

# DATA SHEET

## Single Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 JM Pump Single-Phase Product code : 14505577

|                       |                           |                             |                       |
|-----------------------|---------------------------|-----------------------------|-----------------------|
| Frame                 | : 182/4JM                 | Locked rotor time           | : 12s (cold) 7s (hot) |
| Output                | : 5 HP (3.7 kW)           | Temperature rise            | : 80 K                |
| Poles                 | : 4                       | Duty cycle                  | : Cont.(S1)           |
| Frequency             | : 60 Hz                   | Ambient temperature         | : -20°C to +40°C      |
| Rated voltage         | : 208-230 V               | Altitude                    | : 1000 m.a.s.l.       |
| Rated current         | : 23.0-21.4 A             | Protection degree           | : IP55                |
| L. R. Amperes         | : 150-139 A               | Cooling method              | : IC411 - TEFC        |
| LRC                   | : 6.5x(Code H)            | Mounting                    | : F-1                 |
| No load current       | : 6.90-8.00 A             | Rotation <sup>1</sup>       | : Both (CW and CCW)   |
| Rated speed           | : 1730 rpm                | Noise level <sup>2</sup>    | : 60.0 dB(A)          |
| Slip                  | : 3.89 %                  | Starting method             | : Direct On Line      |
| Rated torque          | : 2.10 kgfm               | Approx. weight <sup>3</sup> | : 54.4 kg             |
| Locked rotor torque   | : 360 %                   |                             |                       |
| Breakdown torque      | : 235 %                   |                             |                       |
| Insulation class      | : F                       |                             |                       |
| Service factor        | : 1.15                    |                             |                       |
| Moment of inertia (J) | : 0.0184 kgm <sup>2</sup> |                             |                       |

|                |      |      |      |                  |           |
|----------------|------|------|------|------------------|-----------|
| Output         | 50%  | 75%  | 100% | Foundation loads |           |
| Efficiency (%) | 72.5 | 78.5 | 80.0 | Max. traction    | : 76 kgf  |
| Power Factor   | 0.89 | 0.93 | 0.94 | Max. compression | : 130 kgf |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6307 ZZ          | 6206 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 |
|--------------|-----------------|---------------------------|---------|------|
|              |                 |                           |         |      |
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| Checked by   |                 |                           |         |      |
| Date         | 29/10/2024      |                           |         |      |

# LOAD PERFORMANCE CURVE

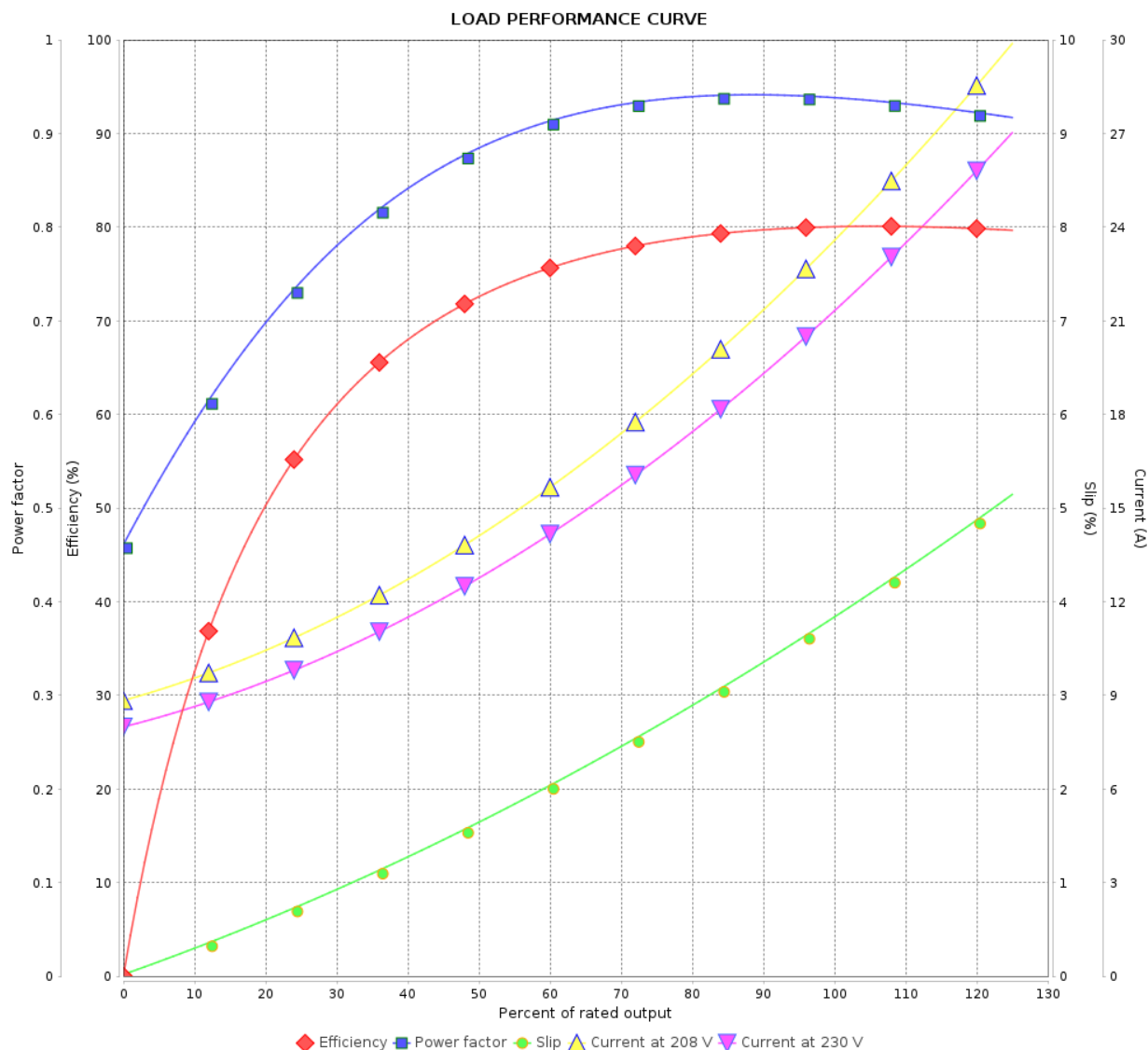
Single Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 JM Pump Single-Phase

Product code : 14505577



Performance : 208-230 V 60 Hz 4P

Rated current : 23.0-21.4 A  
LRC : 6.5  
Rated torque : 2.10 kgfm  
Locked rotor torque : 360 %  
Breakdown torque : 235 %  
Rated speed : 1730 rpm

Moment of inertia (J) : 0.0184 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor :  
Temperature rise : 80 K

| Rev.         | Changes Summary | Performed             | Checked | Date |
|--------------|-----------------|-----------------------|---------|------|
|              |                 |                       |         |      |
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