

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12745775

Catalog # : 03012ET3E326TC-W22

Frame : 324/6TC
Output : 30 HP (22 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 72.4/36.2 A
L. R. Amperes : 449/225 A
LRC : 6.2x(Code G)
No load current : 32.8/16.4 A
Rated speed : 1180 rpm
Slip : 1.67 %
Rated torque : 134 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 240 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 13.2 sq.ft.lb
Design : B

Locked rotor time : 37s (cold) 21s (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
Rotation¹ : Both (CW and CCW)
Noise level² : 62.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 606 lb

Output	50%	75%	100%
Efficiency (%)	91.7 91.3 91.3 90.7 91.7 91.7 91.0	93.0 91.8 92.2 91.9 91.7 92.4 92.4	93.0 91.7 92.1 92.0 91.0 91.7 91.7
Power Factor	0.65 0.64 0.61 0.58 0.71 0.68 0.65	0.76 0.76 0.74 0.71 0.80 0.78 0.76	0.82 0.82 0.80 0.79 0.84 0.83 0.82

Foundation loads
Max. traction : 1178 lb

Max. compression : 1784 lb

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

Losses (%)	P1 (0,9;1,0)	7.3	8.8	8.3	8.4	9.6	8.8	8.8
	P2 (0,5;1,0)	6.1	7.4	7.0	7.1	8.1	7.4	7.4
	P3 (0,25;1,0)	6.0	7.2	6.8	6.9	7.9	7.2	7.2
	P4 (0,9;0,5)	3.6	4.3	4.1	4.2	4.8	4.3	4.3
	P5 (0,5;0,5)	2.5	3.1	2.9	2.9	3.3	3.1	3.1
	P6 (0,5;0,25)	1.7	2.1	2.0	2.0	2.3	2.1	2.1
	P7 (0,25;0,25)	1.2	1.5	1.4	1.4	1.6	1.5	1.5

	Drive end	Non drive end
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		Page 1 / 1		
Checked by				
Date	28/03/2024			
		Revision		