

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



|   |   |                             |  |               |                  |          |      |      |                           |
|---|---|-----------------------------|--|---------------|------------------|----------|------|------|---------------------------|
| Customer :  |   |                             |  |               |                  |          |      |      |                           |
| Product line  | : W22 Close Coupled Pump JP High Efficiency Three-Phase |                             | Product code :   | 12598759      |                  |          |      |      |                           |
| Frame   | : 213/5JP   | Locked rotor time           | : 39s (cold) 22s (hot)   |               |                  |          |      |      |                           |
| Output  | : 7.5 HP (5.5 kW)                                       | Temperature rise            | : 80 K   |               |                  |          |      |      |                           |
| Poles   | : 2   | 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   | : 17.5/8.76 A   | Protection degree           | : IP55   |               |                  |          |      |      |                           |
| L. R. Amperes   | : 123/61.3 A  | Cooling method              | : IC411 - TEFC   |               |                  |          |      |      |                           |
| LRC   | : 7.0x(Code H)  | Mounting                    | : F-1  |               |                  |          |      |      |                           |
| No load current   | : 5.40/2.70 A   | Rotation <sup>1</sup>       | : Both (CW and CCW)  |               |                  |          |      |      |                           |
| Rated speed   | : 3530 rpm  | Noise level <sup>2</sup>    | : 72.0 dB(A)   |               |                  |          |      |      |                           |
| Slip  | : 1.94 %  | Starting method             | : Direct On Line   |               |                  |          |      |      |                           |
| Rated torque  | : 11.2 ft.lb  | Approx. weight <sup>3</sup> | : 160 lb   |               |                  |          |      |      |                           |
| Locked rotor torque   | : 210 %   |                             |  |               |                  |          |      |      |                           |
| Breakdown torque  | : 290 %   |                             |  |               |                  |          |      |      |                           |
| Insulation class  | : F   |                             |  |               |                  |          |      |      |                           |
| Service factor  | : 1.25  |                             |  |               |                  |          |      |      |                           |
| Moment of inertia (J)   | : 0.3842 sq.ft.lb                                       |                             |  |               |                  |          |      |      |                           |
| Design  | : B   |                             |  |               |                  |          |      |      |                           |
| Output  | 25%   | 50%                         | 75%  | 100%          | Foundation loads |          |      |      |                           |
| Efficiency (%)  | 85.3  | 87.6                        | 86.0   | 87.0          | 88.0             | 87.5     | 88.5 | 86.5 | Max. traction : 117 lb    |
|   | 88.7  | 88.7                        | 88.0   | 88.0          | 88.5             | 88.5     | 87.5 | 87.5 | Max. compression : 277 lb |
| Power Factor  | 0.54  | 0.60                        | 0.79   | 0.83          | 0.86             | 0.89     | 0.89 | 0.90 |                           |
|   | 0.56  | 0.54                        | 0.80   | 0.79          | 0.87             | 0.86     | 0.89 | 0.89 |                           |
| Losses at normative operating points (speed;torque), in percentage of rated output power  |   |                             |  |               |                  |          |      |      |                           |
| Losses (%)  | P1 (0,9;1,0)  | 12.1                        | 14.6   | 13.3          | 13.3             |          |      |      |                           |
|   | P2 (0,5;1,0)  | 9.0                         | 10.8   | 9.9           | 9.9              |          |      |      |                           |
|   | P3 (0,25;1,0)   | 7.9                         | 9.5  | 8.7           | 8.7              |          |      |      |                           |
|   | P4 (0,9;0,5)  | 6.7                         | 8.0  | 7.3           | 7.3              |          |      |      |                           |
|   | P5 (0,5;0,5)  | 3.6                         | 4.3  | 3.9           | 3.9              |          |      |      |                           |
|   | P6 (0,5;0,25)   | 2.4                         | 2.9  | 2.6           | 2.6              |          |      |      |                           |
|   | P7 (0,25;0,25)  | 1.3                         | 1.6  | 1.5           | 1.5              |          |      |      |                           |
|   |   |                             | Drive end  | Non drive end |                  |          |      |      |                           |
| Bearing type  | :   | 6309 Z C3                   |  | 6207 ZZ       |                  |          |      |      |                           |
| Sealing   | :   | V'Ring                      |  | V'Ring        |                  |          |      |      |                           |
| Lubrication interval  | :   | 19000 h                     |  | 40000 h       |                  |          |      |      |                           |
| Lubricant amount  | :   | 13 g                        |  | 0 g           |                  |          |      |      |                           |
| Lubricant type  | :   | Mobil Polyrex EM            |  |               |                  |          |      |      |                           |
| Notes:  |   |                             |  |               |                  |          |      |      |                           |
| This revision replaces and cancel the previous one, which must be eliminated.   |   |                             | These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1. |               |                  |          |      |      |                           |
| (1) Looking the motor from the shaft end.<br>(2) Measured at 1m and with tolerance of +3dB(A).<br>(3) Approximate weight subject to changes after manufacturing process.<br>(4) At 100% of full load. |   |                             |  |               |                  |          |      |      |                           |
| Rev.  | Changes Summary   |                             |  | Performed     | Checked          | Date     |      |      |                           |
|   |   |                             |  |               |                  |          |      |      |                           |
| Performed by  |   |                             |  |               | Page             | Revision |      |      |                           |
| Checked by  |   |                             |  |               |                  |          |      |      |                           |
| Date  | 29/03/2024  |                             |  |               | 1 / 1            |          |      |      |                           |