

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency  
Three-Phase

Product code : 12674697

Catalog # : 00158OT3E145TC-S

|                       |                   |                             |                        |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame                 | : 143/5TC         | Locked rotor time           | : 27s (cold) 15s (hot) |
| Output                | : 1.5 HP (1.1 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         | : 4.14/2.07 A     | Cooling method              | : IC01 - ODP           |
| L. R. Amperes         | : 36.0/18.0 A     | Mounting                    | : F-1                  |
| LRC                   | : 8.7x(Code L)    | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| No load current       | : 2.40/1.20 A     | Noise level <sup>2</sup>    | : 52.0 dB(A)           |
| Rated speed           | : 1760 rpm        | Starting method             | : Direct On Line       |
| Slip                  | : 2.22 %          | Approx. weight <sup>3</sup> | : 42.8 lb              |
| Rated torque          | : 4.48 ft.lb      |                             |                        |
| Locked rotor torque   | : 280 %           |                             |                        |
| Breakdown torque      | : 330 %           |                             |                        |
| Insulation class      | : F               |                             |                        |
| Service factor        | : 1.15            |                             |                        |
| Moment of inertia (J) | : 0.1426 sq.ft.lb |                             |                        |
| Design                | : B               |                             |                        |

|                |      |      |      |      |                  |      |      |      |                  |          |
|----------------|------|------|------|------|------------------|------|------|------|------------------|----------|
| Output         | 25%  | 50%  | 75%  | 100% | Foundation loads |      |      |      |                  |          |
| Efficiency (%) | 83.6 | 85.3 | 84.0 | 84.3 | 86.5             | 84.7 | 86.5 | 83.2 | Max. traction    | : 125 lb |
|                | 83.1 |      | 83.0 |      | 84.7             |      | 84.2 |      |                  |          |
| Power Factor   | 0.32 | 0.38 | 0.56 | 0.64 | 0.69             | 0.77 | 0.77 | 0.83 | Max. compression | : 168 lb |
|                | 0.32 |      | 0.57 |      | 0.70             |      | 0.79 |      |                  |          |

|                      |   |                      |                      |
|----------------------|---|----------------------|----------------------|
|                      |   | <u>Drive end</u>     | <u>Non drive end</u> |
| Bearing type         | : | 6205 ZZ              | 6203 ZZ              |
| Sealing              | : | Without Bearing Seal | Without Bearing Seal |
| 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 |                 | Page<br>1 / 1 |          |      |
| Checked by   |                 |               |          |      |
| Date         | 26/03/2024      |               |          |      |
|              |                 |               | Revision |      |