

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 13593624

Catalog # : 45036OT3G447/9TS-W40

Frame	: 447/9TS	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 450 HP (330 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 478 A	Protection degree	: IP23
L. R. Amperes	: 3250 A	Cooling method	: IC01 - ODP
LRC	: 6.8x(Code G)	Mounting	: F-1
No load current	: 105 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3565 rpm	Noise level ²	: 87.0 dB(A)
Slip	: 0.97 %	Starting method	: Direct On Line
Rated torque	: 663 ft.lb	Approx. weight ³	: 2155 lb
Locked rotor torque	: 180 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 43.6 sq.ft.lb		
Design	: A		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	95.7	94.3	95.8	94.9	96.2	95.3	96.2	95.8	Max. traction	: 3447 lb
	94.1	94.0	94.7	94.6	95.3	95.3	95.8	95.8		
	94.5	94.5	95.0	95.0	95.4	95.4	95.8	95.8		
	94.5		95.0		95.4		95.8			
Power Factor	0.63	0.62	0.84	0.82	0.89	0.88	0.90	0.90	Max. compression	: 5602 lb
	0.59	0.55	0.81	0.78	0.88	0.87	0.90	0.89		
	0.66	0.63	0.85	0.84	0.89	0.89	0.90	0.90		
	0.60		0.82		0.88		0.89			

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
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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Customer :

Thermal protection

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

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