

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :							
Product line		: W22 NEMA Premium Efficiency Three-Phase		Product code :	11408291		
				Catalog # :	40018ET3G449T-W22		
Frame	: L447/9T	Locked rotor time	: 37s (cold) 21s (hot)				
Output	: 400 HP (300 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	: 445 A	Protection degree	: IP55				
L. R. Amperes	: 2893 A	Cooling method	: IC411 - TEFC				
LRC	: 6.5x(Code G)	Mounting	: F-1				
No load current	: 125 A	Rotation <sup>1</sup>	: Both (CW and CCW)				
Rated speed	: 1785 rpm	Noise level <sup>2</sup>	: 79.0 dB(A)				
Slip	: 0.83 %	Starting method	: Direct On Line				
Rated torque	: 1180 ft.lb	Approx. weight <sup>3</sup>	: 3218 lb				
Locked rotor torque	: 250 %						
Breakdown torque	: 260 %						
Insulation class	: F						
Service factor	: 1.15						
Moment of inertia (J)	: 136 sq.ft.lb						
Design	: B						
Output	25%	50%	75%	100%	Foundation loads		
Efficiency (%)	94.9	95.4	95.4	95.8			
	94.9	94.9	95.4	95.4			
Power Factor	0.55	0.56	0.80	0.81	Max. traction	: 7960 lb	
	0.52	0.48	0.77	0.74	Max. compression	: 11178 lb	
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	4.5	4.5	4.5	4.5		
	P2 (0,5;1,0)	3.3	3.3	3.3	3.3		
	P3 (0,25;1,0)	2.7	2.7	2.7	2.7		
	P4 (0,9;0,5)	2.5	2.5	2.5	2.5		
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5		
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1		
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6		
Bearings			Drive end				
			Non drive end				
			6322 C3	6319 C3			
			WSeal	WSeal			
			6000 h	8000 h			
			60 g	45 g			
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							
Date	28/03/2024				Revision		