

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel Premium Efficiency Three-Phase

Product code : 13484631

Catalog # : 00156ET3E56-S

Frame : 56  
Output : 1.5 HP (1.1 kW)  
Poles : 2  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 3.74/1.87 A  
L. R. Amperes : 34.0/17.0 A  
LRC : 9.1x(Code L)  
No load current : 1.72/0.859 A  
Rated speed : 3520 rpm  
Slip : 2.22 %  
Rated torque : 2.24 ft.lb  
Locked rotor torque : 229 %  
Breakdown torque : 300 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 0.1023 sq.ft.lb  
Design : B

Locked rotor time : 30s (cold) 17s (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-1  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 68.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 32.3 lb

| Output         | 25%  |      | 50%  |      | 75%  |      | 100% |      |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 78.4 | 83.1 | 80.0 | 82.6 | 82.5 | 83.8 | 84.0 | 82.9 |
|                | 81.4 |      | 81.7 |      | 84.0 |      | 83.9 |      |
| Power Factor   | 0.44 | 0.49 | 0.71 | 0.77 | 0.82 | 0.87 | 0.88 | 0.91 |
|                | 0.43 |      | 0.70 |      | 0.82 |      | 0.88 |      |

Foundation loads  
Max. traction : 71 lb  
Max. compression : 103 lb

|                      | Drive end          | Non drive end          |
|----------------------|--------------------|------------------------|
| Bearing type         | : 6204 ZZ          | : 6202 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      |         |      |