

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12076591

Catalog # : 10018ET3H405TC-W22

Frame : 404/5TC  
Output : 100 HP (75 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 575 V  
Rated current : 90.4 A  
L. R. Amperes : 660 A  
LRC : 7.3x(Code H)  
No load current : 30.4 A  
Rated speed : 1780 rpm  
Slip : 1.11 %  
Rated torque : 295 ft.lb  
Locked rotor torque : 240 %  
Breakdown torque : 260 %  
Insulation class : F  
Service factor : 1.25  
Moment of inertia (J) : 29.9 sq.ft.lb  
Design : B

Locked rotor time : 23s (cold) 13s (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> : 1195 lb

Output 25% 50% 75% 100%

Efficiency (%) 94.6 95.0 95.0 95.4  
Power Factor 0.51 0.77 0.84 0.87

Foundation loads

Max. traction : 1705 lb  
Max. compression : 2900 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)
4.7	3.8	3.7	2.2	1.5	0.9	0.6

	Drive end	Non drive end
Bearing type :	6316 C3	6314 C3
Sealing :	WSeal	WSeal
Lubrication interval :	10000 h	12000 h
Lubricant amount :	34 g	27 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 Revision 1 / 1		
Checked by				
Date	28/03/2024			