

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency Three-Phase

Product code : 11792016

Catalog # : 00536EG3E184T-W22

Frame : 182/4T  
Output : 5 HP (3.7 kW)  
Poles : 2  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 12.0/5.99 A  
L. R. Amperes : 102/50.9 A  
LRC : 8.5x(Code K)  
No load current : 4.40/2.20 A  
Rated speed : 3505 rpm  
Slip : 2.64 %  
Rated torque : 7.49 ft.lb  
Locked rotor torque : 240 %  
Breakdown torque : 350 %  
Insulation class : F  
Service factor : 1.25  
Moment of inertia (J) : 0.2233 sq.ft.lb  
Design : A

Locked rotor time : 57s (cold) 32s (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> : 66.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 101 lb

| Output         | 50%       | 75%       | 100%      |
|----------------|-----------|-----------|-----------|
| Efficiency (%) | 87.5 87.5 | 88.5 88.5 | 90.2 88.5 |
|                | 88.5 88.5 | 89.5 89.5 | 89.5 89.5 |
| Power Factor   | 0.73 0.78 | 0.83 0.86 | 0.86 0.89 |
|                | 0.75 0.72 | 0.84 0.83 | 0.88 0.87 |

Foundation loads  
Max. traction : 163 lb  
Max. compression : 264 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

| Losses (%) | P1 (0,9;1,0)   | 10.4 | 12.4 | 11.2 | 11.2 |
|------------|----------------|------|------|------|------|
|            | P2 (0,5;1,0)   | 7.9  | 9.5  | 8.5  | 8.5  |
|            | P3 (0,25;1,0)  | 6.8  | 8.2  | 7.4  | 7.4  |
|            | P4 (0,9;0,5)   | 5.7  | 6.8  | 6.1  | 6.1  |
|            | P5 (0,5;0,5)   | 3.3  | 4.0  | 3.6  | 3.6  |
|            | P6 (0,5;0,25)  | 2.3  | 2.7  | 2.5  | 2.5  |
|            | P7 (0,25;0,25) | 1.4  | 1.6  | 1.5  | 1.5  |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6207 ZZ          | 6206 ZZ              |
| Sealing              | : | V'Ring           | V'Ring               |
| 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         | 29/03/2024      |           |         |      |

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Revision