

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency  
Three-Phase

Product code : 13216209

Catalog # : 00218ET3E145TF2-S

Frame : 143/5T  
Output : 2 HP (1.5 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 5.44/2.72 A  
L. R. Amperes : 44.6/22.3 A  
LRC : 8.2x(Code K)  
No load current : 2.80/1.40 A  
Rated speed : 1745 rpm  
Slip : 3.06 %  
Rated torque : 6.02 ft.lb  
Locked rotor torque : 270 %  
Breakdown torque : 300 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 0.1296 sq.ft.lb  
Design : B

Locked rotor time : 27s (cold) 15s (hot)  
Temperature rise : 80 K  
Duty cycle : Cont.(S1)  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP55  
Cooling method : IC411 - TEFC  
Mounting : F-2  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 52.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 43.1 lb

| Output         | 25%  |      | 50%  |      | 75%  |      | 100% |      |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 86.0 | 87.1 | 85.5 | 85.4 | 87.5 | 84.9 | 86.5 | 82.6 |
|                | 84.8 |      | 84.2 |      | 85.1 |      | 84.0 |      |
| Power Factor   | 0.35 | 0.42 | 0.60 | 0.68 | 0.73 | 0.80 | 0.80 | 0.85 |
|                | 0.35 |      | 0.60 |      | 0.73 |      | 0.81 |      |

Foundation loads  
Max. traction : 170 lb  
Max. compression : 213 lb

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6205 ZZ          | 6203 ZZ              |
| Sealing              | : | V'Ring           | 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         | 27/03/2024      |               |          |      |
|              |                 |               | Revision |      |