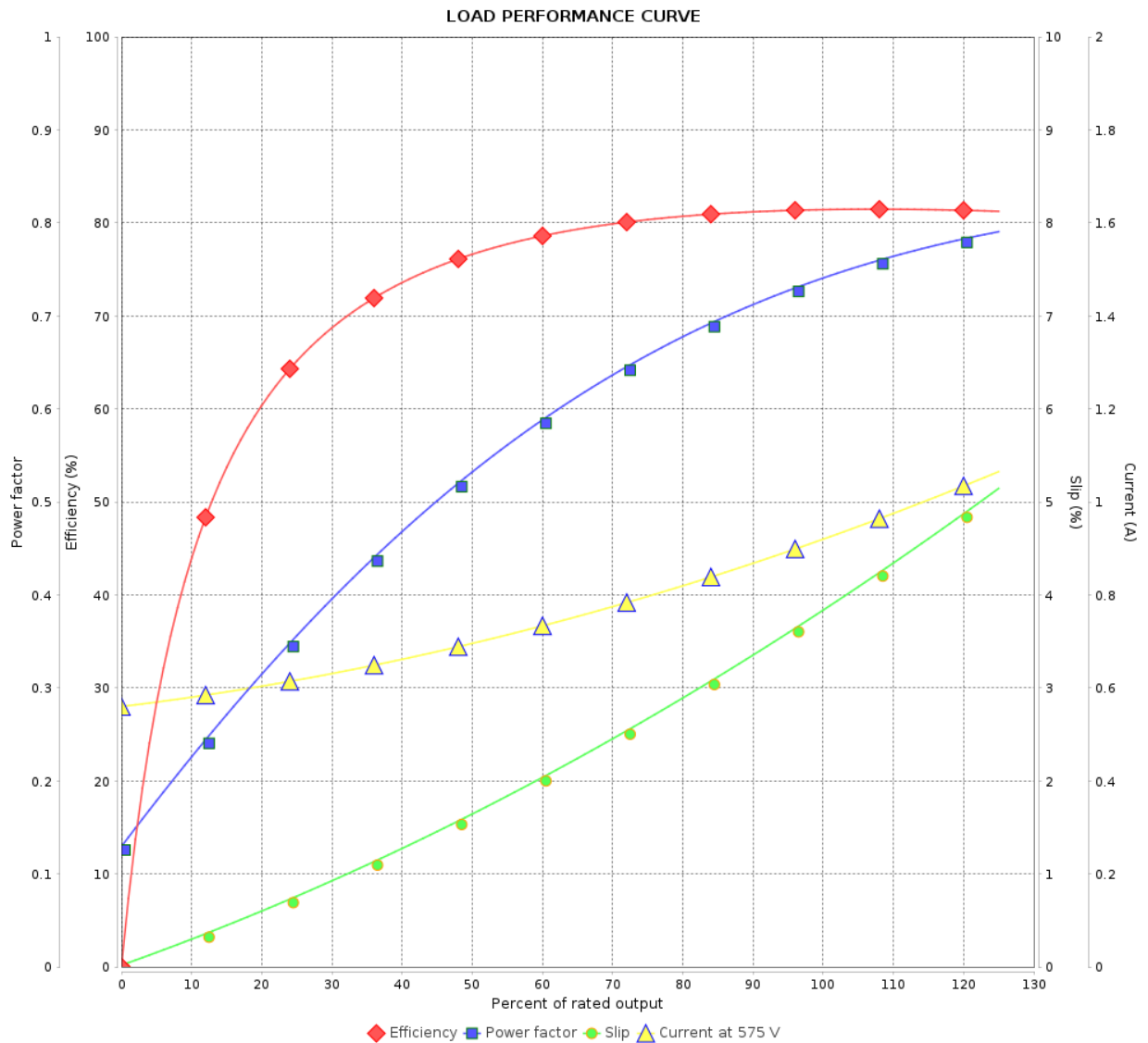
# LOAD PERFORMANCE CURVE

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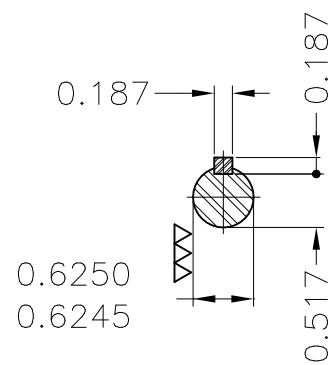




Performance : 575 V 60 Hz 4P

Rated current : 0.928 A  
LRC : 5.7  
Rated torque : 0.315 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 280 %  
Rated speed : 1730 rpm

Moment of inertia (J) : 0.0041 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : B  
Service factor : 1.15  
Temperature rise : 80 K

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



|                 |            |   |  |  |  |  |         |   |          |
|-----------------|------------|---|--|--|--|--|---------|---|----------|
| Mounting B3R(D) |            |   |  |  |  |  |         |   |          |
|                 |            |   |  |  |  |  |         |   |          |
|                 |            |   |  |  |  |  |         |   |          |
|                 |            |   |  |  |  | HYBRISUSER                             |         |   | 00       |
| ECM             | LOC        | SUMMARY OF MODIFICATIONS  |  |  |  | EXECUTED                               | CHECKED | RELEASED  | DATE VER |
| EXECUTED        | HYBRISUSER |  | THREE PH. MOTOR EXPLOSION PROOF<br>FRAME B56EX IP44 TEFC |  |  | <div>PREVIEW</div> <div>WDD   00</div> |         |  |          |
| CHECKED         |            |   |  |  |  |  |         |   |          |
| RELEASED        |            |   |  |  |  |  |         |   |          |
| REL. DATE       |            | WMO   | Jaragua do Sul   |  |  | Product Engineering                    | SHEET   | 1 / 1   |          |