### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 11433086 Catalog #: 03018ST3HIE286T-W22 Frame : 284/6T Locked rotor time : 36s (cold) 20s (hot) Output : 30 HP (22 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 575 V : 1000 m.a.s.l. Altitude Rated current : 28.1 A Protection degree : IP55 : 171 A L. R. Amperes Cooling method : IC411 - TEFC LRC : 6.1x(Code G) Mounting : F-1 No load current : 10.4 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1760 rpm Noise level<sup>2</sup> : 63.0 dB(A) Starting method Slip : 2.22 % : Direct On Line Rated torque : 89.0 ft.lb Approx. weight<sup>3</sup> : 468 lb Locked rotor torque : 240 % Breakdown torque : 240 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 5.85 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 93.6 : 703 lb Efficiency (%) 92.3 93.0 93.0 Max. traction Power Factor 0.80 0.84 0.46 0.70 Max. compression : 1171 lb Drive end Non drive end Bearing type 6311 C3 6211 C3 Inpro/Seal Inpro/Seal Sealing Lubrication interval 20000 h 20000 h Lubricant amount 18 g 11 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

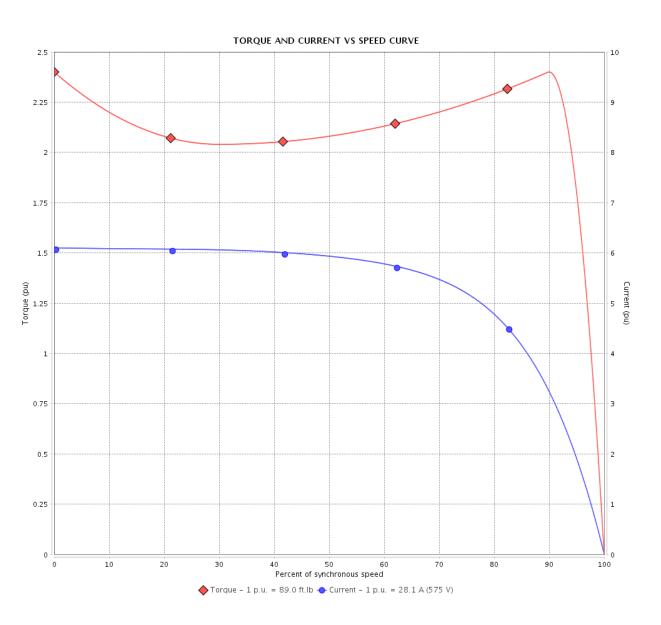


Customer

Product line : NEMA Premium Efficiency Three-

Product code: 11433086

Catalog #: 03018ST3HIE286T-W22



Performance	: 575 V 60 Hz 4P			
Rated current	: 28.1 A	Moment of inertia (J)	: 5.85 sq.ft.lb	
LRC	: 6.1	Duty cycle	: Cont.(S1)	
Rated torque	: 89.0 ft.lb	Insulation class	: F	
Locked rotor torque	: 240 %	Service factor	: 1.25	
Breakdown torque	: 240 %	Temperature rise	: 80 K	
Rated speed	: 1760 rpm	Design	: B	
Locked rotor time	: 36s (cold) 20s (hot)			

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## LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage

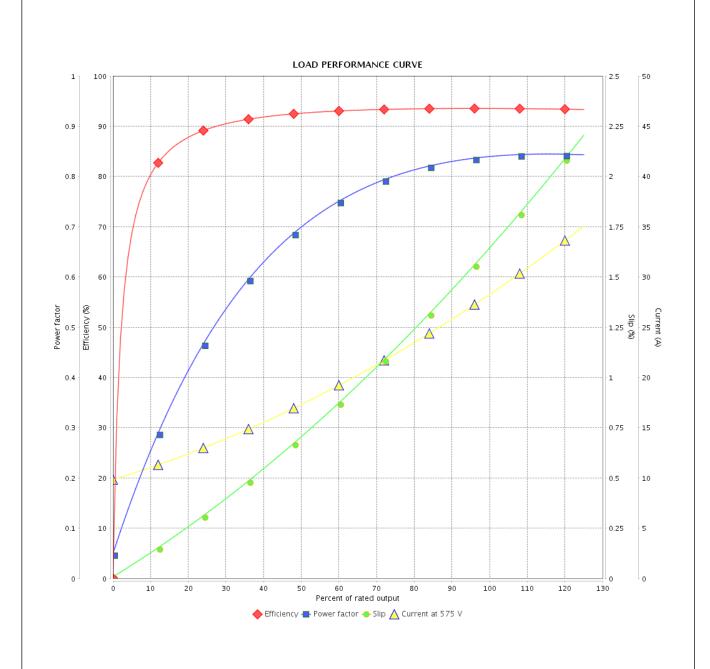


Customer

Product line : NEMA Premium Efficiency Three- Product code : 11433086

Phase

Catalog #: 03018ST3HIE286T-W22



Performance : 575 V 60 Hz 4P : 28.1 A Rated current Moment of inertia (J) : 5.85 sq.ft.lb **LRC** : 6.1 Duty cycle : Cont.(S1) : 89.0 ft.lb Rated torque Insulation class : F Locked rotor torque : 240 % Service factor : 1.25 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 1760 rpm Design : B

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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



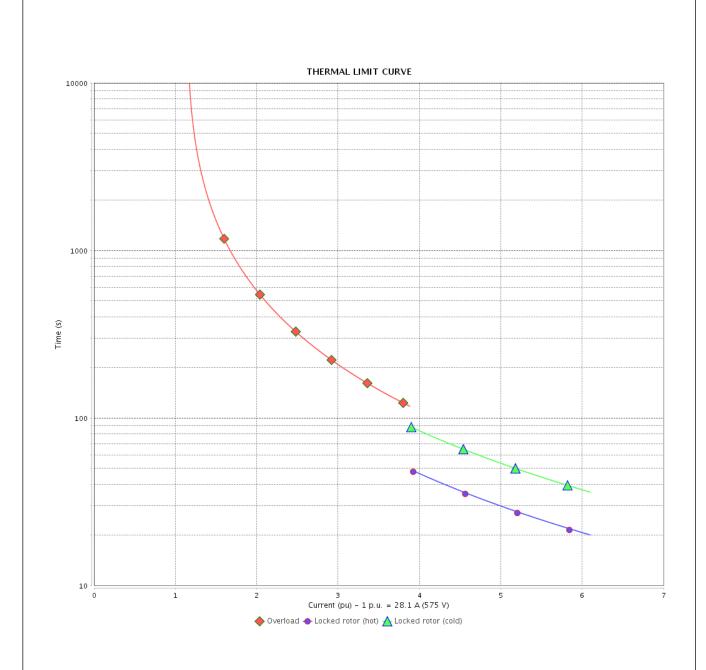
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Product line	: NEMA Premium Efficiency	Three-	Product code :	11433086	
	Phase		Catalog # :	03018ST3HIE	286T-W22
D. f	575 \ / 00     AD				
	: 575 V 60 Hz 4P : 28.1 A	Moment o	f inertia (J)	: 5.85 sq.ft.lb	
LRC	: 6.1	Duty cycle	<b>;</b>	: Cont.(S1)	
	: 89.0 ft.lb : 240 %	Insulation Service fa		: F : 1.25	
Breakdown torque	: 240 %	Temperature		: 80 K	
	: 1760 rpm	Design		: B	
Heating constant					
Cooling constant  Rev.	Changes Summary		Performed	Checked	Date
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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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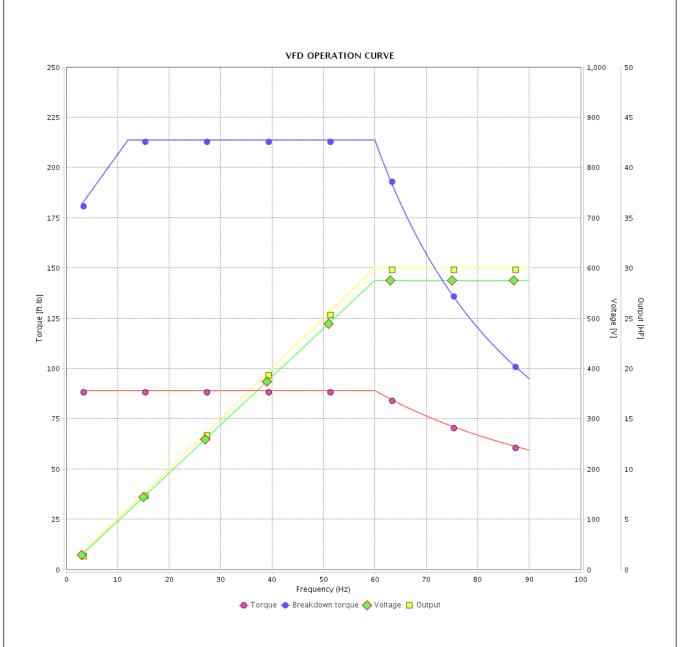
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Product line : NEMA Premium Efficiency Three-

Phase

Product code: 11433086

Catalog #: 03018ST3HIE286T-W22



Performance : 575 V 60 Hz 4P : 28.1 A Rated current Moment of inertia (J) : 5.85 sq.ft.lb **LRC** : 6.1 Duty cycle : Cont.(S1) : 89.0 ft.lb Insulation class Rated torque : F Locked rotor torque : 240 % Service factor : 1.25 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 1760 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

