DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14407016

Phase

Catalog #: 01012XT3E256T

Frame : 256T Cooling method : IC411 - TEFC

Insulation class : F Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW)

Ambient temperature : -20°C to +40°C Starting method : Direct On Line

Altitude : 1000 m.a.s.l. Approx. weight³ : 366 lb

Protection degree : IP55 Moment of inertia (J) : 4.15 sq ft lb

Protection degre	е	: IP55	Moment of ine	Moment of inertia (J) : 4.15 sq.ft.lb		
Design		: B				
Output [HP]		10	10	10	10	
Poles		6	6	6	6	
Frequency [Hz]		60	50	50	50	
Rated voltage [V]		230/460	380	400	415	
Rated current [A]		26.6/13.3	16.1	15.3	14.8	
L. R. Amperes [A]		192/95.8	86.9	91.8	96.2	
LRC [A]		7.2x(Code J)	5.4x(Code G)	6.0x(Code H)	6.5x(Code J)	
No load current [A	.]	13.2/6.60	6.20	6.60	6.90	
Rated speed [RPN	Л]	1175	955	960	965	
Slip [%]	Slip [%]		4.50	4.00	3.50	
Rated torque [ft.lb]	Rated torque [ft.lb]		54.4	54.1	53.9	
Locked rotor torqu	Locked rotor torque [%]		175	200	220	
Breakdown torque	Breakdown torque [%]		220	240	260	
Service factor		1.15	1.00	1.00 1.00		
Temperature rise		80 K	80 K	80 K	80 K	
Locked rotor time		46s (cold) 26s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²		59.0 dB(A)	57.0 dB(A)	57.0 dB(A)	57.0 dB(A)	
	25%	88.6	90.2	90.1	89.2	
Efficiency (%)	50%	89.5	89.5	89.5	89.5	
Efficiency (70)	75%	90.2	88.5	89.5	89.5	
	100%	91.0	87.5	88.5	89.5	
	25%	0.35	0.41	0.38	0.36	
Power Factor	50%	0.60	0.67	0.63	0.61	
FUWEI FACIOI	75%	0.70	0.72	0.70	0.68	
	100%	0.78	0.81	0.80	0.79	

<u>Drive end</u> <u>Non drive end</u> Foundation loads

Bearing type : 6309 C3 6209 C3 Max. traction : 496 lb Sealing : Oil Seal Lip Seal Max. compression : 861 lb

20000 h

Lubricant amount : 13 g 9 g Lubricant type : Mobil Polyrex EM

20000 h

Notes

Lubrication interval

USABLE @208V 29.4A SF 1.15 SFA 33.8A

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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Customer	
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Thermal protection

		•		
ID	Application	Туре	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14407016 Catalog #: 01012XT3E256T TORQUE AND CURRENT VS SPEED CURVE 4.5 Torque (pu) 40 50 -Percent of synchronous speed ◆ Torque - 1 p.u. = 44.7 ft.lb ◆ Current - 1 p.u. = 13.3 A (460 V)

Performance	: 230/460 V 60 Hz 6P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 26.6/13.3 A : 7.2 : 44.7 ft.lb : 270 % : 310 % : 1175 rpm	Moment of industry cycle Insulation cla Service facto Temperature Design	ss r	: 4.15 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
Locked rotor time	: 46s (cold) 26s (hot)				
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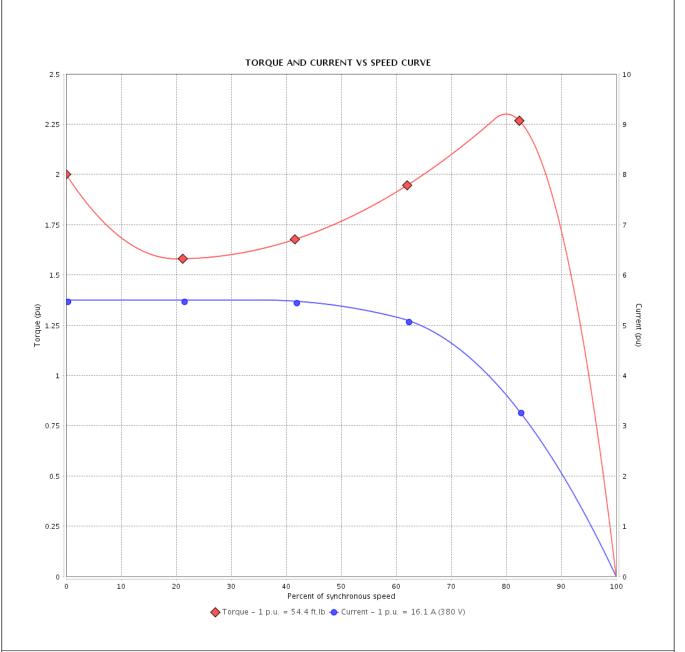
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #:

14407016

01012XT3E256T



Performance	: 380 V 50 Hz 6P IE2		
Rated current LRC	: 16.1 A : 5.4	Moment of inertia (J) Duty cycle	: 4.15 sq.ft.lb : Cont.(S1)
Rated torque	: 54.4 ft.lb	Insulation class	: F
Locked rotor torque	: 175 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 955 rpm	Design	: B
Looked roter time	: 22a (aald) 19a (hat)		

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

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14407016 Catalog #: 01012XT3E256T TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Torque (pu) 1.2 0.6 0.3 Percent of synchronous speed ◆ Torque - 1 p.u. = 54.1 ft.lb ◆ Current - 1 p.u. = 15.3 A (400 V) Performance : 400 V 50 Hz 6P IE2 Rated current : 15.3 A Moment of inertia (J) : 4.15 sq.ft.lb **LRC** : 6.0 Duty cycle : Cont.(S1) : 54.1 ft.lb Insulation class Rated torque : F : 200 % Locked rotor torque Service factor : 1.00 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 960 rpm Design : B Locked rotor time : 32s (cold) 18s (hot) Rev. Performed Checked Date **Changes Summary**

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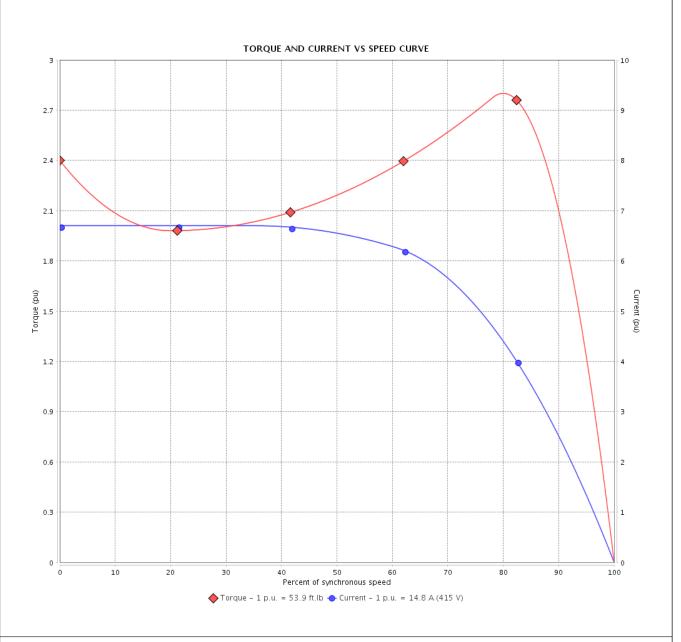
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14407016

Catalog #: 01012XT3E256T



Performance : 415 V 50 Hz 6P IE3 Rated current : 14.8 A Moment of inertia (J) : 4.15 sq.ft.lb **LRC** : 6.5 Duty cycle : Cont.(S1) Insulation class Rated torque : 53.9 ft.lb : F Service factor Locked rotor torque : 220 % : 1.00 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 965 rpm Design : B

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

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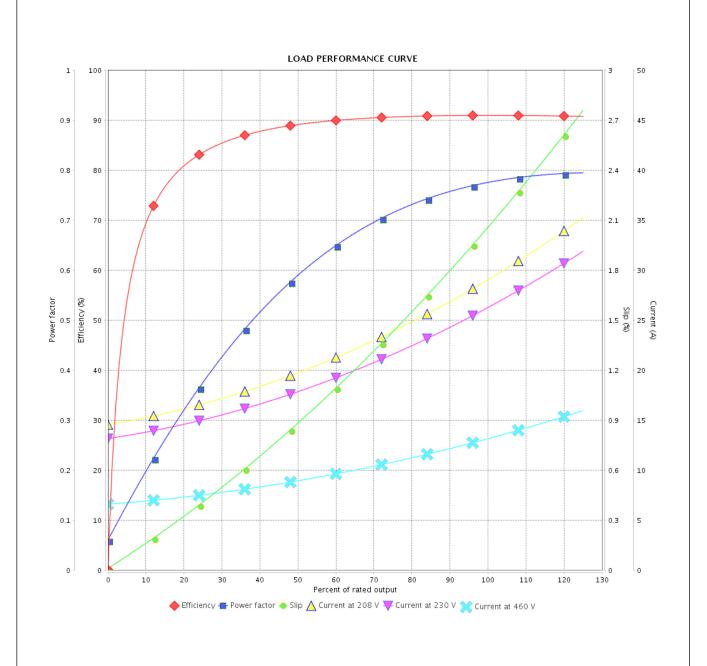
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14407016

Catalog #: 01012XT3E256T



Performance	: 2	230/460 V 60 Hz 6P				
Rated current		26.6/13.3 A	Moment o	f inertia (J)	: 4.15 sq.ft.lb	
LRC	: 7	7.2	Duty cycle)	: Cont.(S1)	
Rated torque	: 4	14.7 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie : 2	270 %	Service fa	ctor	: 1.15	
Breakdown torque	: 3	310 %	Temperati	ıre rise	: 80 K	
Rated speed	: 1	1175 rpm	Design		: B	
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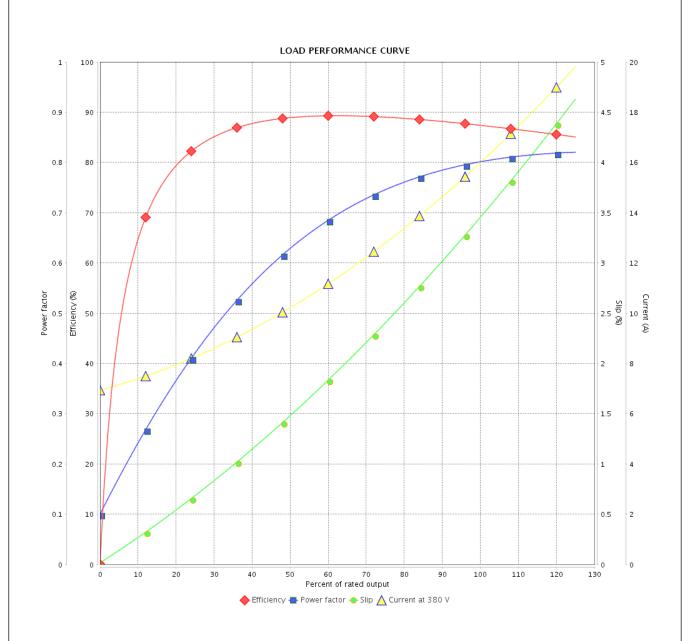
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Performance	: 380 V 50 Hz 6P IE2				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 16.1 A : 5.4 : 54.4 ft.lb : 175 % : 220 % : 955 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 4.15 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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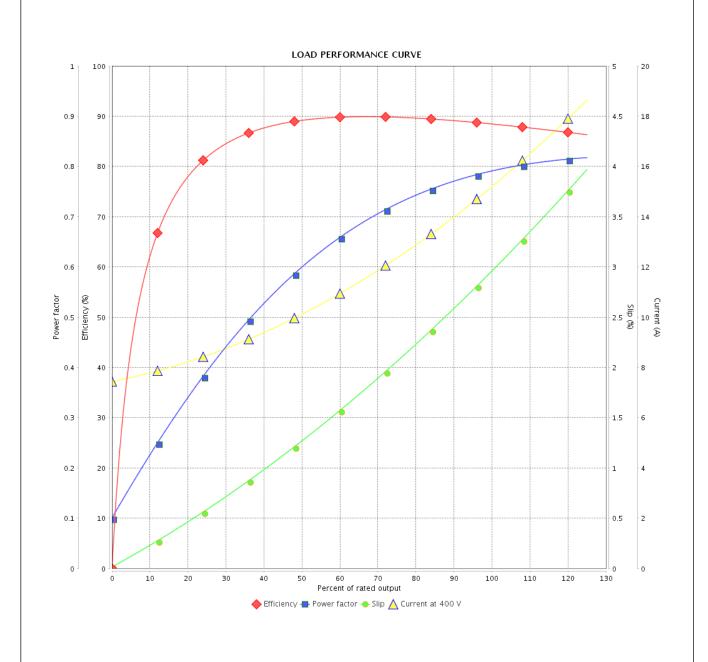


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Product line : NEMA Premium Efficiency Three- Product code : 14407016

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Performance	: 40	00 V 50 Hz 6P IE2				
Rated current LRC Rated torque Locked rotor torque	: 6. : 5. ue : 2.	5.3 A .0 4.1 ft.lb 00 % 40 %	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor		
Breakdown torque Rated speed		40 % 60 rpm	Temperature rise Design		: 80 K : B	
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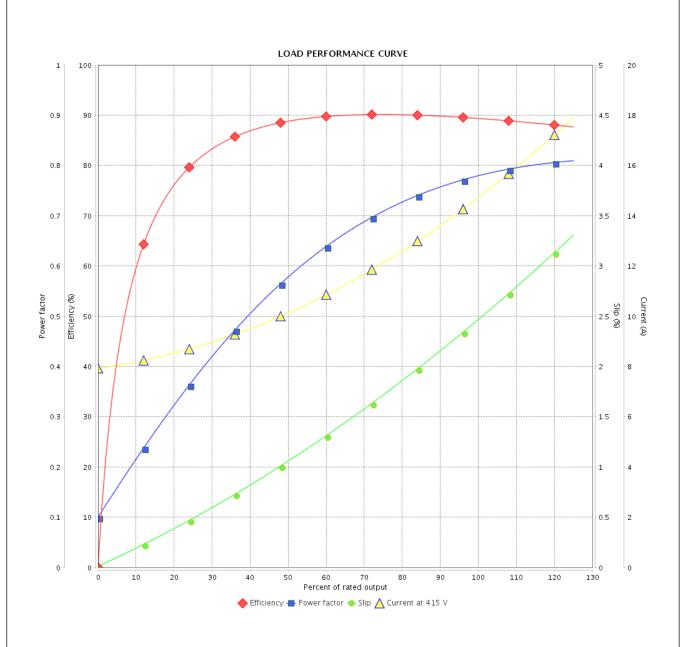
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Product line : NEMA Premium Efficiency Three- Product c

Phase

Product code: 14407016

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Performance : 415 V 50 Hz 6P IE3					
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 14.8 A : 6.5 : 53.9 ft.lb : 220 % : 260 % : 965 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 4.15 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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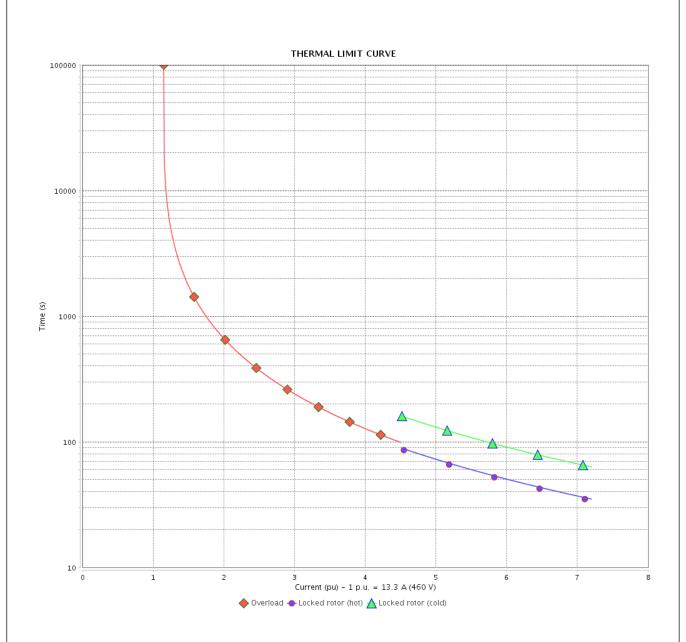


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Product line		NEMA Premium Efficiency hase	Three-	Product code :	14407016	
				Catalog # :	01012XT3E2	256T
Performance		30/460 V 60 Hz 6P				
Rated current		6.6/13.3 A	Moment of	of inertia (J)	: 4.15 sq.ft.lb	
LRC Rated torque	: 7. : 44	.2 4.7 ft.lb	Duty cycle Insulation	e Lclass	: Cont.(S1) : F	
Locked rotor tord		70 %	Service fa		: 1.15	
Breakdown torqu	ue : 3°	10 %	Temperat		: 80 K	
Rated speed	: 11	175 rpm	Design		: B	
Heating constan						
Cooling constant						
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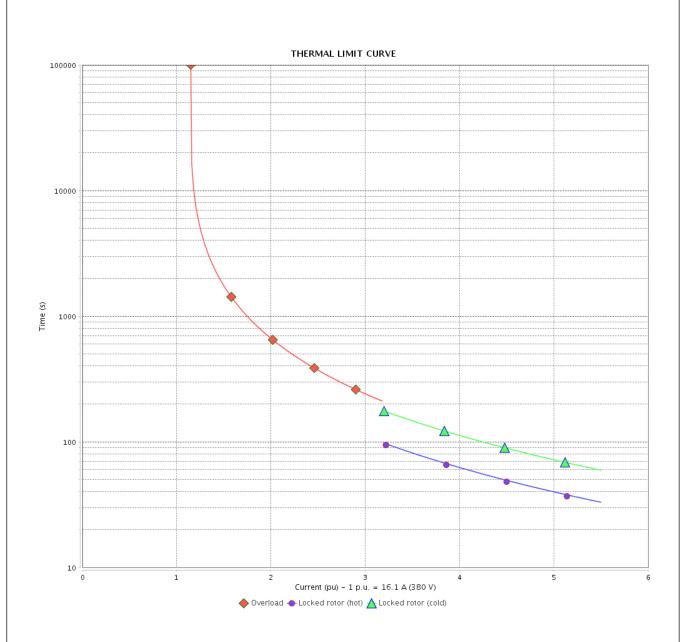


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Product line		NEMA Premium Efficiency ⁻ hase	Three-	Product code :	14407016	
				Catalog # :	01012XT3E2	:56T
Performance	: 38	80 V 50 Hz 6P IE2				
Rated current LRC Rated torque Locked rotor torc	: 16 : 5. : 54	6.1 A	Moment of Duty cycle Insulation Service fa	class	: 4.15 sq.ft.lb : Cont.(S1) : F : 1.00	
Breakdown torqu Rated speed	ie : 22	20 % 55 rpm	Temperat Design		: 80 K : B	
Heating constant						
Cooling constant						
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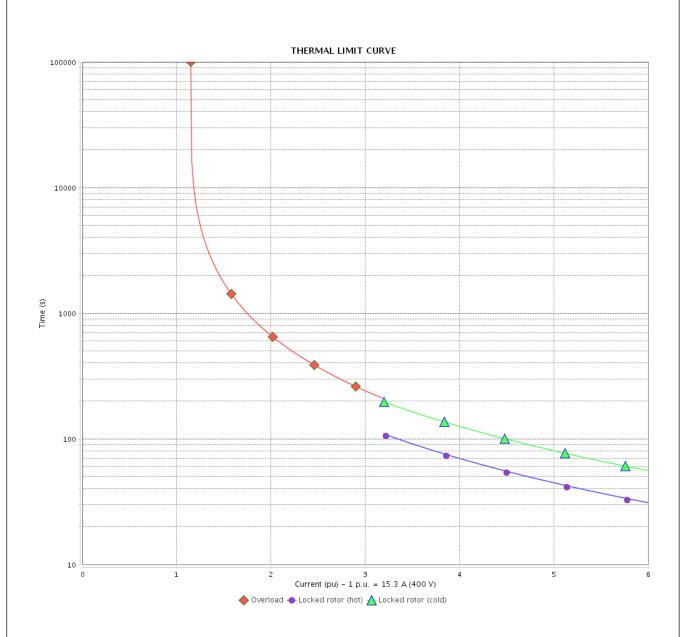


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Product line	:	: NEMA Premium Efficiency Three-		Product code :	14407016	
	Р	hase		Catalog # :	01012XT3E2	256T
Performance Rated current LRC Rated torque Locked rotor torque Rated speed	: 1 : 6 : 5- jue : 2 ie : 2	00 V 50 Hz 6P IE2 5.3 A .0 4.1 ft.lb 00 % 40 % 60 rpm	Moment of Duty cycle Insulation Service fa Temperat Design	class actor	: 4.15 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Heating constant						
Cooling constant		Changas Cummani		Dorform	Charked	Data
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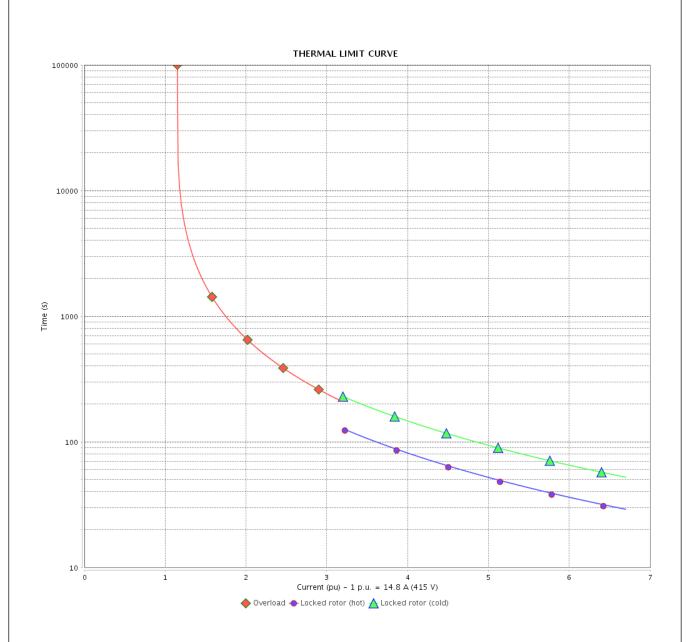


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Product line		NEMA Premium Efficiency	Three-	Product code :	14407016	
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				Catalog # :	01012XT3E2	256T
Performance	: 4	15 V 50 Hz 6P IE3				
Rated current	: 1	4.8 A	Moment o	of inertia (J)	: 4.15 sq.ft.lb	
LRC	: 6	.5	Duty cycle	Э	: Cont.(S1)	
Rated torque		3.9 ft.lb	Insulation		: F	
Locked rotor tord Breakdown torqu		20 % 60 %	Service fa Temperati		: 1.00 : 80 K	
Rated speed		65 rpm	Design	uic iisc	: B	
		•				
Heating constant Cooling constant						
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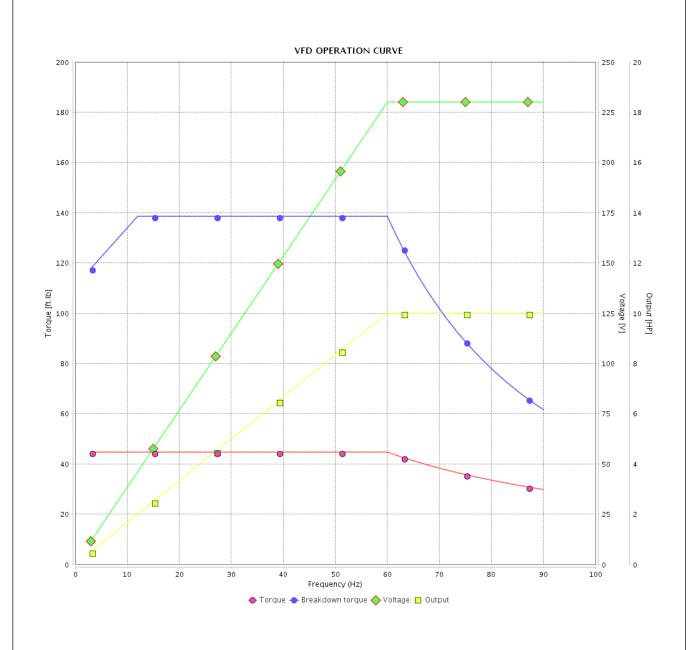


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14407016

Phase

Catalog #: 01012XT3E256T



Performance : 230/460 V 60 Hz 6P : 26.6/13.3 A Rated current Moment of inertia (J) : 4.15 sq.ft.lb **LRC** : 7.2 Duty cycle : Cont.(S1) : 44.7 ft.lb Insulation class : F Rated torque Locked rotor torque : 270 % Service factor : 1.15 Breakdown torque : 310 % Temperature rise : 80 K Rated speed : 1175 rpm Design : B Rev. Performed Checked Date **Changes Summary** Р

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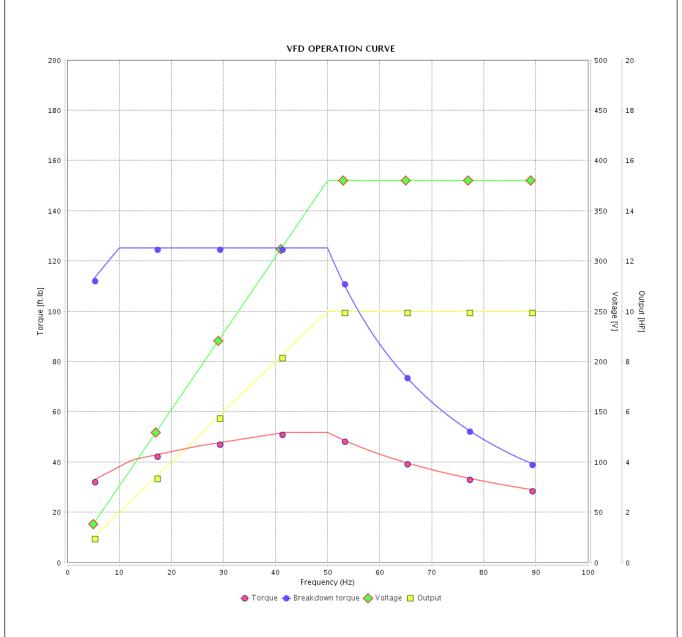
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Product code: 14407016

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Performance : 380 V 50 Hz 6P IE2		880 V 50 Hz 6P IE2				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 5 : 5 jue : 1	16.1 A 5.4 54.4 ft.lb 175 % 220 % 955 rpm	Moment of Duty cycle Insulation Service fa Temperation	class ctor	: 4.15 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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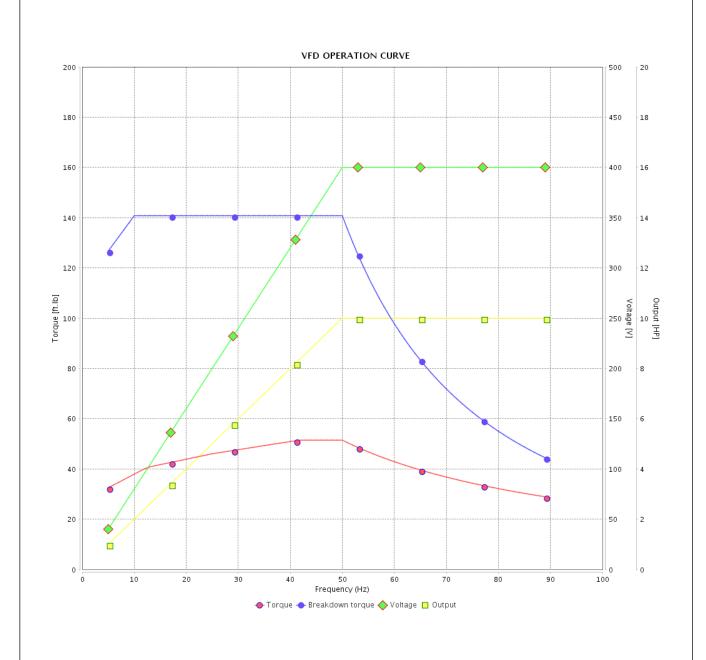
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: 400 V 50 HZ 6P IEZ	: 400 V 50 Hz 6P IE2			
: 15.3 A : 6.0 : 54.1 ft.lb : 200 % : 240 % : 960 rpm	Duty cycle Insulation Service fa	e class actor	: 4.15 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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	: 15.3 A : 6.0 : 54.1 ft.lb : 200 % : 240 % : 960 rpm	: 15.3 A	: 15.3 A : 6.0 : 54.1 ft.lb : 200 % : 240 % : 960 rpm Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 15.3 A Moment of inertia (J) : 4.15 sq.ft.lb : 6.0 Duty cycle : Cont.(S1) : 54.1 ft.lb Insulation class : F : 200 % Service factor : 1.00 : 240 % Temperature rise : 80 K : 960 rpm Design : B

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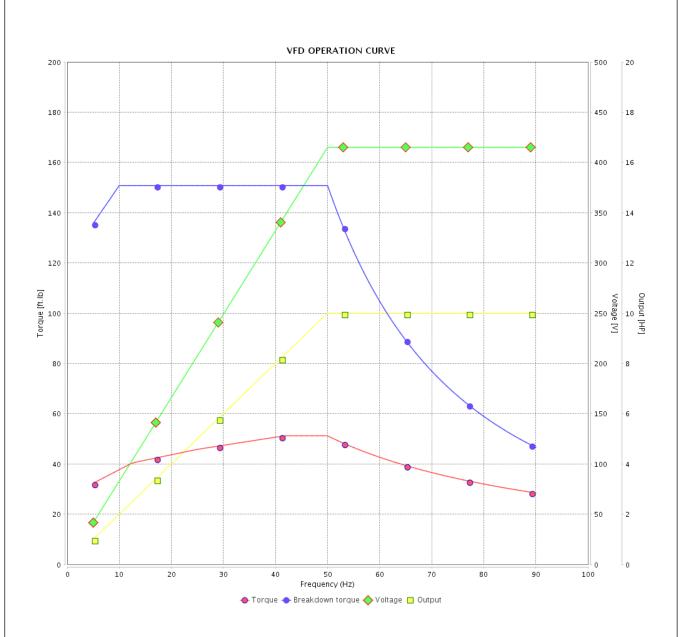
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Product code: 14407016

Catalog #: 01012XT3E256T



Performance : 415 V 50 Hz 6P IE3 : 14.8 A Rated current Moment of inertia (J) : 4.15 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.5 : 53.9 ft.lb Insulation class : F Rated torque Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 965 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

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