

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency  
Three-Phase

Product code : 14459504

Catalog # : 01518OT3ER254TC-S

Frame : 254/6TC  
Output : 15 HP (11 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 37.2/18.6 A  
L. R. Amperes : 249/125 A  
LRC : 6.7x(Code H)  
No load current : 19.0/9.50 A  
Rated speed : 1775 rpm  
Slip : 1.39 %  
Rated torque : 44.4 ft.lb  
Locked rotor torque : 240 %  
Breakdown torque : 300 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 1.82 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.  
Cooling method : IC01 - ODP  
Mounting : W-6  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 64.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 201 lb

| Output         | 25%  |      | 50%  |      | 75%  |      | 100% |      |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 91.0 | 92.3 | 91.7 | 91.3 | 92.4 | 91.0 | 93.0 | 89.7 |
|                | 90.6 |      | 90.3 |      | 90.9 |      | 90.3 |      |
| Power Factor   | 0.36 | 0.45 | 0.62 | 0.71 | 0.73 | 0.81 | 0.80 | 0.85 |
|                | 0.37 |      | 0.62 |      | 0.75 |      | 0.81 |      |

Foundation loads  
Max. traction : 593 lb  
Max. compression : 794 lb

|                      |   |                      |                      |
|----------------------|---|----------------------|----------------------|
|                      |   | <u>Drive end</u>     | <u>Non drive end</u> |
| Bearing type         | : | 6309 Z C3            | 6208 Z C3            |
| Sealing              | : | Without Bearing Seal | Without Bearing Seal |
| Lubrication interval | : | 20000 h              | 20000 h              |
| Lubricant amount     | : | 13 g                 | 8 g                  |
| 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 |      |