

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 13556811

Catalog # : 00509ST3HIE254T-W22

Frame : 254/6T
Output : 5 HP (3.7 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 575 V
Rated current : 6.15 A
L. R. Amperes : 32.6 A
LRC : 5.3x(Code H)
No load current : 4.32 A
Rated speed : 883 rpm
Slip : 1.89 %
Rated torque : 29.7 ft.lb
Locked rotor torque : 250 %
Breakdown torque : 280 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 3.41 sq.ft.lb
Design : B

Locked rotor time : 77s (cold) 43s (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 : 54.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 260 lb

Output 25% 50% 75% 100%

Efficiency (%) 84.0 84.7 87.0 87.5
Power Factor 0.26 0.48 0.61 0.69

Foundation loads

Max. traction : 269 lb
Max. compression : 529 lb

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

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
13.7	11.9	12.0	7.8	5.9	4.6	3.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	Inpro/Seal	Inpro/Seal
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 Revision 1 / 1		
Checked by				
Date	25/03/2024			