

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12182291
Catalog # : 00709ST3HIE256TC-W22

Frame	: 254/6TC	Locked rotor time	: 59s (cold) 33s (hot)
Output	: 7.5 HP (5.5 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 8.88 A	Protection degree	: IP56
L. R. Amperes	: 47.1 A	Cooling method	: IC411 - TEFC
LRC	: 5.3x(Code G)	Mounting	: F-1
No load current	: 5.20 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 880 rpm	Noise level ²	: 54.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 44.8 ft.lb	Approx. weight ³	: 286 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		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	85.2	85.5	87.5	87.5	Max. traction	: 394 lb
Power Factor	0.29	0.50	0.63	0.71	Max. compression	: 679 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)
13.8	11.7	11.4	7.8	5.7	4.4	3.4

		<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 1 / 1		
Checked by				
Date	26/03/2024			
			Revision	