DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12373791

Catalog #: 00152ST3QIE182T-W22

Frame : 182/4T 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

Altitude · 1000 m a s l · 111 lb Approx. weight3

Attitude : 1000 m.a.s.l. Approx. weight : 111 lb				D	
Protection degre	е	: IP55	Moment of ine	ertia (J) : 0.48	79 sq.ft.lb
Design		: B			
Output [HP]		1.5	1.5	1.5	1.5
Poles		6	6	6	6
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		2.54	2.68	2.62	2.64
L. R. Amperes [A]		19.8	16.9	18.1	19.5
LRC [A]		7.8x(Code M)	6.3x(Code J)	6.9x(Code K)	7.4x(Code L)
No load current [A]	1.63	1.60	1.71	1.80
Rated speed [RPN	Rated speed [RPM]		955	960	965
Slip [%]	Slip [%]		4.50	4.00	3.50
Rated torque [ft.lb]		6.73	8.25	8.21	8.16
Locked rotor torqu	e [%]	320	250	300	330
Breakdown torque	[%]	400	290	330	370
Service factor		1.25	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		28s (cold) 16s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²		52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
	25%				
Efficiency (%)	50%	84.0	85.5	84.5	84.0
Efficiency (70)	75%	86.5	86.5	86.5	85.5
	100%	87.5	85.5	86.5	86.5
	25%				
Power Factor	50%	0.45	0.52	0.48	0.45
1 OWEL FACIOI	75%	0.54	0.63	0.60	0.57
	100%	0.62	0.73	0.70	0.67
			·		

Drive end Non drive end Foundation loads

6207 C3 Bearing type 6206 C3 Max. traction : 137 lb Inpro/Seal Sealing Inpro/Seal Max. compression : 248 lb

20000 h

20000 h Lubricant amount 5 g 7 g Mobil Polyrex EM Lubricant type

Notes

Lubrication interval

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	12/04/2022				1 / 21	

Three Phase Induction Motor - Squirrel Cage

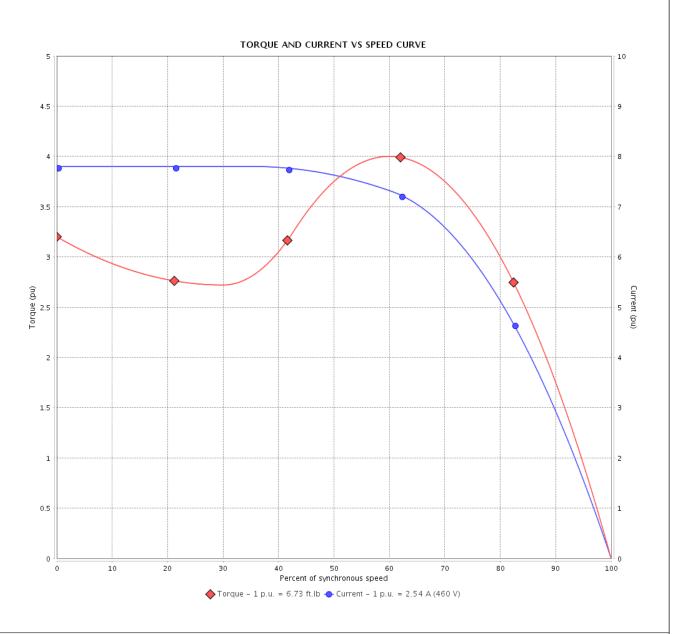


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12373791

Phase

Catalog #: 00152ST3QIE182T-W22



Performance : 460 V 60 Hz 6P Rated current : 2.54 A Moment of inertia (J) : 0.4879 sq.ft.lb **LRC** : 7.8 Duty cycle : Cont.(S1) : F : 6.73 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 320 % : 1.25 Breakdown torque : 400 % Temperature rise : 80 K Rated speed : 1170 rpm Design : B

Locked rotor time : 28s (cold) 16s (hot)

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			2 / 21	



Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12373791 Catalog #: 00152ST3QIE182T-W22 TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Torque (pu) 1.2 0.6 40 50 -Percent of synchronous speed ♦ Torque – 1 p.u. = 8.25 ft.lb ♦ Current – 1 p.u. = 2.68 A (380 V)

Performance	: 380 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 2.68 A : 6.3 : 8.25 ft.lb : 250 % : 290 % : 955 rpm	Moment of i Duty cycle Insulation of Service fact Temperature Design	ass or	: 0.4879 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Locked rotor time	: 25s (cold) 14s (hot) Changes Summary		Performed	Checked	Date

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Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			3 / 21	

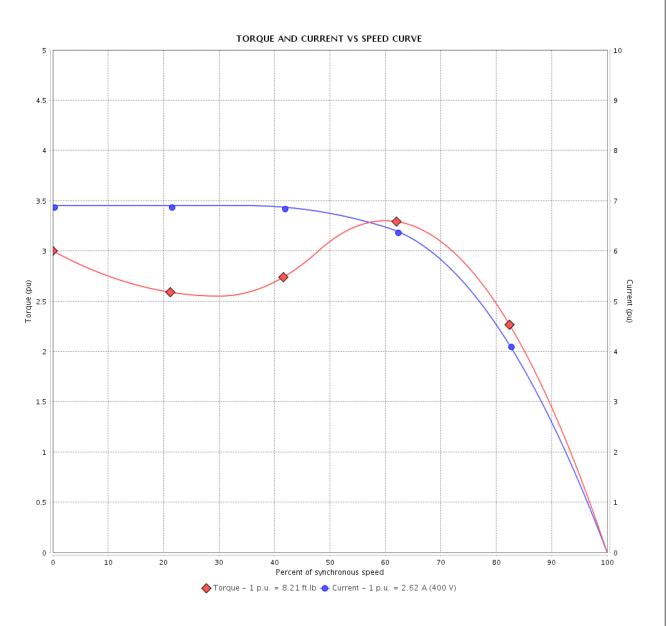
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12373791

Catalog #: 00152ST3QIE182T-W22



Performance : 400 V 50 Hz 6P IE4 Rated current : 2.62 A Moment of inertia (J) : 0.4879 sq.ft.lb **LRC** : 6.9 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 8.21 ft.lb Service factor Locked rotor torque : 300 % : 1.00 Breakdown torque : 330 % Temperature rise : 80 K Rated speed : 960 rpm Design : B

Locked rotor time : 25s (cold) 14s (hot)

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			4 / 21	

Torque (pu)

Rev.

Performed by Checked by

Date

12/04/2022



Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12373791 Catalog #: 00152ST3QIE182T-W22 TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5

0 10	20 30	40 50 Percent of synchronou	60	70	80	90	100
	♦ Torque	– 1 p.u. = 8.16 ft.lb 🔷 Currer	t - 1 p.u. = 2.64 A	(415 V)			
Performance	: 415 V 50 Hz 6	P IE4					
Performance Rated current	: 415 V 50 Hz 6		nt of inertia (J)	: 0.4879	sq.ft.lb	
			•)	: 0.4879 : Cont.(\$		
Rated current LRC	: 2.64 A	Mome Duty o	•)			
Rated current LRC Rated torque	: 2.64 A : 7.4	Mome Duty o Insula	ycle)	: Cont.(S		
Rated current	: 2.64 A : 7.4 : 8.16 ft.lb	Mome Duty o Insula Service	ycle tion class)	: Cont.(8 : F		

Changes Summary

Performed

Checked

Page

5/21

Date

Revision

Three Phase Induction Motor - Squirrel Cage



Revision

Page 6 / 21

Customer :

Checked by

Date

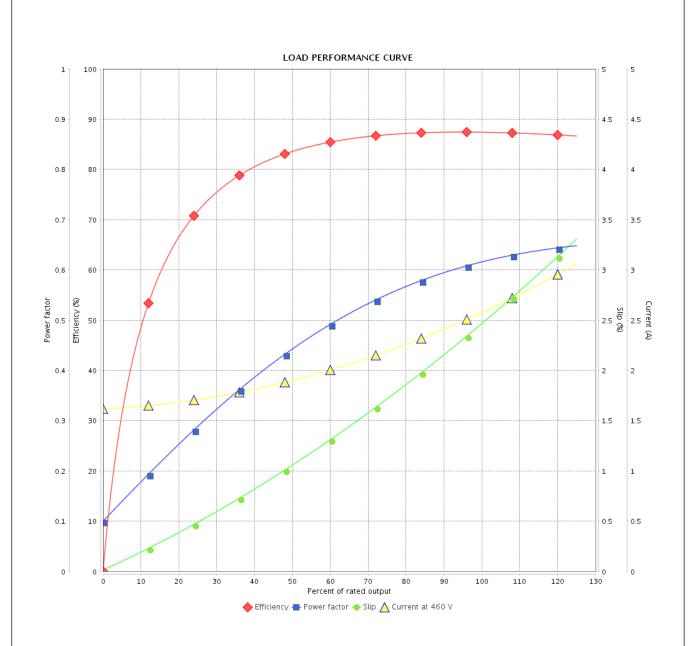
12/04/2022

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog # : 00152ST3QIE182T-W22

12373791



Performance : 460 V 60 Hz 6P : 2.54 A Rated current Moment of inertia (J) : 0.4879 sq.ft.lb **LRC** : 7.8 Duty cycle : Cont.(S1) : 6.73 ft.lb Insulation class Rated torque : F Locked rotor torque : 320 % Service factor : 1.25 Breakdown torque : 400 % Temperature rise : 80 K Rated speed : 1170 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

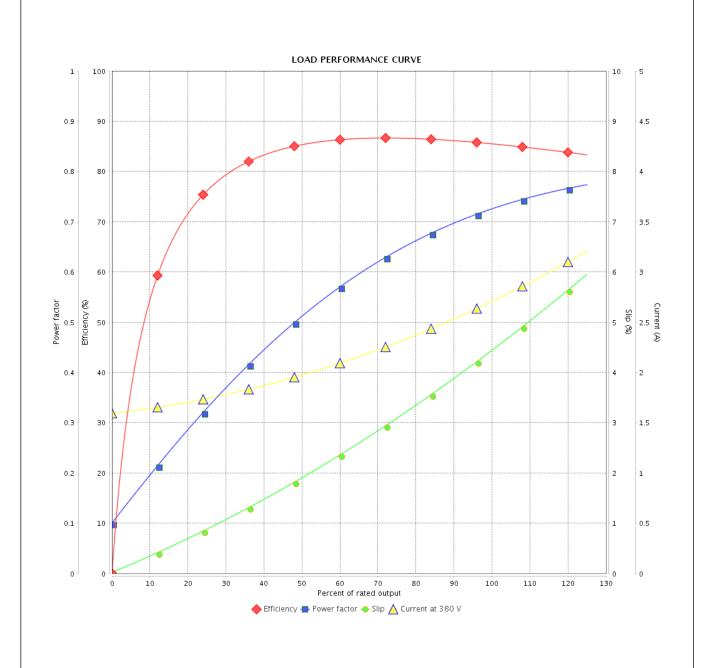
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12373791

Catalog #: 00152ST3QIE182T-W22



Performance	: 3	80 V 50 Hz 6P IE4				
Rated current	Rated current : 2.68 A Mon		Moment o	f inertia (J)	: 0.4879 sq.ft.lb	
LRC	: 6	.3	Duty cycle)	: Cont.(S1)	
Rated torque	: 8	.25 ft.lb	Insulation	class	: F	
Locked rotor torc	que : 2	50 %	Service fa	ctor	: 1.00	
Breakdown torqu	ie : 2	90 %	Temperati	Temperature rise		
Rated speed		55 rpm			: B	
Rev.		Changes Summa	ry	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				7 / 21	

Three Phase Induction Motor - Squirrel Cage

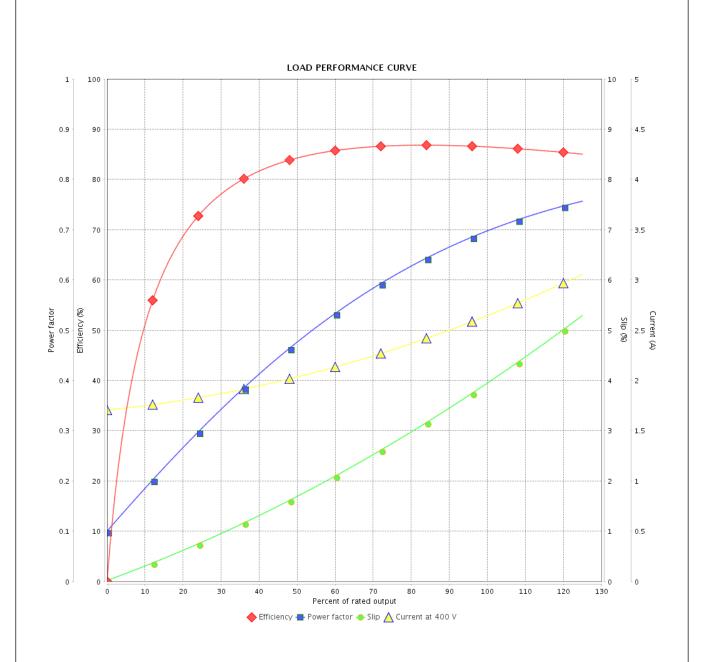


Customer :

Product line : NEMA Premium Efficiency Three- Product code : 12373791

Phase

Catalog #: 00152ST3QIE182T-W22



Performance	: 4	00 V 50 Hz 6P IE4				
Rated current	: 2	.62 A Moment of inertia (J)		of inertia (J)	: 0.4879 sq.ft.lb	
LRC	: 6	.9	Duty cycle	е	: Cont.(S1)	
Rated torque	: 8	.21 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 3	00 %	Service fa	actor	: 1.00	
Breakdown torque	e : 3	30 %	Temperat	ure rise	: 80 K	
Rated speed	: 9	60 rpm	Design		: B	
Rev.		Changes Summary	l l	Performed	Checked	Date
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Performed by						
Checked by					Page	Revision
Date	12/04/2022				8 / 21	

Three Phase Induction Motor - Squirrel Cage



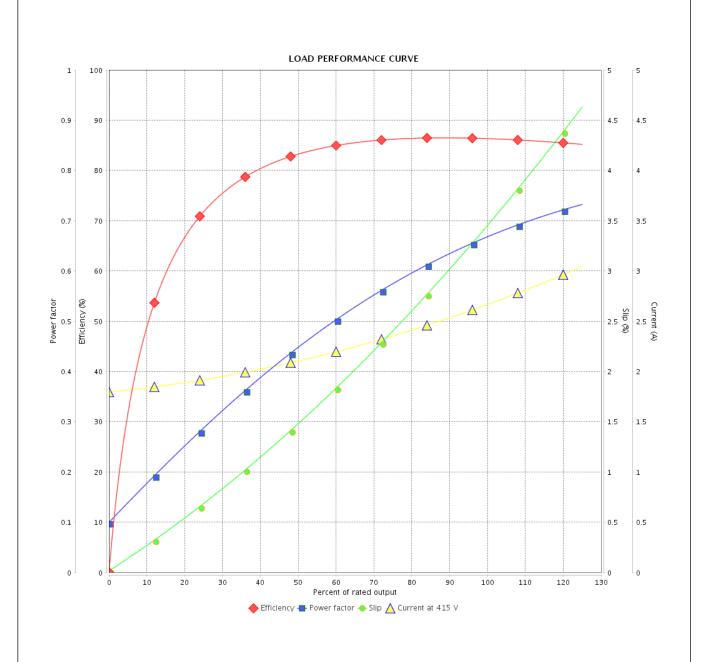
Customer

Product line : NEMA Premium Efficiency Three- Product code : 12373791

Phase

Catalog #: 00152ST3QIE182T-W22

9/21



Performance	: 415 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 2.64 A : 7.4 : 8.16 ft.lb : 330 % : 370 % : 965 rpm	Moment of Duty cycle Insulation c Service fact Temperatur Design	lass	: 0.4879 sq.ft. : Cont.(S1) : F : 1.00 : 80 K : B	lb
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

12/04/2022

Date

Three Phase Induction Motor - Squirrel Cage

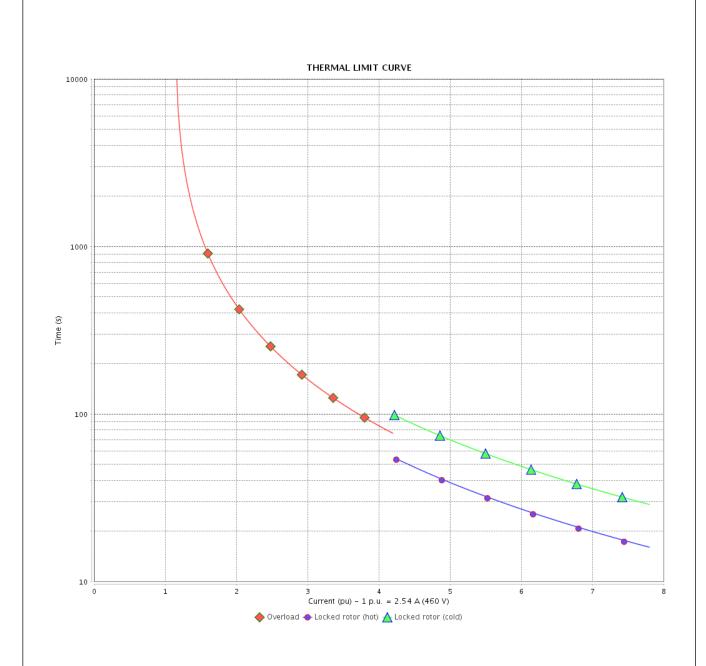


Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	12373791 00152ST3QII	E182T-W22
Performance		: 460 V 60 Hz 6P				
Rated current LRC		: 2.54 A : 7.8	Duty cycle		: 0.4879 sq.ft.l : Cont.(S1)	b
Rated torque Locked rotor tord		: 6.73 ft.lb : 320 %	Insulation Service fa		: F : 1.25	
Breakdown torqu	ie	: 400 %	Temperat		: 80 K	
Rated speed		: 1170 rpm	Design		: B	
Heating constant						
Cooling constant	l	Changes Summary		Performed	Checked	Date
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Performed by						
Checked by					Page	Revision
Date	12/04/2022				10 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			11 / 21	

Three Phase Induction Motor - Squirrel Cage

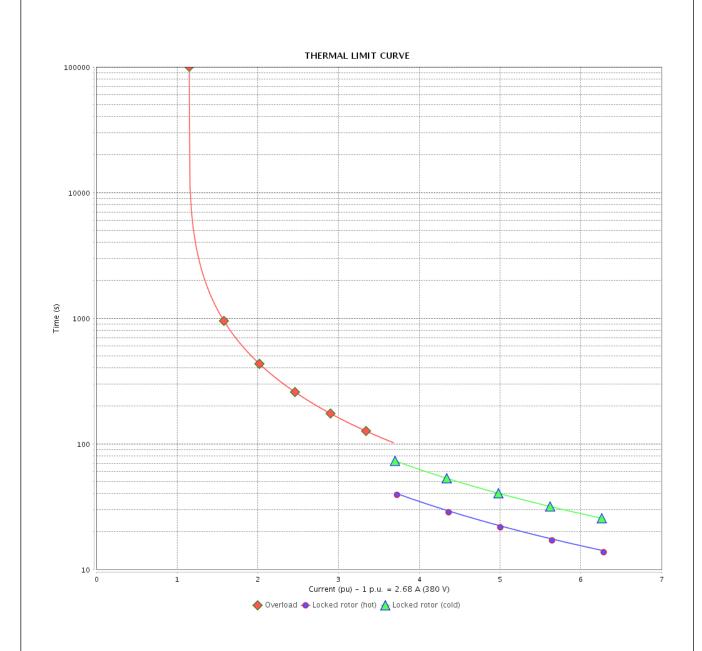


Customer	:				
Product line	: NEMA Premium Efficiency [*] Phase		Product code :	12373791	E400T 11/25
			Catalog # :	00152ST3QI	E182T-W22
Performance	: 380 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 2.68 A : 6.3 : 8.25 ft.lb : 250 % : 290 % : 955 rpm	Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 0.4879 sq.ft.l : Cont.(S1) : F : 1.00 : 80 K : B	b
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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	12/04/2022			13 / 21	

Three Phase Induction Motor - Squirrel Cage

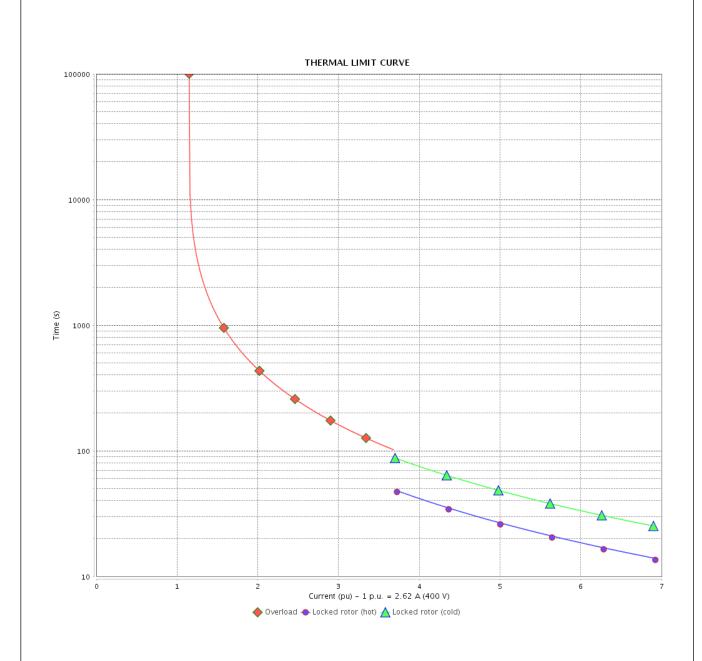


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Product line		: NEMA Premium Efficiency Phase	inree-	Product code :	12373791	
				Catalog # :	00152ST3QI	E182T-W22
Performance Rated current LRC Rated torque Locked rotor torque Breakdown torque	iue	2.62 A 6.9 8.21 ft.lb 300 % 330 %	Moment of Duty cycle Insulation Service fa	class ctor	: 0.4879 sq.ft. : Cont.(S1) : F : 1.00 : 80 K	lb
Rated speed		: 960 rpm	Design	-	: B	
Heating constant						
Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
Performed by Checked by					Page	Revision
Date	12/04/2022				14 / 21	110101011

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			15 / 21	

Three Phase Induction Motor - Squirrel Cage

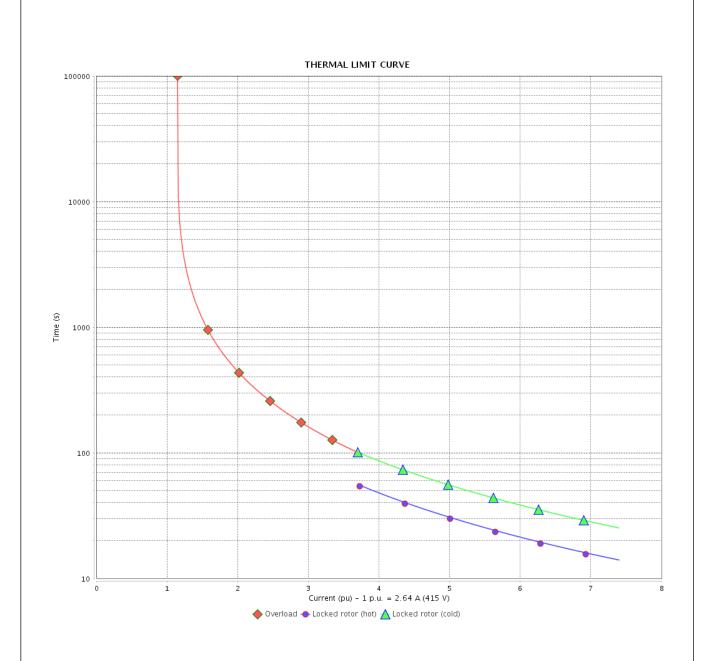


Customer	:				
Product line	: NEMA Premium Efficiency Phase		Product code : Catalog # :	12373791 00152ST3QI	E182T-W22
Performance	: 415 V 50 Hz 6P IE4				
Rated current LRC	: 2.64 A : 7.4	Moment o	f inertia (J)	: 0.4879 sq.ft.l : Cont.(S1)	b
Rated torque Locked rotor torque	: 8.16 ft.lb : 330 %	Insulation Service fa	class	: F : 1.00	
Breakdown torque Rated speed	: 370 % : 965 rpm	Temperati Design		: 80 K : B	
Heating constant	r				
Cooling constant Rev.	Changes Summary		Performed	Checked	Date
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Performed by				_	
Checked by	22			Page	Revision

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			17 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

12/04/2022

Product line : NEMA Premium Efficiency Three-

Phase

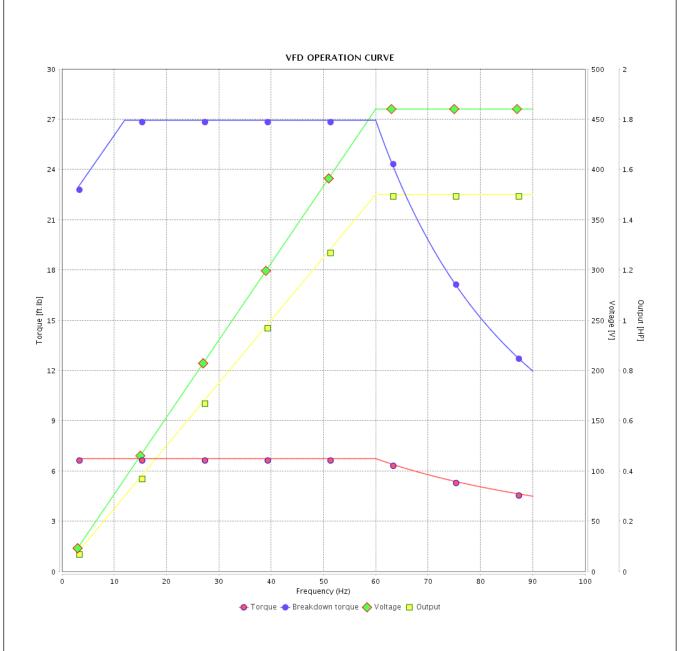
Product code: 12373791

Catalog # : 00152ST3QIE182T-W22

Page

18/21

Revision



Performance	: 4	160 V 60 Hz 6P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 7 : 6 jue : 3	2.54 A 7.8 6.73 ft.lb 320 % 400 % 1170 rpm	Duty cycle Insulation Service far Temperatu		: Cont.(S1) ass : F or : 1.25	
Rev.		Changes Summary		Performed	Checked	Date
Performed by					·	

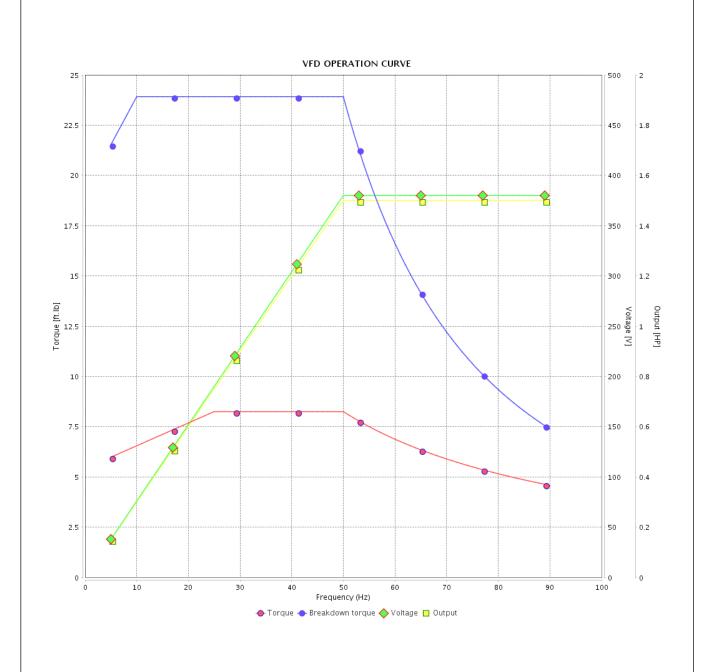
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12373791

Catalog #: 00152ST3QIE182T-W22



Performance	: 3	80 V 50 Hz 6P IE4				
Rated current	: 2	2.68 A	Moment o	f inertia (J)	: 0.4879 sq.ft	.lb
LRC	: 6	5.3	Duty cycle	;	: Cont.(S1)	
Rated torque	: 8	3.25 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie : 2	250 %	Service fa	ctor	: 1.00	
Breakdown torque	: 2	90 %	Temperati	ıre rise	: 80 K	
Rated speed	: 9	955 rpm	Design		: B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022	7			19 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

12/04/2022

Product line : NEMA Premium Efficiency Three- Product line : NEMA Pr

Phase

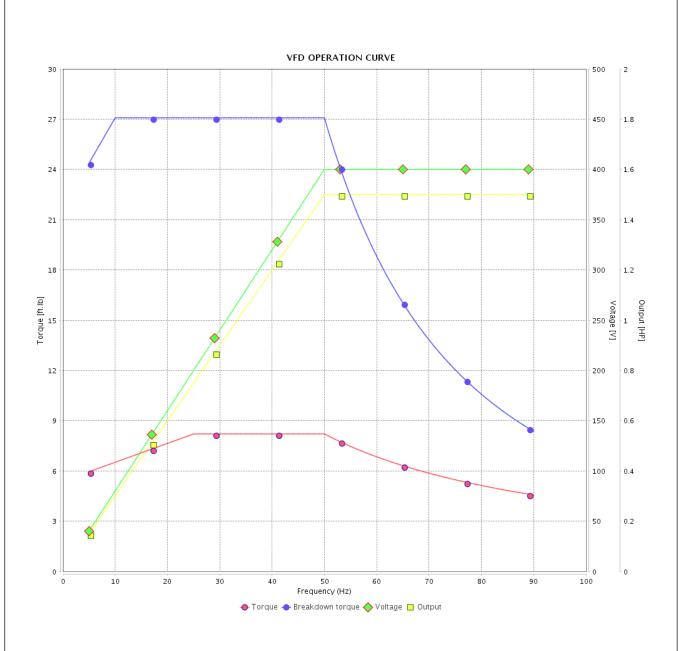
Product code: 12373791

Catalog #: 00152ST3QIE182T-W22

Page

20 / 21

Revision



Performance	: 4	400 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: (ue	2.62 A 6.9 8.21 ft.lb 300 % 330 % 960 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.4879 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.		Changes Summary	<u>'</u>	Performed	Checked	Date
Performed by						

Three Phase Induction Motor - Squirrel Cage



Customer

Checked by

Date

12/04/2022

Product line : NEMA Premium Efficiency Three- Product code : 12373791

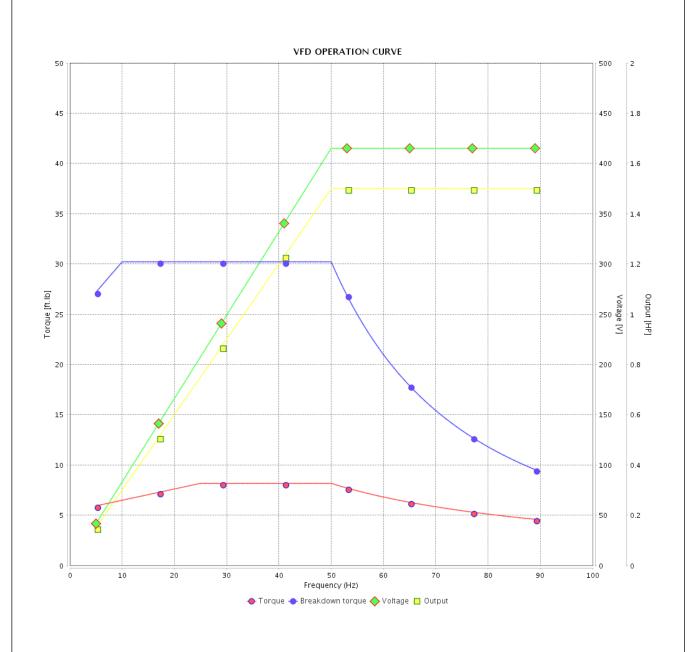
Phase

Catalog #: 00152ST3QIE182T-W22

Page

21 / 21

Revision



Performance	: 415 V 50 Hz 6P IE4				
Rated current LRC Rated torque Locked rotor torque	: 2.64 A : 7.4 : 8.16 ft.lb : 330 %	Moment of inertia (J) Duty cycle Insulation class Service factor		: 0.4879 sq.ft.lb : Cont.(S1) : F : 1.00	
Breakdown torque Rated speed	: 370 % : 965 rpm	Temperati Design	ıre rise	: 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

