### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 NEMA Premium Efficiency Product code: 11416577 Three-Phase Catalog #: 00218ET3E145T-W22 Frame : 143/5T Locked rotor time : 19s (cold) 11s (hot) Output : 2 HP (1.5 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 230/460 V : 1000 m.a.s.l. Altitude Rated current : 5.52/2.76 A Protection degree : IP55 L. R. Amperes : 45.8/22.9 A Cooling method : IC411 - TEFC LRC : 8.3x(Code L) Mounting : F-1 No load current : 3.26/1.63 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1755 rpm Noise level<sup>2</sup> : 51.0 dB(A) Starting method Slip : 2.50 % : Direct On Line Rated torque : 5.98 ft.lb Approx. weight<sup>3</sup> : 50.0 lb Locked rotor torque : 270 % Breakdown torque : 320 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.1561 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 86.5 86.5 : 158 lb Efficiency (%) 85.2 85.5 Max. traction : 208 lb Power Factor 0.70 0.79 0.32 0.57 Max. compression Drive end Non drive end Bearing type 6205 ZZ

Sealing : V'Ring
Lubrication interval : Lubricant amount : Lubricant type :

6204 ZZ V'Ring

Mobil Polyrex EM

Notes

USABLE @208V 5.85A SF 1.15 SFA 6.73A

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



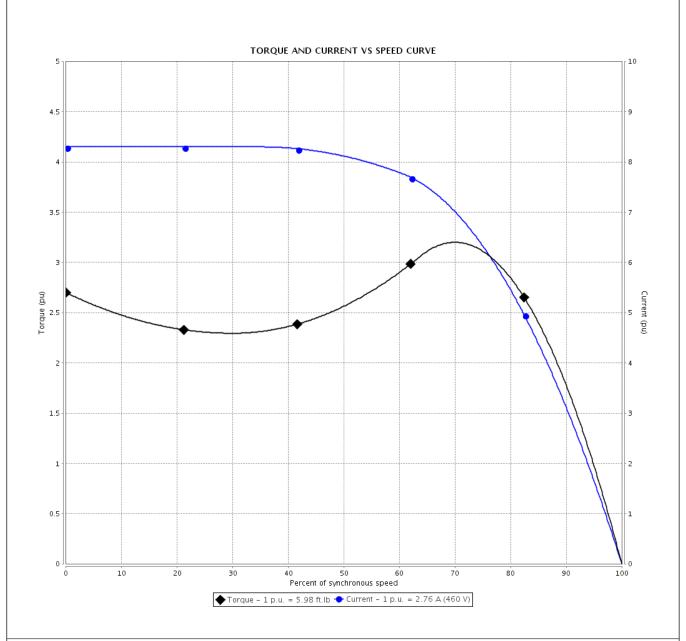
Customer :

Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 11416577

Catalog #: 00218ET3E145T-W22



Performance : 230/460 V 60 Hz 4P Rated current : 5.52/2.76 A Moment of inertia (J) : 0.1561 sq.ft.lb **LRC** : 8.3 Duty cycle : Cont.(S1) : F : 5.98 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 270 % : 1.25 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 1755 rpm Design : B

Locked rotor time : 19s (cold) 11s (hot)

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## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer

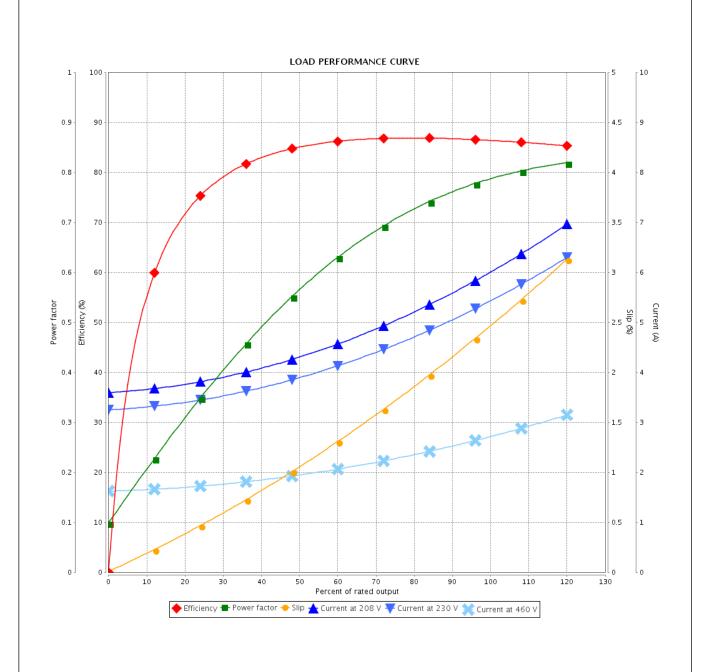
Product line : W22 NEMA Premium Efficiency Product code :

Three-Phase

Catalog #: 00218ET3E145T-W22

11416577

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Performance	: 230/460 V 60 Hz 4P						
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 5.52/2.76 A : 8.3 : 5.98 ft.lb : 270 % : 320 % : 1755 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1561 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B			
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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



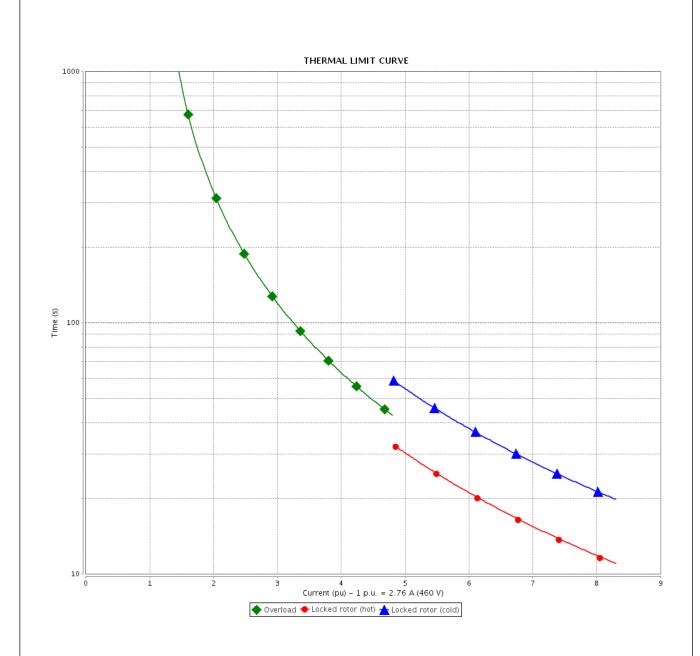
Customer	:					
Product line	: \ Ti	W22 NEMA Premium Efficie hree-Phase		Product code :	11416577 00218ET3E1	45T-W22
Performance	: 2:	30/460 V 60 Hz 4P				
Rated current LRC	: 5. : 8.	.52/2.76 A .3	Moment or Duty cycle	f inertia (J)	: 0.1561 sq.ft.l : Cont.(S1)	b
Rated torque Locked rotor torque	: 5.	.98 ft.lb 70 %	Insulation Service fa	class	: F : 1.25	
Breakdown torque Rated speed	: 32	70 % 20 % 755 rpm	Temperatu Design		: 80 K : B	
Heating constant	. 1	7 3 3 1 pm			. U	
Cooling 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 :

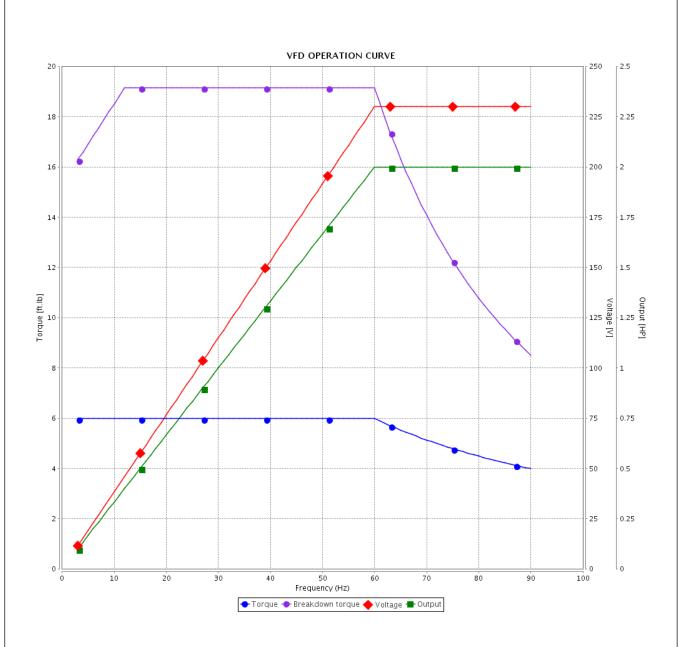
Product line : W22 NEMA Premium Efficiency

Three-Phase

Product code: 11416577

Catalog #: 00218ET3E145T-W22

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Performance	: 230/460 V 60 Hz 4P	: 230/460 V 60 Hz 4P							
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 5.52/2.76 A : 8.3 : 5.98 ft.lb : 270 % : 320 % : 1755 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1561 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B					
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Performed by Checked by				Page	Revision				

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Date

