

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13025620

Catalog # : 00709ET3E256TC-W22

Frame : 254/6TC
 Output : 7.5 HP (5.5 kW)
 Poles : 8
 Frequency : 60 Hz
 Rated voltage : 230/460 V
 Rated current : 22.2/11.1 A
 L. R. Amperes : 118/58.8 A
 LRC : 5.3x(Code G)
 No load current : 13.0/6.50 A
 Rated speed : 880 rpm
 Slip : 2.22 %
 Rated torque : 44.8 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Insulation class : F
 Service factor : 1.25
 Moment of inertia (J) : 4.43 sq.ft.lb
 Design : B

Locked rotor time : 59s (cold) 33s (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 : 298 lb

Output	50%	75%	100%
Efficiency (%)	85.5 84.1 81.6 81.4 85.5 84.0 84.0	87.5 85.7 84.5 84.5 85.5 85.5 85.5	87.5 85.5 85.5 85.5 84.0 85.5 85.5
Power Factor	0.50 0.47 0.44 0.42 0.57 0.53 0.51	0.63 0.60 0.56 0.54 0.69 0.66 0.64	0.71 0.69 0.65 0.63 0.76 0.74 0.72

Foundation loads
 Max. traction : 446 lb
 Max. compression : 744 lb

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

Losses (%)	P1 (0,9;1,0)	13.8	13.8	13.8	13.8	13.8	13.8	13.8
	P2 (0,5;1,0)	11.7	11.7	11.7	11.7	11.7	11.7	11.7
	P3 (0,25;1,0)	11.4	11.4	11.4	11.4	11.4	11.4	11.4
	P4 (0,9;0,5)	7.8	7.8	7.8	7.8	7.8	7.8	7.8
	P5 (0,5;0,5)	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	P6 (0,5;0,25)	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	P7 (0,25;0,25)	3.4	3.4	3.4	3.4	3.4	3.4	3.4

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6309 C3	6209 C3
Sealing :	V'Ring	V'Ring
Lubrication interval :	20000 h	20000 h
Lubricant amount :	13 g	9 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			
		Revision		