DATA SHEET

Three Phase Induction Motor - Squirrel Cage



3

Customer

Output [HP]

Product line : NEMA Premium Efficiency Three-Product code: 12675413

Catalog #: 00312ET3E213T-S

Frame : 213/5T Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW) : -20°C to +40°C Ambient temperature Starting method : Direct On Line

3

: 1000 m.a.s.l. Approx. weight³ Altitude : 125 lb

: IP55 Protection degree Moment of inertia (J) : 1.08 sq.ft.lb Design : B

3

Poles		6	6	6
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190/380	220/415
Rated current [A]		8.34/4.17	9.76/4.88	8.90/4.72
L. R. Amperes [A]		53.4/26.7	49.8/24.9	49.9/26.4
LRC [A]		6.4x(Code H)	5.1x(Code F)	5.6x(Code G)
No load current [A]	4.71/2.36	4.66/2.33	4.69/2.48
Rated speed [RPN	<i>/</i> I]	1175	970	975
Slip [%]		2.08	3.00	2.50
Rated torque [ft.lb]		13.4	16.2	16.2
Locked rotor torqu		229	170	200
Breakdown torque	[%]	290	220	250
Service factor		1.15	1.15	1.15
Temperature rise		80 K	80 K	80 K
Locked rotor time		82s (cold) 46s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²		55.0 dB(A)	53.0 dB(A)	53.0 dB(A)
	25%	84.3	87.4	86.8
Efficiency (%)	50%	85.5	86.9	86.6
Linciency (70)	75%	88.5	87.6	87.8
	100%	89.5	86.7	87.3
	25%	0.32	0.37	0.34
Power Factor	50%	0.55	0.62	0.58
1 OWCI I ACIOI	75%	0.67	0.73	0.70
	100%	0.74	0.79	0.77

Drive end Non drive end Foundation loads

Bearing type 6208 ZZ 6206 ZZ Max. traction : 165 lb Without Sealing V'Ring Max. compression : 290 lb

Bearing Seal

Lubrication interval Lubricant amount Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 9.22A SF 1.00 SFA 9.22A

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.

(1) / 11 / 100 / 10 / 10					
Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			1 / 16	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



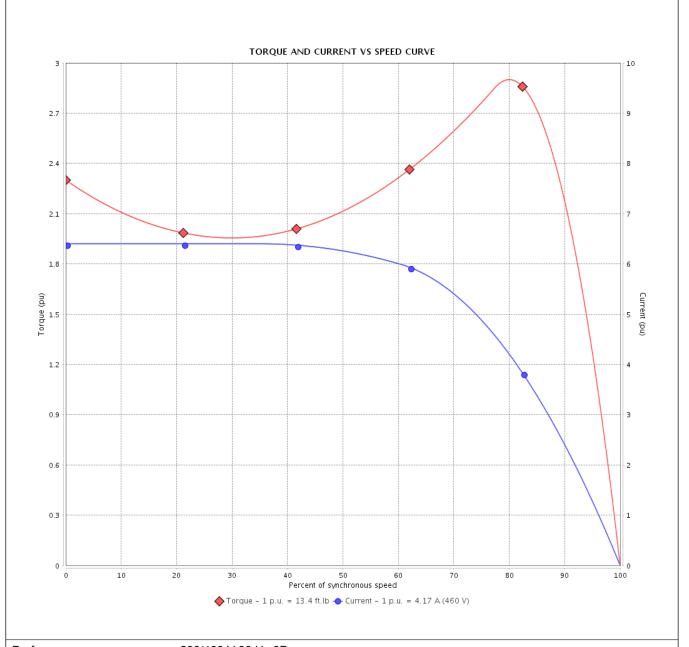
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12675413

Catalog #: 00312ET3E213T-S



Performance : 230/460 V 60 Hz 6P Rated current : 8.34/4.17 A Moment of inertia (J) : 1.08 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) : 13.4 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 229 % : 1.15 Breakdown torque : 290 % Temperature rise : 80 K

Locked rotor time : 82s (cold) 46s (hot)

: 1175 rpm

Rated speed

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			2 / 16	

Design

: B

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

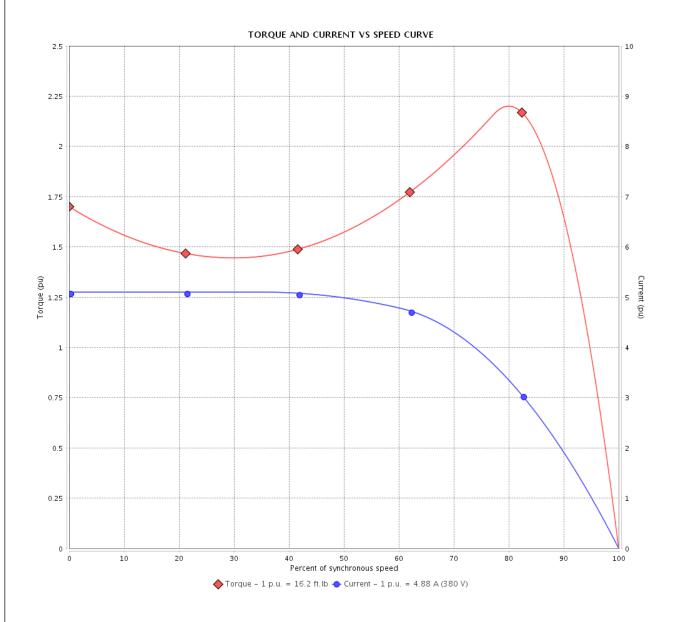


Customer

Product line : NEMA Premium Efficiency Three-Product code:

12675413

Catalog #: 00312ET3E213T-S



Performance : 190/380 V 50 Hz 6P Rated current : 9.76/4.88 A Moment of inertia (J) : 1.08 sq.ft.lb **LRC** : 5.1 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 16.2 ft.lb Locked rotor torque : 170 % Service factor : 1.15 Breakdown torque : 220 % Temperature rise : 80 K : B Rated speed : 970 rpm Design

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

		` ' ' '			
Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			3 / 16	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



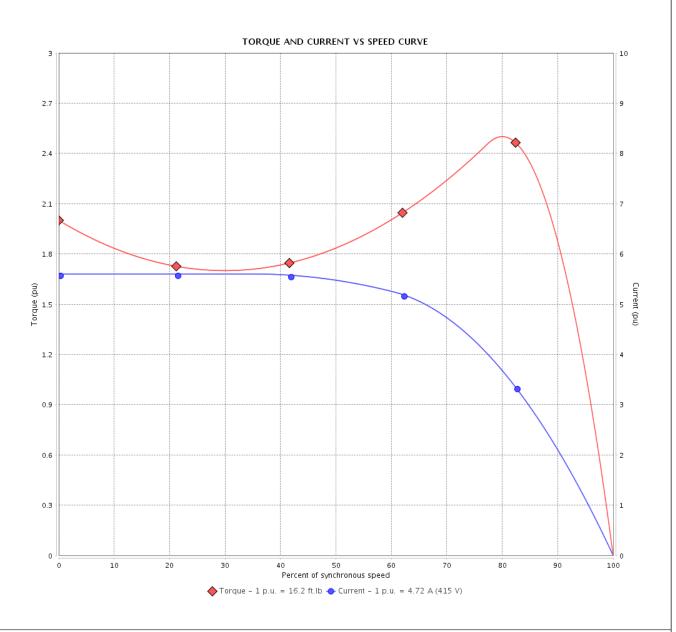
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12675413

Catalog #: 00312ET3E213T-S



Performance : 220/415 V 50 Hz 6P Rated current : 8.90/4.72 A Moment of inertia (J) : 1.08 sq.ft.lb **LRC** : 5.6 Duty cycle : Cont.(S1) : 16.2 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 200 % : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 975 rpm Design : B

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			4 / 16	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

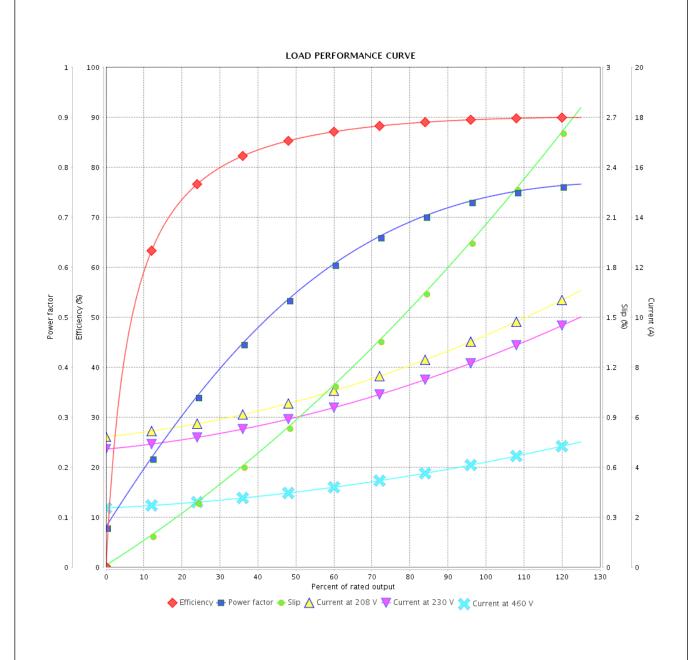


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12675413

Phase

Catalog #: 00312ET3E213T-S



Performance	: 230/460 V 60 Hz 6P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 8.34/4.17 A : 6.4 : 13.4 ft.lb : 229 % : 290 % : 1175 rpm	Moment of Duty cycle Insulation of Service fact Temperatu Design	class	: 1.08 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

5/16

14/04/2022

Date

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

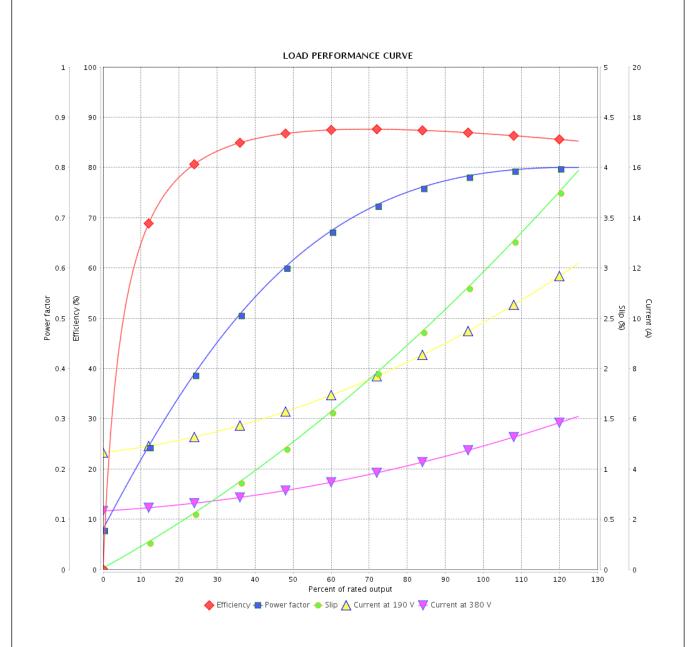


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12675413

Phase

Catalog #: 00312ET3E213T-S



Performance : 190/380 V 50 Hz 6P Rated current : 9.76/4.88 A Moment of inertia (J) : 1.08 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 5.1 : 16.2 ft.lb Insulation class Rated torque : F Locked rotor torque : 170 % Service factor : 1.15 Breakdown torque : 220 % Temperature rise : 80 K Rated speed : 970 rpm Design : B Rev. **Changes Summary** Checked Performed Date

Performed by					
Checked by				Page	Revision
Date	14/04/2022			6 / 16	
This do	ocument is exclusive	property of MEG S/A Deprinting is not al	lowed without written	authorization of ME	C S/A

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

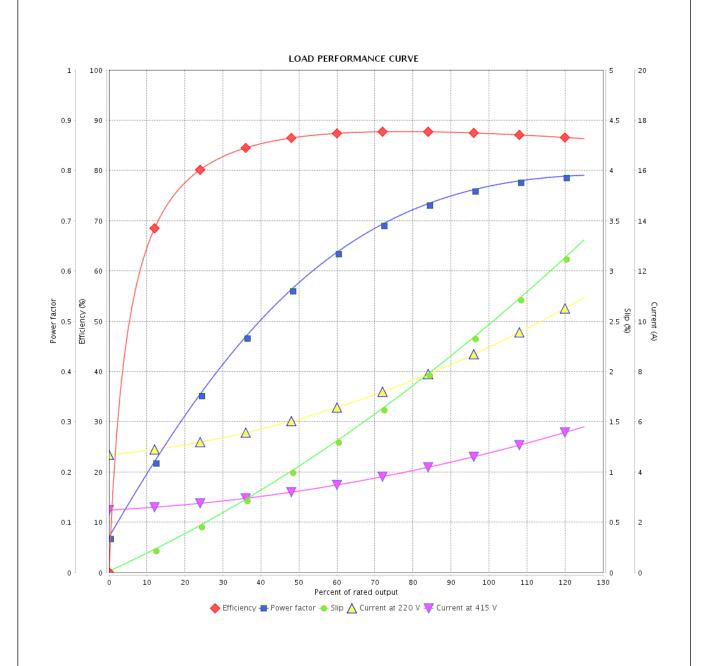


Customer

Product line : NEMA Premium Efficiency Three-Product code:

Catalog #: 00312ET3E213T-S

12675413



Performance : 220/415 V 50 Hz 6P						
Rated current		.90/4.72 A				
LRC	: 5		Duty cycle	, ,	: Cont.(S1)	
Rated torque	: 1	6.2 ft.lb	Insulation		: F	
Locked rotor torqu	ie : 2	00 %	Service fa	ctor	: 1.15	
Breakdown torque		50 %	Temperature rise		: 80 K	
Rated speed	: 9	75 rpm	Design		: B	
Rev.		Changes Summary		Performed	Checked	Date
		T				
Performed by						
Checked by					Page	Revision
Date	14/04/2022	1			7 / 16	

Three Phase Induction Motor - Squirrel Cage

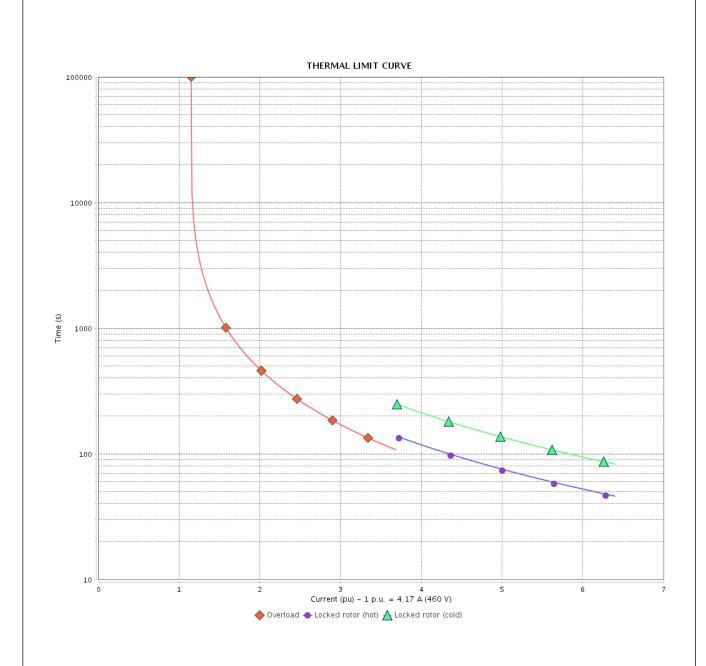


Customer	:				
Product line	: NEMA Premium Efficiency Phase		Product code : Catalog # :	12675413 00312ET3E21	3T-S
Performance	: 230/460 V 60 Hz 6P				
Rated current LRC Rated torque	: 8.34/4.17 A : 6.4 : 13.4 ft.lb	Duty cycle Insulation	class	: 1.08 sq.ft.lb : Cont.(S1) : F	
Locked rotor torque Breakdown torque Rated speed	: 229 % : 290 % : 1175 rpm	Service fa Temperatu Design		: 1.15 : 80 K : B	
Heating constant					
Cooling constant Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			9 / 16	

Three Phase Induction Motor - Squirrel Cage

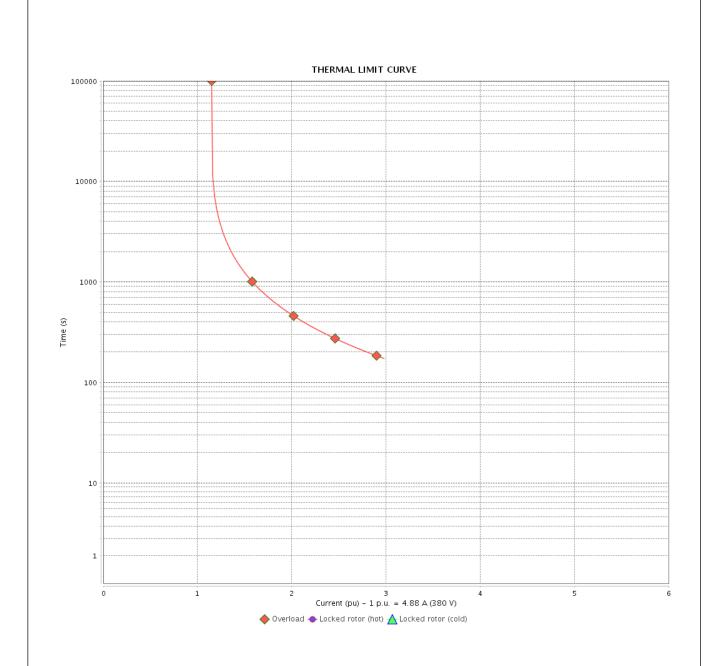


Customer	:					
Product line		NEMA Premium Efficiency	Γhree-	Product code :	12675413	
	P	Phase		Catalog # :	00312ET3E2	13T-S
Performance		90/380 V 50 Hz 6P				
Rated current LRC	: 9 : 5	.76/4.88 A .1	Moment of Duty cycle	f inertia (J)	: 1.08 sq.ft.lb : Cont.(S1)	
Rated torque	: 1	6.2 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		70 % 20 %	Service fa Temperatu		: 1.15 : 80 K	
Rated speed		70 rpm	Design		: B	
Heating constan					·	
Cooling constant	t	Changes Cummani	Т	Performed	Checked	Doto
Rev.		Changes Summary		renomea	Checked	Date
Performed by						
Checked by		-			Page	Revision
Date	14/04/2022				10 / 16	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary		Checked	Date
Performed by			·		
Checked by				Page	Revision
Date	14/04/2022			11 / 16	

Three Phase Induction Motor - Squirrel Cage

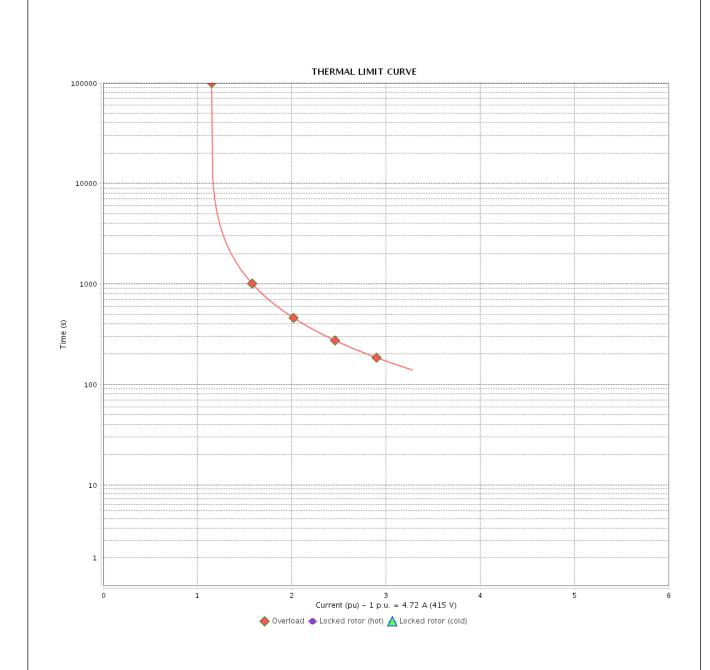


Customer		:					
Product line		: NEMA Premium Efficiency	Three- Product code :		12675413		
		Phase		Catalog # :	00312ET3E21	IST C	
					0001221022	101 0	
Performance		: 220/415 V 50 Hz 6P					
Rated current		: 8.90/4.72 A	Moment of	of inertia (J)	: 1.08 sq.ft.lb		
LRC Rated torque		: 5.6 : 16.2 ft.lb	Duty cycle Insulation		: Cont.(S1) : F		
Locked rotor tord	que	: 200 %	Service fa	actor	: 1.15		
Breakdown torqu Rated speed		: 250 % : 975 rpm	Temperat Design	ture rise	: 80 K : B		
		. στο τριτι	Design		. U		
Heating constant							
Cooling constant	ı	Changes Summary		Performed	Checked	Date	
1.07.		onangoo oanmiary		. Siloiniou	2.130R04	2010	
Performed by							
Checked by					Page	Revision	
Date	14/04/2022	_			12 / 16		

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			13 / 16	

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

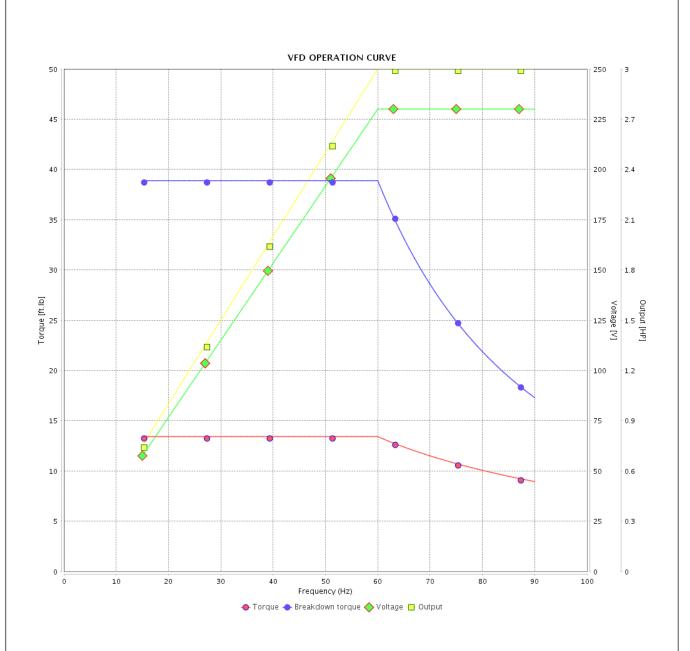
14/04/2022

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12675413

Catalog #: 00312ET3E213T-S



Performance : 230/460 V 60 Hz 6P Rated current : 8.34/4.17 A Moment of inertia (J) : 1.08 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.4 Insulation class : 13.4 ft.lb : F Rated torque Locked rotor torque : 229 % Service factor : 1.15 Breakdown torque : 290 % Temperature rise : 80 K Rated speed : 1175 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

Page

14 / 16

Revision

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer

Checked by

Date

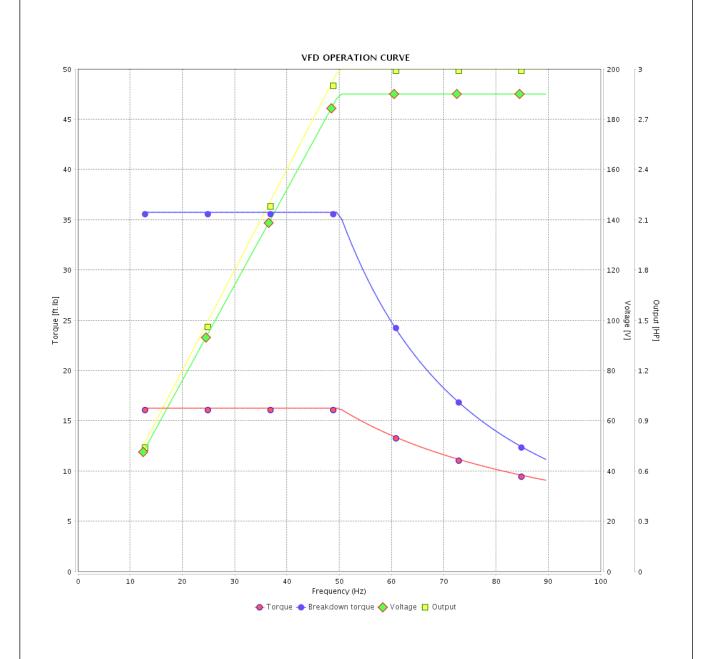
14/04/2022

Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 12675413

Catalog #: 00312ET3E213T-S



Performance	:1	190/380 V 50 Hz 6P					
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 5 : 1 que : 1 ue : 2	: 9.76/4.88 A Moment of in Duty cycle : 5.1 Duty cycle : 16.2 ft.lb Insulation cla : 170 % Service facto : 220 % Temperature : 970 rpm Design		class ctor	: 1.08 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B		
Rev.	Changes Summary		у	Performed	Checked	Date	
Performed by							

Page

15 / 16

Revision

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

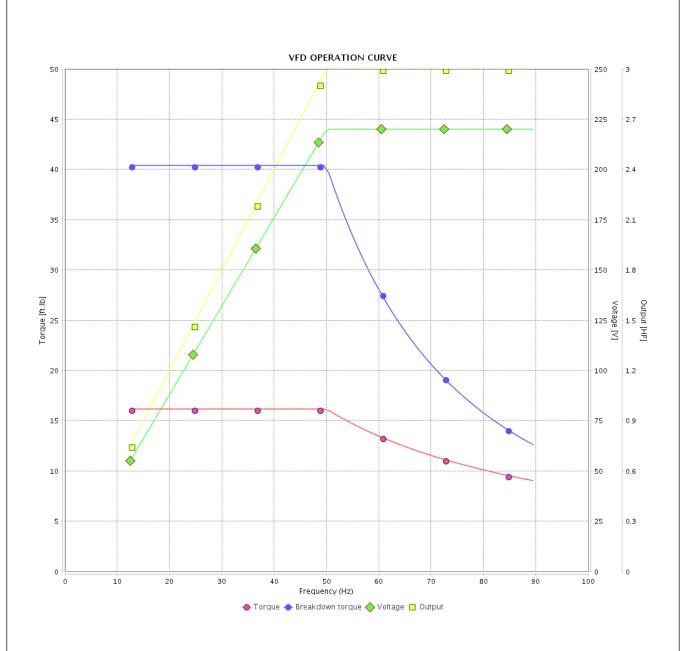
14/04/2022

Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 12675413

Catalog #: 00312ET3E213T-S



Performance		: 220/415 V 50 Hz	6P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		: 8.90/4.72 A : 5.6 : 16.2 ft.lb : 200 % : 250 % : 975 rpm	Duty cy Insulation Service	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 1.08 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
Rev.		Changes Summary		Performed	Checked	Date	
Performed by							

Page

16 / 16

Revision

