

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 13124381
Catalog # : 25018EP3G447TS-W22

Frame	: 445/7TS	Locked rotor time	: 28s (cold) 16s (hot)
Output	: 250 HP (185 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 286 A	Protection degree	: IP55
L. R. Amperes	: 1830 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 80.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1781 rpm	Noise level ²	: 73.0 dB(A)
Slip	: 1.06 %	Starting method	: Direct On Line
Rated torque	: 737 ft.lb	Approx. weight ³	: 2240 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 89.6 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	94.9	95.2	95.0	95.0	Max. traction : 3782 lb
	94.9	94.9	95.0	95.0	Max. compression : 6022 lb
Power Factor	0.54	0.54	0.78	0.78	
	0.51	0.48	0.75	0.73	
			0.83	0.81	
				0.85	
				0.85	

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

Losses (%)	P1 (0,9;1,0)	4.8	5.2	4.8	4.8
	P2 (0,5;1,0)	3.8	4.2	3.8	3.8
	P3 (0,25;1,0)	3.5	3.8	3.5	3.5
	P4 (0,9;0,5)	2.3	2.5	2.3	2.3
	P5 (0,5;0,5)	1.5	1.6	1.5	1.5
	P6 (0,5;0,25)	1.0	1.1	1.0	1.0
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6
Drive end			Non drive end		
Bearing type	:	6314 C3		6314 C3	
Sealing	:	WSeal		WSeal	
Lubrication interval	:	12000 h		12000 h	
Lubricant amount	:	27 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					
Checked by					
Date	28/03/2024				
Page					Revision
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