DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : 02512ST3QIE324TC-W22 Product line : W22 IEEE 841 NEMA Premium Product code: 12447791 Efficiency Three-Phase 02512ST3QIE324TC-W22 Catalog #: Frame : 324/6TC Locked rotor time : 46s (cold) 26s (hot) Output : 25 HP (18.5 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) Frequency : 60 Hz Ambient temperature : -20°C to +40°C Rated voltage : 460 V : 1000 m.a.s.l. Altitude : 30.4 A Protection degree : IP55 Rated current L. R. Amperes : 182 A Cooling method : IC411 - TEFC : 6.0x(Code G) Mounting **LRC** : F-1 No load current : 12.5 A Rotation¹ : Both (CW and CCW) Rated speed : 1175 rpm Noise level² : 62.0 dB(A) Starting method Slip : 2.08 % : Direct On Line : 110 ft.lb Approx. weight³ : 567 lb Rated torque Locked rotor torque : 210 % Breakdown torque : 250 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 11.5 sq.ft.lb Design : B Output 25% 50% 75% 100% Foundation loads 91.7 93.0 93.0 Max. traction : 957 lb Efficiency (%) 91.4 Power Factor 0.41 0.65 0.77 0.82 : 1523 lb Max. compression Non drive end **Drive end** Bearing type 6312 C3 6212 C3 Inpro/Seal Sealing Inpro/Seal Lubrication interval 20000 h 20000 h Lubricant amount 21 g 13 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 : 02512ST3QIE324TC-W22

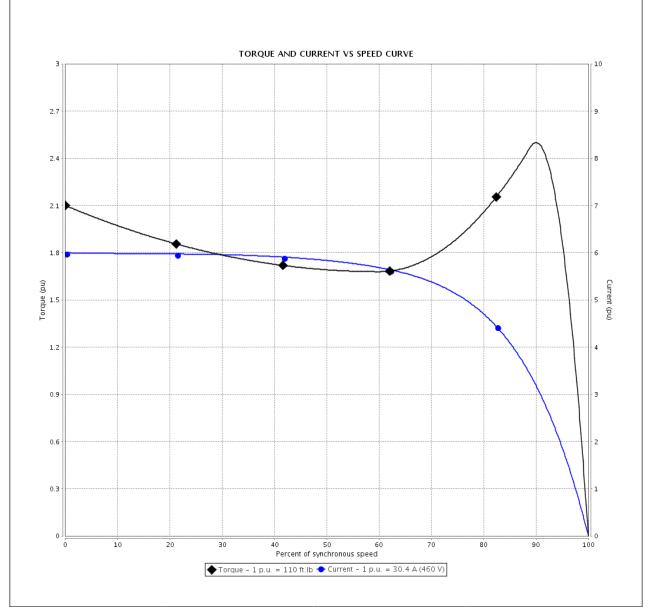
Product line : W22 IEEE 841 NEMA Premium Product code :

Efficiency Three-Phase

Product code: 12447791

: B

Catalog #: 02512ST3QIE324TC-W22



Performance	: 460 V 60 Hz 6P

Rated current : 30.4 A Moment of inertia (J) : 11.5 sq.ft.lb LRC : 6.0 Duty cycle : Cont.(S1) Insulation class Rated torque : 110 ft.lb : F Locked rotor torque : 210 % Service factor : 1.25 Breakdown torque : 250 % Temperature rise : 80 K

Locked rotor time : 46s (cold) 26s (hot)

: 1175 rpm

Rated speed

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Design

LOAD PERFORMANCE CURVE

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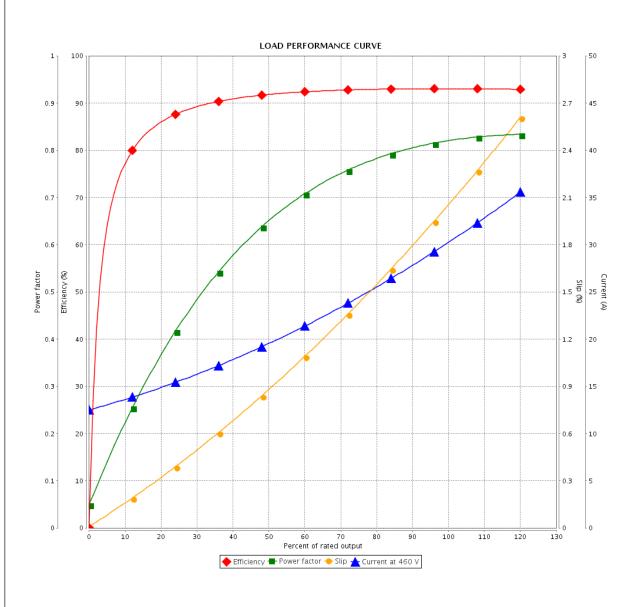
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Product line : W22 IEEE 841 NEMA Premium Product code : 12447791

Efficiency Three-Phase

Catalog #: 02512ST3QIE324TC-W22

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Performance	: 460 V 60) Hz 6P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 30.4 A : 6.0 : 110 ft.lb : 210 % : 250 % : 1175 rpm	Duty cyc Insulation Service f Tempera	n class actor	: 11.5 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
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THERMAL LIMIT CURVE

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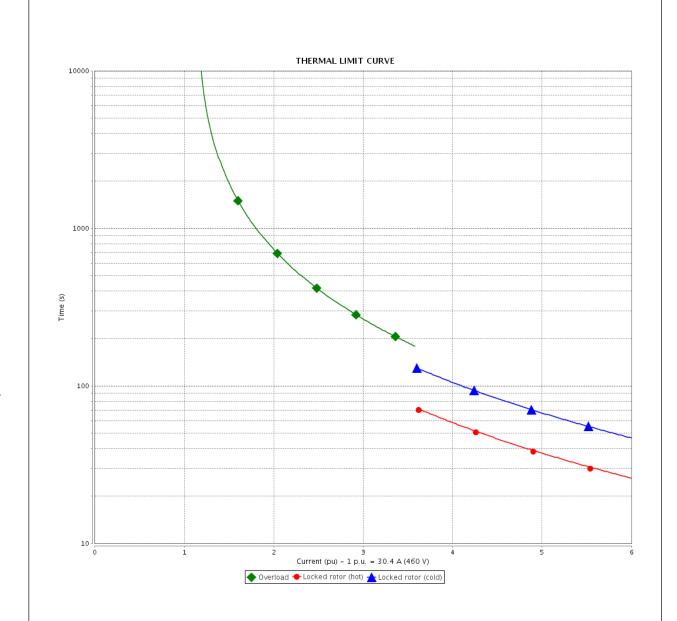
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Product line		W22 IEEE 841 NEMA Prem fficiency Three-Phase		Product code : Catalog # :	12447791 02512ST3QIE	324TC-W22
Performance Rated current		60 V 60 Hz 6P 0.4 A	Moment	f inertia (J)	: 11.5 sq.ft.lb	
LRC	: 6.	.0	Duty cycle	!	: Cont.(S1)	
Rated torque		: 110 ft.lb Insula		class	: F	
Locked rotor torque : 210 % Breakdown torque : 250 %			Service far Temperatu		: 1.25 : 80 K	
Breakdown torque : 250 % Rated speed : 1175 rpm			Design	116 11 3 6	: B	
Heating constan	t					
Cooling constant	<u> </u>					
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THERMAL LIMIT CURVE

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Customer : 02512ST3QIE324TC-W22



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VFD OPERATION CURVE

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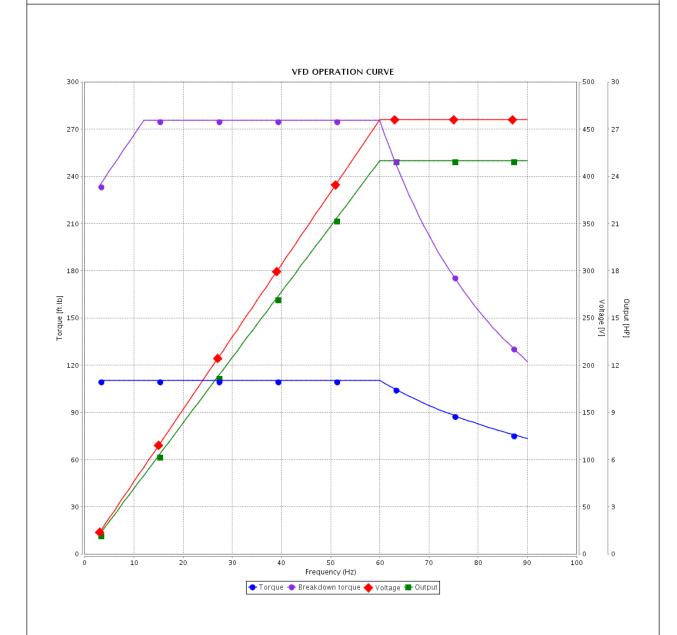
Customer : 02512ST3QIE324TC-W22

Product line : W22 IEEE 841 NEMA Premium Product code :

Efficiency Three-Phase

Catalog #: 02512ST3QIE324TC-W22

12447791



Performance : 460 V 60 Hz 6P : 30.4 A Moment of inertia (J) : 11.5 sq.ft.lb Rated current LRC : 6.0 Duty cycle : Cont.(S1) : 110 ft.lb Insulation class : F Rated torque Locked rotor torque : 210 % Service factor : 1.25 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1175 rpm Design : B

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