

# Three Phase Induction Motor - Squirrel Cage



Product line	: W21 Explosion Proof High Efficiency Three-Phase	Product code :	11114249
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Frame	: 404/5T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 60 HP (45 kW)	Temperature rise	: 105 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 154/77.0 A	Protection degree	: IP55
L. R. Amperes	: 893/447 A	Cooling method	: IC411 - TEFC
LRC	: 5.8x(Code G)	Mounting	: F-1
No load current	: 64.0/32.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 885 rpm	Noise level <sup>2</sup>	: 62.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 356 ft.lb	Approx. weight <sup>3</sup>	: 1164 lb
Locked rotor torque	: 170 %		
Breakdown torque	: 210 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 36.9 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	90.8	93.0	91.0	91.7	91.7	91.0	91.7	89.5	Max. traction	: 1989 lb
	92.3	91.4	91.7	91.0	91.0	91.7	90.2	91.0		
Power Factor	0.43	0.48	0.70	0.72	0.76	0.80	0.80	0.82	Max. compression	: 3153 lb
	0.44	0.40	0.68	0.65	0.78	0.76	0.81	0.80		

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6217 C3	6314 C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	16602 h	17353 h
Lubricant amount	:	21 g	27 g
Lubricant type	:	Mobil Polyrex EM	

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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# DATA SHEET

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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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