

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11722401

Catalog # : 05018ET3H326TSCF2-W2

Frame : 324/6TSC  
Output : 50 HP (37 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 575 V  
Rated current : 47.4 A  
L. R. Amperes : 294 A  
LRC : 6.2x(Code G)  
No load current : 18.8 A  
Rated speed : 1775 rpm  
Slip : 1.39 %  
Rated torque : 148 ft.lb  
Locked rotor torque : 229 %  
Breakdown torque : 270 %  
Insulation class : F  
Service factor : 1.25  
Moment of inertia (J) : 9.16 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> : 70.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 608 lb

Output 25% 50% 75% 100%

Efficiency (%) 92.5 93.0 94.1 94.5  
Power Factor 0.42 0.66 0.77 0.83

Foundation loads

Max. traction : 1229 lb  
Max. compression : 1837 lb

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

| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 5.7          | 4.9          | 4.7           | 2.7          | 1.9          | 1.2           | 0.9            |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6312 C3          | 6212 C3              |
| Sealing              | : | V'Ring           | V'Ring               |
| Lubrication interval | : | 20000 h          | 20000 h              |
| Lubricant amount     | : | 21 g             | 13 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 |                 |           |         |          |
| Checked by   |                 |           |         |          |
| Date         | 29/03/2024      |           |         |          |
|              |                 |           | Page    | Revision |
|              |                 |           | 1 / 1   |          |