DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 12675349

Catalog #: 00236ET3E145TC-S

Frame : 143/5TC Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

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

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

: 1000 m.a.s.l. Approx. weight³ : 40.9 lb Altitude

: IP55 Protection degree Moment of inertia (J) : 0.1279 sq.ft.lb

Design : B

		. 5		
Output [HP]		2	2	2
Poles		2	2	2
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190/380	220/415
Rated current [A]		4.94/2.47	5.94/2.97	5.39/2.86
L. R. Amperes [A]		48.9/24.5	44.0/22.0	44.2/23.5
LRC [A]		9.9x(Code L)	7.4x(Code J)	8.2x(Code K)
No load current [A]		2.13/1.06	2.10/1.05	2.14/1.13
Rated speed [RPM	1]	3520	2875	2890
Slip [%]		2.22	4.17	3.67
Rated torque [ft.lb]		2.98	3.65	3.63
Locked rotor torque	e [%]	250	229	260
Breakdown torque	[%]	300	280	310
Service factor			1.15	1.15
Temperature rise		80 K	80 K	80 K
Locked rotor time		23s (cold) 13s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²		68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
	25%	82.1	84.8	84.0
Efficiency (%)	50%	82.5	84.0	83.7
Elliciency (70)	75%	85.5	84.6	84.9
	100%	85.5	83.3	84.1
	25%	0.45	0.51	0.48
Power Factor	50%	0.73	0.79	0.76
1 OWEL FACIOI	75%	0.83	0.88	0.86
	100%	0.89	0.92	0.90

Foundation loads Drive end Non drive end

Bearing type 6205 ZZ 6203 ZZ Max. traction : 77 lb : 118 lb

Sealing V'Ring V'Ring Max. compression Lubrication interval Lubricant amount Mobil Polyrex EM

Notes

Lubricant type

USABLE @208V 5.46A SF 1.00 SFA 5.46A

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



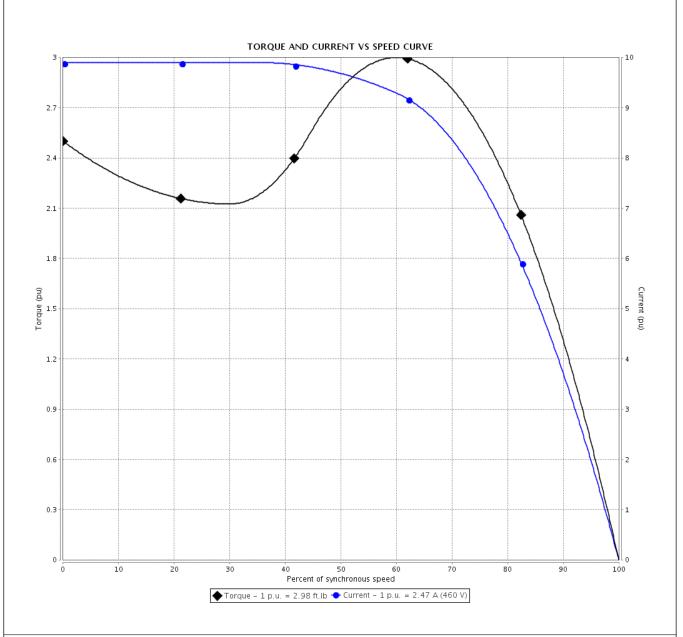
Customer :

Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 12675349

Catalog #: 00236ET3E145TC-S



Performance : 230/460 V 60 Hz 2P Rated current : 4.94/2.47 A Moment of inertia (J) : 0.1279 sq.ft.lb **LRC** : 9.9 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 2.98 ft.lb Service factor Locked rotor torque : 250 % : 80 K Breakdown torque : 300 % Temperature rise Rated speed : 3520 rpm Design : B

Locked rotor time : 23s (cold) 13s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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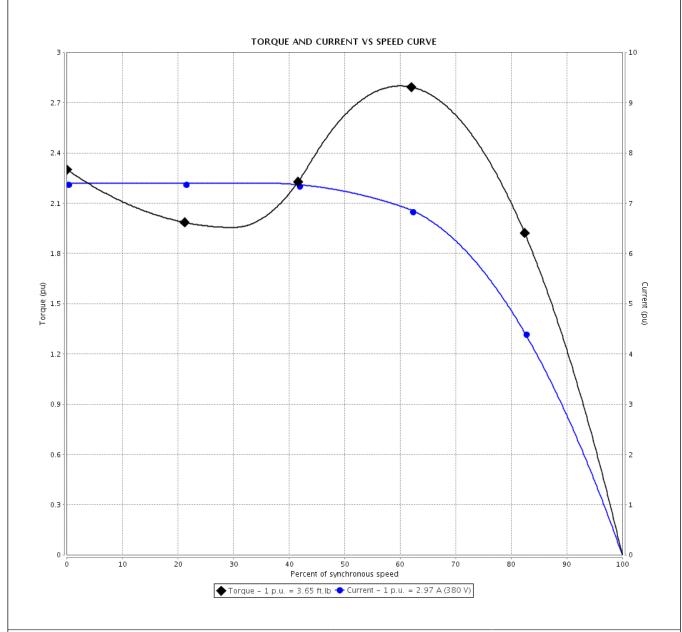
Customer :

Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 12675349

Catalog #: 00236ET3E145TC-S



Performance : 190/380 V 50 Hz 2P Rated current : 5.94/2.97 A Moment of inertia (J) : 0.1279 sq.ft.lb **LRC** : 7.4 Duty cycle : Cont.(S1) : 3.65 ft.lb Insulation class : F Rated torque Locked rotor torque : 229 % Service factor : 1.15 Breakdown torque : 280 % Temperature rise : 80 K : B Rated speed : 2875 rpm Design

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

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TORQUE AND CURRENT VS SPEED CURVE

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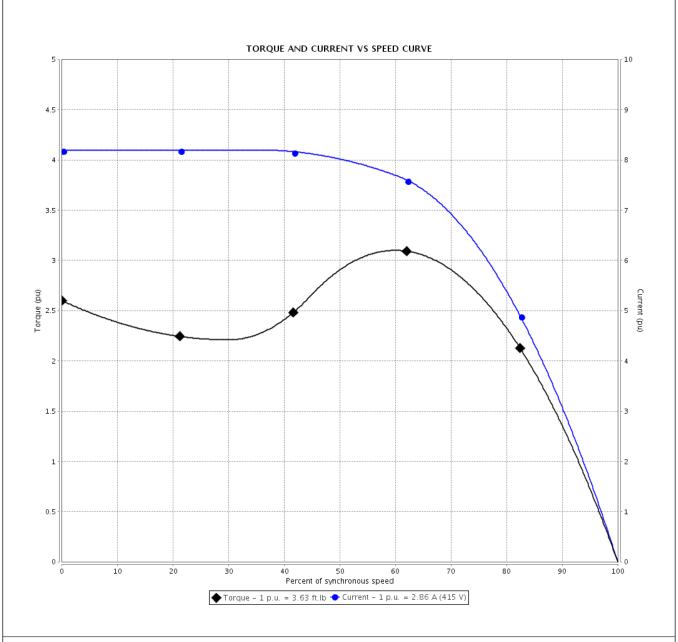
Customer :

Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 12675349

Catalog #: 00236ET3E145TC-S



Performance : 220/415 V 50 Hz 2P Rated current : 5.39/2.86 A Moment of inertia (J) : 0.1279 sq.ft.lb **LRC** : 8.2 Duty cycle : Cont.(S1) : F : 3.63 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 260 % : 1.15 : 80 K Breakdown torque : 310 % Temperature rise Rated speed : 2890 rpm Design : B

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

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LOAD PERFORMANCE CURVE

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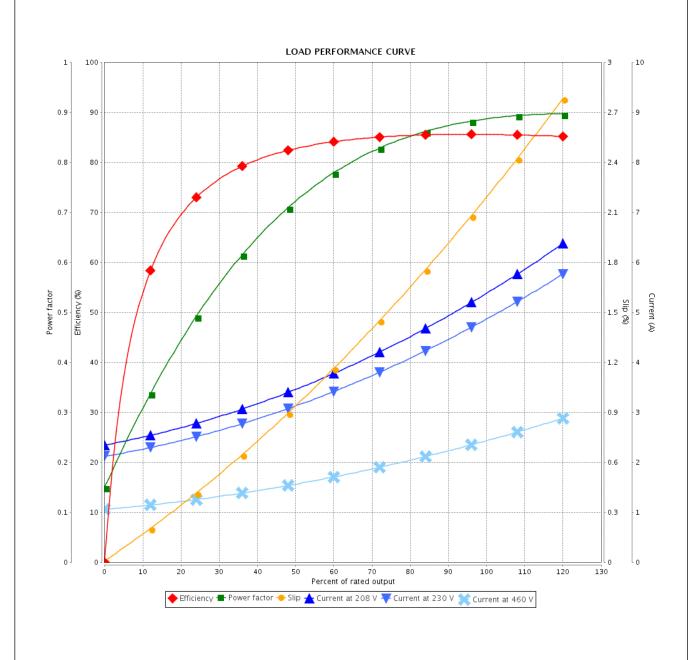
Customer

Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 12675349

Catalog #: 00236ET3E145TC-S



Performance	: 2	: 230/460 V 60 Hz 2P					
Rated current	: 4	1.94/2.47 A	Moment o	f inertia (J)	: 0.1279 sq.ft.lb		
LRC	: 9	9.9	Duty cycle	}	: Cont.(S1)		
Rated torque	: 2	2.98 ft.lb	Insulation	class	: F		
Locked rotor torque	e : 2	250 %	Service fa	ctor	:		
Breakdown torque	: 3	300 %	Temperati	Temperature rise		: 80 K	
Rated speed	: 3	3520 rpm	Design		: B		
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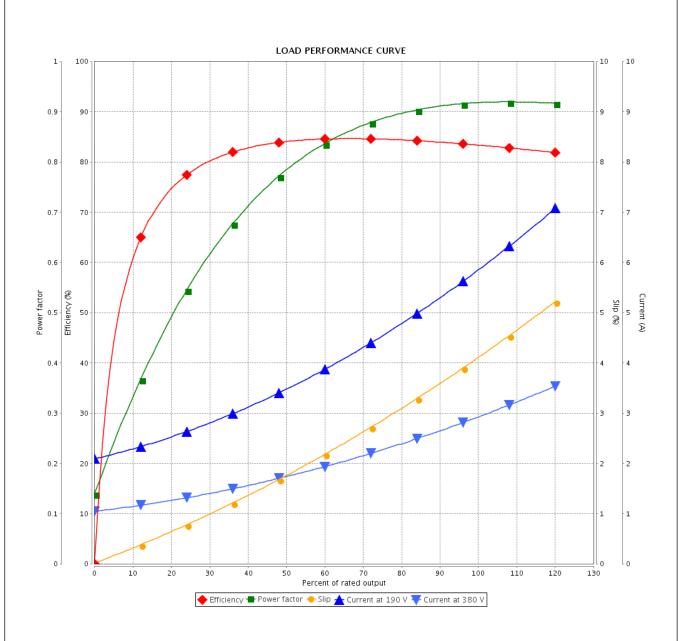
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Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 12675349

Catalog #: 00236ET3E145TC-S



Performance : 190/380 V 50 Hz 2P Rated current : 5.94/2.97 A Moment of inertia (J) : 0.1279 sq.ft.lb **LRC** : 7.4 Duty cycle : Cont.(S1) : 3.65 ft.lb Insulation class Rated torque : F Locked rotor torque : 229 % Service factor : 1.15 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 2875 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

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Three Phase Induction Motor - Squirrel Cage



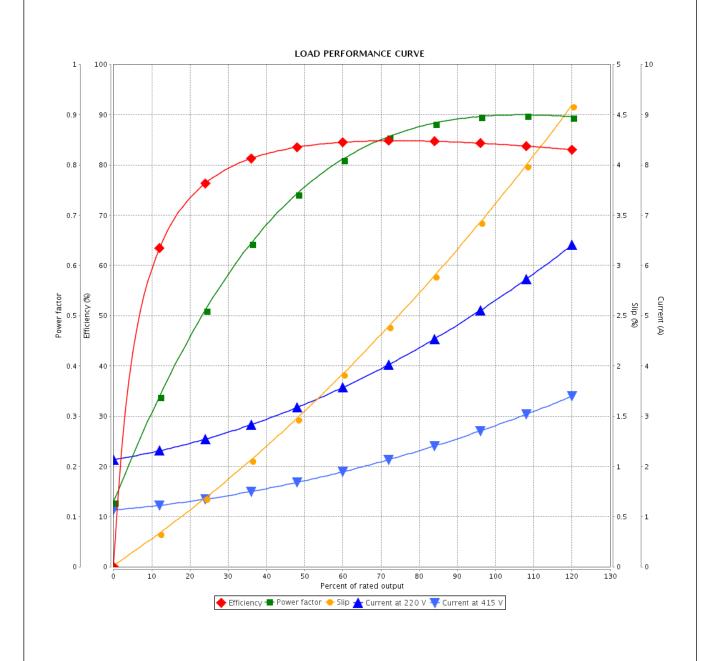
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Catalog #: 00236ET3E145TC-S



Performance	: 2	20/415 V 50 Hz 2P				
Rated current	ated current : 5.39/2.86 A		Moment o	f inertia (J)	: 0.1279 sq.ft.lb	
LRC	: 8	.2	Duty cycle)	: Cont.(S1)	
Rated torque	: 3	.63 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie : 2	60 %	Service fa	ctor	: 1.15	
		10 %	Temperati	Temperature rise		
Rated speed	: 2	890 rpm	Design		: B	
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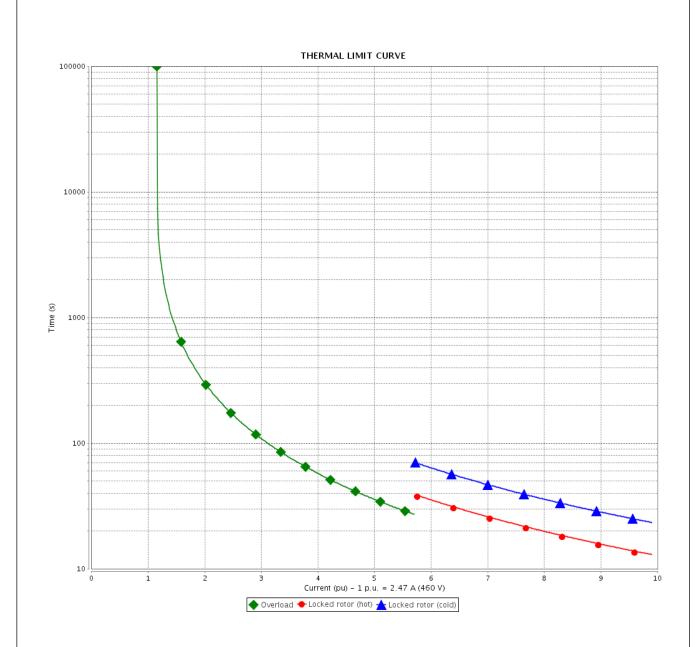


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Product line		: Rolled Steel NEMA Premius Efficiency Three-Phase	m	Product code :	12675349	
				Catalog # :	00236ET3E1	45TC-S
Performance	:	230/460 V 60 Hz 2P				
Rated current		4.94/2.47 A	Moment o	f inertia (J)	: 0.1279 sq.ft.l	b
LRC Rated torque		9.9 2.98 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord	que :	250 %	Service fa	ctor	:	
Breakdown torqu Rated speed		300 % 3520 rpm	Temperati Design	ure rise	: 80 K : B	
		0020 Ipili	Design		. D	
Heating constant						
Cooling constant	<u> </u>	Changes Cummani		Dorformed	Chaskad	Data
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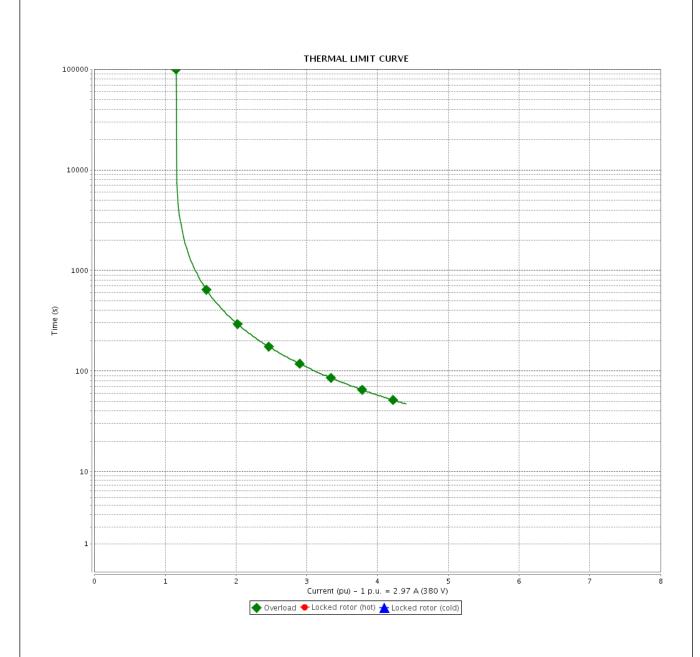


Customer	:				
Product line	: Rolled Steel NEMA Premiu	ım [Product code :	12675349	
	Efficiency Three-Phase		Catalog # :	00236ET3E	METC S
				002002102	140100
Performance	: 190/380 V 50 Hz 2P	1			
Rated current LRC	: 5.94/2.97 A : 7.4	Moment of Duty cycle		: 0.1279 sq.ft. : Cont.(S1)	lb
Rated torque	: 3.65 ft.lb	Insulation	class	: F	
Locked rotor torque	: 229 % : 280 %	Service fac		: 1.15 : 80 K	
Breakdown torque Rated speed	. 200 % : 2875 rpm	Temperatu Design	ire rise	: B	
Heating constant					
Cooling constant					
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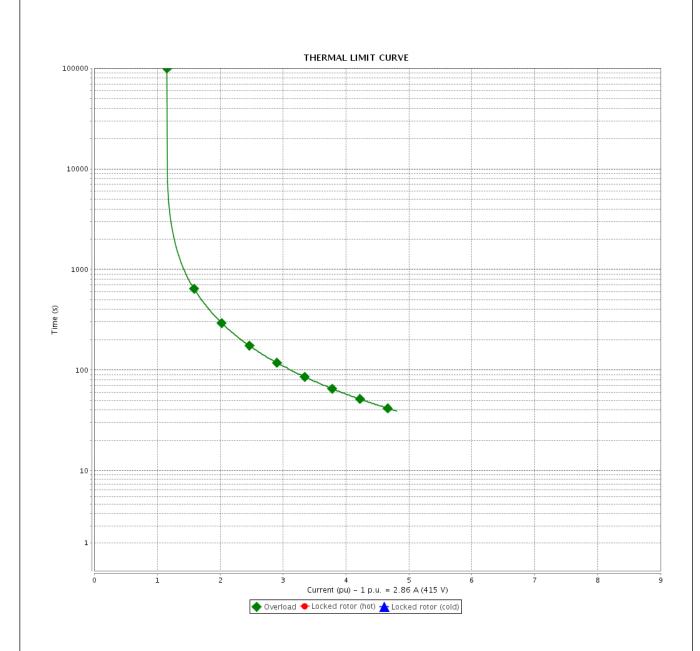


Customer		:				
Product line		: Rolled Steel NEMA Premiu Efficiency Three-Phase	m	Product code :	12675349	
		Liliciency Three-Friase		Catalog # :	00236ET3E1	45TC-S
Performance	:	220/415 V 50 Hz 2P				
Rated current	:	5.39/2.86 A	Moment of	of inertia (J)	: 0.1279 sq.ft.l	b
LRC		8.2 3.63 ft.lb	Duty cycle Insulation	Э	: Cont.(S1) : F	
Rated torque Locked rotor tord		: 260 %	Service fa		: F : 1.15	
Breakdown torqu	ue :	310 %	Temperat	ure rise	: 80 K	
Rated speed		2890 rpm	Design		: B 	
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Cooling constant	t	Changes Summary		Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Date

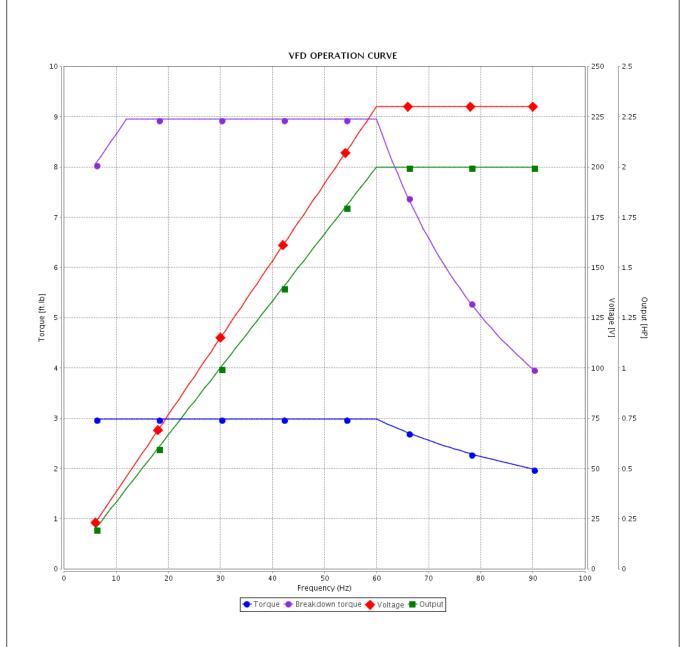
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Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 12675349

Catalog #: 00236ET3E145TC-S



Performance : 230/460 V 60 Hz 2P Rated current : 4.94/2.47 A Moment of inertia (J) : 0.1279 sq.ft.lb **LRC** : 9.9 Duty cycle : Cont.(S1) Insulation class Rated torque : 2.98 ft.lb : F Locked rotor torque : 250 % Service factor Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 3520 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Page Checked by Revision

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



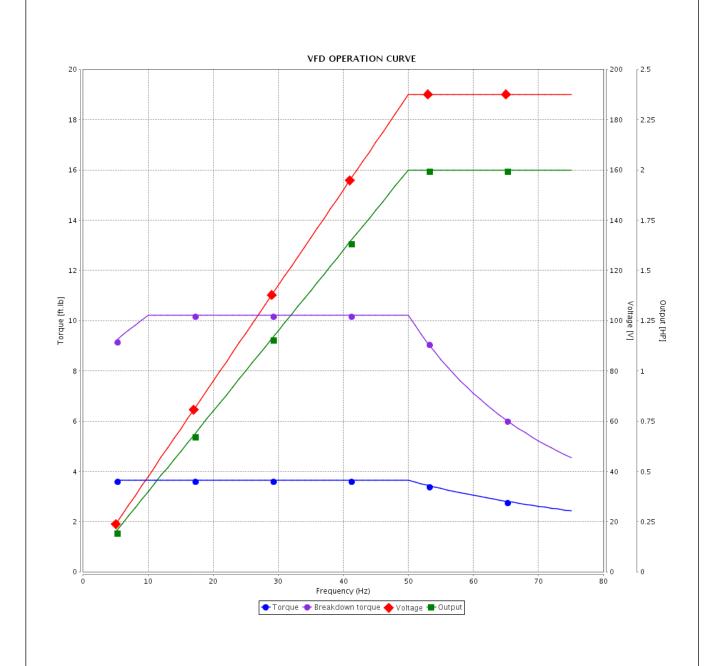
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Performance	: 1	: 190/380 V 50 Hz 2P						
Rated current :		.94/2.97 A	Moment o	Moment of inertia (J)		: 0.1279 sq.ft.lb		
LRC : 7.		.4	Duty cycle	Duty cycle		: Cont.(S1)		
Rated torque		.65 ft.lb	Insulation class		:F			
Locked rotor torque		29 %	Service fa	Service factor		: 1.15		
Breakdown torqu	ie : 2	80 %	Temperati	Temperature rise		: 80 K		
Rated speed	: 2	875 rpm	Design		: B			
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VFD OPERATION CURVE

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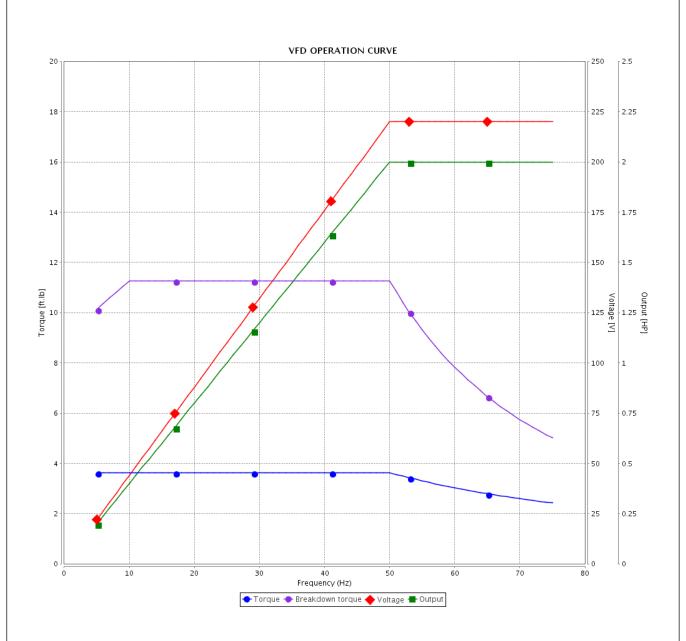
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Performance	: 220/415 V 50 Hz 2P						
Rated current LRC Rated torque Locked rotor torque Breakdown torque	: 5.39/2.86 A : 8.2 : 3.63 ft.lb : 260 % : 310 %	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise		: 0.1279 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K			
Rated speed	: 2890 rpm	Design		: B			
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