### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 14369980 Catalog #: 06012ST3HIE404TC-W22 Frame : 404/5TC Locked rotor time : 36s (cold) 20s (hot) Output : 60 HP (45 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 : 55.6 A Protection degree : IP55 L. R. Amperes : 395 A Cooling method : IC411 - TEFC : 7.1x(Code G) LRC Mounting : F-1 No load current : 20.0 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1185 rpm Noise level<sup>2</sup> : 68.0 dB(A) Starting method Slip : 1.25 % : Direct On Line Rated torque : 266 ft.lb Approx. weight<sup>3</sup> : 1036 lb Locked rotor torque : 200 % Breakdown torque : 229 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 36.9 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 94.0 94.5 Efficiency (%) 94.1 94.5 Max. traction : 1317 lb Power Factor 0.74 0.82 0.86 0.48 Max. compression : 2354 lb Drive end Non drive end Bearing type 6316 C3 6314 C3 Inpro/Seal Inpro/Seal Sealing Lubrication interval 16000 h 17000 h Lubricant amount 34 g 27 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



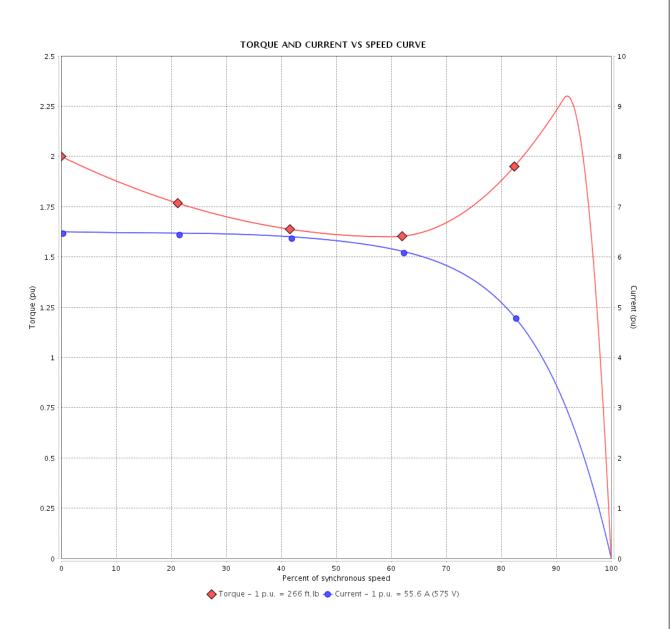
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14369980

Catalog #: 06012ST3HIE404TC-W22



Performance : 575 V 60 Hz 6P Rated current : 55.6 A Moment of inertia (J) : 36.9 sq.ft.lb **LRC** : 7.1 Duty cycle : Cont.(S1) Insulation class Rated torque : 266 ft.lb : F Service factor Locked rotor torque : 200 % : 1.25 Breakdown torque : 229 % Temperature rise : 80 K Rated speed : 1185 rpm Design : B

Locked rotor time : 36s (cold) 20s (hot)

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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage

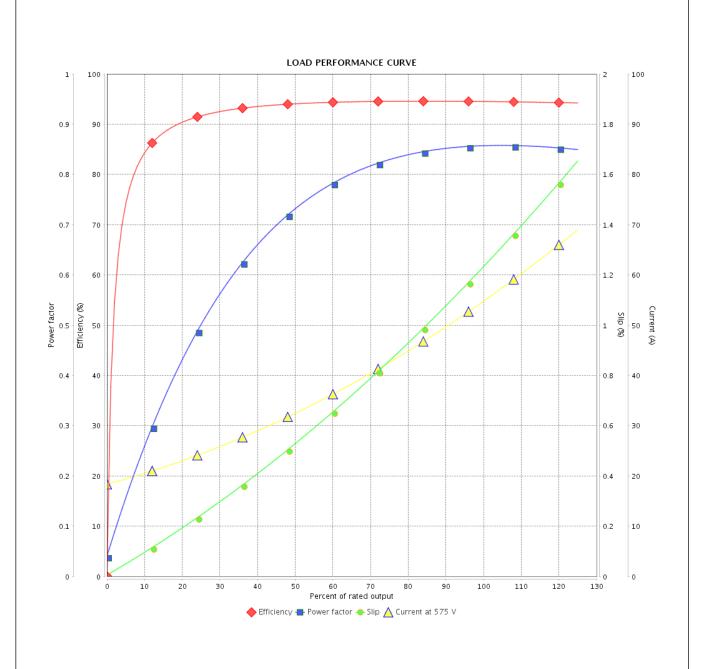


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14369980

Phase

Catalog #: 06012ST3HIE404TC-W22



Performance		: 575 V 60 Hz 6P					
Rated current	: :	: 55.6 A Moment of iner		f inertia (J)	: 36.9 sq.ft.lb		
LRC		7.1	Duty cycle	Duty cycle			
Rated torque		266 ft.lb Insulation class		class	: F		
Locked rotor torque		200 %	Service fa	Service factor		: 1.25	
Breakdown torqu	e ::	: 229 % Temperature ris : 1185 rpm Design		ıre rise	: 80 K		
Rated speed	:				: B		
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



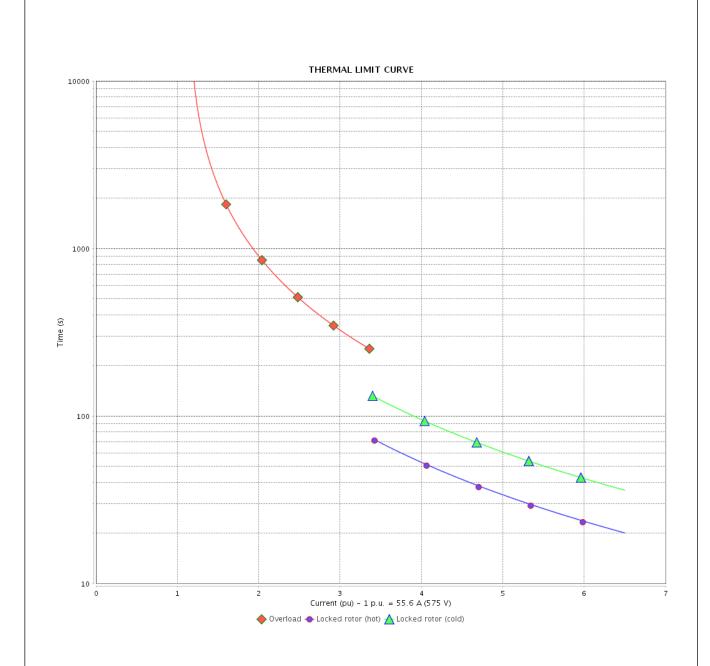
Customer	:				
Product line	: NEMA Premium Effic	iency Three-	Product code :	14369980	
	Phase		Catalog # :	06012ST3HIE	E404TC-W22
Performance	: 575 V 60 Hz 6P				
Rated current LRC	: 55.6 A : 7.1	Moment of Duty cycle	of inertia (J) e	: 36.9 sq.ft.lb : Cont.(S1)	
Rated torque	: 266 ft.lb : 200 %	Insulation	class	: F : 1.25	
Locked rotor torque Breakdown torque	: 229 %	Service fa Temperat		: 1.25 : 80 K	
Rated speed	: 1185 rpm	Design		: B	
Heating constant					
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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



Customer :

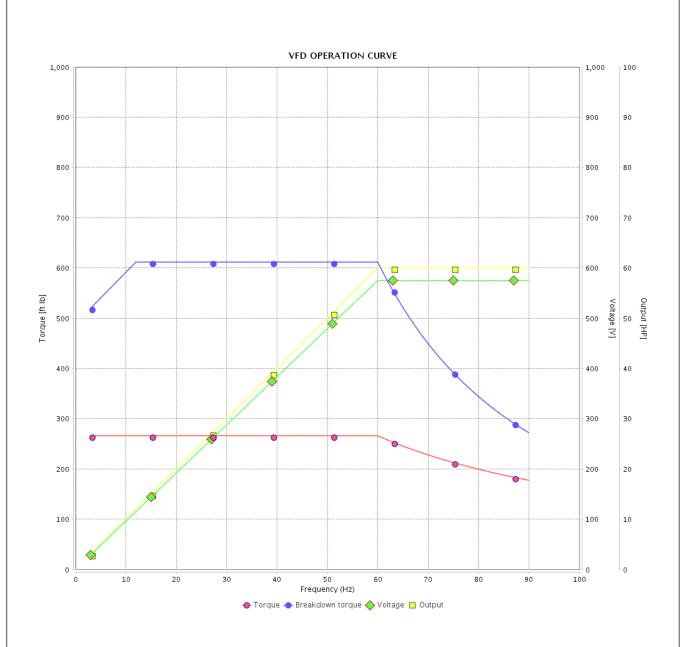
Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14369980

Catalog #: 06012ST3HIE404TC-W22

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Performance	: 575 V 60 Hz 6P						
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 55.6 A : 7.1 : 266 ft.lb : 200 % : 229 % : 1185 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 36.9 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B			
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