

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Saw Arbor Motor Standard Efficiency Three-Phase Product code : 14212918

|                       |                           |                             |                       |
|-----------------------|---------------------------|-----------------------------|-----------------------|
| Frame                 | : 90L/MS                  | Locked rotor time           | : 12s (cold) 7s (hot) |
| Output                | : 10 HP (7.5 kW)          | Temperature rise            | : 80 K                |
| Poles                 | : 2                       | Duty cycle                  | : S6                  |
| Frequency             | : 60 Hz                   | Ambient temperature         | : -20°C to +40°C      |
| Rated voltage         | : 208-230/460 V           | Altitude                    | : 1000 m.a.s.l.       |
| Rated current         | : 27.2-24.6/12.3 A        | Protection degree           | : IP54                |
| L. R. Amperes         | : 236-214/107 A           | Cooling method              | : IC411 - TEFC        |
| LRC                   | : 8.7                     | Mounting                    | : B3R(D)              |
| No load current       | : 9.94-8.99/4.50 A        | Rotation <sup>1</sup>       | : CCW                 |
| Rated speed           | : 3480 rpm                | Noise level <sup>2</sup>    | : 68.0 dB(A)          |
| Slip                  | : 3.33 %                  | Starting method             | : Direct On Line      |
| Rated torque          | : 2.09 kgfm               | Approx. weight <sup>3</sup> | : 75.9 kg             |
| Locked rotor torque   | : 400 %                   |                             |                       |
| Breakdown torque      | : 420 %                   |                             |                       |
| Insulation class      | : F                       |                             |                       |
| Service factor        | : 1.15                    |                             |                       |
| Moment of inertia (J) | : 0.0140 kgm <sup>2</sup> |                             |                       |
| Design                | : N                       |                             |                       |

|                |      |      |      |                  |           |
|----------------|------|------|------|------------------|-----------|
| Output         | 50%  | 75%  | 100% | Foundation loads |           |
| Efficiency (%) | 82.0 | 84.5 | 85.0 | Max. traction    | : 181 kgf |
| Power Factor   | 0.77 | 0.86 | 0.90 | Max. compression | : 256 kgf |

|                      | Drive end              | Non drive end          |
|----------------------|------------------------|------------------------|
| Bearing type         | : 6308 ZZ              | : 6208 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 Revision<br>1 / 2 |         |      |
| Checked by   |                 |                        |         |      |
| Date         | 28/10/2024      |                        |         |      |

LOAD PERFORMANCE CURVE

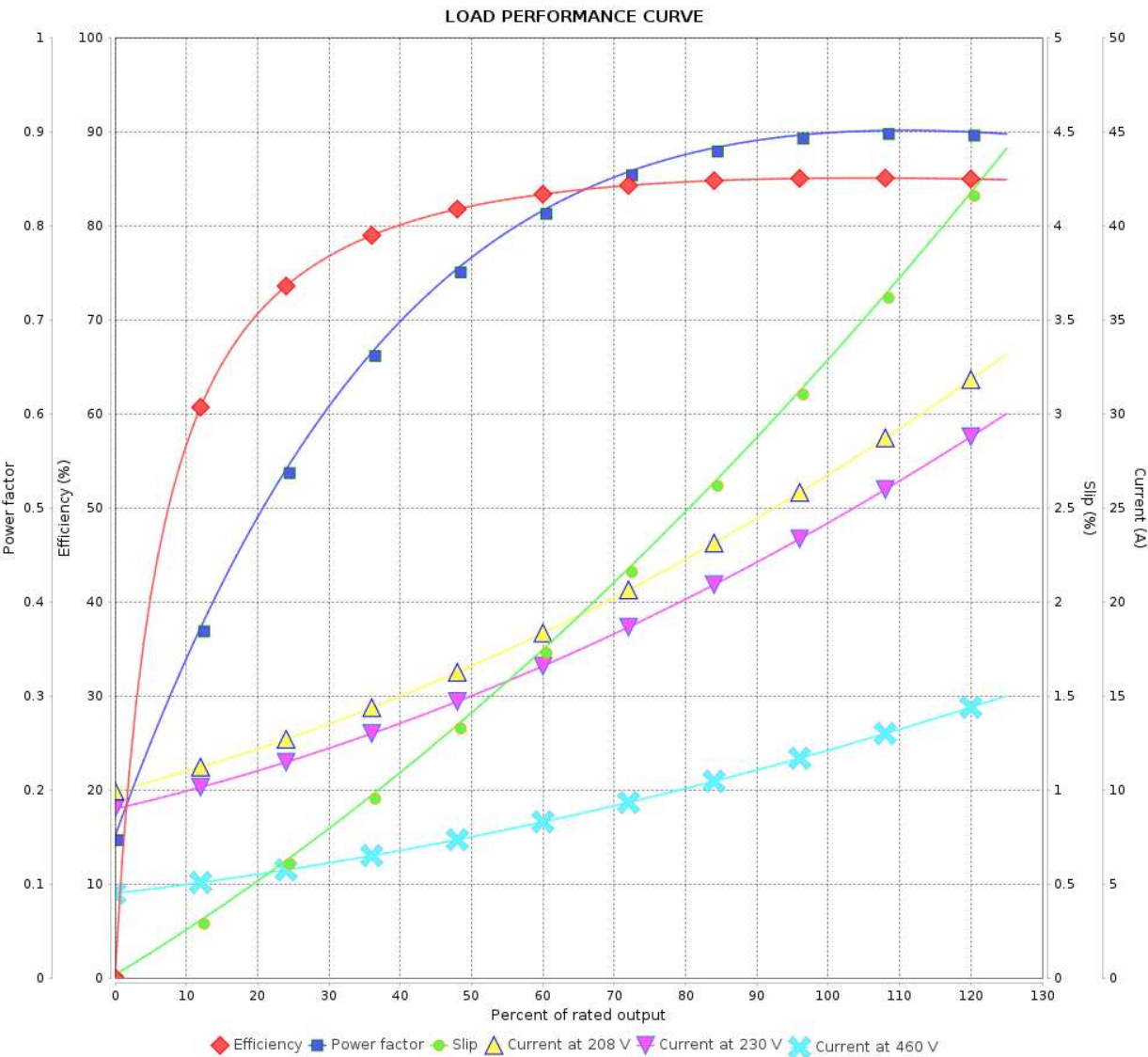
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Customer :

Product line : Saw Arbor Motor Standard  
Efficiency Three-Phase

Product code : 14212918



Performance : 208-230/460 V 60 Hz 2P

Rated current : 27.2-24.6/12.3 A  
LRC : 8.7  
Rated torque : 2.09 kgfm  
Locked rotor torque : 400 %  
Breakdown torque : 420 %  
Rated speed : 3480 rpm

Moment of inertia (J) : 0.0140 kgm<sup>2</sup>  
Duty cycle : S6  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : N

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
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