

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14325513

Catalog # : 01009ST3QIE284TC-W22

Frame : 284/6TC
Output : 10 HP (7.5 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 13.4 A
L. R. Amperes : 75.0 A
LRC : 5.6x(Code G)
No load current : 6.50 A
Rated speed : 880 rpm
Slip : 2.22 %
Rated torque : 59.7 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 240 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 7.20 sq.ft.lb
Design : B

Locked rotor time : 57s (cold) 32s (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 : 54.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 373 lb

Output	25%		50%		75%		100%	
Efficiency (%)	89.3	90.3	89.5	89.5	90.2	88.5	90.2	87.5
	88.3	89.1	88.5	88.5	88.5	89.5	88.5	88.5
Power Factor	0.36	0.42	0.61	0.68	0.72	0.77	0.78	0.81
	0.39	0.36	0.64	0.61	0.74	0.72	0.80	0.78

Foundation loads
Max. traction : 535 lb
Max. compression : 908 lb

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

Losses (%)	P1 (0,9;1,0)	10.3	10.3	10.3	10.3
	P2 (0,5;1,0)	8.5	8.5	8.5	8.5
	P3 (0,25;1,0)	8.4	8.4	8.4	8.4
	P4 (0,9;0,5)	5.4	5.4	5.4	5.4
	P5 (0,5;0,5)	3.7	3.7	3.7	3.7
	P6 (0,5;0,25)	2.6	2.6	2.6	2.6
	P7 (0,25;0,25)	1.8	1.8	1.8	1.8

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 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				
Checked by				
Date	25/03/2024			

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