

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14244253

Catalog # : 30018ST3HIE449T-W22

Frame	: 447/9T	Locked rotor time	: 28s (cold) 16s (hot)
Output	: 300 HP (220 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 264 A	Protection degree	: IP56
L. R. Amperes	: 1716 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 76.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 75.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 885 ft.lb	Approx. weight ³	: 2966 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 89.6 sq.ft.lb		
Design	: B		

Output 25% 50% 75% 100%

Efficiency (%) 95.7 95.8 96.2 96.2
Power Factor 0.53 0.77 0.84 0.87

Foundation loads

Max. traction : 3944 lb
Max. compression : 6909 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)
4.2	3.6	3.3	2.0	1.4	0.9	0.6

	Drive end	Non drive end
Bearing type	: 6322 C3	: 6319 C3
Sealing	: Inpro/Seal	: Inpro/Seal
Lubrication interval	: 6000 h	: 8000 h
Lubricant amount	: 60 g	: 45 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				
Checked by				
Date	25/03/2024			

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Revision