

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12373788

Catalog # : 00156ST3QIE143T-W22

Frame : 143/5T
Output : 1.5 HP (1.1 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 1.96 A
L. R. Amperes : 17.4 A
LRC : 8.9x(Code L)
No load current : 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 : IP56
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 : 51.6 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 : 48 lb

Max. compression : 100 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 C3	6204 C3
Sealing :	Inpro/Seal	Inpro/Seal
Lubrication interval :	20000 h	20000 h
Lubricant amount :	4 g	4 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	29/03/2024			