DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 13163449

Phase

Catalog #: 01036ET3E215TC-SG

Frame : 213/5TC 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 : 161 lb

Altitude		: 1000 m.a.s.l.	Approx. weight ³	: 161 lb
Protection degre	е	: IP55	Moment of inertia (J)	: 0.7188 sq.ft.lb
Design		: B		·
Output [HP]		10	10	10
Poles		2 2 2		2
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190/380	220/415
Rated current [A]		23.0/11.5	28.4/14.2	25.1/13.3
L. R. Amperes [A]		173/86.2	173/86.6	171/90.4
LRC [A]		7.5x(Code H)	6.1x(Code G)	6.8x(Code G)
No load current [A	.]	7.53/3.77	7.43/3.71	7.53/3.99
Rated speed [RPI	Л]	3530	2900	2910
Slip [%]		1.94	3.33	3.00
Rated torque [ft.lb]]	14.9	18.1	18.0
Locked rotor torqu	ie [%]	260	190	220
Breakdown torque	: [%]	300	229	260
Service factor		1.15	1.00	1.00
Temperature rise		80 K	105 K	105 K
Locked rotor time		21s (cold) 12s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²		70.0 dB(A)	67.0 dB(A)	67.0 dB(A)
	25%	89.3	91.7	91.3
Efficiency (%)	50%	89.5	90.0	90.1
Efficiency (%)	75%	90.2	89.2	89.7
	100%	90.2	87.2	88.2
	25%	0.53	0.59	0.55
Power Factor	50%	0.80	0.85	0.82
1 OWEI FACIOI	75%	0.88	0.90	0.89
	100%	0.91	0.92	0.92

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

Bearing type : 6208 ZZ 6206 ZZ Max. traction : 184 lb Sealing : V'Ring Without Max. compression : 345 lb

Bearing Seal

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

Notes

USABLE @208V 25.4A SF 1.00 SFA 25.4A

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



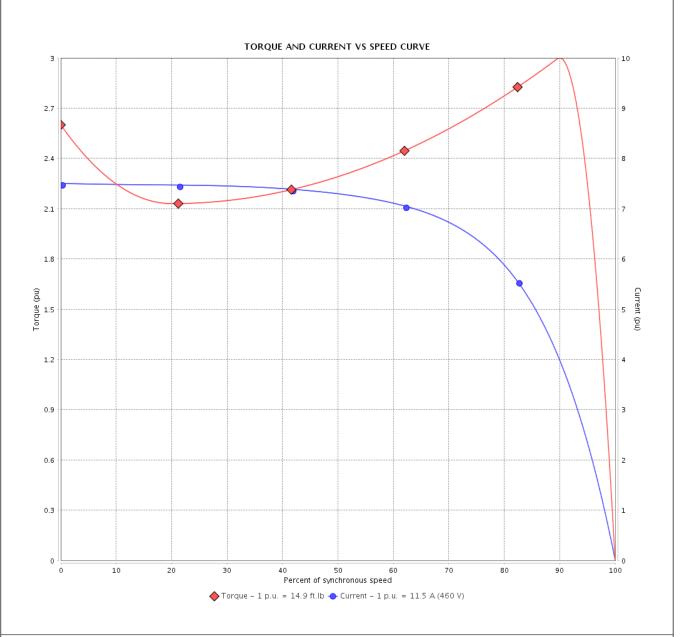
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 13163449

Catalog #: 01036ET3E215TC-SG



Performance : 230/460 V 60 Hz 2P Rated current : 23.0/11.5 A Moment of inertia (J) : 0.7188 sq.ft.lb **LRC** : 7.5 Duty cycle : Cont.(S1) : F : 14.9 ft.lb Insulation class Rated torque Locked rotor torque : 260 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 3530 rpm Design : B

Locked rotor time : 21s (cold) 12s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

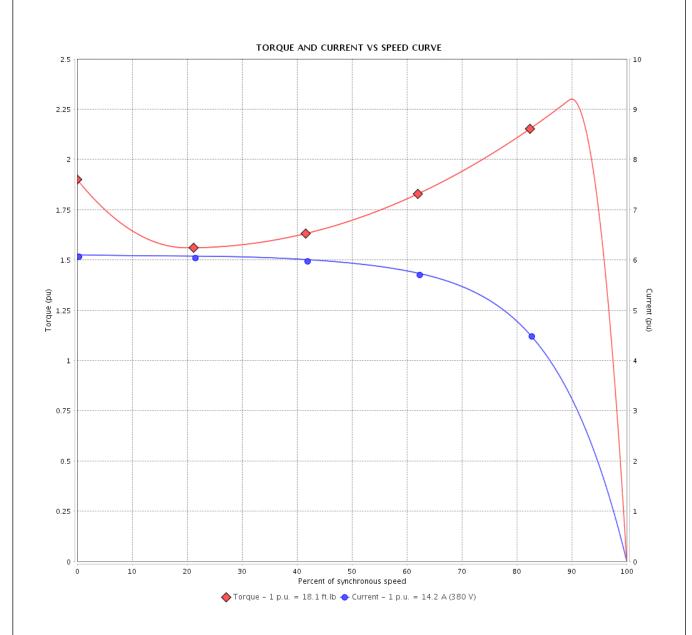


Customer

Product line : NEMA Premium Efficiency Three- Product code : 13163449

Phase

Catalog #: 01036ET3E215TC-SG



Performance	: 190/380 V 50 Hz 2P		
Rated current	: 28.4/14.2 A	Moment of inertia (J)	: 0.7188 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 18.1 ft.lb	Insulation class	:F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 2900 rpm	Design	: B
Locked rotor time	· Os (cold) Os (hot)		

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



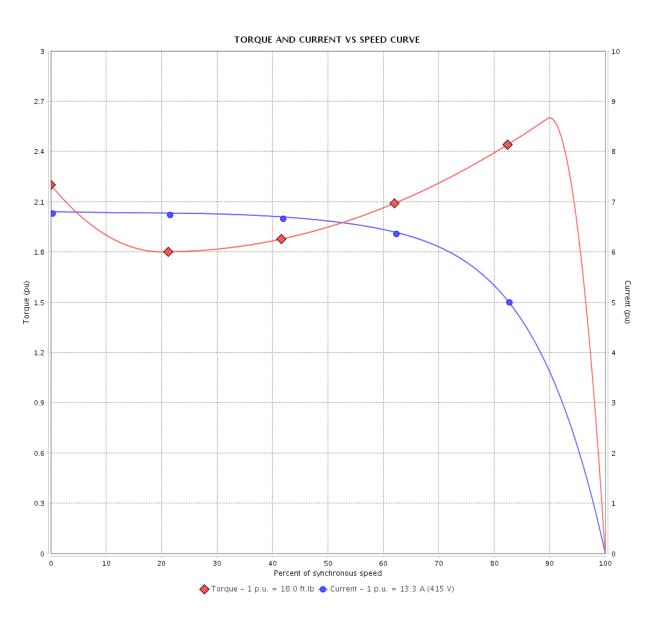
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 13163449

Catalog #: 01036ET3E215TC-SG



Performance : 220/415 V 50 Hz 2P Rated current : 25.1/13.3 A Moment of inertia (J) : 0.7188 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) Insulation class Rated torque : 18.0 ft.lb : F Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 105 K Rated speed : 2910 rpm Design : B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



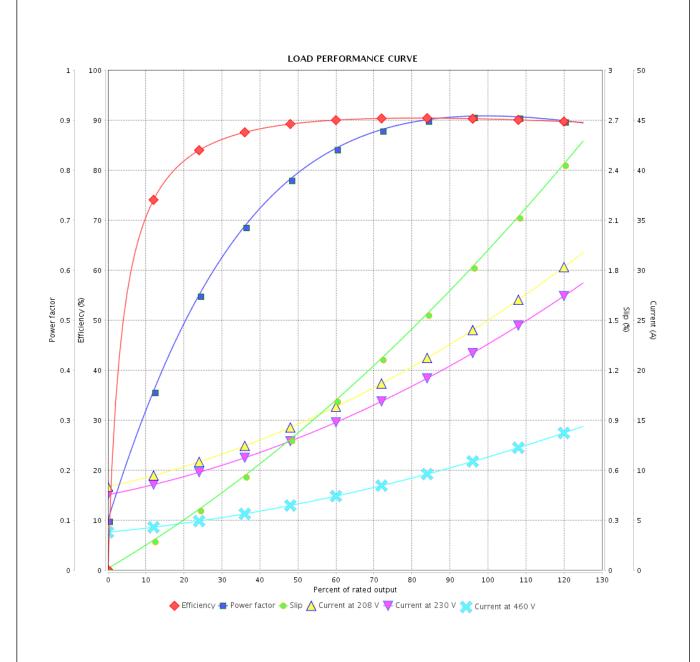
Customer

Product line : NEMA Premium Efficiency Three- Product code : 13163449

Phase

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Performance	: 230/460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 23.0/11.5 A : 7.5 : 14.9 ft.lb : 260 % : 300 % : 3530 rpm	Moment of Duty cycle Insulation of Service fact Temperatur Design	class ctor	: 0.7188 sq.ft.l : Cont.(S1) : F : 1.15 : 80 K : B	b
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LOAD PERFORMANCE CURVE

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Customer :

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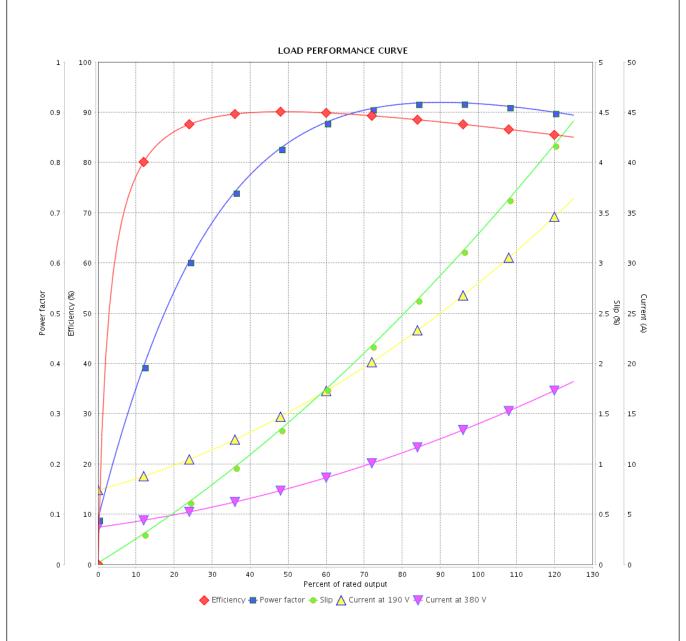
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Product line : NEMA Premium Efficiency Three- Product of

Phase

Product code: 13163449

Catalog #: 01036ET3E215TC-SG



Performance : 190/380 V 50 Hz 2P : 28.4/14.2 A Rated current Moment of inertia (J) : 0.7188 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.1 Insulation class Rated torque : 18.1 ft.lb : F Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 105 K Rated speed : 2900 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

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LOAD PERFORMANCE CURVE

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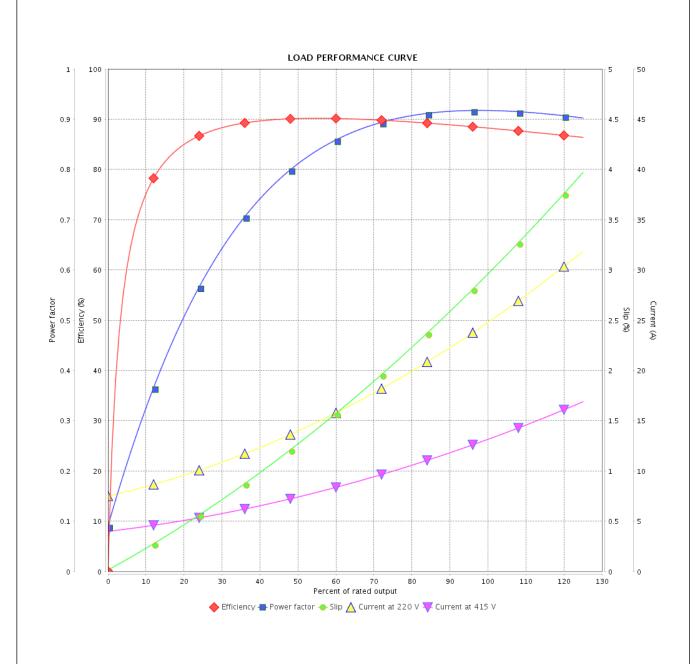


Customer

Product line : NEMA Premium Efficiency Three- Product code : 13163449

Phase

Catalog #: 01036ET3E215TC-SG



Performance	::	220/415 V 50 Hz 2P				
Rated current	::	25.1/13.3 A	Moment o	f inertia (J)	: 0.7188 sq.ft.lb	
LRC	:	6.8	Duty cycle	;	: Cont.(S1)	
Rated torque	:	18.0 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie :	220 %	Service fa	ctor	: 1.00	
Breakdown torque		260 %	Temperati	Temperature rise		
Rated speed	:	2910 rpm) rpm Design		: B	
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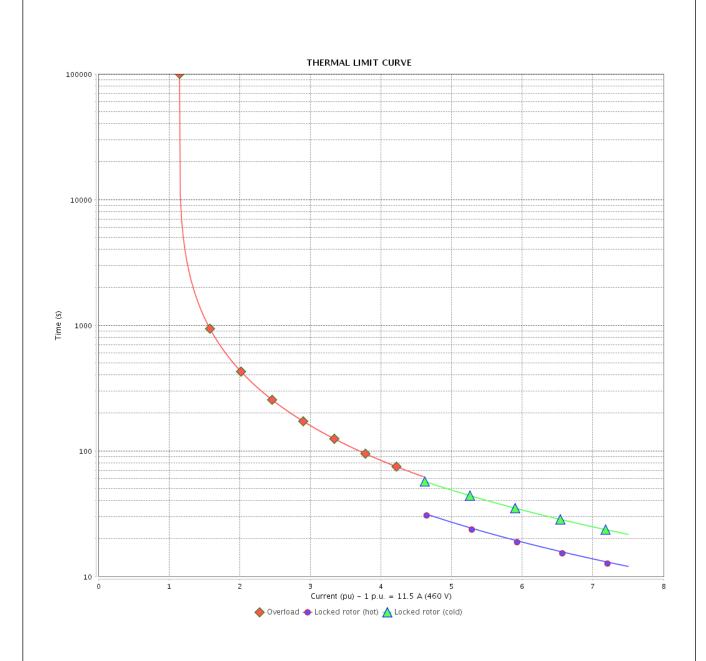


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Product line	: NEMA Premium Efficier Phase		Product code : Catalog # :	13163449 01036ET3E2	115TC-SG
			Catalog # :	01030E13E2	TISTC-SG
Performance Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 230/460 V 60 Hz 2P : 23.0/11.5 A : 7.5 : 14.9 ft.lb : 260 % : 300 % : 3530 rpm	Moment o Duty cycle Insulation Service fa Temperati Design	class ctor	: 0.7188 sq.ft.l : Cont.(S1) : F : 1.15 : 80 K : B	b
Heating constant Cooling constant Rev.	Changes Summary		Performed	Checked	Date
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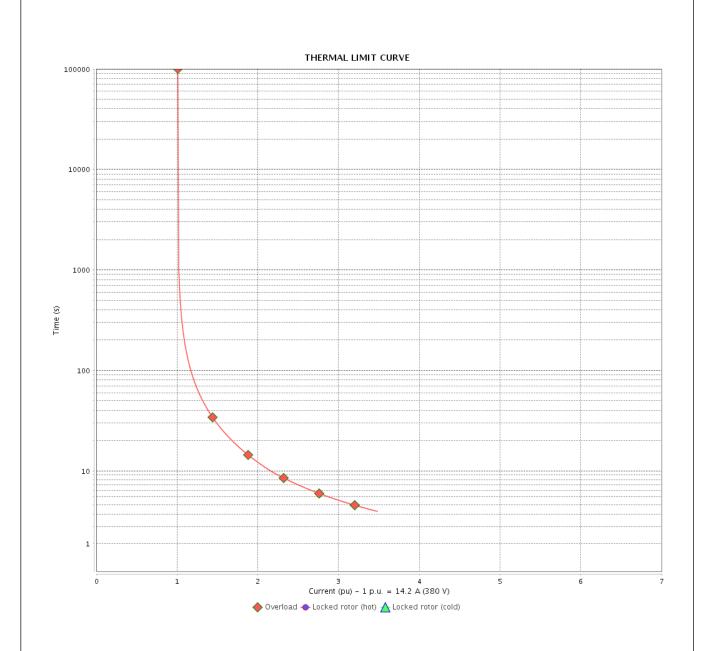


Customer	:					
Product line		NEMA Premium Efficiency [*]		Product code :	13163449	
				Catalog # :	01036ET3E2	.151C-SG
Performance	: 1	190/380 V 50 Hz 2P				
Rated current		28.4/14.2 A	Moment o	f inertia (J)	: 0.7188 sq.ft.l	b
LRC Rated torque		6.1 18.1 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord	que : 1	190 %	Service fa	ctor	: 1.00	
Breakdown torqu Rated speed		229 % 2900 rpm	Temperatu Design	ıre rise	: 105 K : B	
					. =	
Heating constant Cooling constant						
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Three Phase Induction Motor - Squirrel Cage



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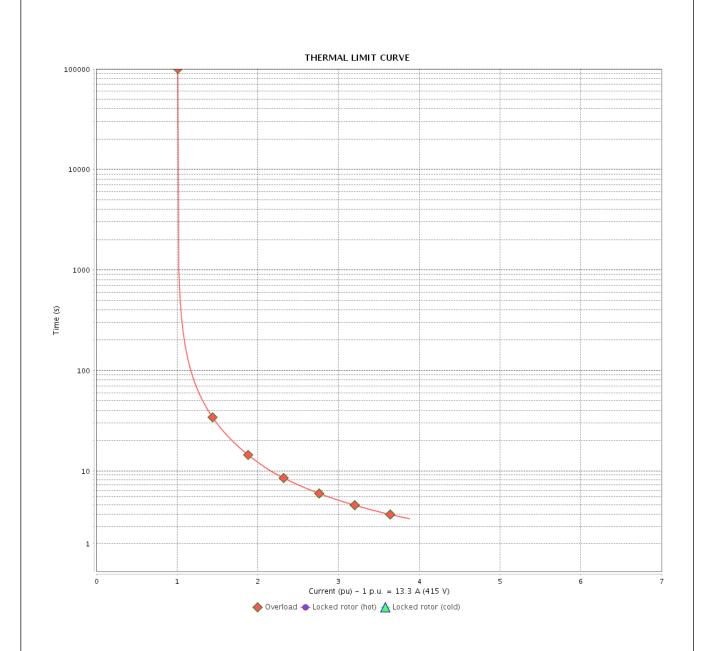


Customer		:				
Product line		: NEMA Premium Efficiency ⁻ Phase		Product code :	13163449 01036ET3E21	5TC-SG
Rated current LRC Rated torque Locked rotor torque		: 6.8 Duty cycle : 18.0 ft.lb Insulation : 220 % Service far : 260 % Temperatu		n class : F factor : 1.00 ature rise : 105 K		
Rated speed Heating constant Cooling constant Rev.	:	2910 rpm Changes Summary	Design	Performed	: B	Date
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Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

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Product line : NEMA Premium Efficiency Three- Product code : 13163449

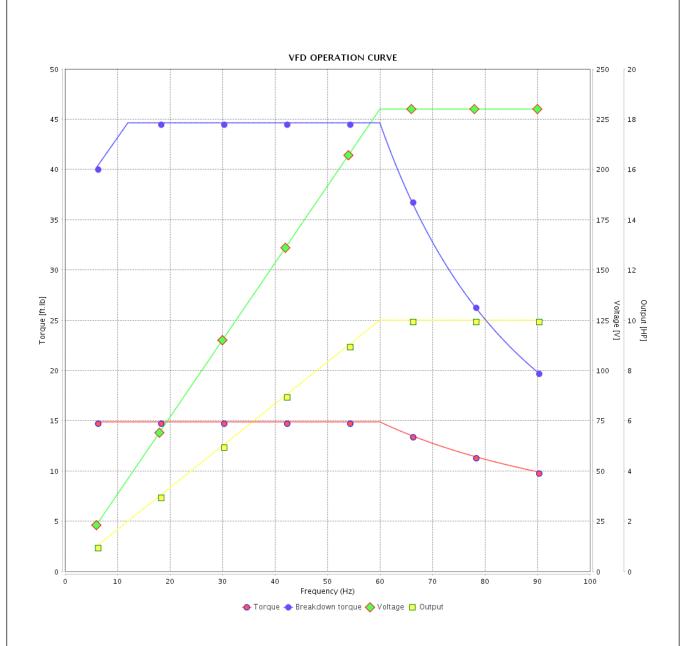
Phase

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Performance : 230/460 V 60 Hz 2P : 23.0/11.5 A Rated current Moment of inertia (J) : 0.7188 sq.ft.lb **LRC** : 7.5 Duty cycle : Cont.(S1) : 14.9 ft.lb Insulation class Rated torque : F Locked rotor torque : 260 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 3530 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



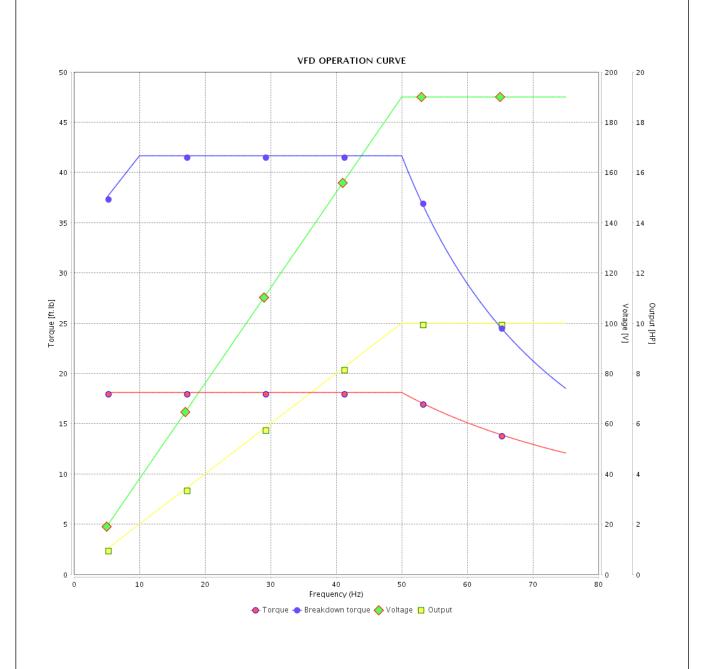
Customer

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 01036ET3E215TC-SG

13163449



Performance		190/380 V 50 Hz 2P					
Rated current	:	28.4/14.2 A	Moment of inertia (J)		: 0.7188 sq.ft.	lb	
LRC	:	6.1	Duty cycle	Duty cycle		: Cont.(S1)	
Rated torque	:	: 18.1 ft.lb Insulation : 190 % Service factors: 229 % Temperature : 2900 rpm Design		class	:F		
Locked rotor torque	e :			ctor	: 1.00)	
Breakdown torque	:			ıre rise	: 105 K		
Rated speed	:			Design		: B	
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



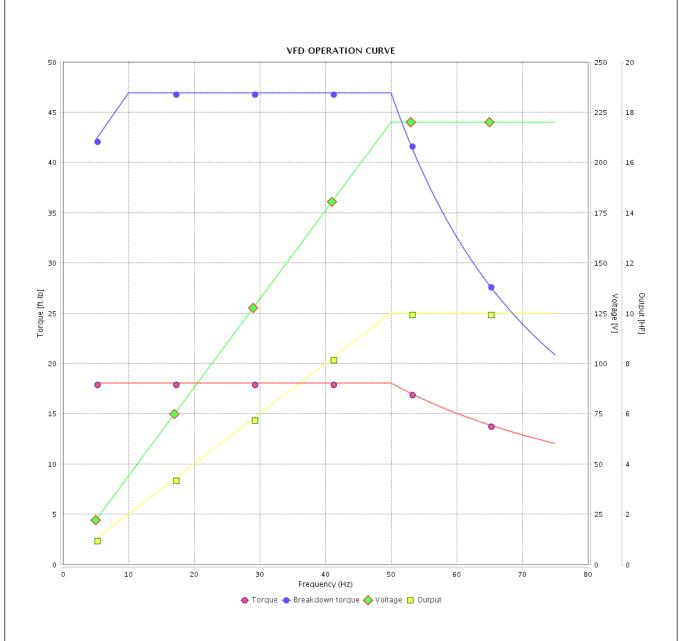
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 13163449

Catalog #: 01036ET3E215TC-SG



Performance	: 220/415 V 50 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 25.1/13.3 A : 6.8 : 18.0 ft.lb : 220 % : 260 % : 2910 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class actor	: 0.7188 sq.ft : Cont.(S1) : F : 1.00 : 105 K : B	lb
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