### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 12139519 Catalog #: 20009ST3QIERB449T-W2 Frame : L447/9T Locked rotor time : 45s (cold) 25s (hot) Output : 200 HP (150 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 460 V : 1000 m.a.s.l. Altitude Rated current : 242 A Protection degree : IP55 L. R. Amperes : 1476 A Cooling method : IC411 - TEFC LRC : 6.1x(Code G) Mounting : F-1 No load current : 90.0 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 891 rpm Noise level<sup>2</sup> : 64.0 dB(A) Starting method Slip : 1.00 % : Direct On Line Rated torque : 1180 ft.lb Approx. weight<sup>3</sup> : 3517 lb Locked rotor torque : 190 % Breakdown torque : 210 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 255 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 95.0 : 4840 lb Efficiency (%) 94.5 94.6 95.0 Max. traction Power Factor 0.82 0.45 0.70 0.79 Max. compression : 8358 lb Drive end Non drive end Bearing type NU-322 C3 6319 C3 Sealing Inpro/Seal Inpro/Seal Lubrication interval 13000 h 17000 h Lubricant amount 60 g 45 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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### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



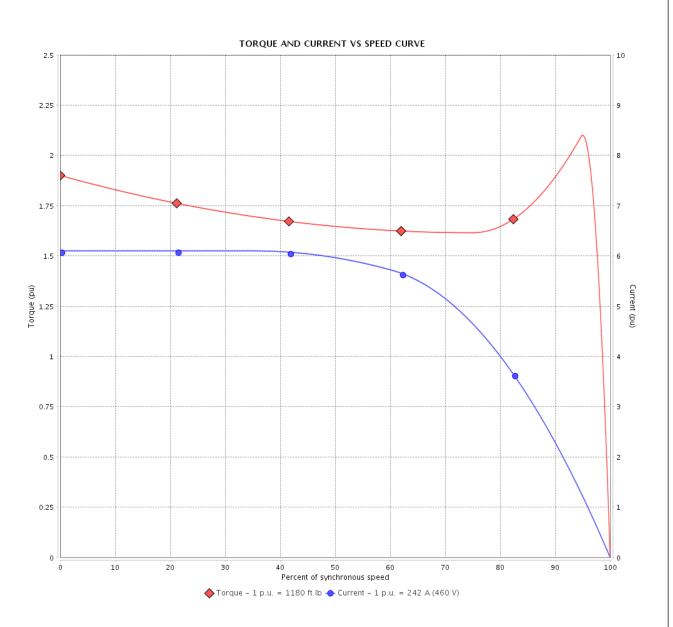
Customer :

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 20009ST3QIERB449T-W2

12139519



Performance : 460 V 60 Hz 8P Rated current : 242 A Moment of inertia (J) : 255 sq.ft.lb **LRC** : 6.1 Duty cycle : Cont.(S1) : F : 1180 ft.lb Insulation class Rated torque Locked rotor torque : 190 % Service factor : 1.15 Breakdown torque : 210 % Temperature rise : 80 K Rated speed : 891 rpm Design : B

Locked rotor time : 45s (cold) 25s (hot)

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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer

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Date

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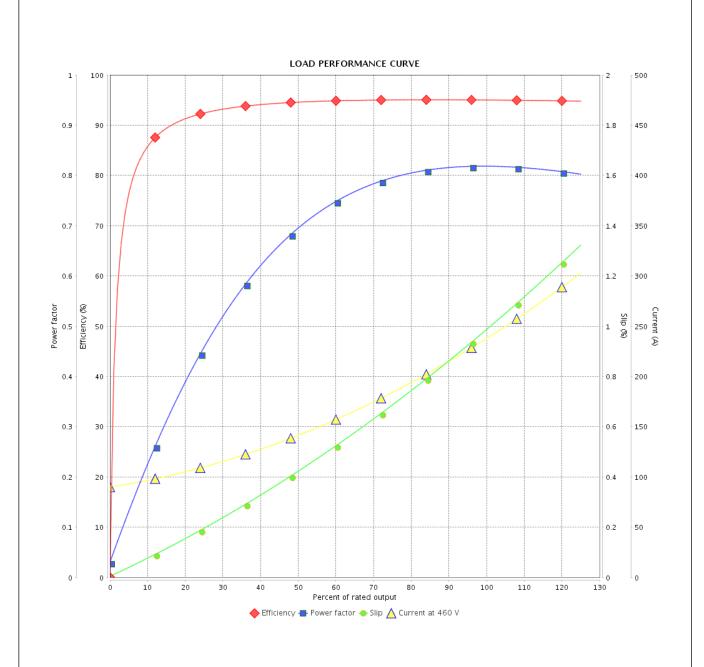
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Performance	: 460 V 60 Hz 8P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 242 A : 6.1 : 1180 ft.lb : 190 % : 210 % : 891 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 255 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



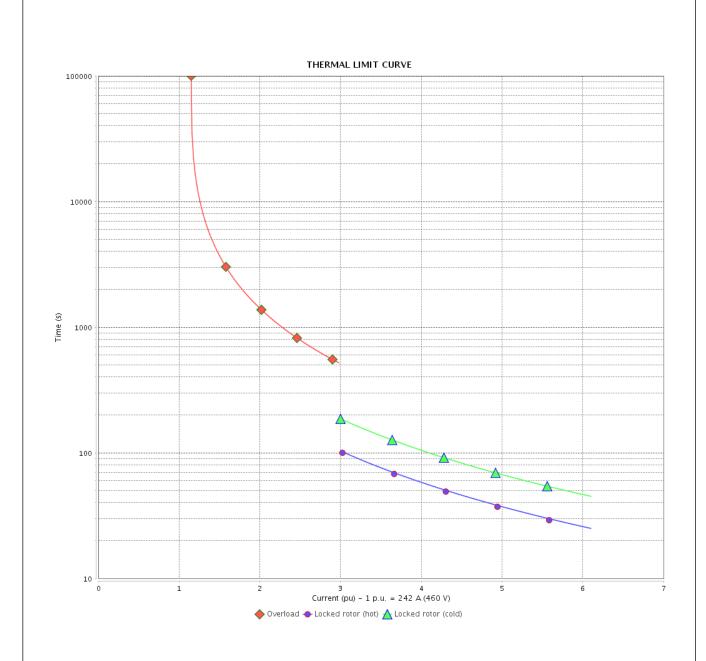
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Customer	:			
Product line	: NEMA Premium Efficiency Phase		12139519	
		Catalog # :	20009ST3QIEF	RB449T-W2
Performance	: 460 V 60 Hz 8P			
Rated current LRC	: 242 A : 6.1 : 1180 ft.lb	Moment of inertia (J) Duty cycle Insulation class	: 255 sq.ft.lb : Cont.(S1) : F	
Rated torque Locked rotor torque	: 190 %	Service factor	: 1.15	
Breakdown torque Rated speed	: 210 % : 891 rpm	Temperature rise Design	: 80 K : B	
Heating constant				
Cooling constant	01 0			D :
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer



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## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



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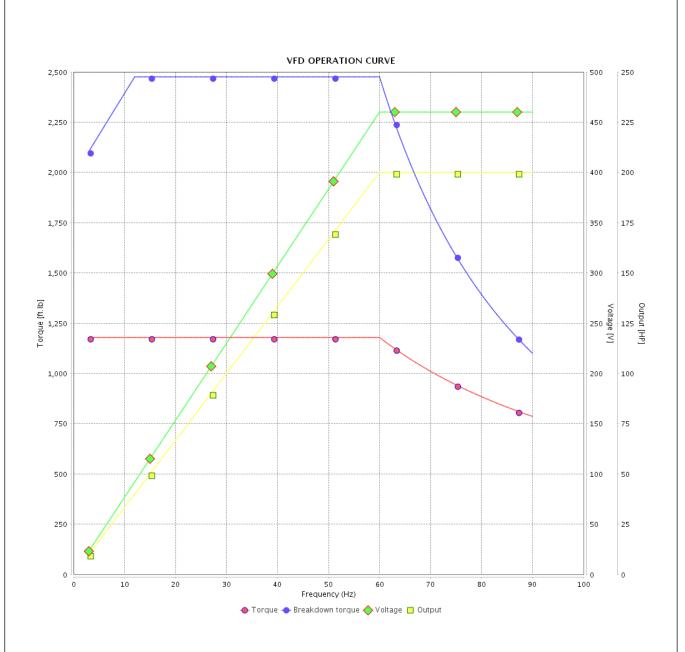
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Product line : NEMA Premium Efficiency Three- Produ

Phase

Product code: 12139519

Catalog #: 20009ST3QIERB449T-W2



Performance : 460 V 60 Hz 8P : 242 A Rated current Moment of inertia (J) : 255 sq.ft.lb **LRC** Duty cycle : 6.1 : Cont.(S1) : 1180 ft.lb Insulation class : F Rated torque Locked rotor torque : 190 % Service factor : 1.15 Breakdown torque : 210 % Temperature rise : 80 K Rated speed : 891 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

