

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355339

Catalog # : 10012ET3E444T-W22

Frame : 444/5T
Output : 100 HP (75 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 242/121 A
L. R. Amperes : 1498/749 A
LRC : 6.2x(Code G)
No load current : 90.0/45.0 A
Rated speed : 1189 rpm
Slip : 0.92 %
Rated torque : 442 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 250 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 87.3 sq.ft.lb
Design : B

Locked rotor time : 36s (cold) 20s (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 : 69.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 1547 lb

Output	50%	75%	100%
Efficiency (%)	94.5 93.8 93.8 93.7 94.5 94.5 94.0	95.0 94.3 94.6 94.6 94.0 94.5 94.0	95.0 94.2 94.5 94.6 93.6 94.0 94.0
Power Factor	0.68 0.64 0.60 0.57 0.73 0.70 0.68	0.78 0.75 0.72 0.71 0.81 0.79 0.77	0.82 0.81 0.79 0.77 0.83 0.83 0.82

Foundation loads
Max. traction : 2772 lb

Max. compression : 4319 lb

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

Losses (%)	P1 (0,9;1,0)	5.2	6.1	5.8	5.7	6.8	6.3	6.3
	P2 (0,5;1,0)	4.2	4.9	4.6	4.5	5.4	5.1	5.1
	P3 (0,25;1,0)	3.8	4.5	4.2	4.1	5.0	4.6	4.6
	P4 (0,9;0,5)	2.8	3.2	3.1	3.0	3.6	3.4	3.4
	P5 (0,5;0,5)	1.8	2.2	2.0	2.0	2.4	2.2	2.2
	P6 (0,5;0,25)	1.3	1.5	1.4	1.4	1.7	1.6	1.6
	P7 (0,25;0,25)	0.9	1.0	1.0	0.9	1.1	1.0	1.0

	Drive end	Non drive end
Bearing type :	6319 C3	6316 C3
Sealing :	WSeal	WSeal
Lubrication interval :	13000 h	16000 h
Lubricant amount :	45 g	34 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	28/03/2024			