DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408372

Phase

Catalog #: 07509XT3E444T

Frame : 444/5T 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 : 1954 lb

Protection degree : IP55 | Moment of inertia (J) : 73.6 sq.ft.lb

Design		: B			
Output [HP]		75	60	60	60
Poles		8	8	8	8
Frequency [Hz]		60	50	50	50
Rated voltage [V]		230/460	380	400	415
Rated current [A]		184/92.2	91.9	88.4	86.9
L. R. Amperes [A]		1125/562	533	566	600
LRC [A]		6.1x(Code G)	5.8x(Code G)	6.4x(Code H)	6.9x(Code J)
No load current [A]		76.0/38.0	37.5	40.7	43.0
Rated speed [RPM	/ 1]	890	740	740	740
	Slip [%]		1.33	1.33	1.33
Rated torque [ft.lb]		443	426	426	426
Locked rotor torque [%]		170	160	190	210
Breakdown torque [%]		210	210	229	260
Service factor		1.15	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		32s (cold) 18s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²		64.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)
	25%	93.9	94.0	93.4	92.8
Efficiency (%)	50%	93.6	93.6	93.0	93.0
Linciency (70)	75%	94.1	93.6	93.6	93.6
	100%	93.6	93.0	93.0	93.6
	25%	0.41	0.41	0.37	0.35
Power Factor	50%	0.66	0.66	0.62	0.59
1 OWELL ACIO	75%	0.76	0.76	0.73	0.71
	100%	0.80	0.80	0.79	0.77

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

Bearing type : 6219 C3 6316 C3 Max. traction : 1974 lb Sealing : Viton Viton Seal Max. compression : 3928 lb

Oil Seal

Lubrication interval:15247 h15904 hLubricant amount:28 g34 gLubricant type:Mobil Polyrex EM

Notes

USABLE @208V 204A SF 1.00 SFA 204A

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.

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			1 / 22	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer		

Thermal protection

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			2 / 22	

Three Phase Induction Motor - Squirrel Cage

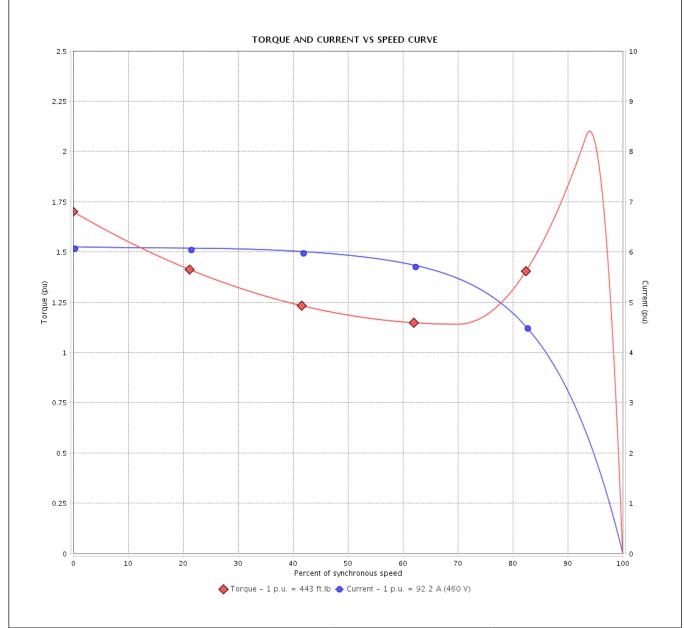


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408372

Phase

Catalog #: 07509XT3E444T



Performance	: 230/460 V 60 Hz 8P			
Rated current	: 184/92.2 A	Moment of inertia (J)	: 73.6 sq.ft.lb	
LRC	: 6.1	Duty cycle	: Cont.(S1)	
Rated torque	: 443 ft.lb	Insulation class	: F	
Locked rotor torque	: 170 %	Service factor	: 1.15	
Breakdown torque	: 210 %	Temperature rise	: 80 K	
Rated speed	: 890 rpm	Design	: B	

Locked rotor time : 32s (cold) 18s (hot)

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Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			3 / 22	

Three Phase Induction Motor - Squirrel Cage

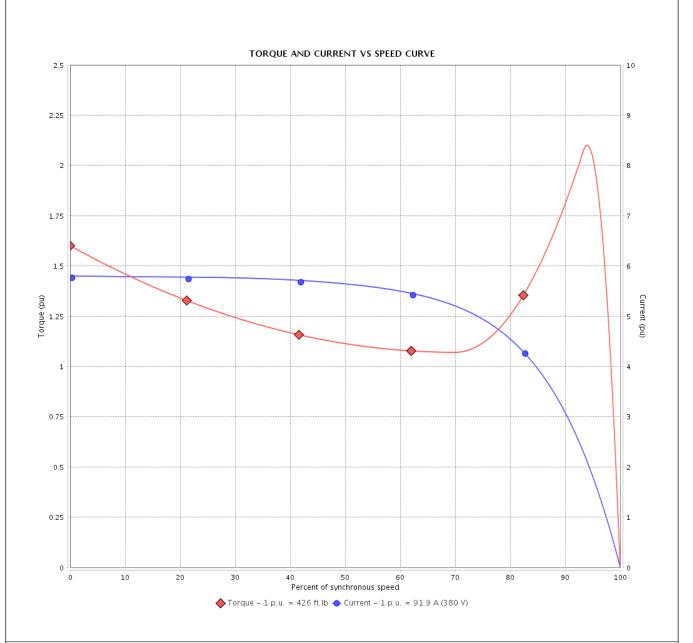


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12408372

Phase

Catalog #: 07509XT3E444T



Performance : 380 V 50 Hz 8P IE3 Rated current : 91.9 A Moment of inertia (J) : 73.6 sq.ft.lb **LRC** : 5.8 Duty cycle : Cont.(S1) Insulation class Rated torque : 426 ft.lb : F Locked rotor torque : 160 % Service factor : 1.00 : 210 % Breakdown torque Temperature rise : 80 K Rated speed : 740 rpm Design : B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			4 / 22	

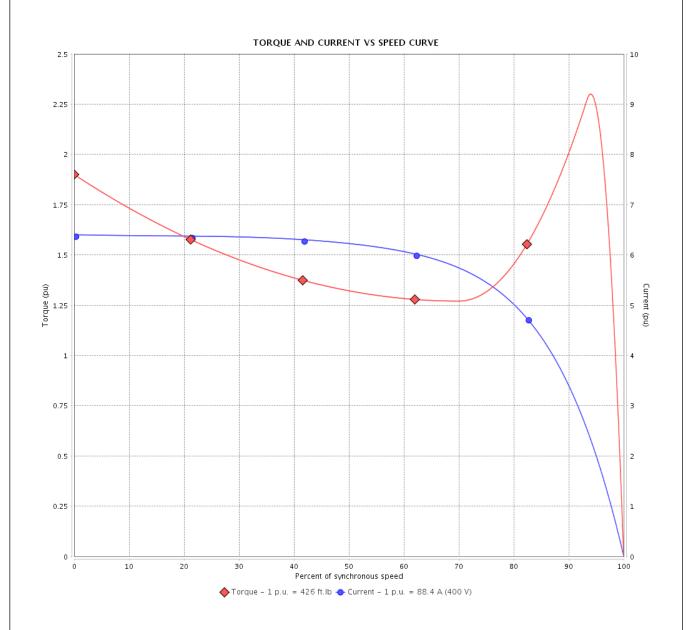
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12408372

Catalog #: 07509XT3E444T



Performance	: 400 V 50 Hz 8P IE3		
Rated current	: 88.4 A	Moment of inertia (J)	: 73.6 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 426 ft.lb	Insulation class	:F ` ´
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 740 rpm	Design	: B
Locked rotor time	: 36s (cold) 20s (hot)		

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Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by		-		Page	Revision
Date	13/04/2022			5 / 22	

Three Phase Induction Motor - Squirrel Cage



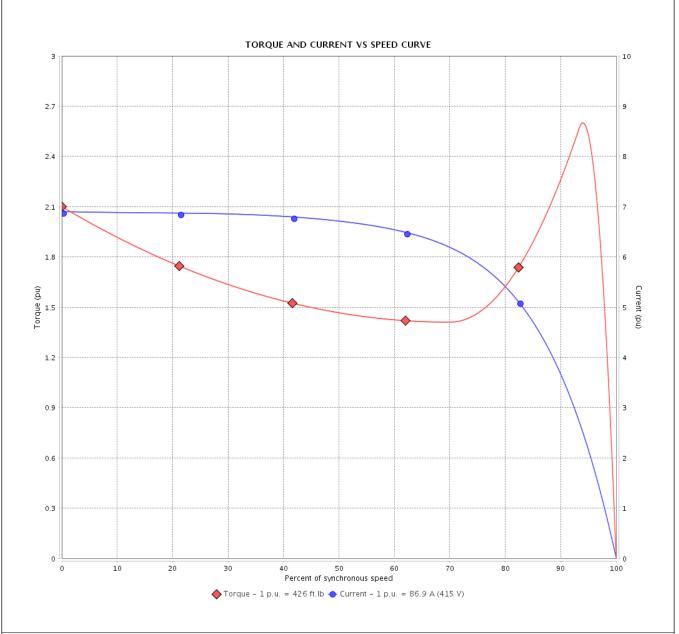
Customer :

Product line : NEMA Premium Efficiency Three- F

Phase

Product code: 12408372

Catalog #: 07509XT3E444T



Performance	: 415 V 50 Hz 8P IE4		
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 86.9 A : 6.9 : 426 ft.lb : 210 % : 260 % : 740 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 73.6 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			6 / 22	

Three Phase Induction Motor - Squirrel Cage

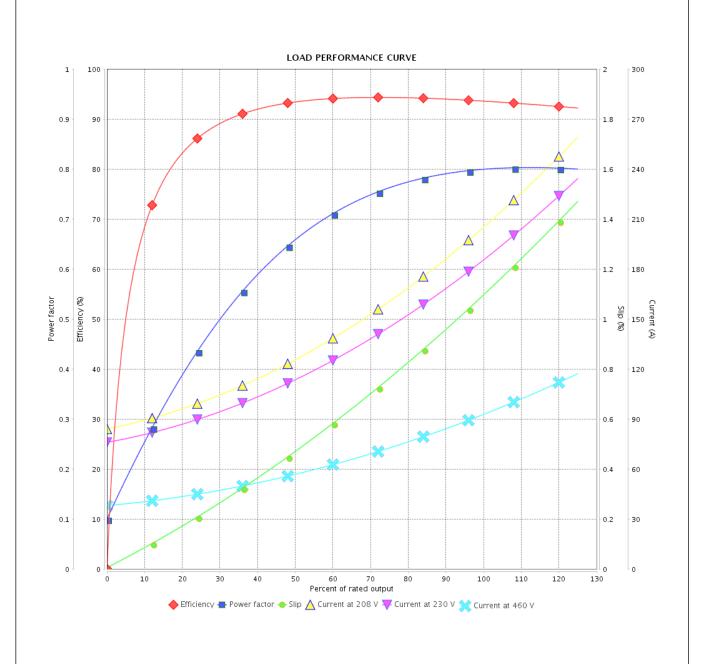


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408372

Phase

Catalog #: 07509XT3E444T



Performance	: :	230/460 V 60 Hz 8P				
Rated current	ated current : 184/92.2 A Mor		Moment o	f inertia (J)	: 73.6 sq.ft.lb	
LRC	: 6.1 Duty cycle		: Cont.(S1)			
Rated torque			: F			
Locked rotor torqu	ocked rotor torque : 170 % Service factor		: 1.15			
Breakdown torque		210 %	Temperature rise		: 80 K	
Rated speed	: 8	890 rpm	Design		: B	
Rev.		Changes Summar	ту	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				7 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :

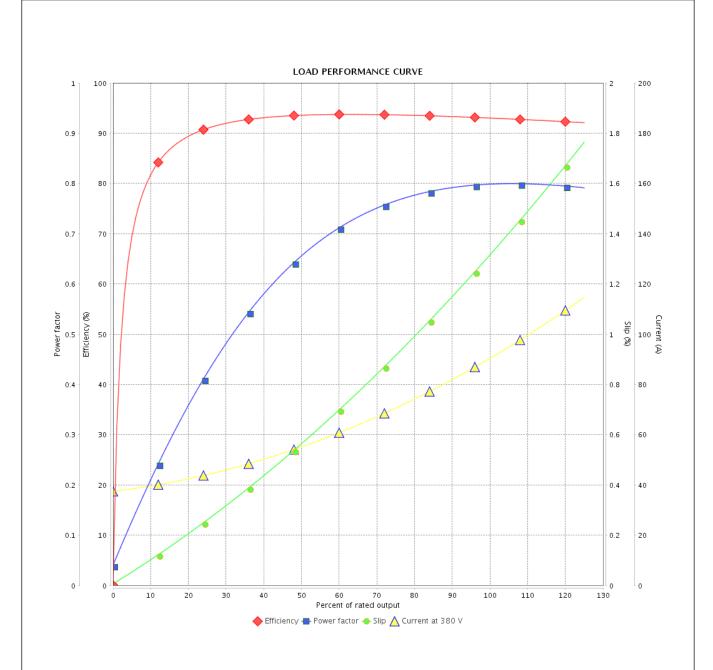
Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 07509XT3E444T

12408372

8 / 22



Performance	: 380 V 50 Hz 8P IE3								
Rated current LRC Rated torque	: 91.9 A : 5.8 : 426 ft.lb	: 5.8 Duty cycle		: 5.8 Duty cycle		: 5.8 Duty cycle		: 73.6 sq.ft.lb : Cont.(S1) : F	
Locked rotor torque Breakdown torque Rated speed	cked rotor torque : 160 % Service factor eakdown torque : 210 % Temperature rise			: 1.00 : 80 K : B					
Rev.	Changes Summary	'	Performed	Checked	Date				
Performed by									
Checked by				Page	Revision				

13/04/2022

Three Phase Induction Motor - Squirrel Cage

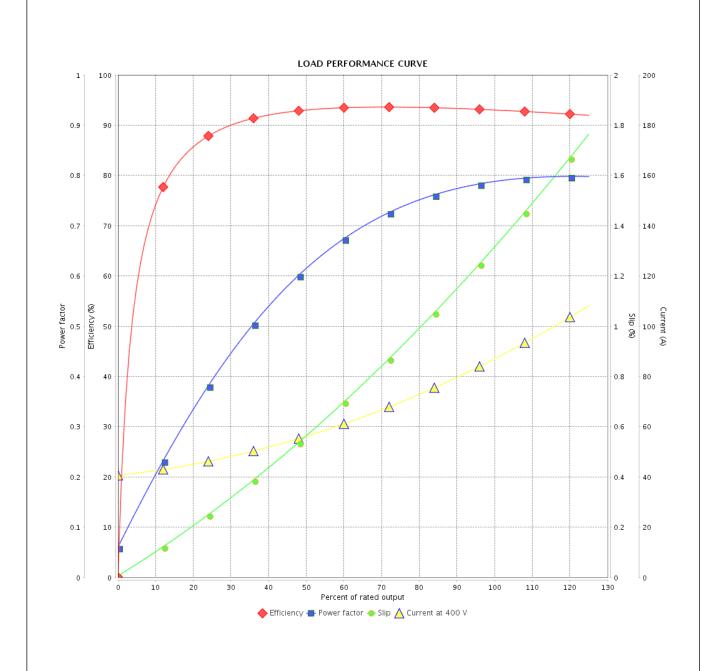


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408372

Phase

Catalog #: 07509XT3E444T



Performance	ance : 400 V 50 Hz 8P IE3				
Rated current	: 88.4 A	Moment of inertia (J)		: 73.6 sq.ft.lb	
LRC	: 6.4	Duty cycle		: Cont.(S1)	
Rated torque	: 426 ft.lb	Insulation	class	: F	
Locked rotor torque	: 190 %	Service fa	ctor	: 1.00	
Breakdown torque	: 229 %	Temperature rise Design		: 80 K	
Rated speed	: 740 rpm			: B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

9/22

13/04/2022

Three Phase Induction Motor - Squirrel Cage



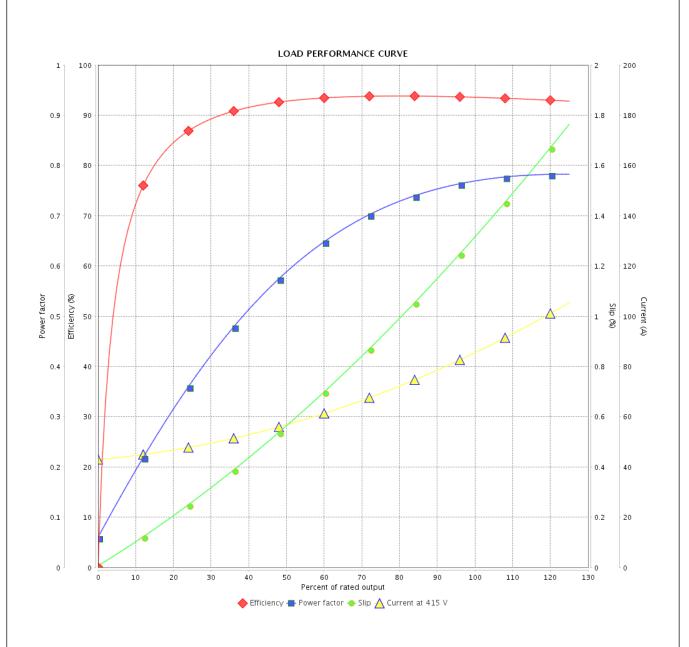
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12408372

Catalog #: 07509XT3E444T



Performance	: 415 V 50 Hz 8P IE4			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 86.9 A : 6.9 : 426 ft.lb : 210 % : 260 % : 740 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 73.6 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision

10/22

13/04/2022

Three Phase Induction Motor - Squirrel Cage

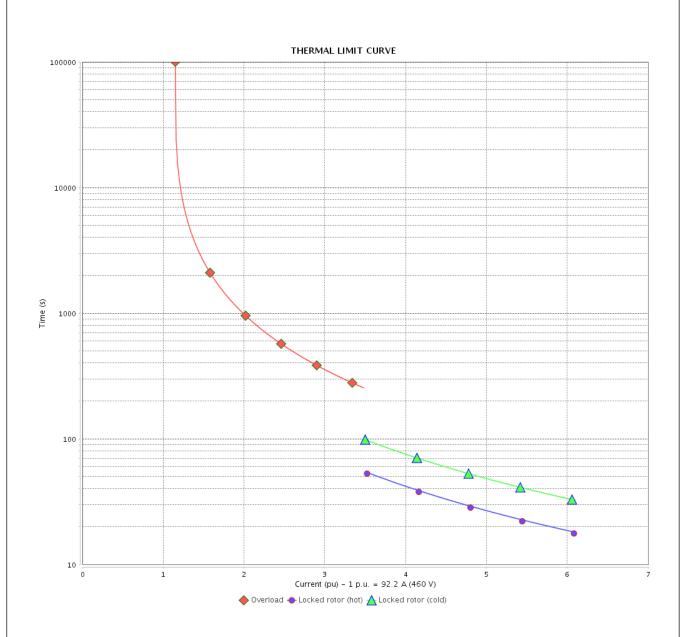


Customer	:					
Product line		NEMA Premium Efficiency in the hase		Product code : Catalog # :	12408372 07509XT3E4	4 4T
D		20/400 \/ 00 LI= 0D				
Performance Rated current		30/460 V 60 Hz 8P 84/92.2 A	Moment	of inartia (I)	: 72 6 ag ft lb	
LRC	: 6.		Duty cycle	of inertia (J) e	: 73.6 sq.ft.lb : Cont.(S1)	
Rated torque		43 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown tord		70 % 10 %	Service fa Temperat		: 1.15 : 80 K	
Rated speed		90 rpm	Design	uic iisc	: B	
Heating constan						
Cooling constant						
Rev.		Changes Summary	I	Performed	Checked	Date
Performed by				`	-	
Checked by					Page	Revision
Date	13/04/2022				11 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by		-		Page	Revision
Date	13/04/2022			12 / 22	

Three Phase Induction Motor - Squirrel Cage

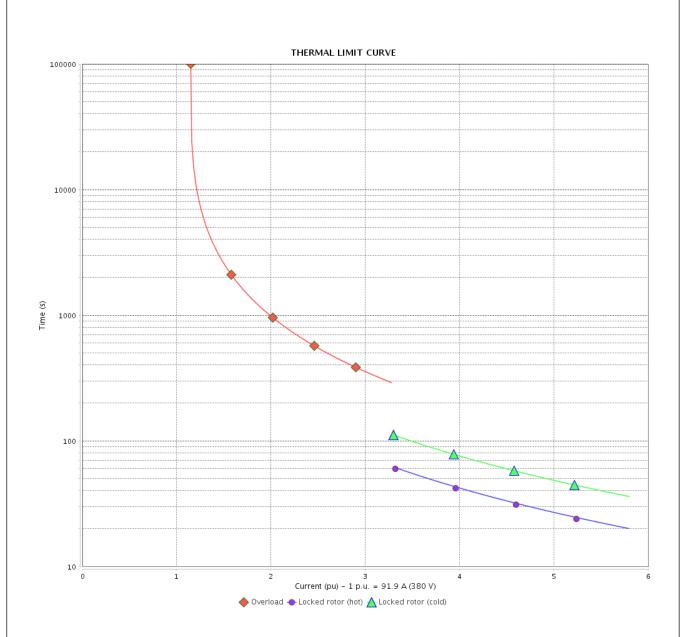


Customer	:					
Product line		NEMA Premium Efficiency ⁻ hase		Product code : Catalog # :	12408372 07509XT3E4	44T
Performance		80 V 50 Hz 8P IE3				
Rated current LRC	: 9 [,] : 5.	1.9 A	Moment of Duty cycle	of inertia (J)	: 73.6 sq.ft.lb : Cont.(S1)	
Rated torque	: 42	26 ft.lb	Insulation	class	: F	
Locked rotor tord		60 % 10 %	Service fa Temperat		: 1.00 : 80 K	
Breakdown torqu Rated speed		10 % 40 rpm	Design	ure rise	: B	
Heating constan			-			
Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				13 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by		-		Page	Revision
Date	13/04/2022			14 / 22	

Three Phase Induction Motor - Squirrel Cage

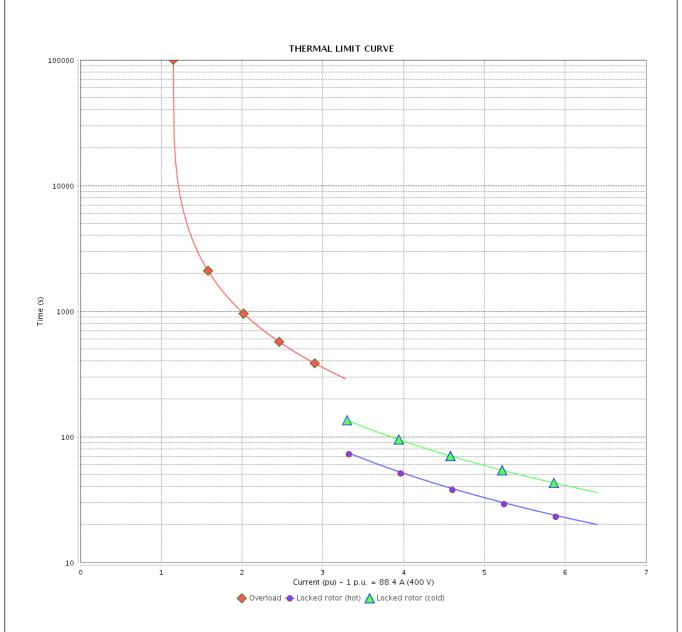


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Product line		NEMA Premium Efficiency in the contract of the		Product code : Catalog # :	12408372 07509XT3E4	.44T
				<u>-</u>		
Performance	: 40	00 V 50 Hz 8P IE3				
Rated current		8.4 A	Moment of	of inertia (J)	: 73.6 sq.ft.lb	
LRC Rated torque	: 6. : 42	.4 26 ft.lb	Duty cycle Insulation	e class	: Cont.(S1) : F	
Locked rotor tord	que : 19	90 %	Service fa	actor	: 1.00	
Breakdown torqu Rated speed		29 % 40 rpm	Temperat Design	ure rise	: 80 K : B	
		ιο τριτι	Design			
Heating constant Cooling constant						
Rev.	•	Changes Summary		Performed	Checked	Date
-						
Performed by	<u> </u>				I	
Checked by					Page	Revision
Date	13/04/2022	1			15 / 22	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			16 / 22	

Three Phase Induction Motor - Squirrel Cage

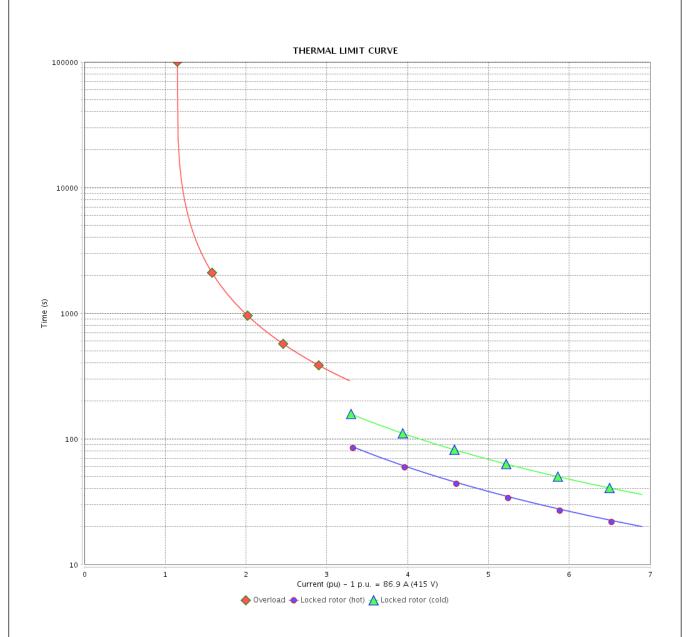


Product line		NEMA Premium Efficiency T hase	hree-	Product code :	12408372	
	Г	liase		Catalog # :	07509XT3E4	44T
Performance Rated current LRC Rated torque Locked rotor tord Breakdown tord	: 8 : 6 : 4 que : 2 ue : 2	.9 26 ft.lb 10 % 60 %	Duty cycle Insulation Service fa Temperatu	class ctor	: 73.6 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K	
Rated current _RC Rated torque _ocked rotor tore	: 8 : 6 : 4 que : 2 ue : 2 : 7	6.9 A .9 26 ft.lb 10 % 60 %	Duty cycle Insulation Service fa	e class ctor	: Cont.(S1) : F : 1.00	
Rated current LRC Rated torque Locked rotor torg Breakdown torg Rated speed	: 8 : 6 : 4 que : 2 ue : 2 : 7	6.9 A .9 26 ft.lb 10 % 60 %	Duty cycle Insulation Service fa Temperatu	e class ctor	: Cont.(S1) : F : 1.00 : 80 K	
Rated current LRC Rated torque Locked rotor torg Breakdown torg Rated speed	: 8 : 6 : 4 que : 2 ue : 2 : 7	6.9 A .9 26 ft.lb 10 % 60 %	Duty cycle Insulation Service fa Temperatu	e class ctor	: Cont.(S1) : F : 1.00 : 80 K	Date
Rated current LRC Rated torque Locked rotor torgoreakdown torgoreated speed Heating constan Cooling constan	: 8 : 6 : 4 que : 2 ue : 2 : 7	6.9 A 9 26 ft.lb 10 % 60 % 40 rpm	Duty cycle Insulation Service fa Temperatu	class ctor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date
Rated current LRC Rated torque Locked rotor torgoreakdown torgoreated speed Heating constan Cooling constan	: 8 : 6 : 4 que : 2 ue : 2 : 7	6.9 A 9 26 ft.lb 10 % 60 % 40 rpm	Duty cycle Insulation Service fa Temperatu	class ctor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date
Rated current LRC Rated torque Locked rotor torg Breakdown torg Rated speed Heating constan Cooling constan Rev.	: 8 : 6 : 4 que : 2 ue : 2 : 7	6.9 A 9 26 ft.lb 10 % 60 % 40 rpm	Duty cycle Insulation Service fa Temperatu	class ctor ure rise	: Cont.(S1) : F : 1.00 : 80 K : B	Date

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			18 / 22	

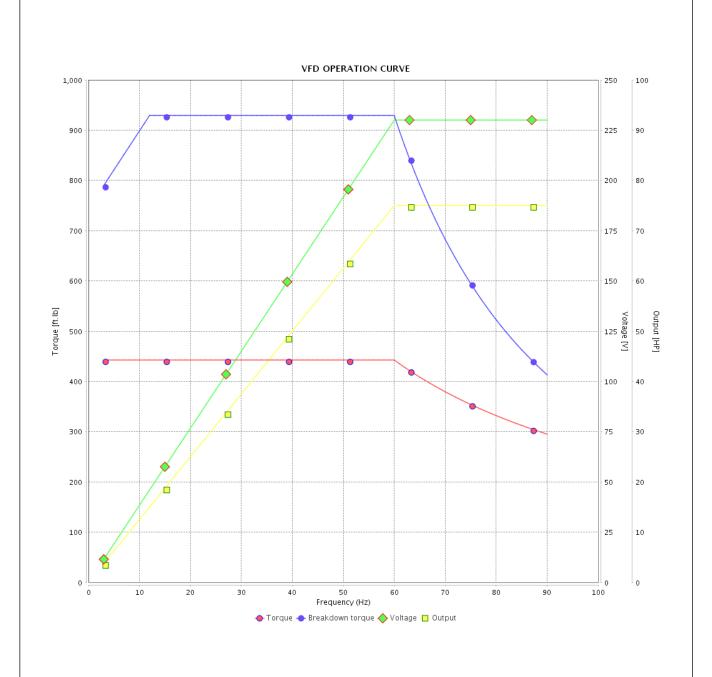
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12408372

Catalog #: 07509XT3E444T



Performance	: 2	: 230/460 V 60 Hz 8P				
Rated current : 184/9		84/92.2 A	Moment o	Moment of inertia (J)		
LRC		.1	Duty cycle		: Cont.(S1)	
Rated torque	: 4	43 ft.lb	lb Insulation class		:F	
Locked rotor tord	que : 1	70 %	Service factor		: 1.15	
Breakdown torqu	ie : 2	10 %	Temperati	Temperature rise		
Rated speed	: 8	: 890 rpm		Design		
Rev.		Changes Summary			Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				19 / 22	

Three Phase Induction Motor - Squirrel Cage



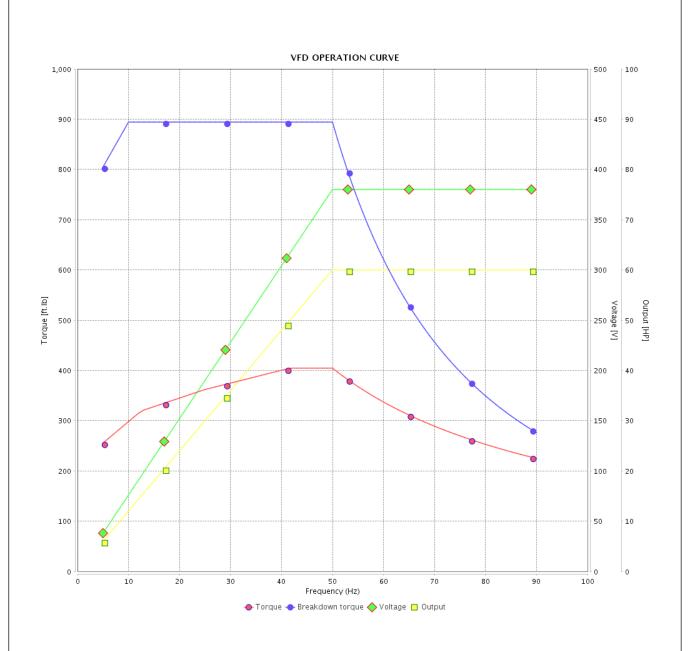
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12408372

Catalog #: 07509XT3E444T



Performance	::	: 380 V 50 Hz 8P IE3						
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	que :	91.9 A 5.8 426 ft.lb 160 % 210 % 740 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 73.6 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B		
Rev.		Changes Summary		Performed	Checked	Date		
Performed by Checked by					Page	Revision		

20 / 22

13/04/2022

Three Phase Induction Motor - Squirrel Cage

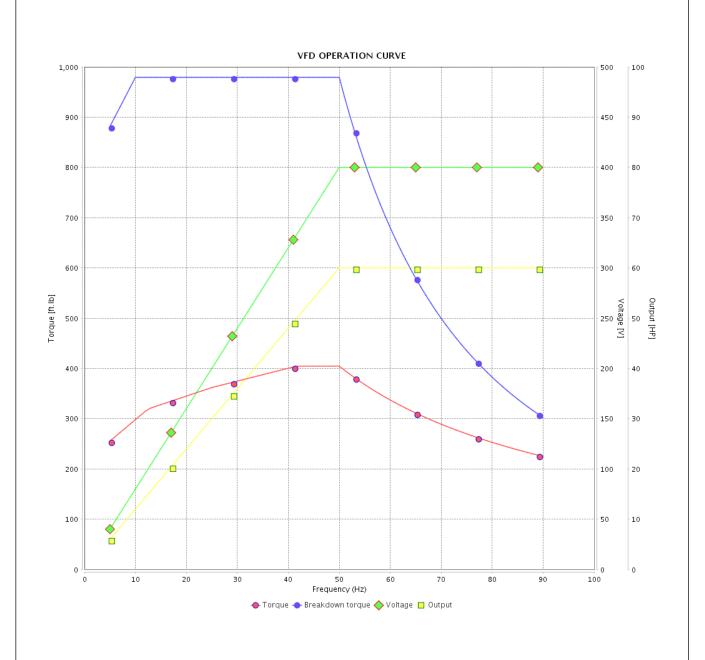


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12408372

Phase

Catalog #: 07509XT3E444T



- ·					,			
Performance :		: 400 V 50 Hz 8P IE3						
Rated current :		8.4 A	Moment of inertia (J)		: 73.6 sq.ft.lb			
LRC		.4	Duty cycle		: Cont.(S1)			
Rated torque		26 ft.lb	Insulation class		: F			
Locked rotor torque	e :1	90 %	Service factor		: 1.00			
Breakdown torque	: 2	: 229 % : 740 rpm		Temperature rise Design				
Rated speed	: 7							
Rev.	Changes Summary			Performed	Checked	Date		
Performed by								
Checked by					Page	Revision		
Date	13/04/2022				21 / 22			

Three Phase Induction Motor - Squirrel Cage



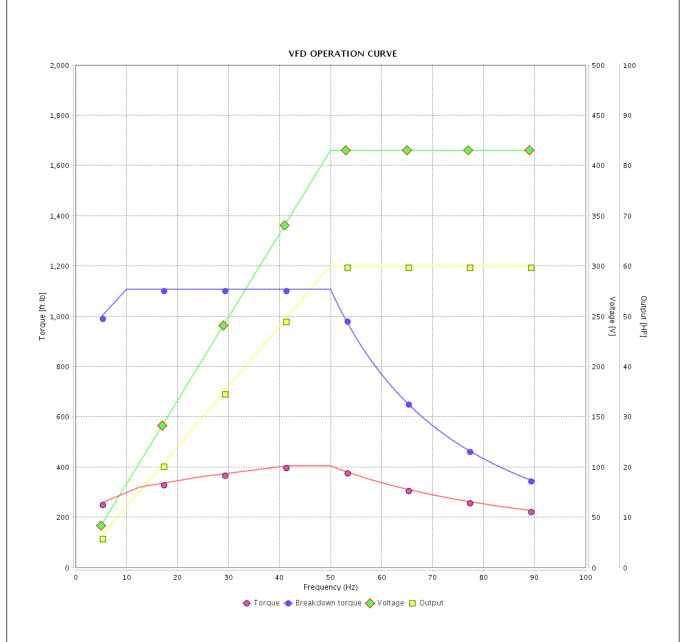
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12408372

Catalog #: 07509XT3E444T



			<u> </u>						
Performance	: 4	: 415 V 50 Hz 8P IE4							
Rated current	: 80	6.9 A	Moment of	Moment of inertia (J)					
LRC	: 6.	.9	Duty cycle		: Cont.(S1)				
Rated torque	: 42	26 ft.lb	Insulation class		: F				
Locked rotor tord	que : 2°	10 %	Service factor		: 1.00				
Breakdown torqu	ie : 20	60 %	Temperat	Temperature rise					
Rated speed	: 74	40 rpm	Design	Design					
Rev. Changes Summary		/	Performed	Checked	Date				
Performed by									
Checked by		1			Page	Revision			

22 / 22

13/04/2022

