DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 14406885

Phase

Catalog #: 03018XT3E286T

Frame : 286T 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 : 517 lb

Ailitude				. Weight . 517 ib		
Protection degre	е	: IP55	Moment of ine	ertia (J) : 5.16	sq.ft.lb	
Design		: B				
Output [HP]		30	30	30	30	
Poles		4	4	4	4	
Frequency [Hz]		60	50	50	50	
Rated voltage [V]		230/460	380	400	415	
Rated current [A]		72.0/36.0	43.4	41.4	40.4	
L. R. Amperes [A]		569/284	278	298	311	
LRC [A]		7.9x(Code G)	6.4x(Code F)	7.2x(Code G)	7.7x(Code G)	
No load current [A]	29.0/14.5	14.5	15.5	16.5	
Rated speed [RPM]		1770	1460	1460 1465		
Slip [%]		1.67	2.67	2.33	2.00	
Rated torque [ft.lb]		89.0	108	108	108	
Locked rotor torque [%]		310	229	260	290	
Breakdown torque	Breakdown torque [%]		229	260	290	
Service factor		1.15	1.00	1.00	1.00	
Temperature rise		80 K	80 K	80 K	80 K	
Locked rotor time		30s (cold) 17s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level ²		68.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	
	25%	92.8	93.5	93.4	92.7	
Efficiency (%)	50%	93.0	93.0	93.0	92.4	
Linciency (70)	75%	93.6	92.4	93.0	93.0	
	100%	93.6	91.7	92.4	92.4	
	25%	0.42	0.47	0.44	0.42	
Power Factor	50%	0.66	0.71	0.68	0.66	
Power Factor	75%	0.77	0.80	0.78	0.77	

Drive end Non drive end Foundation loads

0.84

Bearing type : 6311 C3 6211 C3 Max. traction : 1097 lb Sealing : Oil Seal Lip Seal Max. compression : 1614 lb

20000 h

0.82

20000 h

Lubricant amount : 18 g 11 g Lubricant type : Mobil Polyrex EM

Notes

Lubrication interval

USABLE @208V 79.6A SF 1.00 SFA 79.6A

100%

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.

0.83

0.82

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DATA SHEET



Customer		

Thermal	protection
HIIGHIIIAI	protection

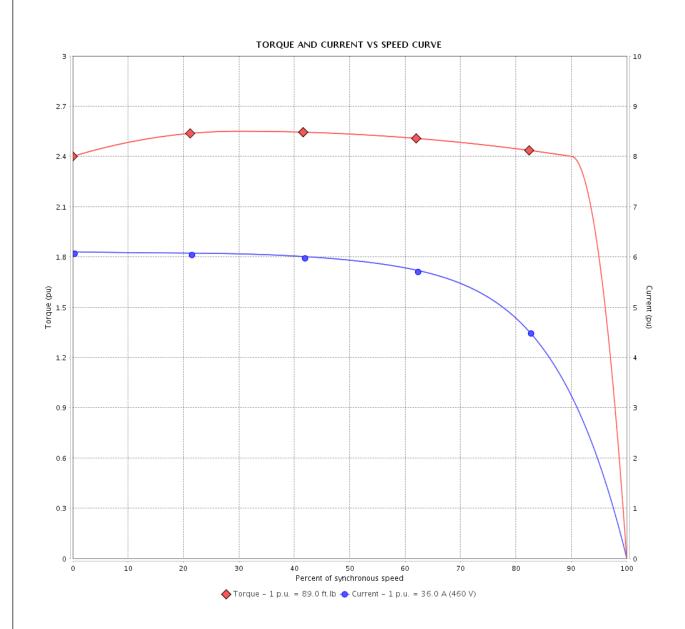
ID	Application	Туре	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 14406885 Catalog #: 03018XT3E286T



Performance : 230/460 V 60 Hz 4P Rated current : 72.0/36.0 A Moment of inertia (J) : 5.16 sq.ft.lb **LRC** : 7.9 Duty cycle : Cont.(S1) : 89.0 ft.lb Insulation class Rated torque : F Locked rotor torque : 310 % Service factor : 1.15 Breakdown torque : 310 % Temperature rise : 80 K Rated speed : 1770 rpm Design : B Locked rotor time : 30s (cold) 17s (hot)

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Three Phase Induction Motor - Squirrel Cage



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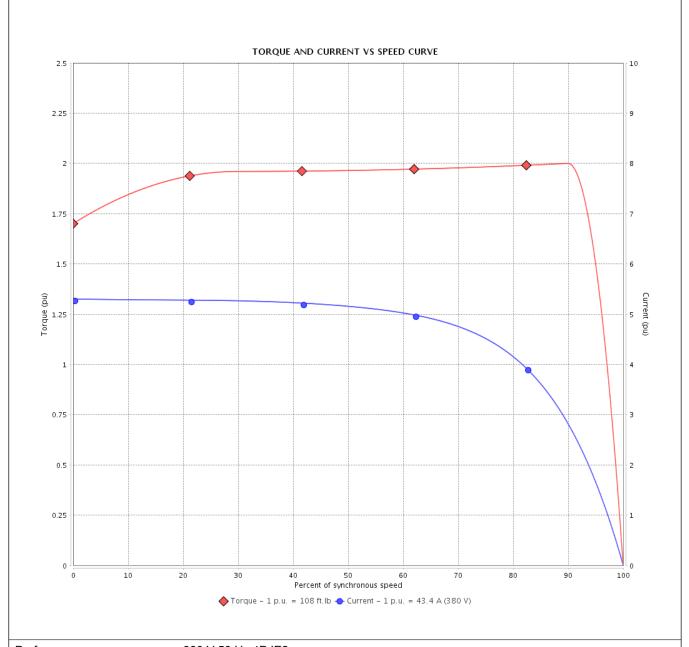
Product line : NEMA Premium Efficiency Three- Product

Phase

Product code: 14406885

Catalog #: 03018XT3E286T

: B



Performance : 380 V 50 Hz 4P IE2 Rated current : 43.4 A Moment of inertia (J) : 5.16 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) Insulation class Rated torque : 108 ft.lb : F Locked rotor torque : 229 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 80 K

Rated speed : 1460 rpm Design

Locked rotor time : 36s (cold) 20s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 14406885 Catalog #: 03018XT3E286T TORQUE AND CURRENT VS SPEED CURVE 2.25 1.75 1.5 (bd) 1.25 Current 0.5 0.25 Percent of synchronous speed ◆ Torque - 1 p.u. = 108 ft.lb ◆ Current - 1 p.u. = 41.4 A (400 V) Performance : 400 V 50 Hz 4P IE2 Rated current : 41.4 A Moment of inertia (J) : 5.16 sq.ft.lb **LRC** : 7.2 Duty cycle : Cont.(S1) Insulation class Rated torque : 108 ft.lb : F : 260 % Locked rotor torque Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 1465 rpm Design : B Locked rotor time : 36s (cold) 20s (hot) Rev. Performed Checked Date **Changes Summary**

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Date

14/04/2022

Three Phase Induction Motor - Squirrel Cage



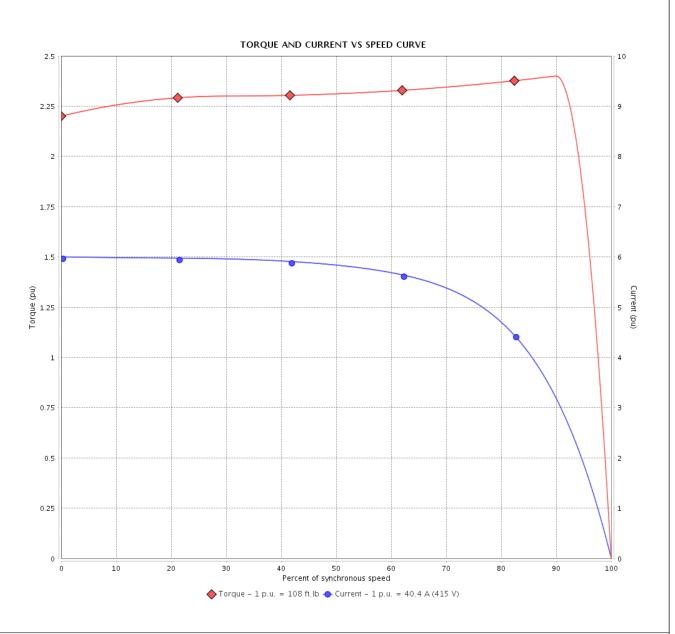
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14406885

Catalog #: 03018XT3E286T



Performance : 415 V 50 Hz 4P IE2 Rated current : 40.4 A Moment of inertia (J) : 5.16 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) : F : 108 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 290 % : 1.00 Breakdown torque : 290 % Temperature rise : 80 K Rated speed : 1470 rpm Design : B

Locked rotor time : 36s (cold) 20s (hot)

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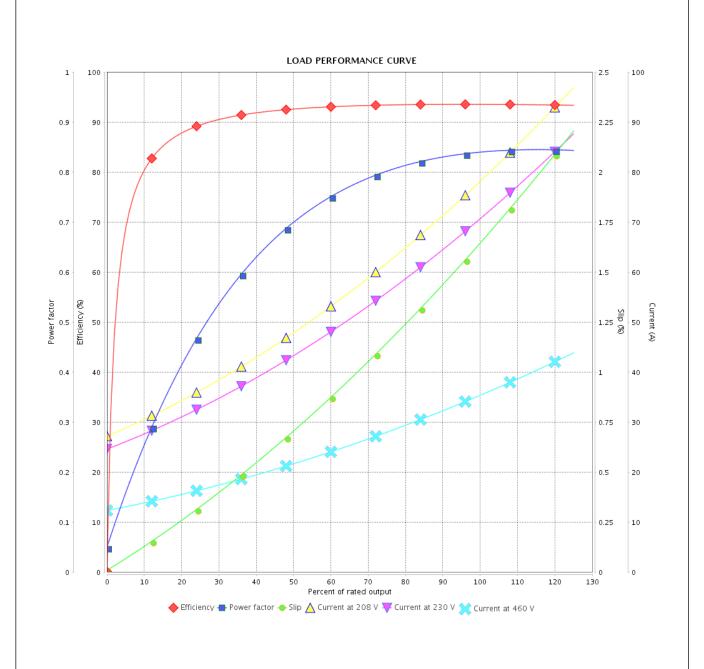
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14406885

Catalog #: 03018XT3E286T



Performance	: 23	30/460 V 60 Hz 4P				
Rated current	: 72	2.0/36.0 A	Moment o	f inertia (J)	: 5.16 sq.ft.lb	
LRC	: 7.	9	Duty cycle	;	: Cont.(S1)	
Rated torque	: 89	9.0 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 3°	10 %	Service fa	ctor	: 1.15	
Breakdown torque	eakdown torque : 310 % Temperature rise		ıre rise	: 80 K		
Rated speed	: 17	770 rpm	Design		: B	
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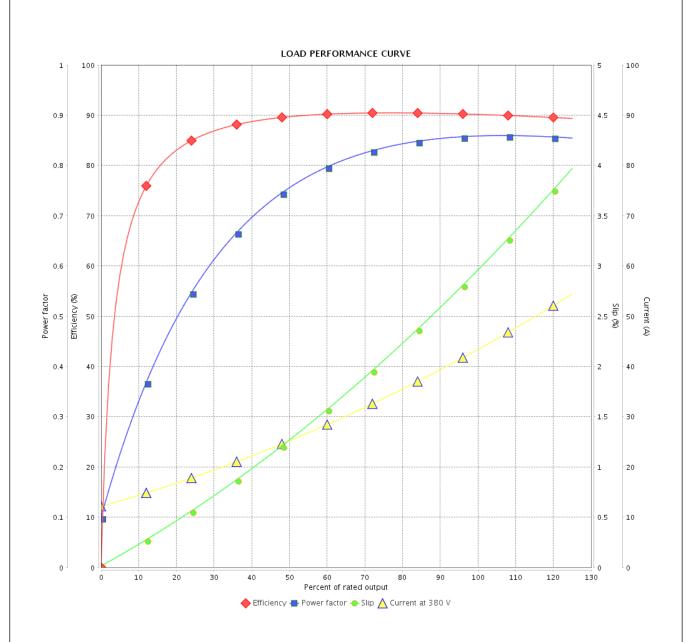
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 03018XT3E286T

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Performance	: 380 V 50 Hz 4P IE2				
Rated current	: 43.4 A	Moment of inertia (J)		: 5.16 sq.ft.lb	
LRC	: 6.4	Duty cycle	,	: Cont.(S1)	
Rated torque	: 108 ft.lb	Insulation of	class	: F ` ´	
Locked rotor torque	: 229 %	Service factor		: 1.00	
Breakdown torque	: 229 %	Temperature rise		: 80 K	
Rated speed	: 1460 rpm	Design		: B	
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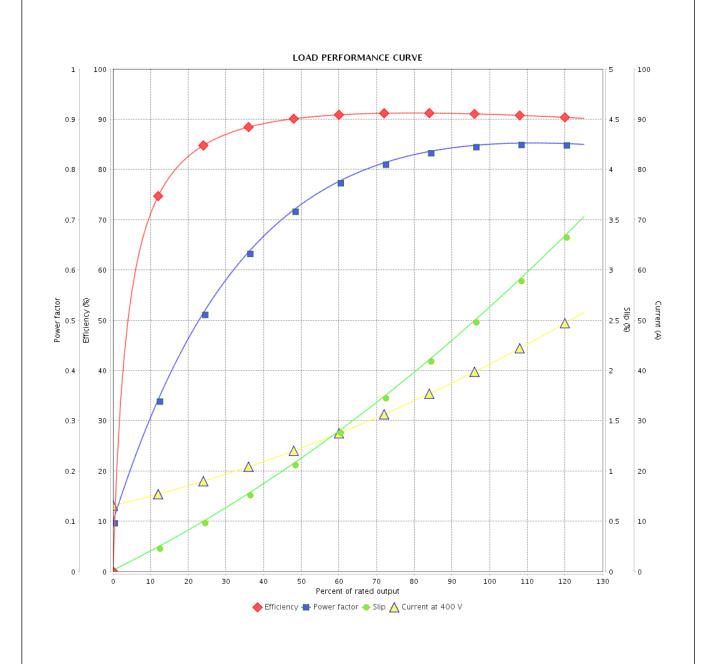


Customer

Product line : NEMA Premium Efficiency Three- Product code : 14406885

Phase

Catalog #: 03018XT3E286T



Performance	: -	400 V 50 Hz 4P IE2				
Rated current	ated current : 41.4 A Moment of inertia (J)		f inertia (J)	: 5.16 sq.ft.lb		
LRC	:	7.2	Duty cycle	;	: Cont.(S1)	
Rated torque	:	108 ft.lb	Insulation	class	: F	
Locked rotor torqu	e ::	260 %	Service fa	ctor	: 1.00	
Breakdown torque	: ::	260 %	Temperati	Temperature rise		
Rated speed	:	1465 rpm	Design		: B	
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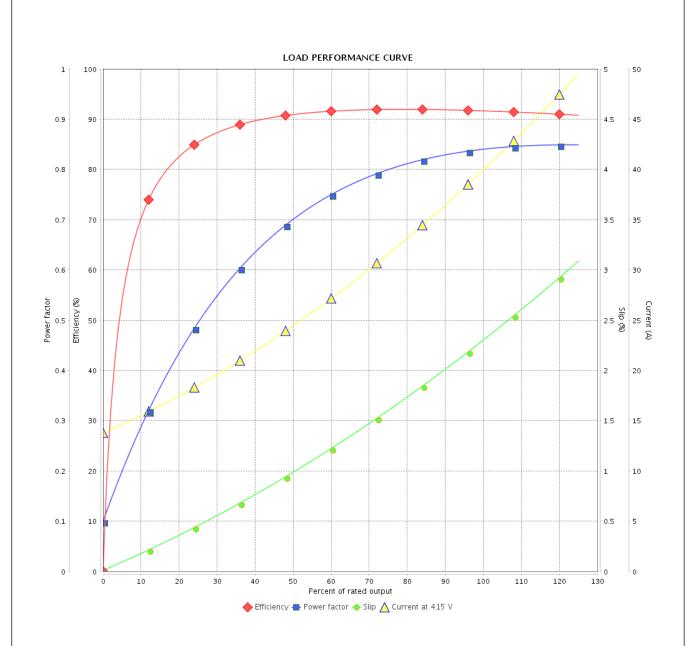
Phase

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Performance : 415 V 50 Hz 4P IE2 Rated current : 40.4 A Moment of inertia (J) : 5.16 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) : 108 ft.lb Insulation class Rated torque : F Locked rotor torque : 290 % Service factor : 1.00 Breakdown torque : 290 % Temperature rise : 80 K Rated speed : 1470 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

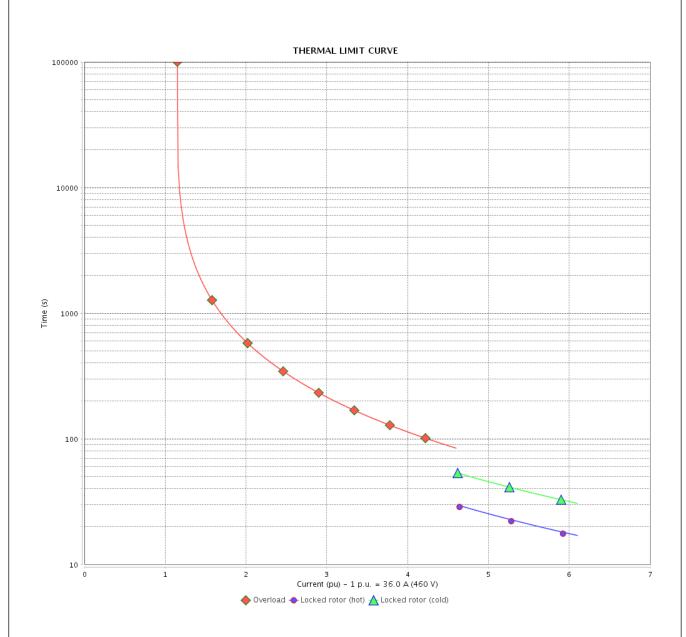


Customer	:					
Product line		NEMA Premium Efficiency T	Three-	Product code :	14406885	
				Catalog # :	03018XT3E2	286T
		230/460 V 60 Hz 4P				
Rated current	: 7	72.0/36.0 A	Moment o	of inertia (J)	: 5.16 sq.ft.lb	
Rated current .RC Rated torque	: 7 : 7 : 8	72.0/36.0 A 7.9 39.0 ft.lb	Duty cycle Insulation	e class	: Cont.(S1) : F	
Rated current RC Rated torque ocked rotor tor	: 7 : 7 : 8 que : 3	72.0/36.0 A 7.9 89.0 ft.lb 810 %	Duty cycle Insulation Service fa	e class actor	: Cont.(S1) : F : 1.15	
Rated current IRC Rated torque ocked rotor tor Breakdown torq	: 7 : 7 : 8 que : 3 ue : 3	72.0/36.0 A 7.9 89.0 ft.lb 810 %	Duty cycle Insulation Service fa Temperat	e class actor	: Cont.(S1) : F	
Performance Rated current .RC Rated torque .ocked rotor torgreakdown torq Rated speed	: 7 : 7 : 8 que : 3 ue : 3	72.0/36.0 A 7.9 89.0 ft.lb 810 %	Duty cycle Insulation Service fa	e class actor	: Cont.(S1) : F : 1.15 : 80 K	
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed	: 7 : 7 : 8 que : 3 : 3	72.0/36.0 A 7.9 89.0 ft.lb 810 %	Duty cycle Insulation Service fa Temperat	e class actor	: Cont.(S1) : F : 1.15 : 80 K	
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed Heating constan Cooling constan	: 7 : 7 : 8 que : 3 : 3	72.0/36.0 A 7.9 39.0 ft.lb 310 % 310 % 1770 rpm	Duty cycle Insulation Service fa Temperat	e class actor	: Cont.(S1) : F : 1.15 : 80 K : B	Date
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed	: 7 : 7 : 8 que : 3 : 3	72.0/36.0 A 7.9 89.0 ft.lb 810 %	Duty cycle Insulation Service fa Temperat	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K	Date
Rated current RC Rated torque Cocked rotor tor Breakdown torq Rated speed Reating constan Cooling constan Rev.	: 7 : 7 : 8 que : 3 : 3	72.0/36.0 A 7.9 39.0 ft.lb 310 % 310 % 1770 rpm	Duty cycle Insulation Service fa Temperat	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	Date
Rated current .RC Rated torque .ocked rotor tor Breakdown torq Rated speed Heating constan	: 7 : 7 : 8 que : 3 : 3	72.0/36.0 A 7.9 39.0 ft.lb 310 % 310 % 1770 rpm	Duty cycle Insulation Service fa Temperat	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	Date

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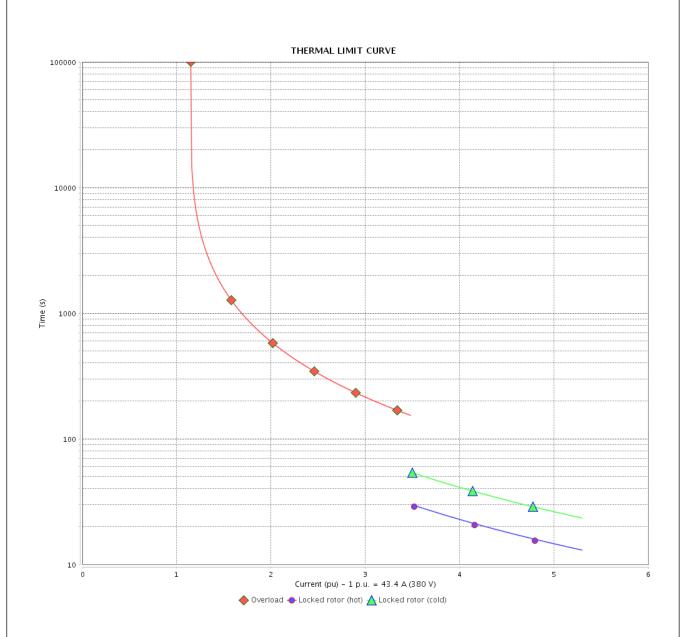


erformance : 380 ∨ 50 Hz 4P IE2 alact current	Customer	:					
erformance : 380 V 50 Hz 4P IE2 ated current : 43.4 A	Product line						
ated current : 43.4 A					Catalog # :	03018XT3E2	86T
ated current : 43.4 A							
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ated current : 43.4 A							
ated current : 43.4 A							
ated current : 43.4 A	Performance	: 3	80 V 50 Hz 4P IF2				
RC : 6.4 Duty cycle : Cont.(\$1) ated torque : 108 ft.lb Insulation class : F ocked rotor torque : 229 % Service factor : 1.00 reakdown torque : 229 % Temperature rise : 80 K ated speed : 1460 rpm Design : B eating constant ooling constant Rev. Changes Summary Performed Checked Date Performed by Checked by Page Revis	Rated current			Moment of	of inertia (J)	: 5.16 sq.ft.lb	
cocked rotor torque : 229 % Service factor : 1.00 reakdown torque : 229 % Temperature rise : 80 K ated speed : 1460 rpm Design : B eating constant cooling constant Rev. Changes Summary Performed Checked Date Performed by Checked by Checked by	.RC	: 6	.4	Duty cycle	Э	: Cont.(S1)	
reakdown torque : 229 % Temperature rise : 80 K Design : B eating constant cooling constant Rev. Changes Summary Performed Checked Date Performed by Checked by							
eating constant ooling constant Rev. Changes Summary Performed Checked Date Performed by Checked by Page Revis	Breakdown torqu	ie : 2:	29 %	Temperat		: 80 K	
Changes Summary Performed Checked Date Performed by Checked by	Rated speed	: 1	460 rpm	Design		: B	
Rev. Changes Summary Performed Checked Date Performed by Checked by Page Revis							
Performed by Checked by Page Revis	Cooling constant	t	-				
Checked by Page Revis	Rev.		Changes Summary		Performed	Checked	Date
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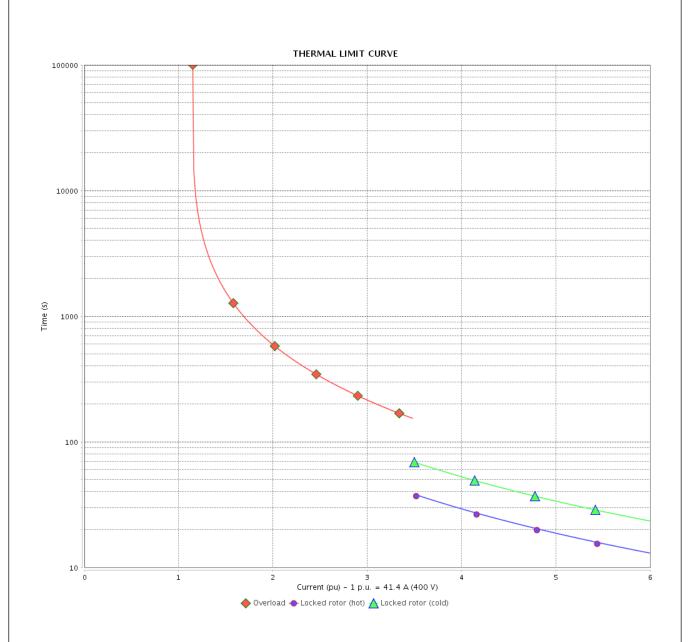


Customer	:					
Product line		NEMA Premium Efficiency hase		Product code :	14406885	
				Catalog # :	03018XT3E28	36T
Performance	: 41	00 V 50 Hz 4P IE2				
Rated current	: 4	1.4 A	Moment o	of inertia (J)	: 5.16 sq.ft.lb	
Rated current RC	: 4 : 7.	1.4 A 2	Duty cycle	9	: Cont.(S1)	
Rated current LRC Rated torque	: 4 : 7 : 10	1.4 A	Moment of Duty cycle Insulation Service fa	e class	: 5.16 sq.ft.lb : Cont.(S1) : F : 1.00	
Rated current LRC Rated torque Locked rotor tord Breakdown tord	: 4 : 7 : 1 que : 2 ue : 2	1.4 A .2 08 ft.lb 60 % 60 %	Duty cycle Insulation Service fa Temperate	e class ictor	: Cont.(S1) : F : 1.00 : 80 K	
Rated current LRC Rated torque Locked rotor tord Breakdown tord Rated speed	: 4 : 7 : 1 que : 2 ue : 2 : 1	1.4 A .2 08 ft.lb 60 %	Duty cycle Insulation Service fa	e class ictor	: Cont.(S1) : F : 1.00	
Rated current LRC Rated torque Locked rotor tor Breakdown torq Rated speed Heating constan	: 4 : 7 : 10 que : 20 ue : 20 : 10	1.4 A .2 08 ft.lb 60 % 60 %	Duty cycle Insulation Service fa Temperate	e class ictor	: Cont.(S1) : F : 1.00 : 80 K	
Rated current LRC Rated torque Locked rotor torg Breakdown torg Rated speed Heating constan Cooling constan	: 4 : 7 : 10 que : 20 ue : 20 : 10	1.4 A .2 08 ft.lb 60 % 60 % 465 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Data
Rated current LRC Rated torque Locked rotor torg Breakdown torg Rated speed	: 4 : 7 : 10 que : 20 ue : 20 : 10	1.4 A .2 08 ft.lb 60 % 60 %	Duty cycle Insulation Service fa Temperate	e class ictor	: Cont.(S1) : F : 1.00 : 80 K	Date
Rated current LRC Rated torque Locked rotor tore Breakdown torque Rated speed Heating constan Cooling constan Rev.	: 4 : 7 : 10 que : 20 ue : 20 : 10	1.4 A .2 08 ft.lb 60 % 60 % 465 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date
Performance Rated current LRC Rated torque Locked rotor tord Breakdown torque Rated speed Heating constant Cooling constant Rev. Performed by Checked by	: 4 : 7 : 10 que : 20 ue : 20 : 10	1.4 A .2 08 ft.lb 60 % 60 % 465 rpm	Duty cycle Insulation Service fa Temperate	e class actor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date

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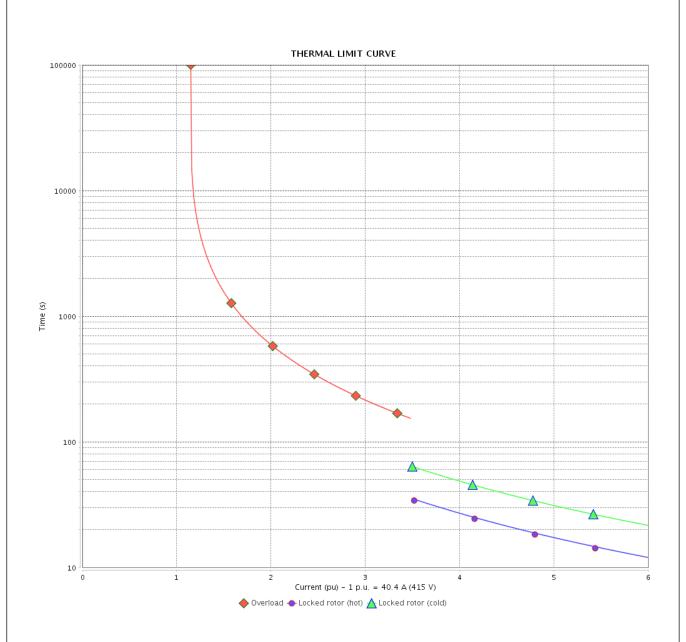


Customer	:					
Product line		NEMA Premium Efficiency hase		Product code :	14406885	
				Catalog # :	03018XT3E2	86T
Performance	• 4	15 V 50 Hz 4P IE2				
Rated current		0.4 A	Moment of	of inertia (J)	: 5.16 sq.ft.lb	
_RC	: 7	.7	Duty cycle	Э	: Cont.(S1)	
Rated torque ₋ocked rotor tord		08 ft.lb 90 %	Insulation Service fa		: F : 1.00	
Breakdown torqu		90 %	Temperat		: 80 K	
Rated speed		470 rpm	Design		: B	
Heating constan	t					
Cooling constan						
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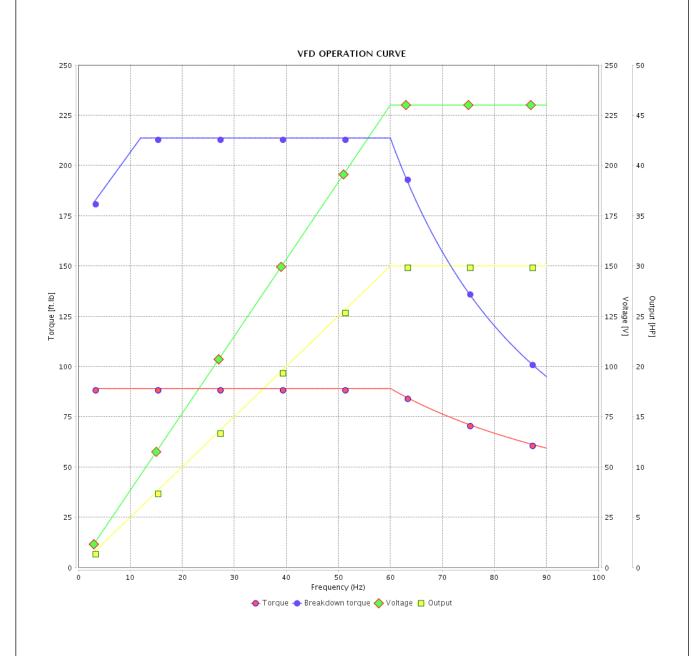
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14406885

03018XT3E286T Catalog #:



Performance	: 230/	/460 V 60 Hz 4P				
Rated current	: 72.0	/36.0 A	Moment of	f inertia (J)	: 5.16 sq.ft.lb	
LRC	: 7.9		Duty cycle)	: Cont.(S1)	
Rated torque	: 89.0	ft.lb	Insulation	class	: F	
Locked rotor tord	que : 310	%	Service fa	Service factor : 1.15		
Breakdown torqu	ie : 310	%	Temperati	ıre rise	: 80 K	
Rated speed	: 1770	0 rpm	Design		: B	
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Date

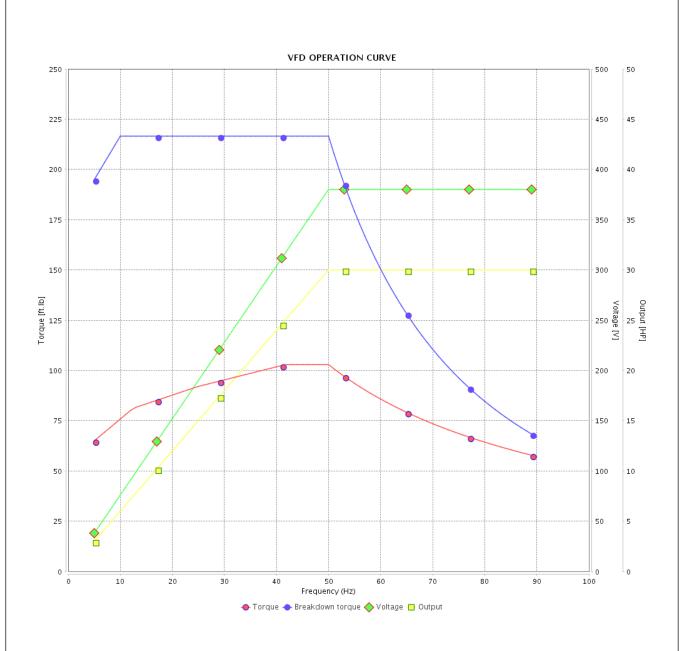
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Product line : NEMA Premium Efficiency Three-

Phase

Product code: 14406885

Catalog #: 03018XT3E286T



Performance : 380 V 50 Hz 4P IE2 Rated current : 43.4 A Moment of inertia (J) : 5.16 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.4 : 108 ft.lb Insulation class : F Rated torque Locked rotor torque : 229 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 80 K Rated speed : 1460 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

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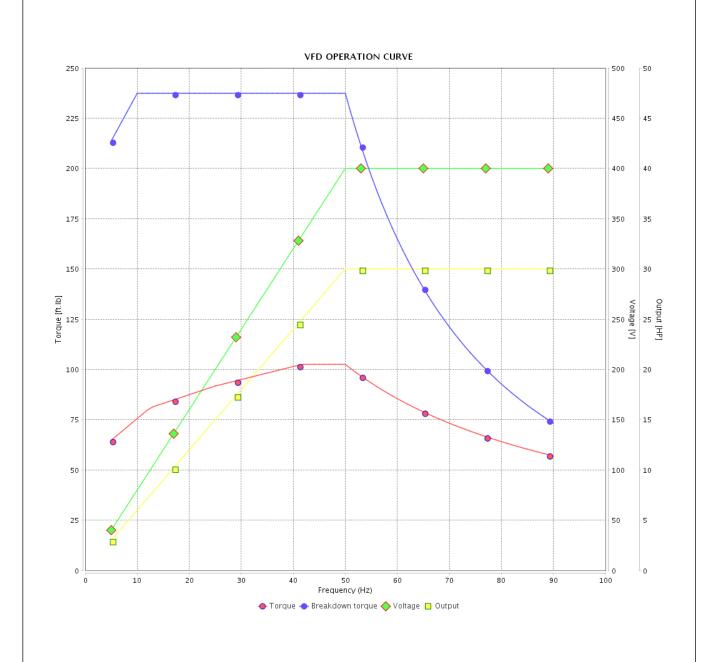
Customer

Product line : NEMA Premium Efficiency Three- Pro-

Phase

Product code: 14406885

Catalog #: 03018XT3E286T



Performance	: 400 V 50 Hz 4P IE2				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 41.4 A : 7.2 : 108 ft.lb : 260 % : 260 % : 1465 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 5.16 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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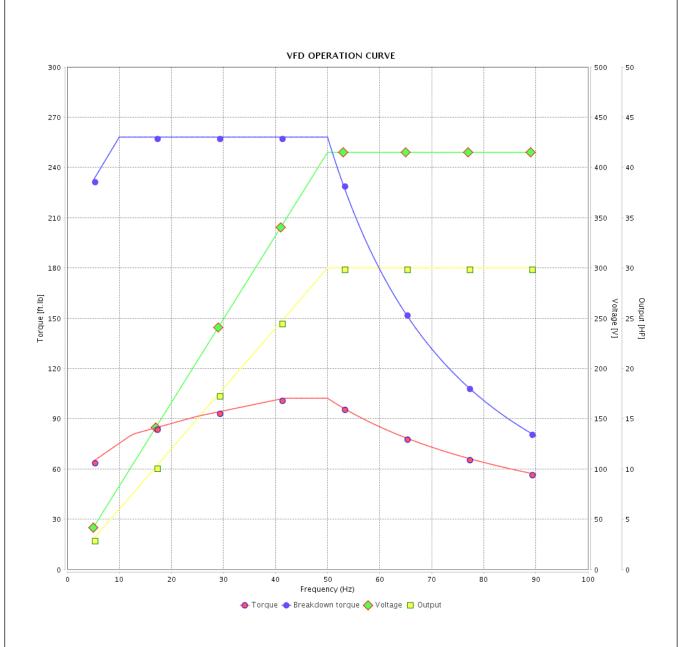
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Product line : NEMA Premium Efficiency Three- Pr

Phase

Product code: 14406885

Catalog #: 03018XT3E286T



Performance : 415 V 50 Hz 4P IE2 Rated current : 40.4 A Moment of inertia (J) : 5.16 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) : 108 ft.lb Insulation class : F Rated torque Locked rotor torque : 290 % Service factor : 1.00 Breakdown torque : 290 % Temperature rise : 80 K Rated speed : 1470 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

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