### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 12807285 Catalog #: 02518ET3V284T-W22G Frame : 284/6T Locked rotor time : 43s (cold) 24s (hot) Output : 25 HP (18.5 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 200/400 V : 1000 m.a.s.l. Altitude Rated current : 67.8/33.9 A Protection degree : IP55 L. R. Amperes : 421/210 A Cooling method : IC411 - TEFC LRC : 6.2x(Code G) Mounting : F-1 : 24.1/12.1 A No load current Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1765 rpm Noise level<sup>2</sup> : 63.0 dB(A) Starting method Slip : 1.94 % : Direct On Line Rated torque : 74.4 ft.lb Approx. weight<sup>3</sup> : 429 lb Locked rotor torque : 240 % Breakdown torque : 270 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 5.11 sq.ft.lb Design 25% 50% 75% 100% Output Foundation loads 93.6 : 661 lb Efficiency (%) 91.7 92.4 93.0 Max. traction Power Factor 0.70 0.80 0.84 : 1090 lb 0.46 Max. compression Non drive end Drive end Bearing type 6311 C3 6211 C3 V'Ring Sealing V'Ring 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



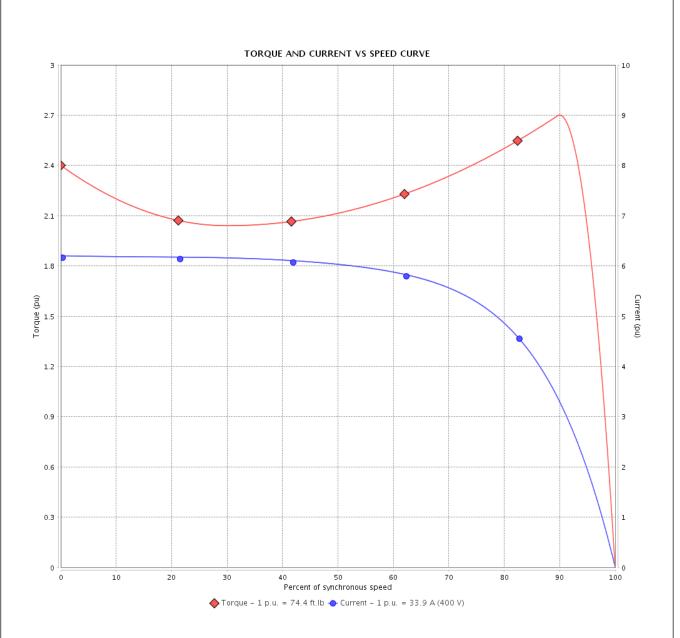
Customer :

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 02518ET3V284T-W22G

12807285



Performance : 200/400 V 60 Hz 4P Rated current : 67.8/33.9 A Moment of inertia (J) : 5.11 sq.ft.lb **LRC** : 6.2 Duty cycle : Cont.(S1) : 74.4 ft.lb Insulation class Rated torque : F : 240 % Locked rotor torque Service factor : 1.25 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B

Locked rotor time : 43s (cold) 24s (hot)

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## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage

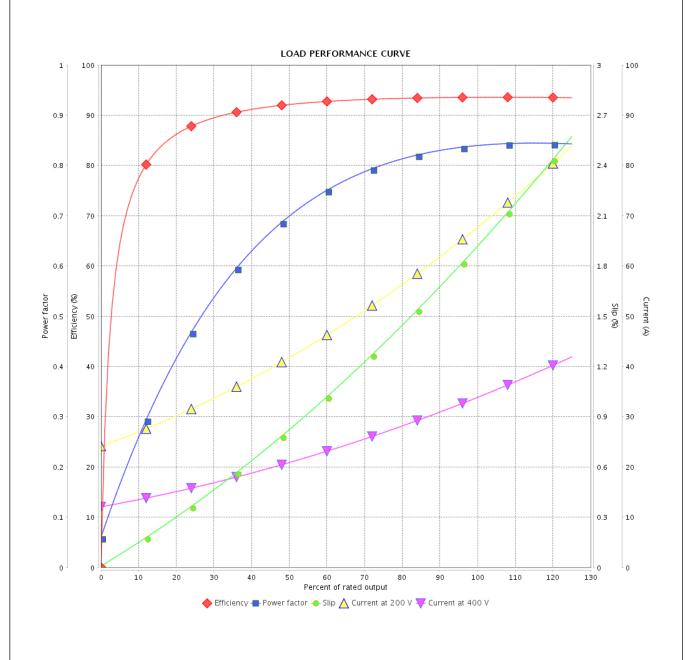


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12807285

Phase

Catalog #: 02518ET3V284T-W22G



Performance	:	200/400 V 60 Hz 4P				
Rated current	:	67.8/33.9 A	Moment o	f inertia (J)	: 5.11 sq.ft.lb	
LRC	:	: 6.2 Duty cyc : 74.4 ft.lb Insulatio			: Cont.(S1)	
Rated torque	:			class	: F	
Locked rotor torque	e :	240 %	Service fa	ctor	: 1.25	
Breakdown torque	:	: 270 %		Temperature rise Design		
Rated speed	ed speed : 1765 rpm  Rev. Changes Summary		Design			
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



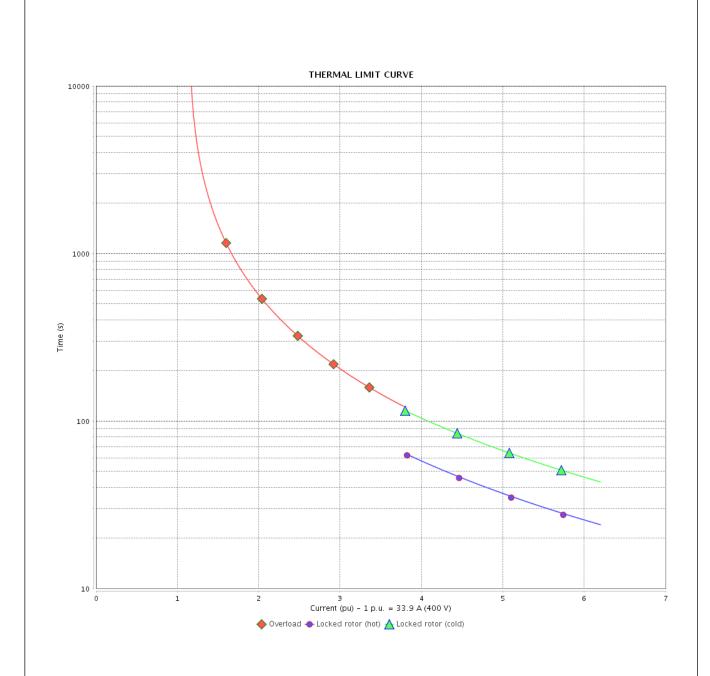
Customer		:					
Product line		: NEMA Premium Efficiency T		Product code :	12807285		
		Phase		Catalog # :	02518ET3V28	34T-W22G	
Performance	:	200/400 V 60 Hz 4P					
Rated current LRC Rated torque	:	67.8/33.9 A 6.2 74.4 ft.lb	Duty cycle Insulation	class	: 5.11 sq.ft.lb : Cont.(S1) : F		
Locked rotor torque Breakdown torque		240 % 270 % 1765 rpm	Service factor Temperature rise Design		: 1.25 : 80 K : 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



Customer :

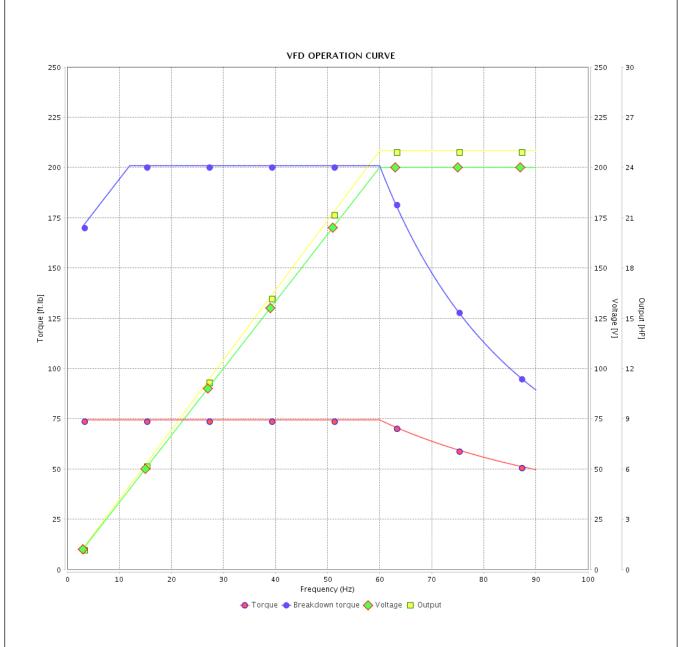
Product line : NEMA Premium Efficiency Three- Product of

Phase

Product code: 12807285

Catalog #: 02518ET3V284T-W22G

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Performance	:	: 200/400 V 60 Hz 4P						
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: que :	67.8/33.9 A 6.2 74.4 ft.lb 240 % 270 % 1765 rpm	Moment on Duty cycle Insulation Service fa Temperatu Design	class ctor	: 5.11 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B			
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14/04/2022

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