

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel Standard Efficiency Three-Phase

Product code : 14305469

Catalog # : .5018ES3E48-S

Frame : 48  
Output : 0.5 HP (0.37 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 208-230/460 V  
Rated current : 1.98-1.79/0.896 A  
L. R. Amperes : 11.9-10.8/5.38 A  
LRC : 6.0x(Code K)  
No load current : 1.20-1.40/0.698 A  
Rated speed : 1730 rpm  
Slip : 3.89 %  
Rated torque : 1.52 ft.lb  
Locked rotor torque : 260 %  
Breakdown torque : 280 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 0.0399 sq.ft.lb

Locked rotor time : 28s (cold) 16s (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> : 50.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 17.8 lb

Output	25%		50%		75%		100%	
Efficiency (%)	60.0	63.4	62.0	64.0	70.0	68.0	72.0	68.0
	57.6		59.0		66.0		67.0	
Power Factor	0.27	0.32	0.49	0.57	0.62	0.71	0.72	0.81
	0.27		0.50		0.63		0.73	

Foundation loads  
Max. traction : 43 lb  
Max. compression : 61 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6203 ZZ	6202 ZZ
Sealing	:	V'Ring	Without Bearing Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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	27/03/2024			
			Revision	