

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12438231

Catalog # : 00156ET3E143T-W22

Frame : 143/5T
 Output : 1.5 HP (1.1 kW)
 Poles : 2
 Frequency : 60 Hz
 Rated voltage : 230/460 V
 Rated current : 3.92/1.96 A
 L. R. Amperes : 34.9/17.4 A
 LRC : 8.9x(Code L)
 No load current : 1.66/0.830 A
 Rated speed : 3480 rpm
 Slip : 3.33 %
 Rated torque : 2.26 ft.lb
 Locked rotor torque : 310 %
 Breakdown torque : 370 %
 Insulation class : F
 Service factor : 1.25
 Moment of inertia (J) : 0.0470 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 : 68.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 44.4 lb

Output	50%	75%	100%
Efficiency (%)	81.5 80.5 79.3 78.9 81.0 82.0 82.0	84.0 83.2 82.8 82.7 81.5 82.5 82.5	84.0 83.4 83.4 83.4 81.5 82.5 82.5
Power Factor	0.68 0.63 0.58 0.55 0.75 0.70 0.67	0.78 0.74 0.71 0.68 0.84 0.80 0.78	0.84 0.81 0.78 0.76 0.87 0.86 0.84

Foundation loads
 Max. traction : 52 lb
 Max. compression : 96 lb

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

Losses (%)	P1 (0,9;1,0)	17.7	17.7	17.7	17.7	17.7	17.7	17.7
	P2 (0,5;1,0)	13.3	13.3	13.3	13.3	13.3	13.3	13.3
	P3 (0,25;1,0)	12.1	12.1	12.1	12.1	12.1	12.1	12.1
	P4 (0,9;0,5)	9.8	9.8	9.8	9.8	9.8	9.8	9.8
	P5 (0,5;0,5)	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	P6 (0,5;0,25)	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	P7 (0,25;0,25)	2.4	2.4	2.4	2.4	2.4	2.4	2.4

		<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	26/03/2024			
		Revision		