

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :							
Product line	: W22 NEMA Premium Efficiency Three-Phase			Product code :	13472723		
				Catalog # :	04036ET3ER324TSC-W22		
Frame	: 324TSC	Locked rotor time	: 39s (cold) 22s (hot)				
Output	: 40 HP (30 kW)	Temperature rise	: 80 K				
Poles	: 2	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	: 92.6/46.3 A	Protection degree	: IP55				
L. R. Amperes	: 584/292 A	Cooling method	: IC411 - TEFC				
LRC	: 6.3x(Code G)	Mounting	: W-6				
No load current	: 25.0/12.5 A	Rotation <sup>1</sup>	: Both (CW and CCW)				
Rated speed	: 3555 rpm	Noise level <sup>2</sup>	: 76.0 dB(A)				
Slip	: 1.25 %	Starting method	: Direct On Line				
Rated torque	: 59.1 ft.lb	Approx. weight <sup>3</sup>	: 480 lb				
Locked rotor torque	: 250 %						
Breakdown torque	: 240 %						
Insulation class	: F						
Service factor	: 1.25						
Moment of inertia (J)	: 4.90 sq.ft.lb						
Design	: B						
Output	25%	50%	75%	100%	Foundation loads		
Efficiency (%)	91.5	90.0	91.7	90.9	92.4	91.8	92.4
	89.2	90.0	90.3	90.7	91.7	92.1	92.7
	92.2	91.6	91.7	91.7	91.7	91.7	91.7
	92.1	91.7	92.4	91.7			
Power Factor	0.56	0.54	0.80	0.77	0.86	0.85	0.88
	0.50	0.46	0.74	0.71	0.83	0.80	0.86
	0.62	0.58	0.84	0.81	0.88	0.86	0.89
	0.54	0.78	0.85	0.87			
Losses at normative operating points (speed/torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	7.4	7.1	7.1	7.1	8.9	8.2
	P2 (0,5;1,0)	4.7	4.5	4.5	4.5	5.7	5.2
	P3 (0,25;1,0)	3.8	3.6	3.6	3.6	4.6	4.2
	P4 (0,9;0,5)	4.6	4.4	4.4	4.4	5.5	5.0
	P5 (0,5;0,5)	2.2	2.1	2.1	2.1	2.7	2.4
	P6 (0,5;0,25)	1.7	1.6	1.6	1.6	2.0	1.8
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	1.0	0.9
Drive end				Non drive end			
Bearing type	:	6312 C3		6212 C3			
Sealing	:	V'Ring		V'Ring			
Lubrication interval	:	6000 h		7000 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						Page	Revision
Date	28/03/2024					1 / 1	