

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium  
Efficiency Three-Phase

Product code : 14407417

Catalog # : 00509XT3E254T

Frame : 254T  
Output : 5 HP (3.7 kW)  
Poles : 8  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 15.9/7.93 A  
L. R. Amperes : 84.0/42.0 A  
LRC : 5.3x(Code H)  
No load current : 11.0/5.50 A  
Rated speed : 880 rpm  
Slip : 2.22 %  
Rated torque : 29.8 ft.lb  
Locked rotor torque : 210 %  
Breakdown torque : 270 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 3.41 sq.ft.lb  
Design : B

Locked rotor time : 37s (cold) 21s (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> : 55.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 326 lb

Output	25%		50%		75%		100%	
Efficiency (%)	82.8	82.1	84.0	82.5	86.5	84.0	87.5	84.0
	80.9	81.0	82.5	82.5	84.0	84.0	85.5	85.5
Power Factor	0.25	0.30	0.46	0.53	0.58	0.65	0.67	0.73
	0.28	0.26	0.50	0.47	0.62	0.60	0.70	0.69

Foundation loads  
Max. traction : 269 lb  
Max. compression : 593 lb

	Drive end	Non drive end
Bearing type	6309 C3	6209 C3
Sealing	Oil Seal	Lip Seal
Lubrication interval	20000 h	20000 h
Lubricant amount	13 g	9 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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Customer :

Thermal protection

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

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