

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Flameproof Motor NEMA  
Premium Efficiency Three-Phase

Product code : 11341204

Catalog # : 00336XT3E182T

|                     |                  |                             |                     |
|---------------------|------------------|-----------------------------|---------------------|
| Frame               | : 182T           | Cooling method              | : IC411 - TEFC      |
| 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> | : 114 lb            |
| Protection degree   | : IP55           | Moment of inertia (J)       | : 0.1471 sq.ft.lb   |
| Design              | : B              |                             |                     |

|                          |                      |                      |                      |                      |
|--------------------------|----------------------|----------------------|----------------------|----------------------|
| Output [HP]              | 3                    | 3                    | 3                    | 3                    |
| Poles                    | 2                    | 2                    | 2                    | 2                    |
| Frequency [Hz]           | 60                   | 50                   | 50                   | 50                   |
| Rated voltage [V]        | 208-230/460          | 380                  | 400                  | 415                  |
| Rated current [A]        | 8.32-7.52/3.76       | 4.44                 | 4.27                 | 4.16                 |
| L. R. Amperes [A]        | 69.8-63.2/31.6       | 29.7                 | 31.6                 | 33.3                 |
| LRC [A]                  | 8.4x(Code K)         | 6.7x(Code H)         | 7.4x(Code J)         | 8.0x(Code J)         |
| No load current [A]      | 1.40-2.80/1.40       | 1.30                 | 1.40                 | 1.48                 |
| Rated speed [RPM]        | 3510                 | 2880                 | 2890                 | 2900                 |
| Slip [%]                 | 2.50                 | 4.00                 | 3.67                 | 3.33                 |
| Rated torque [ft.lb]     | 4.43                 | 5.40                 | 5.38                 | 5.36                 |
| Locked rotor torque [%]  | 250                  | 210                  | 240                  | 260                  |
| Breakdown torque [%]     | 400                  | 300                  | 340                  | 370                  |
| Service factor           | 1.15                 | 1.00                 | 1.00                 | 1.00                 |
| Temperature rise         | 80 K                 | 80 K                 | 80 K                 | 80 K                 |
| Locked rotor time        | 54s (cold) 30s (hot) | 77s (cold) 43s (hot) | 77s (cold) 43s (hot) | 77s (cold) 43s (hot) |
| Noise level <sup>2</sup> | 69.0 dB(A)           | 64.0 dB(A)           | 64.0 dB(A)           | 64.0 dB(A)           |
| Efficiency (%)           | 25%                  | 81.3                 | 82.0                 | 81.3                 |
|                          | 50%                  | 82.5                 | 82.5                 | 82.5                 |
|                          | 75%                  | 85.5                 | 85.5                 | 85.5                 |
|                          | 100%                 | 86.5                 | 86.5                 | 86.5                 |
| Power Factor             | 25%                  | 0.48                 | 0.55                 | 0.48                 |
|                          | 50%                  | 0.73                 | 0.78                 | 0.72                 |
|                          | 75%                  | 0.81                 | 0.85                 | 0.81                 |
|                          | 100%                 | 0.85                 | 0.88                 | 0.85                 |

|                      |                    |                      |                  |          |
|----------------------|--------------------|----------------------|------------------|----------|
|                      | <u>Drive end</u>   | <u>Non drive end</u> | Foundation loads |          |
| Bearing type         | : 6307 2RS         | 6206 2RS             | Max. traction    | : 71 lb  |
| Sealing              | : Oil Seal         | Lip Seal             | Max. compression | : 185 lb |
| 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         | 23/01/2018      |           |         |          |
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Customer : \_\_\_\_\_

### Thermal protection

| ID | Application | Type                 | Quantity  | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1  | Winding     | Thermostat - 2 wires | 1 x Phase | 130 °C              |
| 2  | Winding     | Thermostat - 2 wires | 1 x Phase | 155 °C              |

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 2 / 2   |          |
| Date         | 23/01/2018      |  |           |         |          |