

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12549569

Frame : 254/6T
Output : 5 HP (3.7 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 15.5/7.76 A
L. R. Amperes : 85.4/42.7 A
LRC : 5.5x(Code H)
No load current : 10.0/5.00 A
Rated speed : 880 rpm
Slip : 2.22 %
Rated torque : 29.8 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 260 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 2.90 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 : 248 lb

Output	50%	75%	100%
Efficiency (%)	82.5 77.0	84.0 80.0	85.5 81.5
	77.0 77.0	80.0 80.0	81.5 81.5
Power Factor	0.48 0.53	0.61 0.66	0.70 0.73
	0.49 0.47	0.63 0.60	0.70 0.68

Foundation loads
Max. traction : 258 lb
Max. compression : 506 lb

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

Losses (%)	P1 (0,9;1,0)	16.3	21.9	21.9	21.9
	P2 (0,5;1,0)	13.8	18.4	18.4	18.4
	P3 (0,25;1,0)	13.3	17.8	17.8	17.8
	P4 (0,9;0,5)	10.2	13.7	13.7	13.7
	P5 (0,5;0,5)	7.6	10.2	10.2	10.2
	P6 (0,5;0,25)	6.3	8.4	8.4	8.4
	P7 (0,25;0,25)	4.9	6.6	6.6	6.6

		<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	