

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14132562

Catalog # : FRV42436FT3G4479TDZ1

Frame : 447/9TDZ  
Output : 424 HP (312 kW)  
Poles : 2  
Frequency : 60 Hz  
Rated voltage : 460 V  
Rated current : 457 A  
L. R. Amperes : 3108 A  
LRC : 6.8x(Code G)  
No load current : 90.0 A  
Rated speed : 3570 rpm  
Slip : 0.83 %  
Rated torque : 624 ft.lb  
Locked rotor torque : 190 %  
Breakdown torque : 220 %  
Insulation class : H  
Service factor : 1.15  
Moment of inertia (J) : 46.0 sq.ft.lb  
Design : A

Locked rotor time : 48s (cold) 27s (hot)  
Temperature rise : 105 K  
Duty cycle : Cont.(S1)  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP23  
Mounting : F-1  
Rotation<sup>1</sup> : CCW  
Noise level<sup>2</sup> : 85.0 dB(A)  
Starting method : VFD  
Approx. weight<sup>3</sup> : 2591 lb

Output 25% 50% 75% 100%

Efficiency (%) 94.5 95.8 96.2 96.2  
Power Factor 0.70 0.82 0.88 0.89

Foundation loads

Max. traction : 2362 lb  
Max. compression : 4953 lb

	Drive end	Non drive end
Bearing type :	6314 C4	6314 C4
Sealing :	Without Bearing Seal	Without Bearing Seal
Lubrication interval :	10800 h	10800 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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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	PT100 - 3 wires	2 x Phase	-
2	DE bearing	PT100 - 3 wires	1 x Bearing	-
3	NDE bearing	PT100 - 3 wires	1 x Bearing	-

Space heater information

Voltage: 110-127/200-240 V

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