### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 11434630 Catalog #: 15018ST3HIE445T-W22 Frame : 444/5T Locked rotor time : 48s (cold) 27s (hot) Output : 150 HP (110 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 : 136 A Protection degree : IP55 L. R. Amperes : 898 A Cooling method : IC411 - TEFC LRC : 6.6x(Code G) Mounting : F-1 No load current : 46.4 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1780 rpm Noise level<sup>2</sup> : 73.0 dB(A) Starting method Slip : 1.11 % : Direct On Line Rated torque : 443 ft.lb Approx. weight<sup>3</sup> : 1856 lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 66.7 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 95.8 : 2021 lb Efficiency (%) 95.3 95.4 95.8 Max. traction Power Factor 0.74 0.82 0.85 0.49 Max. compression : 3877 lb Non drive end Drive end Bearing type 6319 C3 6316 C3 Inpro/Seal Sealing Inpro/Seal Lubrication interval 8000 h 10000 h Lubricant amount 45 g 34 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.

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			1/6	

### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



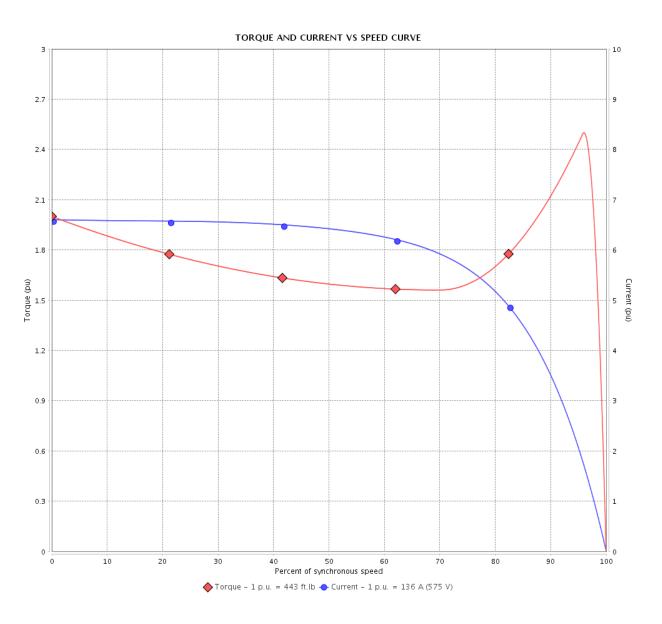
Customer :

Product line : NEMA Premium Efficiency Three- Produ

Phase

Product code: 11434630

Catalog #: 15018ST3HIE445T-W22



Performance : 575 V 60 Hz 4P Rated current : 136 A Moment of inertia (J) : 66.7 sq.ft.lb **LRC** : 6.6 Duty cycle : Cont.(S1) Insulation class Rated torque : 443 ft.lb : F Service factor Locked rotor torque : 200 % : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B

Locked rotor time : 48s (cold) 27s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			2/6	

## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



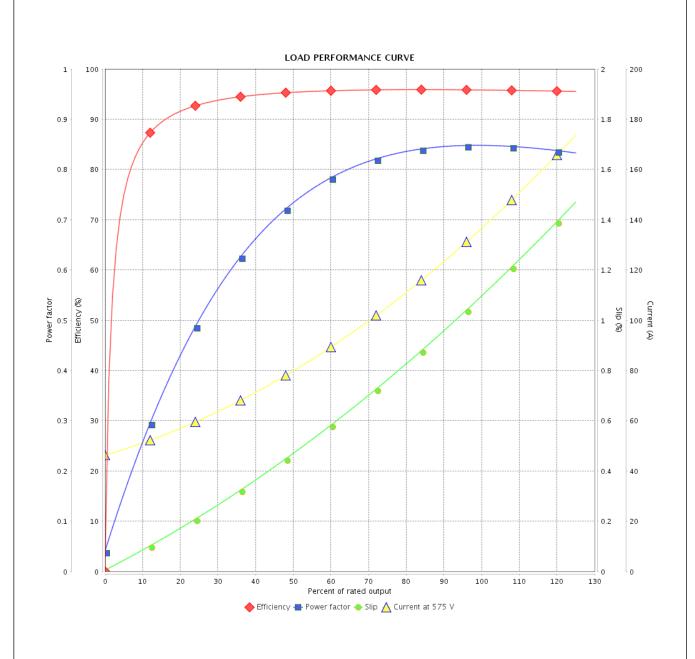
Customer

Product line : NEMA Premium Efficiency Three- Product code : 11434630

Phase

Catalog #: 15018ST3HIE445T-W22

3/6



Performance	: 575 V 60 Hz 4P				
Rated current LRC Rated torque Locked rotor torqu Breakdown torque Rated speed		Moment of inerti Duty cycle Insulation class Service factor Temperature rise Design	. ,	: 66.7 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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13/04/2022

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# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



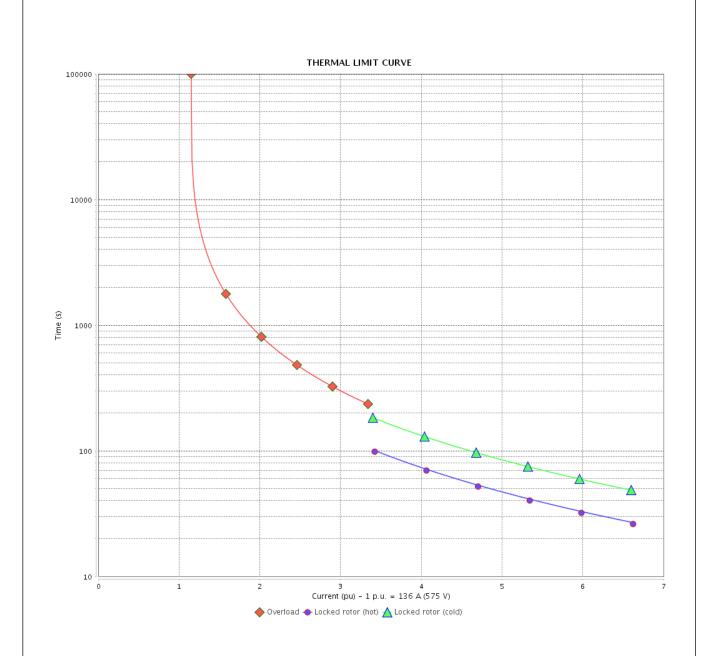
Customer	:				
Product line	: NEMA Premium Efficiency Phase		Product code : Catalog # :	11434630 15018ST3HI	E445T-W22
Performance Rated current LRC Rated torque Locked rotor torque Breakdown torque	: 575 V 60 Hz 4P : 136 A : 6.6 : 443 ft.lb : 200 % : 250 %	Moment of Duty cycle Insulation Service fa	class actor	: 66.7 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
Rated speed Heating constant	: 1780 rpm	Design		: B	
Cooling constant  Rev.	Changes Summary		Performed	Checked	Date
Performed by Checked by Date 13/04/20	22			Page	Revision

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			5/6	

## VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

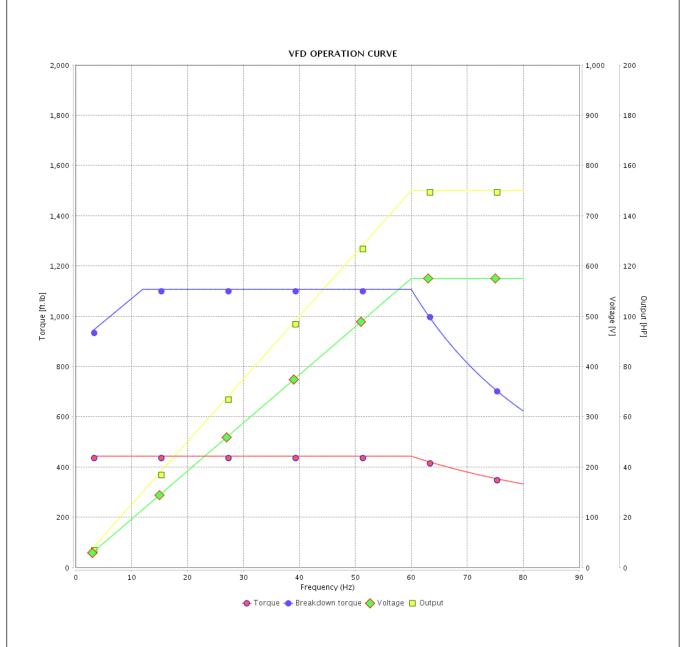
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog # : 15018ST3HIE445T-W22

6/6

11434630



Performance	: 575 V 60 Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 136 A : 6.6 : 443 ft.lb : 200 % : 250 % : 1780 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 66.7 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

13/04/2022

Date

