

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code :	12447793					
		Catalog # :	02512ST3QIE324T-W22					
Frame	: 324/6T	Locked rotor time	: 46s (cold) 26s (hot)					
Output	: 25 HP (18.5 kW)	Temperature rise	: 80 K					
Poles	: 6	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	: 30.4 A	Protection degree	: IP56					
L. R. Amperes	: 182 A	Cooling method	: IC411 - TEFC					
LRC	: 6.0x(Code G)	Mounting	: F-1					
No load current	: 12.5 A	Rotation <sup>1</sup>	: Both (CW and CCW)					
Rated speed	: 1175 rpm	Noise level <sup>2</sup>	: 62.0 dB(A)					
Slip	: 2.08 %	Starting method	: Direct On Line					
Rated torque	: 112 ft.lb	Approx. weight <sup>3</sup>	: 551 lb					
Locked rotor torque	: 210 %							
Breakdown torque	: 250 %							
Insulation class	: F							
Service factor	: 1.25							
Moment of inertia (J)	: 11.5 sq.ft.lb							
Design	: B							
Output	50%	75%	100%					
Efficiency (%)	91.7 91.1 91.1 91.1 91.7 91.7 91.7	93.0 91.8 92.2 92.2 91.7 92.4 92.4	93.0 91.6 92.2 92.2 91.0 91.7 91.7					
Power Factor	0.65 0.63 0.60 0.57 0.71 0.68 0.65	0.77 0.76 0.74 0.71 0.81 0.79 0.77	0.82 0.83 0.80 0.79 0.85 0.83 0.82					
Foundation loads								
Max. traction		: 965 lb						
Max. compression		: 1516 lb						
Losses at normative operating points (speed;torque), in percentage of rated output power								
Losses (%)	P1 (0,9;1,0)	8.2	10.1	9.3	9.3	10.9	9.9	9.9
	P2 (0,5;1,0)	6.8	8.6	7.8	7.8	9.4	8.5	8.5
	P3 (0,25;1,0)	6.3	8.1	7.3	7.3	8.9	7.9	7.9
	P4 (0,9;0,5)	4.4	5.2	4.9	4.9	5.6	5.2	5.2
	P5 (0,5;0,5)	3.0	3.7	3.4	3.4	4.0	3.7	3.7
	P6 (0,5;0,25)	2.2	2.7	2.5	2.5	2.9	2.6	2.6
	P7 (0,25;0,25)	1.5	1.9	1.7	1.7	2.0	1.8	1.8
Bearing type	:	Drive end		Non drive end				
Sealing	:	6312 C3		6212 C3				
Lubrication interval	:	Inpro/Seal		Inpro/Seal				
Lubricant amount	:	20000 h		20000 h				
Lubricant type	:	21 g		13 g				
Mobil Polyrex EM								
Notes:								
This revision replaces and cancel the previous one, which must be eliminated. (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.				These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.				
Rev.	Changes Summary			Performed	Checked	Date		
Performed by								
Checked by						Page	Revision	
Date	25/03/2024					1 / 1		