

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12448182

|                       |                           |                             |                        |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame                 | : 324/6TSC                | Locked rotor time           | : 39s (cold) 22s (hot) |
| Output                | : 40 HP (30 kW)           | Temperature rise            | : 80 K                 |
| Poles                 | : 2                       | 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         | : 37.0 A                  | Protection degree           | : IP55                 |
| L. R. Amperes         | : 233 A                   | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 6.3x(Code G)            | Mounting                    | : F-1                  |
| No load current       | : 10.0 A                  | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 3555 rpm                | Noise level <sup>2</sup>    | : 76.0 dB(A)           |
| Slip                  | : 1.25 %                  | Starting method             | : Direct On Line       |
| Rated torque          | : 8.15 kgfm               | Approx. weight <sup>3</sup> | : 226 kg               |
| Locked rotor torque   | : 250 %                   |                             |                        |
| Breakdown torque      | : 240 %                   |                             |                        |
| Insulation class      | : F                       |                             |                        |
| Service factor        | : 1.25                    |                             |                        |
| Moment of inertia (J) | : 0.2063 kgm <sup>2</sup> |                             |                        |
| Design                | : B                       |                             |                        |

|                |       |      |      |      |                  |           |
|----------------|-------|------|------|------|------------------|-----------|
| Output         | 25%   | 50%  | 75%  | 100% | Foundation loads |           |
| Efficiency (%) | 0.000 | 91.7 | 92.4 | 92.4 | Max. traction    | : 133 kgf |
| Power Factor   | 0.00  | 0.80 | 0.86 | 0.88 | Max. compression | : 359 kgf |

Losses at normative operating points (speed;torque), in percentage of rated output power

| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 7.4          | 4.7          | 3.8           | 4.6          | 2.2          | 1.7           | 0.8            |

|                      | Drive end        | Non drive end |
|----------------------|------------------|---------------|
| Bearing type         | : 6312 C3        | 6212 C3       |
| Sealing              | : V'Ring         | V'Ring        |
| Lubrication interval | : 12000 h        | 15000 h       |
| Lubricant amount     | : 21 g           | 13 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 | Checked       | Date     |
|--------------|-----------------|-----------|---------------|----------|
|              |                 |           |               |          |
| Performed by |                 |           |               |          |
| Checked by   |                 |           |               |          |
| Date         | 19/10/2024      |           | Page<br>1 / 2 | Revision |

# LOAD PERFORMANCE CURVE

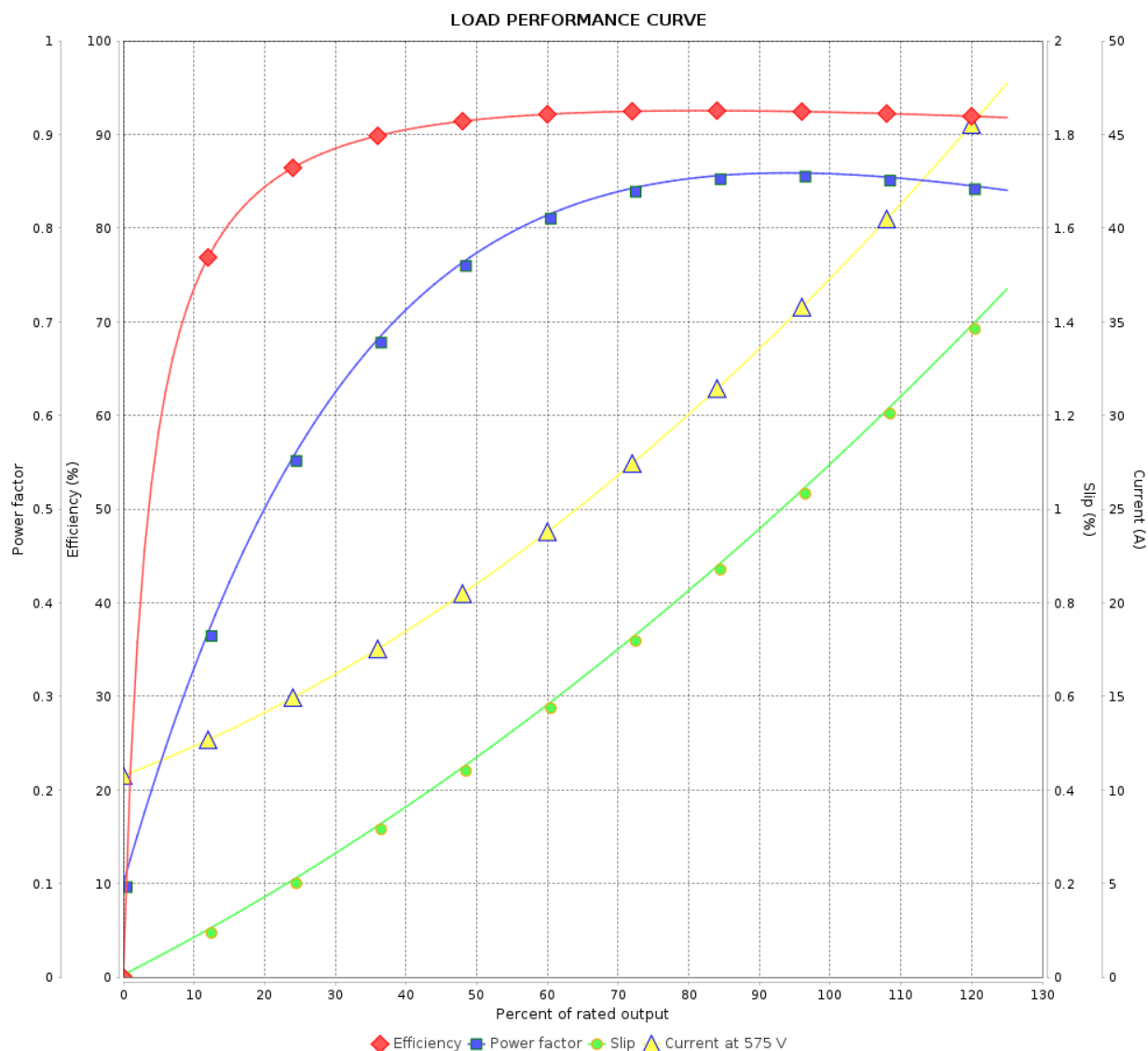
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Three-Phase

Product code : 12448182



Performance : 575 V 60 Hz 2P

Rated current : 37.0 A  
LRC : 6.3  
Rated torque : 8.15 kgfm  
Locked rotor torque : 250 %  
Breakdown torque : 240 %  
Rated speed : 3555 rpm

Moment of inertia (J) : 0.2063 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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