

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12082753

|                       |                           |                             |                        |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame                 | : 90L                     | Locked rotor time           | : 25s (cold) 14s (hot) |
| Output                | : 2 HP (1.5 kW)           | Temperature rise            | : 80 K                 |
| Poles                 | : 4                       | Duty cycle                  | : S1                   |
| Frequency             | : 60 Hz                   | Ambient temperature         | : -20°C to +40°C       |
| Rated voltage         | : 575 V                   | Altitude                    | : 1000 m.a.s.l.        |
| Rated current         | : 2.26 A                  | Protection degree           | : IP55                 |
| L. R. Amperes         | : 18.8 A                  | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 8.3                     | Mounting                    | : B35L(E)              |
| No load current       | : 1.24 A                  | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 1755 rpm                | Noise level <sup>2</sup>    | : 49.0 dB(A)           |
| Slip                  | : 2.50 %                  | Starting method             | : Direct On Line       |
| Rated torque          | : 0.827 kgfm              | Approx. weight <sup>3</sup> | : 26.3 kg              |
| Locked rotor torque   | : 300 %                   |                             |                        |
| Breakdown torque      | : 350 %                   |                             |                        |
| Insulation class      | : F                       |                             |                        |
| Service factor        | : 1.25                    |                             |                        |
| Moment of inertia (J) | : 0.0066 kgm <sup>2</sup> |                             |                        |
| Design                | : N                       |                             |                        |

|                |      |      |      |                  |          |
|----------------|------|------|------|------------------|----------|
| Output         | 50%  | 75%  | 100% | Foundation loads |          |
| Efficiency (%) | 82.5 | 85.5 | 86.5 | Max. traction    | : 69 kgf |
| Power Factor   | 0.55 | 0.68 | 0.77 | Max. compression | : 95 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) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 14.6         | 12.0         | 12.1          | 8.5          | 5.9          | 4.7           | 3.4            |

|                      | Drive end          | Non drive end |
|----------------------|--------------------|---------------|
| Bearing type         | : 6205 ZZ          | : 6204 ZZ     |
| Sealing              | : V'Ring           | : V'Ring      |
| 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   |                 |           |         |          |
| Date         | 24/10/2024      |           |         |          |
|              |                 | Page      |         | Revision |
|              |                 | 1 / 2     |         |          |

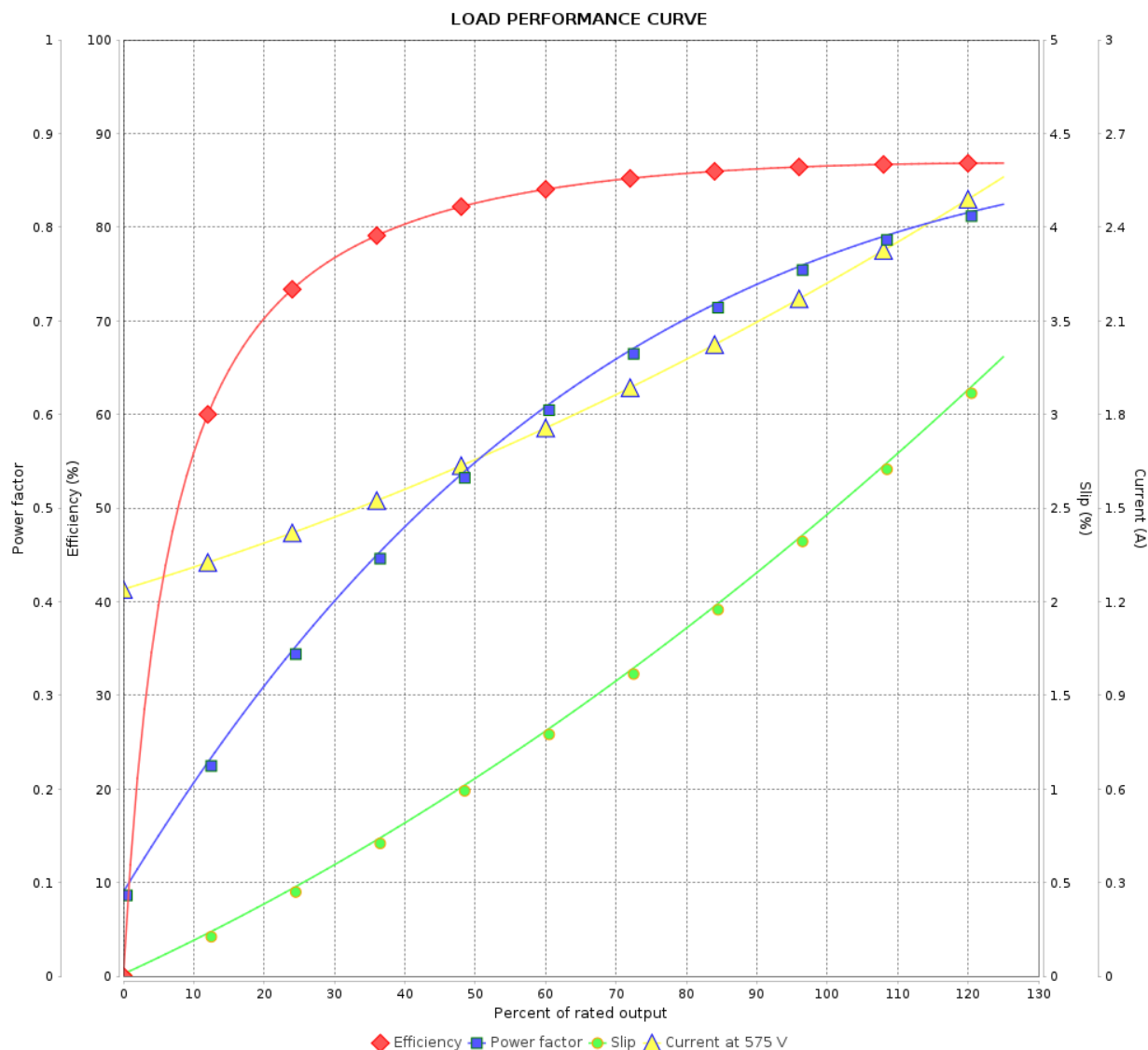
# LOAD PERFORMANCE CURVE

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Performance : 575 V 60 Hz 4P

Rated current : 2.26 A  
LRC : 8.3  
Rated torque : 0.827 kgfm  
Locked rotor torque : 300 %  
Breakdown torque : 350 %  
Rated speed : 1755 rpm

Moment of inertia (J) : 0.0066 kgm<sup>2</sup>  
Duty cycle : S1  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : N

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
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| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 2 / 2   |          |
| Date         |                 |  |           |         |          |
|              | 24/10/2024      |  |           |         |          |