DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12866861

Phase

00112OT3E145T-SG Catalog #: Frame : 143/5T Cooling method : IC01 - ODP Insulation class 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 : 35.3 lb Design : B Moment of inertia (J) : 0.1419 sq.ft.lb Output [HP] 1 1 Poles 6 6 6 Frequency [Hz] 60 50 50 220/415 Rated voltage [V] 230/460 190/380 Rated current [A] 3.30/1.65 3.82/1.91 3.53/1.87 L. R. Amperes [A] 20.1/10.1 17.6/8.79 18.0/9.54 LRC [A] 6.1x(Code K) 4.6x(Code G) 5.1x(Code H) No load current [A] 2.26/1.13 2.22/1.11 2.27/1.20 Rated speed [RPM] 1150 920 930 Slip [%] 4.17 8.00 7.00 Rated torque [ft.lb] 4.57 5.71 5.65 Locked rotor torque [%] 250 190 220 Breakdown torque [%] 300 210 240 Service factor 1.00 1.00 105 K Temperature rise 80 K 105 K Locked rotor time 43s (cold) 24s (hot) 0s (cold) 0s (hot) 0s (cold) 0s (hot) Noise level² 50.0 dB(A) 47.0 dB(A) 47.0 dB(A) 25% 77.2 80.1 78.1 50% 78.5 78.8 77.7 Efficiency (%) 75% 81.5 79.5 79.4 100% 82.5 77.3 78.2 25% 0.26 0.31 0.28 50% 0.47 0.55 0.51 Power Factor 75% 0.60 0.69 0.65

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

Bearing type : 6205 ZZ 6203 ZZ Max. traction : 100 lb Sealing : Without Without Max. compression : 135 lb

Bearing Seal Bearing Seal

0.69

Lubrication interval : - - Lubricant amount : - Lubricant type : Mobil Polyrex EM

Lubricant type : Mobil Polyre

100%

Notes

USABLE @208V 3.65A SF 1.00 SFA 3.65A

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.

0.74

0.77

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



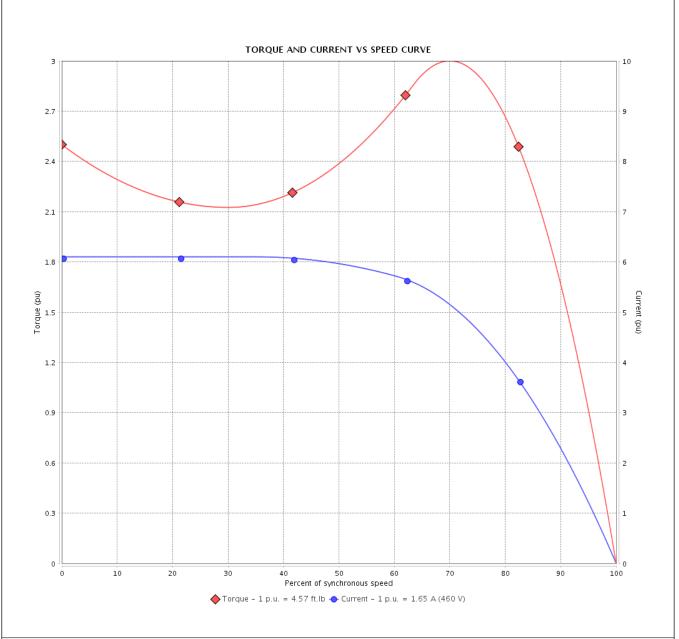
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12866861

Catalog #: 00112OT3E145T-SG



Performance : 230/460 V 60 Hz 6P Rated current : 3.30/1.65 A Moment of inertia (J) : 0.1419 sq.ft.lb **LRC** : 6.1 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 4.57 ft.lb Locked rotor torque : 250 % Service factor Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1150 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

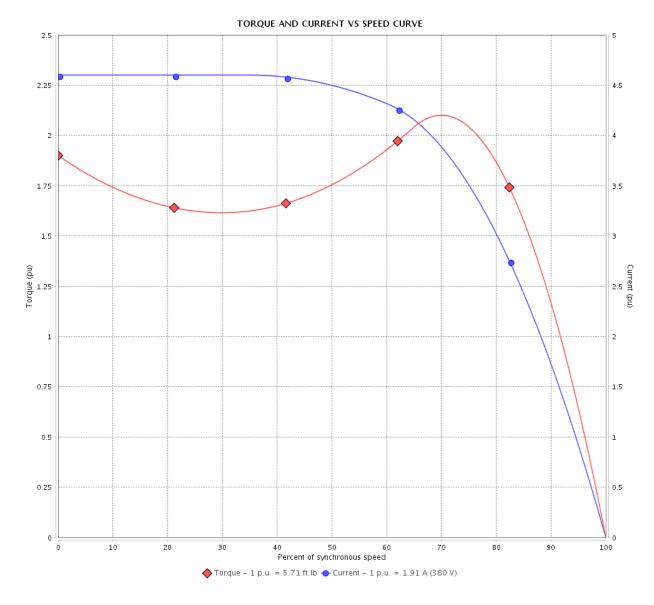


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12866861

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Catalog #: 00112OT3E145T-SG



Performance	: 190/380 V 50 Hz 6P		
Rated current	: 3.82/1.91 A	Moment of inertia (J)	: 0.1419 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 5.71 ft.lb	Insulation class	:F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 920 rpm	Design	: B
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Locked rotor time : 0s (cold) 0s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



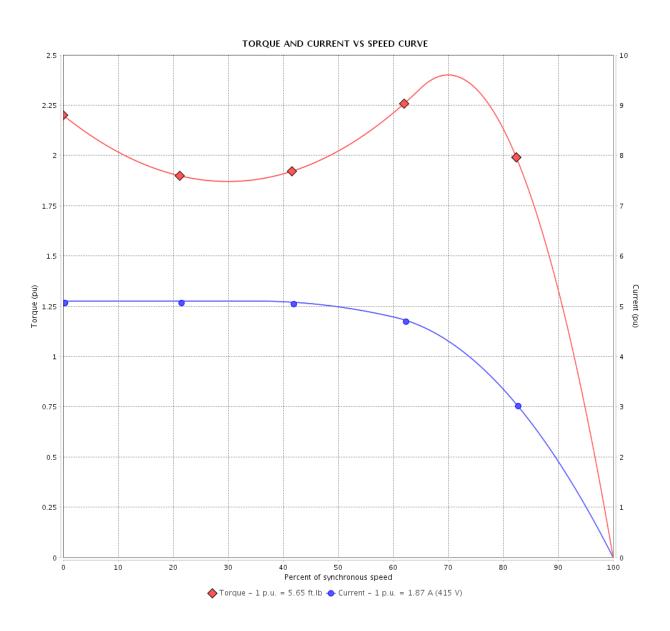
Customer :

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Product code: 12866861

Catalog #: 00112OT3E145T-SG



Performance : 220/415 V 50 Hz 6P Rated current : 3.53/1.87 A Moment of inertia (J) : 0.1419 sq.ft.lb **LRC** : 5.1 Duty cycle : Cont.(S1) Insulation class Rated torque : 5.65 ft.lb : F Service factor Locked rotor torque : 220 % : 1.00 Breakdown torque : 240 % Temperature rise : 105 K Rated speed : 930 rpm Design : B

Locked rotor time : 0s (cold) 0s (hot)

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LOAD PERFORMANCE CURVE

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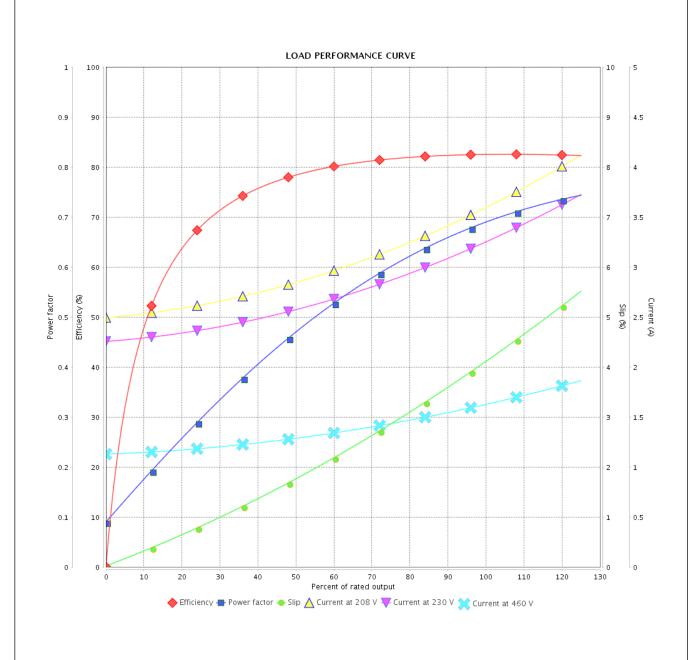


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12866861

Phase

Catalog #: 00112OT3E145T-SG



Performance	: 230/460 V 60 Hz 6P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 3.30/1.65 A : 6.1 : 4.57 ft.lb : 250 % : 300 % : 1150 rpm	Moment of Duty cycle Insulation c Service fact Temperatur Design	lass tor	: 0.1419 sq.ft. : Cont.(S1) : F : : 80 K : B	lb
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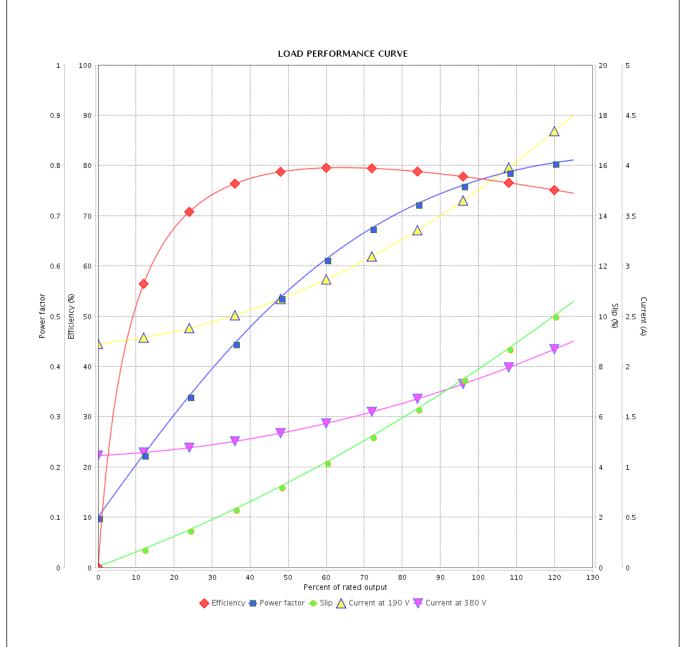
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Product line : NEMA Premium Efficiency Three- Pr

Phase

Product code: 12866861

Catalog #: 00112OT3E145T-SG



Performance : 190/380 V 50 Hz 6P : 3.82/1.91 A Rated current Moment of inertia (J) : 0.1419 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 4.6 : 5.71 ft.lb Insulation class Rated torque : F Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 210 % Temperature rise : 105 K Rated speed : 920 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

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Three Phase Induction Motor - Squirrel Cage

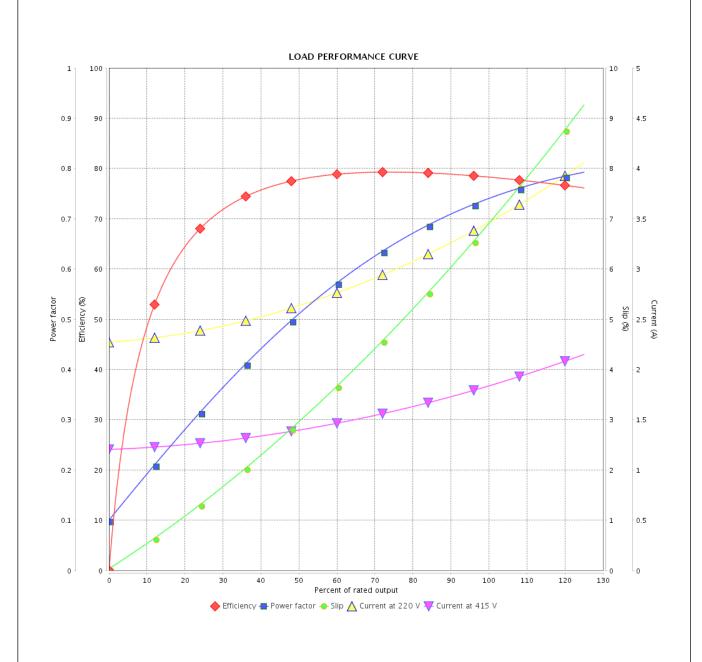


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Product line : NEMA Premium Efficiency Three- Product code : 12866861

Phase

Catalog #: 00112OT3E145T-SG



			1				
Performance		: 220/415 V 50 Hz 6P					
Rated current		: 3.53/1.87 A	: 3.53/1.87 A Moment of inertia (J)		: 0.1419 sq.ft	t.lb	
LRC		: 5.1	Duty cycle	•	: Cont.(S1)		
Rated torque		: 5.65 ft.lb	Insulation	Insulation class		: F	
Locked rotor tord	que	: 220 %	Service fa	ctor	: 1.00		
Breakdown torqu	ıe	: 240 %	Temperati	ure rise	: 105 K		
Rated speed		: 930 rpm	Design		: B		
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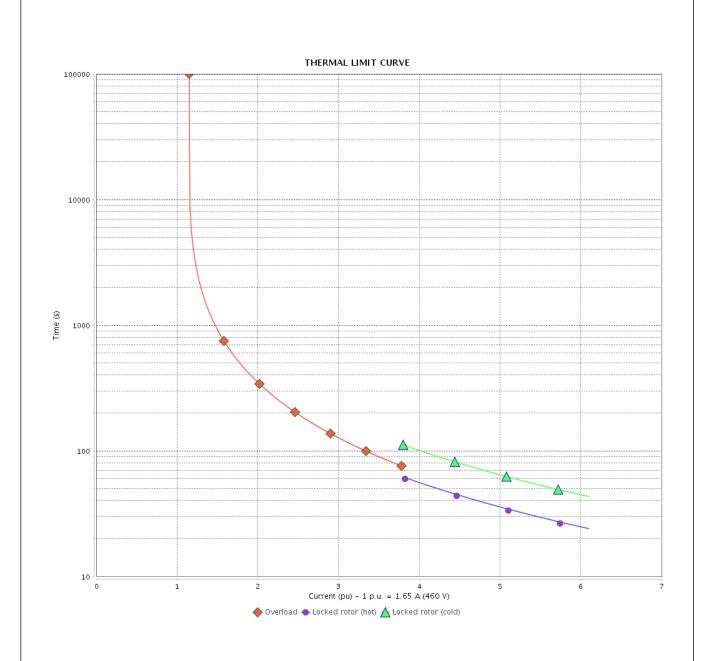


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Product line	: NEMA Premium Efficiency Phase	Three-	Product code :	12866861	
	Filase		Catalog # :	00112OT3E1	45T-SG
Performance Rated current	: 230/460 V 60 Hz 6P : 3.30/1.65 A	Moment o	f inertia (J)	: 0.1419 sq.ft.l	h
LRC	: 6.1	Duty cycle	;	: Cont.(S1)	U
Rated torque Locked rotor torque	: 4.57 ft.lb : 250 %	Insulation Service fa		: F :	
Breakdown torque	: 300 %	Temperatu		: 80 K	
Rated speed	: 1150 rpm	Design		: B	
Heating constant					
Cooling constant Rev.	Changes Summary		Performed	Checked	Date
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Three Phase Induction Motor - Squirrel Cage



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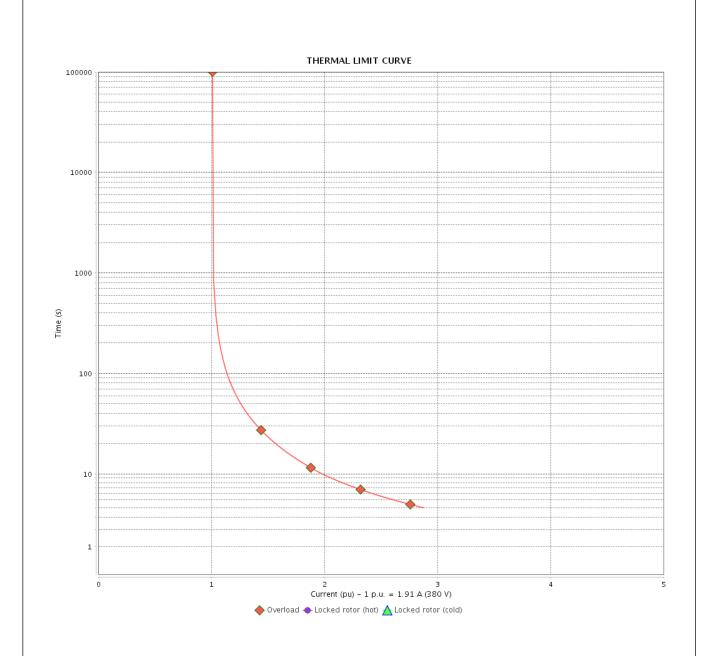


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Product line		NEMA Premium Efficiency Thase		Product code :	12866861	
			(Catalog # :	00112OT3E1	45T-SG
Performance	: 19	90/380 V 50 Hz 6P				
Rated current LRC Rated torque Locked rotor torqu Breakdown torque Rated speed	: 4. : 5. e : 19 : 2	82/1.91 A 6 71 ft.lb 90 % 10 % 20 rpm	Moment of Duty cycle Insulation Service fac Temperatu Design	class ctor	: 0.1419 sq.ft.I : Cont.(S1) : F : 1.00 : 105 K : B	0
		•				
Heating constant						
Cooling constant		Changes Summers		Performed	Checked	Doto
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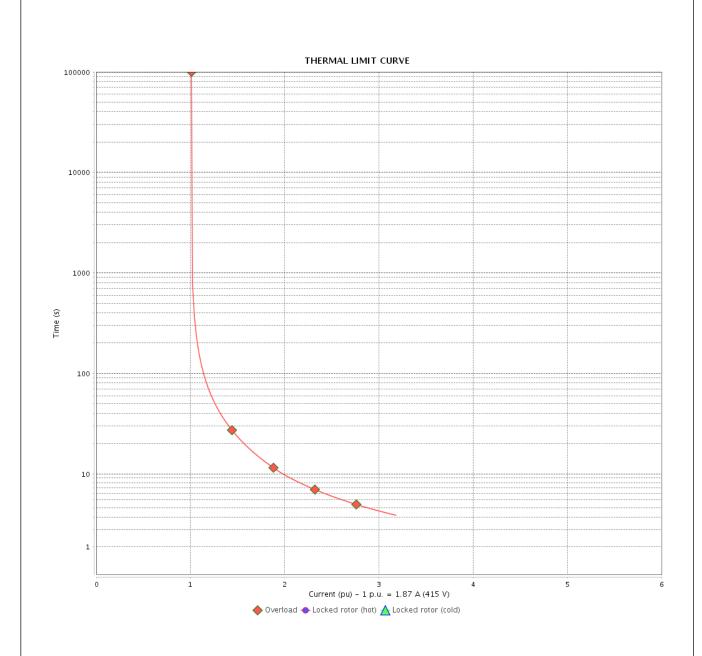


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Product line		: NEMA Premium Efficiency	Three	Product code :	12866861	
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				Catalog # :	00112OT3E1	45T-SG
D . (000/445 // 50 // . 0D				
Performance Rated current		220/415 V 50 Hz 6P 3.53/1.87 A	Moment	of inertia (J)	· 0.1410.og ft II	<u> </u>
LRC	:	5.1	Duty cycle	Э	: 0.1419 sq.ft.ll : Cont.(S1)	J
Rated torque		5.65 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		220 % 240 %	Service fa Temperat		: 1.00 : 105 K	
Rated speed		930 rpm	Design		: B	
Heating constant	t					
Cooling constant						
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Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



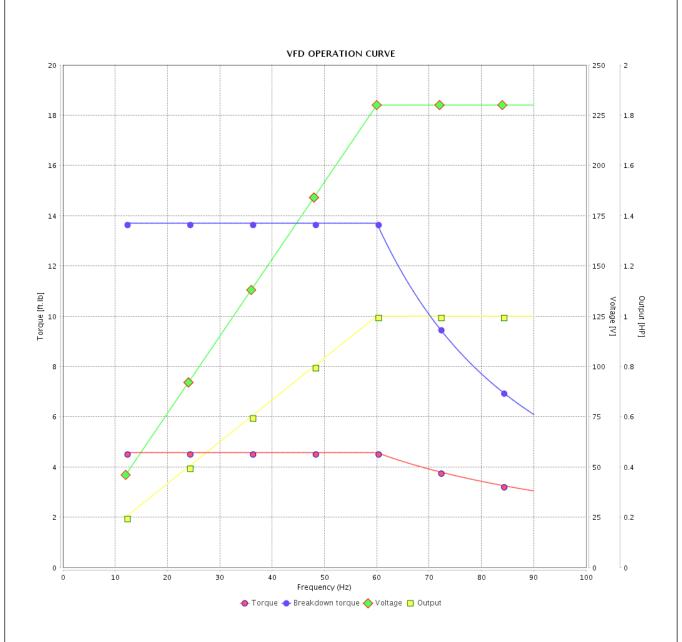
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Product line : NEMA Premium Efficiency Three- Product line : NEMA Pr

Phase

Product code: 12866861

Catalog #: 00112OT3E145T-SG



Performance	: 230/460 V 60 Hz 6P				
Rated current	: 3.30/1.65 A	A Moment of inertia (J)		: 0.1419 sq.ft.lb	
LRC	: 6.1	Duty cycle		: Cont.(S1)	
Rated torque	: 4.57 ft.lb	Insulation class		: F	
Locked rotor torque	250 %	Service factor		:	
Breakdown torque	: 300 %	Temperature rise		: 80 K	
Rated speed	: 1150 rpm	Design		: B	
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer

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Product line : NEMA Premium Efficiency Three- Product code : 12866861

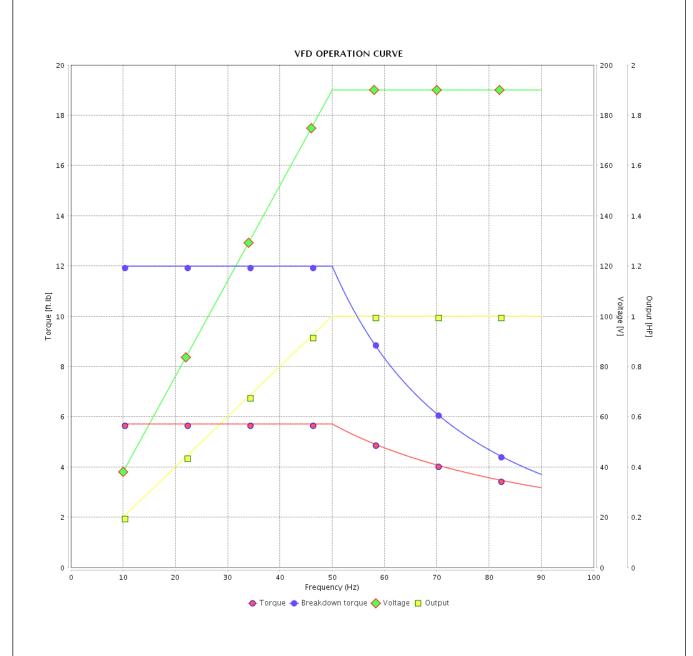
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Performance	: 190/380 V 50 Hz 6P					
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 3.82/1.91 A : 4.6 : 5.71 ft.lb : 190 % : 210 % : 920 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1419 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B	
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VFD OPERATION CURVE

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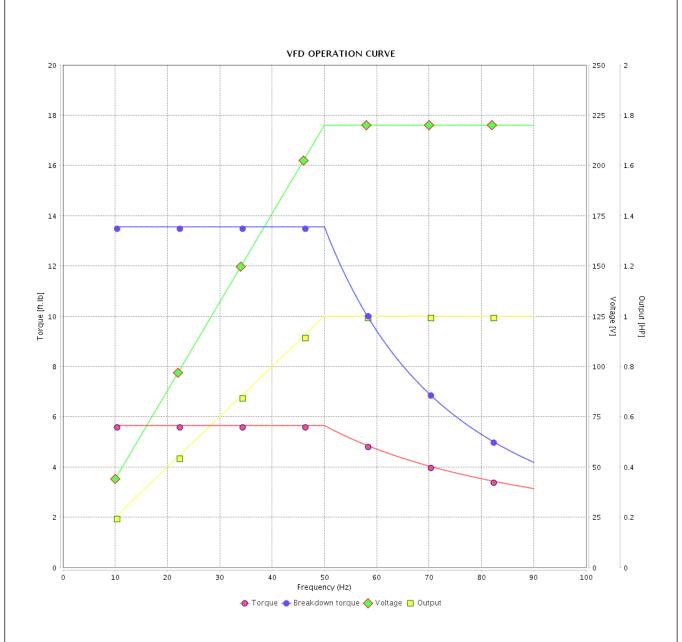
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Product line : NEMA Premium Efficiency Three-

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Performance : 220/415 V 50 Hz 6P : 3.53/1.87 A Rated current Moment of inertia (J) : 0.1419 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 5.1 Insulation class Rated torque : 5.65 ft.lb : F Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 240 % Temperature rise : 105 K Rated speed : 930 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

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