

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 13575098

Catalog # : 50036OT3G449TS-RFW40

Frame : 447/9TS  
Output : 500 HP (370 kW)  
Poles : 2  
Frequency : 60 Hz  
Rated voltage : 460 V  
Rated current : 536 A  
L. R. Amperes : 3806 A  
LRC : 7.1x(Code G)  
No load current : 120 A  
Rated speed : 3570 rpm  
Slip : 0.83 %  
Rated torque : 735 ft.lb  
Locked rotor torque : 190 %  
Breakdown torque : 250 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 46.9 sq.ft.lb  
Design : A

Locked rotor time : 25s (cold) 14s (hot)  
Temperature rise : 80 K  
Duty cycle : Cont.(S1)  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP23  
Cooling method : IC01 - ODP  
Mounting : F-1  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 87.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 2252 lb

Output	25%		50%		75%		100%	
Efficiency (%)	95.7	93.6	95.8	94.3	96.2	95.2	96.2	95.8
	93.5	93.5	94.2	94.2	95.2	95.2	95.8	95.8
	94.2	94.2	95.0	95.0	95.0	95.0	95.8	95.8
	94.2		95.0		95.0		95.8	
Power Factor	0.62	0.61	0.84	0.82	0.89	0.89	0.90	0.90
	0.57	0.53	0.79	0.77	0.87	0.86	0.89	0.88
	0.65	0.60	0.85	0.82	0.89	0.88	0.90	0.89
	0.57		0.80		0.87		0.88	

Foundation loads  
Max. traction : 4380 lb  
Max. compression : 6631 lb

	Drive end	Non drive end
Bearing type	6314 C4	6314 C4
Sealing	Without Bearing Seal	Without Bearing Seal
Lubrication interval	14418 h	14418 h
Lubricant amount	27 g	27 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.

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Performed by				
Checked by				
Date	28/03/2024			

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Revision

Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

Space heater information

Voltage: 110-127/200-240 V

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