

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11456827

Catalog # : 00236ET3E145T-W22

Frame : 143/5T
 Output : 2 HP (1.5 kW)
 Poles : 2
 Frequency : 60 Hz
 Rated voltage : 230/460 V
 Rated current : 5.38/2.69 A
 L. R. Amperes : 47.9/23.9 A
 LRC : 8.9x(Code L)
 No load current : 2.40/1.20 A
 Rated speed : 3500 rpm
 Slip : 2.78 %
 Rated torque : 3.00 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 380 %
 Insulation class : F
 Service factor : 1.25
 Moment of inertia (J) : 0.0605 sq.ft.lb
 Design : B

Locked rotor time : 21s (cold) 12s (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 : 68.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 49.5 lb

Output	50%	75%	100%
Efficiency (%)	82.5 81.4 80.3 80.1 82.5 82.5 82.5	85.5 83.3 83.1 83.1 84.0 84.0 84.0	85.5 83.5 84.0 84.0 82.5 84.0 84.0
Power Factor	0.64 0.61 0.60 0.52 0.71 0.68 0.65	0.76 0.73 0.69 0.65 0.82 0.79 0.77	0.82 0.81 0.78 0.75 0.87 0.85 0.83

Foundation loads
 Max. traction : 70 lb
 Max. compression : 119 lb

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

Losses (%)	P1 (0,9;1,0)	15.7	18.3	17.6	17.6	19.6	17.6	17.6
	P2 (0,5;1,0)	12.3	14.3	13.8	13.8	15.4	13.8	13.8
	P3 (0,25;1,0)	11.6	13.5	13.0	13.0	14.5	13.0	13.0
	P4 (0,9;0,5)	8.8	10.3	9.9	9.9	11.0	9.9	9.9
	P5 (0,5;0,5)	5.4	6.3	6.1	6.1	6.8	6.1	6.1
	P6 (0,5;0,25)	3.9	4.6	4.4	4.4	4.9	4.4	4.4
	P7 (0,25;0,25)	2.7	3.1	3.0	3.0	3.4	3.0	3.0

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6205 ZZ	6204 ZZ
Sealing :	V'Ring	V'Ring
Lubrication interval :	-	-
Lubricant amount :	-	-
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		