

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line		: W22 IEEE 841 NEMA Premium Efficiency Three-Phase			Product code :		12912584
					Catalog # :		10009ST3HIE445T-W22
Frame : 444/5T Output : 100 HP (75 kW) Poles : 8 Frequency : 60 Hz Rated voltage : 575 V Rated current : 102 A L. R. Amperes : 610 A LRC : 6.0x(Code G) No load current : 44.8 A Rated speed : 890 rpm Slip : 1.11 % Rated torque : 590 ft.lb Locked rotor torque : 190 % Breakdown torque : 220 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 87.3 sq.ft.lb Design : B				Locked rotor time : 27s (cold) 15s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP56 Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 63.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 1762 lb			
Output		25%	50%	75%	100%	Foundation loads	
Efficiency (%)		93.5	93.6	94.1	94.1	Max. traction : 2579 lb	
Power Factor		0.38	0.63	0.74	0.79	Max. compression : 4341 lb	
Losses at normative operating points (speed;torque), in percentage of rated output power							
P1 (0,9;1,0)		P2 (0,5;1,0)		P3 (0,25;1,0)		P4 (0,9;0,5)	
6.1		4.9		4.4		3.0	
						P5 (0,5;0,5)	
						2.0	
						P6 (0,5;0,25)	
						1.4	
						P7 (0,25;0,25)	
						0.9	
				<u>Drive end</u>		<u>Non drive end</u>	
Bearing type		: 6319 C3			: 6316 C3		
Sealing		: Inpro/Seal			: Inpro/Seal		
Lubrication interval		: 17000 h			: 20000 h		
Lubricant amount		: 45 g			: 34 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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