

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump High Efficiency Three-Phase Product code : 11143252

|                       |                 |                             |                        |
|-----------------------|-----------------|-----------------------------|------------------------|
| Frame                 | : 324JP         | Locked rotor time           | : 43s (cold) 24s (hot) |
| Output                | : 40 HP (30 kW) | Temperature rise            | : 80 K                 |
| Poles                 | : 4             | Duty cycle                  | : Cont.(S1)            |
| Frequency             | : 60 Hz         | Ambient temperature         | : -20°C to +40°C       |
| Rated voltage         | : 230/460 V     | Altitude                    | : 1000 m.a.s.l.        |
| Rated current         | : 98.8/49.4 A   | Protection degree           | : IP23                 |
| L. R. Amperes         | : 573/287 A     | Cooling method              | : IC01 - ODP           |
| LRC                   | : 5.8x(Code G)  | Mounting                    | : W-6                  |
| No load current       | : 42.0/21.0 A   | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 1775 rpm      | Noise level <sup>2</sup>    | : 64.0 dB(A)           |
| Slip                  | : 1.39 %        | Starting method             | : Direct On Line       |
| Rated torque          | : 118 ft.lb     | Approx. weight <sup>3</sup> | : 461 lb               |
| Locked rotor torque   | : 210 %         |                             |                        |
| Breakdown torque      | : 220 %         |                             |                        |
| Insulation class      | : F             |                             |                        |
| Service factor        | : 1.15          |                             |                        |
| Moment of inertia (J) | : 5.40 sq.ft.lb |                             |                        |
| Design                | : B             |                             |                        |

| Output         | 25%  |      | 50%  |      | 75%  |      | 100% |      | Foundation loads |           |
|----------------|------|------|------|------|------|------|------|------|------------------|-----------|
| Efficiency (%) | 92.2 | 90.6 | 92.4 | 90.2 | 93.0 | 91.0 | 93.0 | 90.2 | Max. traction    | : 980 lb  |
|                | 90.6 | 90.8 | 90.2 | 91.0 | 91.0 | 91.0 | 90.2 | 91.0 |                  |           |
| Power Factor   | 0.41 | 0.52 | 0.67 | 0.74 | 0.77 | 0.81 | 0.82 | 0.82 | Max. compression | : 1441 lb |
|                | 0.48 | 0.44 | 0.70 | 0.67 | 0.79 | 0.77 | 0.81 | 0.80 |                  |           |

|                      |   |                      |                      |
|----------------------|---|----------------------|----------------------|
|                      |   | <u>Drive end</u>     | <u>Non drive end</u> |
| Bearing type         | : | 6312 Z C3            | 6212 Z C3            |
| Sealing              | : | Without Bearing Seal | Without Bearing Seal |
| Lubrication interval | : | 20000 h              | 20000 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 |                 | Page<br>1 / 1 |          |      |
| Checked by   |                 |               |          |      |
| Date         | 28/03/2024      |               |          |      |
|              |                 |               | Revision |      |