### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 12700685 Catalog #: 02518ET3E284T-W22G Frame : 284/6T Cooling method : IC411 - TEFC Insulation class Mounting : F-1 Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line : 1000 m.a.s.l. Approx. weight3 Altitude : 408 lb : IP55 Protection degree Moment of inertia (J) Design : B Output [HP] 25 25 Poles 4 Frequency [Hz] 60 50 Rated voltage [V] 208-230/460 380 Rated current [A] 65.2-59.0/29.5 35.6 L. R. Amperes [A] 404-366/183 174 LRC [A] 6.2x(Code G) 4.9x(Code E) No load current [A] 18.1-21.0/10.5 10.4 Rated speed [RPM] 1765 1445 Slip [%] 1.94 3.67 Rated torque [ft.lb] 74.4 90.9 Locked rotor torque [%] 240 180 Breakdown torque [%] 270 210 Service factor 1.25 1.00 Temperature rise 80 K 80 K Locked rotor time 43s (cold) 24s (hot) 32s (cold) 18s (hot) Noise level<sup>2</sup> 64.0 dB(A) 61.0 dB(A) 25% 0.000 0.000 50% 92.4 92.4 Efficiency (%) 75% 93.0 91.7 100% 91.7 93.6 25% 0.00 0.00 50% 0.70 0.76 Power Factor 75% 0.80 0.84 100% 0.84 0.86 Drive end Non drive end Foundation loads Bearing type 6211 C3 6311 C3 Max. traction : 628 lb Sealing V'Ring V'Ring Max. compression : 1036 lb 20000 h Lubrication interval 20000 h Lubricant amount 18 g 11 g Mobil Polyrex EM Lubricant type 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

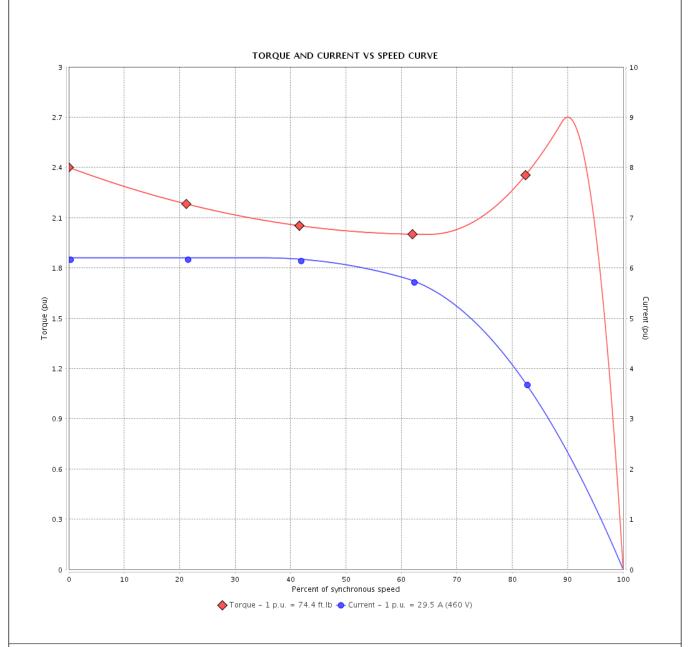


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12700685

Phase

Catalog #: 02518ET3E284T-W22G



 Performance
 : 208-230/460 V 60 Hz 4P

 Rated current
 : 65.2-59.0/29.5 A
 Moment of inertia (J)

 LRC
 : 6.2
 Duty cycle
 : Cont.(S1)

 Rated torque
 : 74.4 ft.lb
 Insulation class
 : F

Locked rotor torque : 240 % 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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### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage

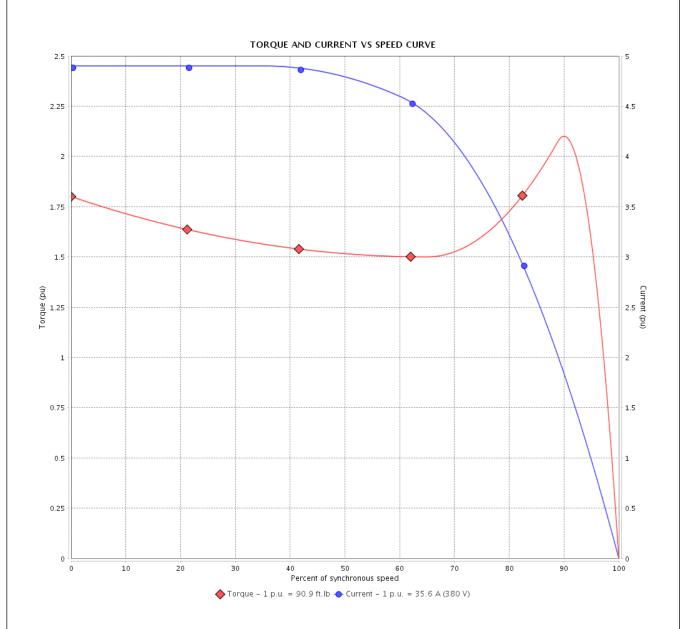


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12700685

Phase

Catalog #: 02518ET3E284T-W22G



Performance : 380 V 50 Hz 4P Rated current : 35.6 A Moment of inertia (J) **LRC** : 4.9 Duty cycle : Cont.(S1) Rated torque : 90.9 ft.lb Insulation class : F : 180 % Service factor : 1.00 Locked rotor torque : 80 K Breakdown torque : 210 % Temperature rise : B Rated speed : 1445 rpm Design

Locked rotor time : 32s (cold) 18s (hot)

Lockou rotor tim		20 (0014) 100 (1101)			
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## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



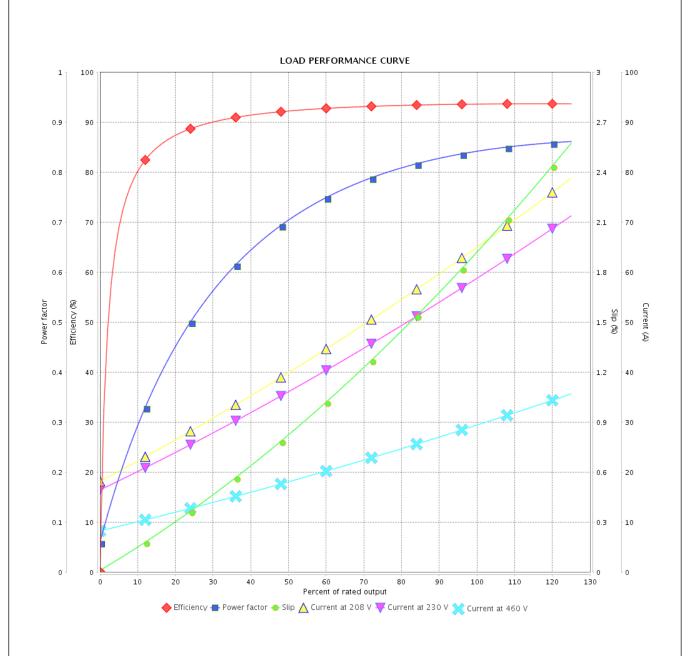
Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12700685

Phase

Catalog #: 02518ET3E284T-W22G

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Performance	: 208-230/460 V 60 Hz 4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 6.2 Duty cycle orque : 74.4 ft.lb Insulation class rotor torque : 240 % Service factor own torque : 270 % Temperature rise		Duty cycle : Cont.(S1) Insulation class : F Service factor : 1.25 Temperature rise : 80 K	
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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



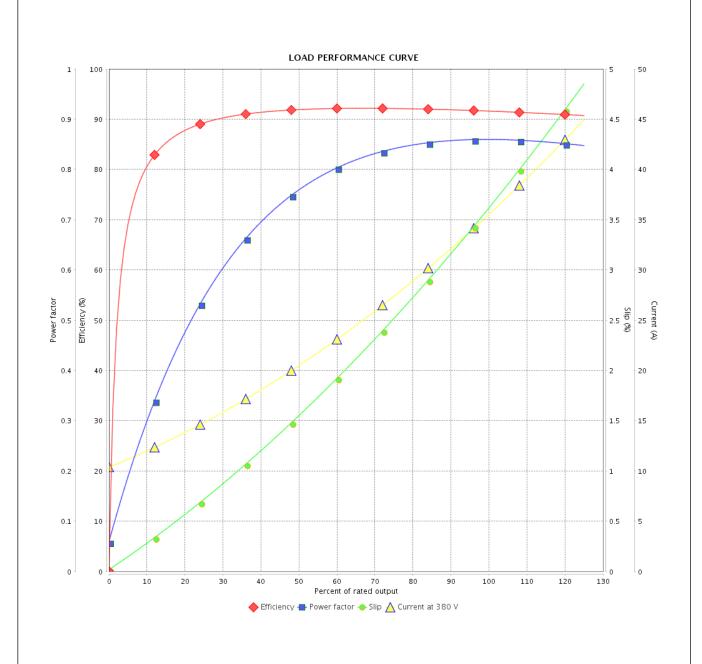
Customer

Product line : NEMA Premium Efficiency Three- Product code : 12700685

Phase

Catalog #: 02518ET3E284T-W22G

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Performance	: 380 V 50 Hz 4P				
Rated current : 35.6 A		Moment of inertia (J)			
LRC	: 4.9	Duty cycle		: Cont.(S1)	
Rated torque	: 90.9 ft.lb	Insulation class		:F	
Locked rotor torque	: 180 %	Service factor		: 1.00	
Breakdown torque	: 210 %	Temperature rise		: 80 K	
Rated speed	: 1445 rpm	Design		: B	
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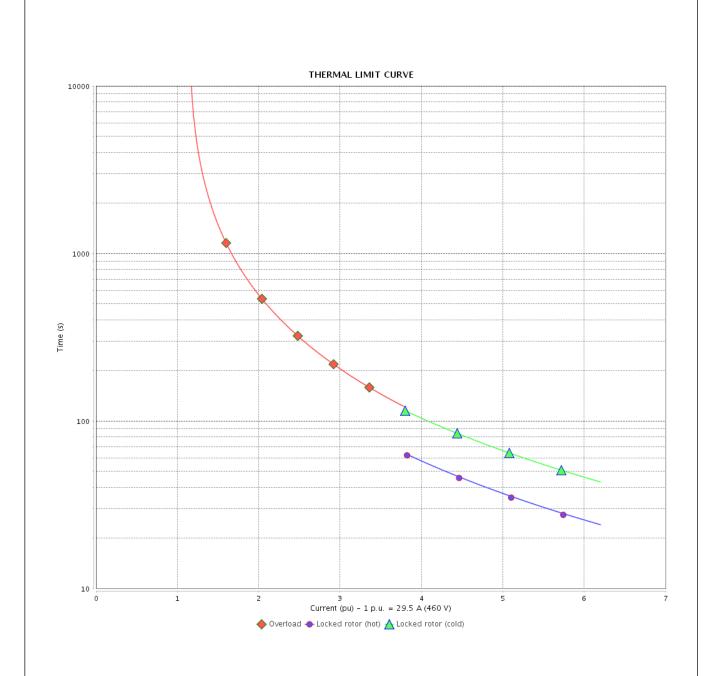


Customer	:			
Product line	: NEMA Premium Efficiency Phase	Three- Product code : Catalog #:	12700685 02518ET3E2	284T-W22G
Performance	: 208-230/460 V 60 Hz 4P			
Rated current	: 65.2-59.0/29.5 A	Moment of inertia (J)		
₋RC Rated torque	: 6.2 : 74.4 ft.lb	Duty cycle Insulation class	: Cont.(S1) : F	
ocked rotor torque	: 240 %	Service factor	: 1.25	
Breakdown torque Rated speed	: 270 % : 1765 rpm	Temperature rise Design	: 80 K : B	
Heating constant				
Cooling constant				
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### Three Phase Induction Motor - Squirrel Cage



Customer



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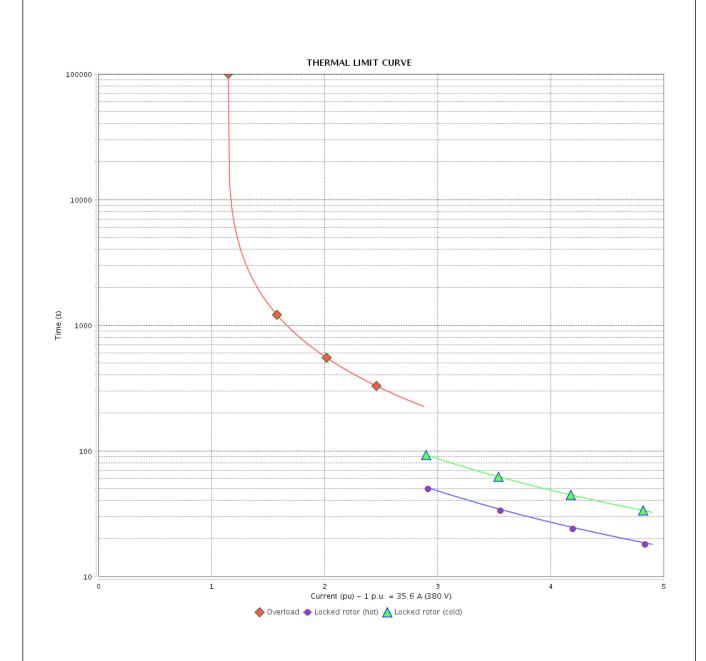


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Product line		NEMA Premium Efficiency hase	Three-	Product code :	12700685	
	Pi	nase	1	Catalog # :	02518ET3E2	84T-W22G
Performance		80 V 50 Hz 4P	1			
Rated current LRC	: 35 : 4.	5.6 A 9	Moment o Duty cycle	f inertia (J)	: Cont.(S1)	
Rated torque	: 90	0.9 ft.lb	Insulation	class	: F	
Locked rotor torque Breakdown torque		30 % 10 %	Service fa Temperatu		: 1.00 : 80 K	
Rated speed		145 rpm	Design		: B	
Heating constant						
Cooling constant		Changes Comme		Derf	Ohl !	D-1-
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### Three Phase Induction Motor - Squirrel Cage



Customer



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## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



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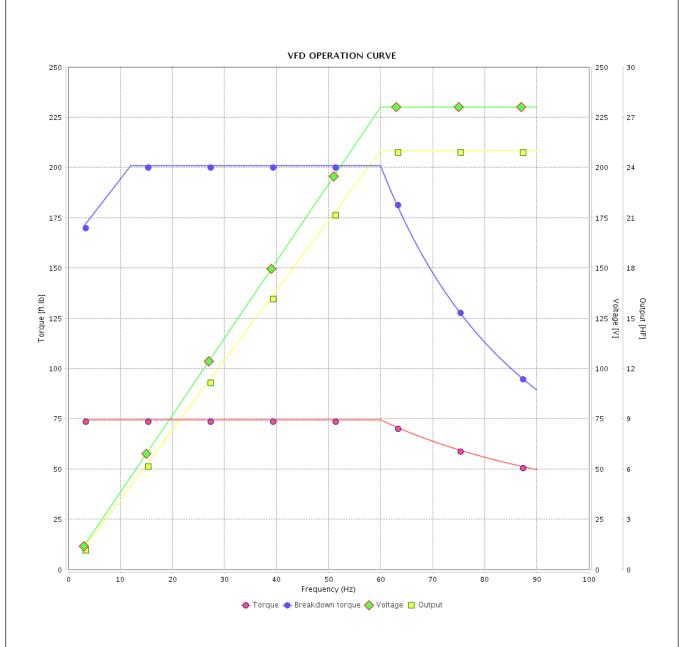
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Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G



Performance : 208-230/460 V 60 Hz 4P Rated current : 65.2-59.0/29.5 A Moment of inertia (J) **LRC** Duty cycle : Cont.(S1) : 6.2 : 74.4 ft.lb Insulation class : F Rated torque Locked rotor torque : 240 % Service factor : 1.25 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

## VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer

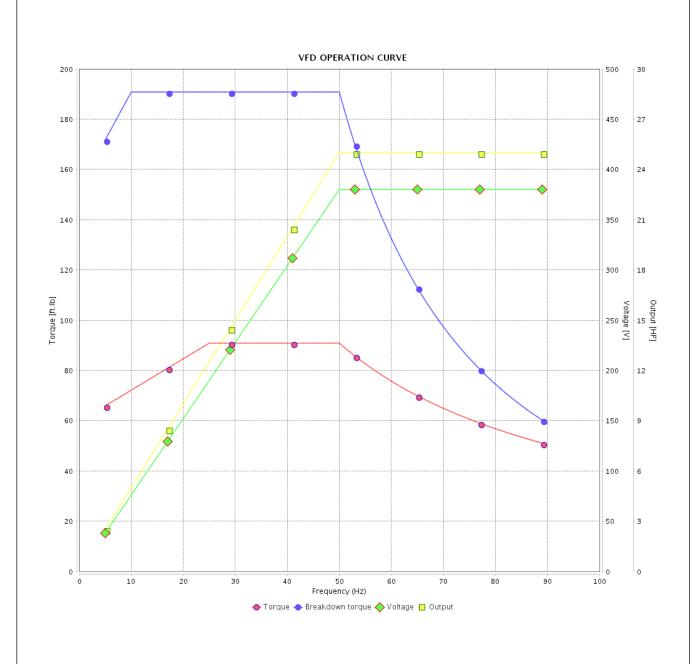
Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 12700685

Catalog #: 02518ET3E284T-W22G

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Performance	: 380 V 50 Hz 4P				
Rated current	: 35.6 A	Moment of inertia (J)			
LRC	: 4.9	Duty cycle :		: Cont.(S1)	
Rated torque : 90.9 ft.lb		Insulation class : F		: F	
Locked rotor torque	: 180 %	Service factor		: 1.00	
Breakdown torque	: 210 %	Temperature rise		: 80 K	
Rated speed	: 1445 rpm	Design		: B	
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