

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :									
Product line	: W22 NEMA Premium Efficiency Three-Phase			Product code :	11625473				
				Catalog # :	04018ET3ER324TC-W22				
Frame	: 324TC	Locked rotor time	: 36s (cold) 20s (hot)						
Output	: 40 HP (30 kW)	Temperature rise	: 80 K						
Poles	: 4	Duty cycle	: Cont.(S1)						
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C						
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.						
Rated current	: 94.2/47.1 A	Protection degree	: IP55						
L. R. Amperes	: 575/287 A	Cooling method	: IC411 - TEFC						
LRC	: 6.1x(Code G)	Mounting	: W-6						
No load current	: 34.0/17.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)						
Rated speed	: 1775 rpm	Noise level <sup>2</sup>	: 66.0 dB(A)						
Slip	: 1.39 %	Starting method	: Direct On Line						
Rated torque	: 118 ft.lb	Approx. weight <sup>3</sup>	: 556 lb						
Locked rotor torque	: 229 %								
Breakdown torque	: 240 %								
Insulation class	: F								
Service factor	: 1.25								
Moment of inertia (J)	: 9.16 sq.ft.lb								
Design	: B								
Output	25%	50%	75%	100%	Foundation loads				
Efficiency (%)	93.5	92.9	93.6	92.9	94.1	93.1	94.1		
	92.1	91.1	92.4	91.7	93.0	92.6	93.2		
	94.0	94.0	93.6	93.6	93.0	93.0	92.4		
	92.8	93.0	93.0	93.0					
Power Factor	0.46	0.43	0.72	0.68	0.80	0.78	0.85		
	0.40	0.38	0.64	0.62	0.75	0.73	0.82		
	0.53	0.53	0.78	0.78	0.84	0.84	0.86		
	0.47	0.72	0.80	0.80					
Losses at normative operating points (speed;torque), in percentage of rated output power									
Losses (%)	P1 (0,9;1,0)	6.1	6.1	6.1	6.1	6.1	6.1		
	P2 (0,5;1,0)	5.1	5.1	5.1	5.1	5.1	5.1		
	P3 (0,25;1,0)	5.0	5.0	5.0	5.0	5.0	5.0		
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8		
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9		
	P6 (0,5;0,25)	1.2	1.2	1.2	1.2	1.2	1.2		
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	0.8	0.8		
Drive end				Non drive end					
Bearing type	:	6312 C3		6212 C3					
Sealing	:	V'Ring		V'Ring					
Lubrication interval	:	14000 h		15000 h					
Lubricant amount	:	21 g		13 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	Date			
Performed by									
Checked by									
Date		28/03/2024			Page	Revision			
					1 / 1				