

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency
Three-Phase

Product code : 12110524

Catalog # : 05018ST3HIE326T-W22

Frame : 324/6T
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 : IP56
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 70.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 606 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 : 1230 lb

Max. compression : 1836 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

	Drive end	Non drive end
Bearing type :	6312 C3	6212 C3
Sealing :	Inpro/Seal	Inpro/Seal
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		Page 1 / 1 Revision		
Checked by				
Date	25/03/2024			