

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12378984

Catalog # : 00736ST3QIE213T-W22

Frame : 213/5T
Output : 7.5 HP (5.5 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 8.97 A
L. R. Amperes : 64.6 A
LRC : 7.2x(Code H)
No load current : 3.20 A
Rated speed : 3525 rpm
Slip : 2.08 %
Rated torque : 11.2 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 290 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 0.4665 sq.ft.lb
Design : B

Locked rotor time : 39s (cold) 22s (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 : 150 lb

Output	50%	75%	100%
Efficiency (%)	87.5 86.7 86.4 86.1 88.5 87.5 87.5	89.5 88.2 88.3 88.5 88.5 88.5 88.5	89.5 88.2 88.3 88.5 87.5 87.5 88.5
Power Factor	0.74 0.68 0.66 0.62 0.80 0.76 0.74	0.83 0.80 0.76 0.73 0.86 0.85 0.82	0.86 0.84 0.82 0.80 0.89 0.88 0.86

Foundation loads
Max. traction : 138 lb

Max. compression : 288 lb

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

Losses (%)	P1 (0,9;1,0)	11.2	12.8	12.7	12.4	13.6	13.6	12.4
	P2 (0,5;1,0)	8.7	9.9	9.8	9.6	10.6	10.6	9.6
	P3 (0,25;1,0)	7.6	8.7	8.6	8.4	9.2	9.2	8.4
	P4 (0,9;0,5)	6.0	6.9	6.8	6.7	7.3	7.3	6.7
	P5 (0,5;0,5)	3.6	4.1	4.0	4.0	4.3	4.3	4.0
	P6 (0,5;0,25)	2.4	2.8	2.7	2.7	2.9	2.9	2.7
	P7 (0,25;0,25)	1.5	1.7	1.7	1.6	1.8	1.8	1.6

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6308 C3	6207 C3
Sealing :	Inpro/Seal	Inpro/Seal
Lubrication interval :	20000 h	20000 h
Lubricant amount :	11 g	7 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 Revision 1 / 1		
Checked by				
Date	26/03/2024			