

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 12408373		
		Catalog # : 10009XT3E445T		
Frame	: 444/5T	Locked rotor time	: 28s (cold) 16s (hot)	
Output	: 100 HP (75 kW)	Temperature rise	: 80 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	: 250/125 A	Protection degree	: IP55	
L. R. Amperes	: 1525/763 A	Cooling method	: IC411 - TEFC	
LRC	: 6.1x(Code G)	Mounting	: F-1	
No load current	: 95.0/47.5 A	Rotation ¹	: Both (CW and CCW)	
Rated speed	: 890 rpm	Noise level ²	: 64.0 dB(A)	
Slip	: 1.11 %	Starting method	: Direct On Line	
Rated torque	: 590 ft.lb	Approx. weight ³	: 2086 lb	
Locked rotor torque	: 170 %			
Breakdown torque	: 200 %			
Insulation class	: F			
Service factor	: 1.15			
Moment of inertia (J)	: 87.3 sq.ft.lb			
Design	: B			
Output	25%	50%	75%	100%
Efficiency (%)	94.3	93.5	94.1	93.6
	94.5	94.1	94.1	94.1
	93.5	92.5	93.6	93.0
	94.1	93.6	94.1	94.1
Power Factor	0.43	0.41	0.68	0.65
	0.77	0.75	0.80	0.79
	0.37	0.34	0.61	0.58
	0.72	0.70	0.78	0.76
Foundation loads		Max. traction : 2762 lb		
		Max. compression : 4848 lb		
Bearing type	:	<u>Drive end</u>	<u>Non drive end</u>	
Sealing	:	6219 C3	6316 C3	
Lubrication interval	:	Viton Oil Seal	Viton Seal	
Lubricant amount	:	15247 h	15904 h	
Lubricant type	:	28 g	34 g	
		Mobil Polyrex EM		
Notes:				
This revision replaces and cancel the previous one, which must be eliminated.		These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
(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.				
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Thermal protection

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

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