

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :						
Product line		: W22 NEMA Premium Efficiency Three-Phase		Product code :	11428921	
				Catalog # :	20018ET3GRB447T-W22	
Frame	: 445/7T	Locked rotor time	: 28s (cold) 16s (hot)			
Output	: 200 HP (150 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	: 230 A	Protection degree	: IP55			
L. R. Amperes	: 1564 A	Cooling method	: IC411 - TEFC			
LRC	: 6.8x(Code G)	Mounting	: F-1			
No load current	: 70.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)			
Rated speed	: 1785 rpm	Noise level <sup>2</sup>	: 73.0 dB(A)			
Slip	: 0.83 %	Starting method	: Direct On Line			
Rated torque	: 588 ft.lb	Approx. weight <sup>3</sup>	: 2308 lb			
Locked rotor torque	: 229 %					
Breakdown torque	: 250 %					
Insulation class	: F					
Service factor	: 1.15					
Moment of inertia (J)	: 76.2 sq.ft.lb					
Design	: B					
Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	95.7	94.3	95.8	94.5		
	94.9	94.9	95.0	95.0		
Power Factor	0.50	0.56	0.73	0.78	Max. traction	: 3386 lb
	0.53	0.50	0.76	0.73	Max. compression	: 5694 lb
Losses at normative operating points (speed;torque), in percentage of rated output power						
Losses (%)	P1 (0,9;1,0)	4.0	4.0	4.0	4.0	
	P2 (0,5;1,0)	3.2	3.2	3.2	3.2	
	P3 (0,25;1,0)	2.9	2.9	2.9	2.9	
	P4 (0,9;0,5)	2.0	2.0	2.0	2.0	
	P5 (0,5;0,5)	1.3	1.3	1.3	1.3	
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9	
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5	
			Drive end	Non drive end		
Bearing type	:	NU-319 C3		6316 C3		
Sealing	:	WSeal		WSeal		
Lubrication interval	:	5000 h		10000 h		
Lubricant amount	:	45 g		34 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					