

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	
Power Factor	0.54	0.54	0.78	0.78	Max. compression : 6022 lb
	0.51	0.48	0.75	0.73	
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.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
(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.					
Rev.	Changes Summary			Performed	Checked
Performed by					Page
Checked by					Revision
Date	28/03/2024				1 / 1