

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase      Product code : 14486225  
Catalog # : 02518OT3E284JP-W40

|                                      |                                           |
|--------------------------------------|-------------------------------------------|
| Frame : 284JP                        | Cooling method : IC01 - ODP               |
| Insulation class : F                 | Mounting : F-1                            |
| Duty cycle : Cont.(S1)               | Rotation <sup>1</sup> : Both (CW and CCW) |
| Ambient temperature : -20°C to +40°C | Starting method : Direct On Line          |
| Altitude : 1000 m.a.s.l.             | Approx. weight <sup>2</sup> : 368 lb      |
| Protection degree : IP23             | Moment of inertia (J) : 3.71 sq.ft.lb     |
| Design : B                           |                                           |

|                          |                      |                      |                      |                      |
|--------------------------|----------------------|----------------------|----------------------|----------------------|
| Output [HP]              | 25                   | 20                   | 20                   | 20                   |
| Poles                    | 4                    | 4                    | 4                    | 4                    |
| Frequency [Hz]           | 60                   | 50                   | 50                   | 50                   |
| Rated voltage [V]        | 230/460              | 380                  | 400                  | 415                  |
| Rated current [A]        | 59.0/29.5            | 29.5                 | 28.7                 | 28.0                 |
| L. R. Amperes [A]        | 389/195              | 198                  | 192                  | 210                  |
| LRC [A]                  | 6.6x(Code G)         | 6.7x(Code H)         | 6.7x(Code H)         | 7.5x(Code J)         |
| No load current [A]      | 22.0/11.0            | 12.1                 | 13.1                 | 13.9                 |
| Rated speed [RPM]        | 1770                 | 1470                 | 1475                 | 1475                 |
| Slip [%]                 | 1.67                 | 2.00                 | 1.67                 | 1.67                 |
| Rated torque [ft.lb]     | 74.2                 | 71.4                 | 71.2                 | 71.2                 |
| Locked rotor torque [%]  | 270                  | 229                  | 250                  | 270                  |
| Breakdown torque [%]     | 280                  | 250                  | 290                  | 300                  |
| Service factor           | 1.25                 | 1.00                 | 1.00                 | 1.00                 |
| Temperature rise         | 80 K                 | 80 K                 | 80 K                 | 80 K                 |
| Locked rotor time        | 30s (cold) 17s (hot) | 32s (cold) 18s (hot) | 37s (cold) 21s (hot) | 30s (cold) 17s (hot) |
| Noise level <sup>2</sup> | 64.0 dB(A)           |                      |                      |                      |
| Efficiency (%)           | 25%                  | 92.8                 | 91.5                 | 91.5                 |
|                          | 50%                  | 93.0                 | 91.7                 | 91.7                 |
|                          | 75%                  | 93.6                 | 92.1                 | 92.1                 |
|                          | 100%                 | 93.6                 | 92.1                 | 92.1                 |
| Power Factor             | 25%                  | 0.45                 | 0.43                 | 0.39                 |
|                          | 50%                  | 0.69                 | 0.69                 | 0.65                 |
|                          | 75%                  | 0.80                 | 0.79                 | 0.77                 |
|                          | 100%                 | 0.84                 | 0.84                 | 0.82                 |

|                        |                  |                      |                  |
|------------------------|------------------|----------------------|------------------|
|                        | <u>Drive end</u> | <u>Non drive end</u> | Foundation loads |
| Bearing type :         | 6311 Z C3        | 6211 Z C3            | Max. traction    |
| Sealing :              | Without          | Without              | Max. compression |
|                        | Bearing Seal     | Bearing Seal         |                  |
| Lubrication interval : | 20000 h          | 20000 h              |                  |
| Lubricant amount :     | 18 g             | 11 g                 |                  |
| Lubricant type :       | Mobil Polyrex EM |                      |                  |

### Notes

USABLE @208V 65.2A SF 1.15 SFA 75.0A

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      Revision<br>1 / 1 |         |      |
| Checked by   |                 |                             |         |      |
| Date         | 11/04/2020      |                             |         |      |