

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency Three-Phase

Product code : 12604501

Catalog # : 04036EG3E324TS-W22

Frame : 324/6TS  
 Output : 40 HP (30 kW)  
 Poles : 2  
 Frequency : 60 Hz  
 Rated voltage : 230/460 V  
 Rated current : 93.0/46.5 A  
 L. R. Amperes : 744/372 A  
 LRC : 8.0x(Code J)  
 No load current : 31.0/15.5 A  
 Rated speed : 3565 rpm  
 Slip : 0.97 %  
 Rated torque : 58.9 ft.lb  
 Locked rotor torque : 310 %  
 Breakdown torque : 310 %  
 Insulation class : F  
 Service factor : 1.25  
 Moment of inertia (J) : 4.63 sq.ft.lb  
 Design : A

Locked rotor time : 48s (cold) 27s (hot)  
 Temperature rise : 80 K  
 Duty cycle : Cont.(S1)  
 Ambient temperature : -20°C to +40°C  
 Altitude : 1000 m.a.s.l.  
 Protection degree : IP55  
 Cooling method : IC411 - TEFC  
 Mounting : F-1  
 Rotation<sup>1</sup> : Both (CW and CCW)  
 Noise level<sup>2</sup> : 76.0 dB(A)  
 Starting method : Direct On Line  
 Approx. weight<sup>3</sup> : 553 lb

Output	50%	75%	100%
Efficiency (%)	92.4 93.0	94.1 93.6	94.1 93.6
	93.6 93.0	94.1 94.1	94.1 94.1
Power Factor	0.74 0.79	0.83 0.86	0.86 0.88
	0.76 0.73	0.84 0.82	0.87 0.86

Foundation loads  
 Max. traction : 539 lb  
 Max. compression : 1092 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	5.8	6.3	5.8	5.8
	P2 (0,5;1,0)	3.9	4.2	3.9	3.9
	P3 (0,25;1,0)	3.2	3.5	3.2	3.2
	P4 (0,9;0,5)	3.6	3.9	3.6	3.6
	P5 (0,5;0,5)	1.8	2.0	1.8	1.8
	P6 (0,5;0,25)	1.3	1.5	1.3	1.3
	P7 (0,25;0,25)	0.7	0.8	0.7	0.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 C3	6212 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	12000 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.

- (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		Page 1 / 1		
Checked by				
Date	29/03/2024			
		Revision		