

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13025671

Catalog # : 06009ET3E405TC-W22

Frame : 404/5TC
 Output : 60 HP (45 kW)
 Poles : 8
 Frequency : 60 Hz
 Rated voltage : 230/460 V
 Rated current : 146/73.0 A
 L. R. Amperes : 949/475 A
 LRC : 6.5x(Code H)
 No load current : 60.0/30.0 A
 Rated speed : 880 rpm
 Slip : 2.22 %
 Rated torque : 358 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 270 %
 Insulation class : F
 Service factor : 1.25
 Moment of inertia (J) : 40.2 sq.ft.lb
 Design : B

Locked rotor time : 23s (cold) 13s (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 : 60.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 1185 lb

Output	50%	75%	100%
Efficiency (%)	93.0 92.4 91.9 91.9 92.4 92.4 92.4	93.0 92.1 92.1 92.2 91.7 91.7 91.7	93.0 91.8 91.8 91.8 90.2 91.0 91.0
Power Factor	0.68 0.67 0.64 0.61 0.74 0.71 0.68	0.78 0.79 0.77 0.74 0.82 0.80 0.78	0.83 0.84 0.82 0.81 0.85 0.84 0.83

Foundation loads
 Max. traction : 2799 lb
 Max. compression : 3985 lb

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

Losses (%)	P1 (0,9;1,0)	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	P2 (0,5;1,0)	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	P3 (0,25;1,0)	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	P6 (0,5;0,25)	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0	1.0	1.0	1.0

	Drive end	Non drive end
Bearing type :	6316 C3	6314 C3
Sealing :	WSeal	WSeal
Lubrication interval :	20000 h	20000 h
Lubricant amount :	34 g	27 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		