DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12373466

Catalog #: 00118ST3QIE143T-W22

Frame : 143/5T 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. : 57.4 lb Altitude

Approx. weight3

Ailitude		. 1000 III.a.S.I.	11		
Protection degre	е	: IP55	Moment of ine	ertia (J) : 0.11	72 sq.ft.lb
Design		: B			
Output [HP]		1	1	1	1
Poles		4	4	4	4
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		1.47	1.71	1.65	1.63
L. R. Amperes [A]		12.6	10.9	11.5	12.1
LRC [A]		8.6x(Code M)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)
No load current [A]	0.940	0.930	1.00	1.08
Rated speed [RPN	/ []	1760	1450	1455	1455
Slip [%]		2.22	3.33	3.00	3.00
	Rated torque [ft.lb]		3.62	3.61	3.61
Locked rotor torqu	e [%]	290	220	240	260
Breakdown torque	[%]	350	250	290	310
Service factor		1.25	1.25	1.25	1.25
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		32s (cold) 18s (hot)			
Noise level ²		51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
	25%				
Efficiency (%)	50%	80.0	80.0	80.0	80.0
Liliciency (70)	75%	84.0	82.5	82.5	82.5
	100%	85.5	82.5	84.0	84.0
	25%				
Power Factor	50%	0.55	0.62	0.58	0.55
I OWELL ACIO	75%	0.68	0.74	0.71	0.69
	100%	0.75	0.81	0.78	0.76

Drive end Non drive end Foundation loads

Bearing type 6205 C3 6204 C3 Max. traction : 68 lb Sealing Inpro/Seal Inpro/Seal Max. compression : 126 lb

20000 h Lubrication interval 20000 h Lubricant amount 4 g 4 g Mobil Polyrex EM Lubricant type

Notes

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	11/04/2022			1 / 21	

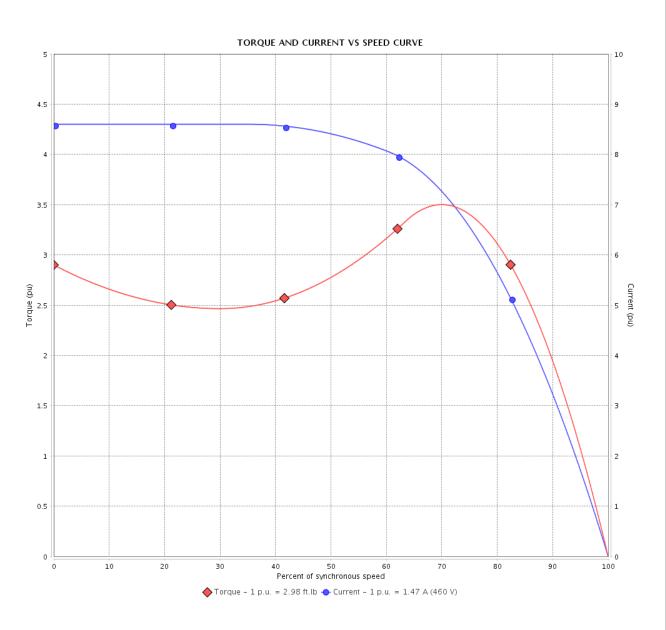
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12373466

Catalog #: 00118ST3QIE143T-W22



Performance : 460 V 60 Hz 4P Rated current : 1.47 A Moment of inertia (J) : 0.1172 sq.ft.lb **LRC** : 8.6 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 2.98 ft.lb Service factor Locked rotor torque : 290 % : 1.25 Breakdown torque : 350 % Temperature rise : 80 K Rated speed : 1760 rpm Design : B Locked rotor time

: 32s (cold) 18s (hot)

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			2 / 21	



Revision

Page

3/21

Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12373466 Catalog #: 00118ST3QIE143T-W22 TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Current Torque (pu) 1.2 0.6 0.3 Percent of synchronous speed ◆ Torque - 1 p.u. = 3.62 ft.lb ◆ Current - 1 p.u. = 1.71 A (380 V) Performance : 380 V 50 Hz 4P IE3 Rated current : 1.71 A Moment of inertia (J) : 0.1172 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 3.62 ft.lb Locked rotor torque : 220 % Service factor : 1.25 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B Locked rotor time : 32s (cold) 18s (hot) Rev. Performed Checked Date **Changes Summary**

Performed by Checked by

11/04/2022

Three Phase Induction Motor - Squirrel Cage



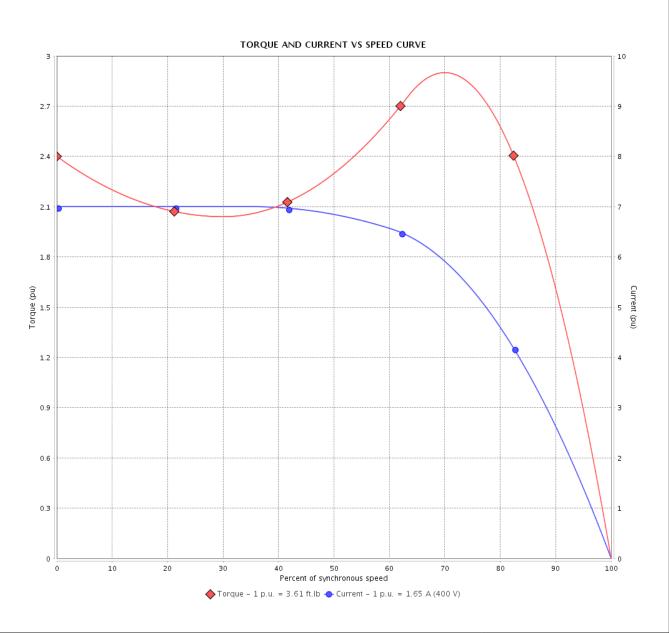
Customer :

Product line : NEMA Premium Efficiency Three- Pr

Phase

Product code: 12373466

Catalog #: 00118ST3QIE143T-W22



Performance	: 400 V 50 Hz 4P IE3		
Rated current	: 1.65 A	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.1172 sq.ft.lb
LRC	: 7.0		: Cont.(S1)
Rated torque	: 3.61 ft.lb		: F
Locked rotor torque	: 240 %		: 1.25
Breakdown torque	: 290 %		: 80 K
Rated speed	: 1455 rpm		: B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			4 / 21	



Three Phase Induction Motor - Squirrel Cage Customer Product line : NEMA Premium Efficiency Three-Product code: 12373466 Catalog #: 00118ST3QIE143T-W22 TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Current Torque (pu) 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 3.61 ft.lb ◆ Current - 1 p.u. = 1.63 A (415 V) Performance : 415 V 50 Hz 4P IE3 Rated current : 1.63 A Moment of inertia (J) : 0.1172 sq.ft.lb **LRC** : 7.4 Duty cycle : Cont.(S1) : 3.61 ft.lb Insulation class : F Rated torque : 260 % Locked rotor torque Service factor : 1.25 Breakdown torque : 310 % Temperature rise : 80 K Rated speed : 1455 rpm Design : B Locked rotor time : 32s (cold) 18s (hot)

Performed by Checked by Revision Page Date 11/04/2022 5/21 This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A. Subject to change without notice

Changes Summary

Performed

Checked

Date

Rev.

Three Phase Induction Motor - Squirrel Cage



Revision

Page 6 / 21

Customer :

Checked by

Date

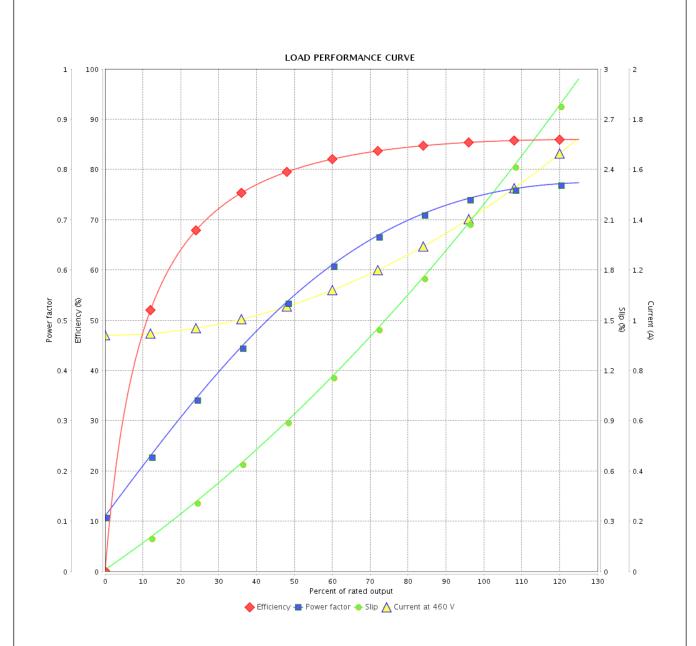
11/04/2022

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Catalog #: 00118ST3QIE143T-W22

12373466



Performance : 460 V 60 Hz 4P : 1.47 A Rated current Moment of inertia (J) : 0.1172 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 8.6 : 2.98 ft.lb Insulation class Rated torque : F Locked rotor torque : 290 % Service factor : 1.25 Breakdown torque : 350 % Temperature rise : 80 K Rated speed : 1760 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

Three Phase Induction Motor - Squirrel Cage



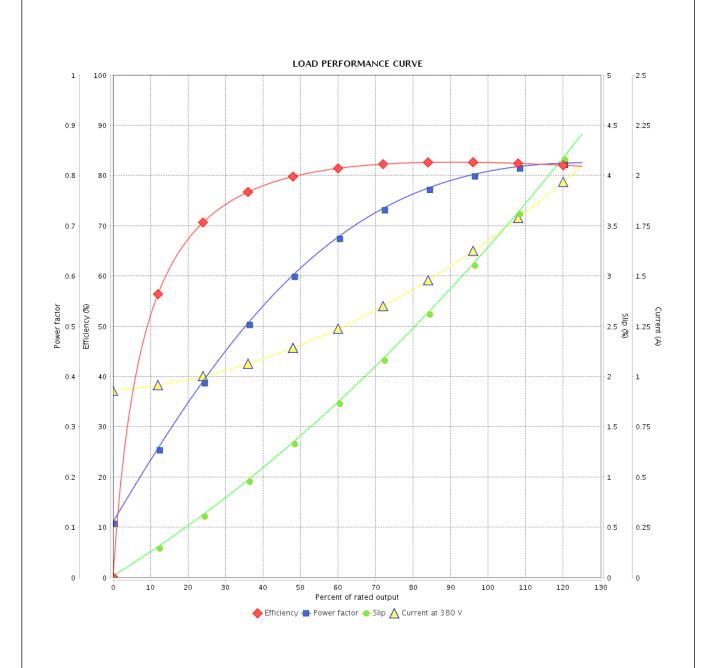
Customer

Product line : NEMA Premium Efficiency Three- Product code : 12373466

Phase

Catalog #: 00118ST3QIE143T-W22

7/21



Performance	: 380 V 50 Hz 4P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.71 A : 6.4 : 3.62 ft.lb : 220 % : 250 % : 1450 rpm	Moment of Duty cycle Insulation of Service fact Temperatur Design	class tor	: 0.1172 sq.ft.I : Cont.(S1) : F : 1.25 : 80 K : B	b
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

11/04/2022

Date

Three Phase Induction Motor - Squirrel Cage



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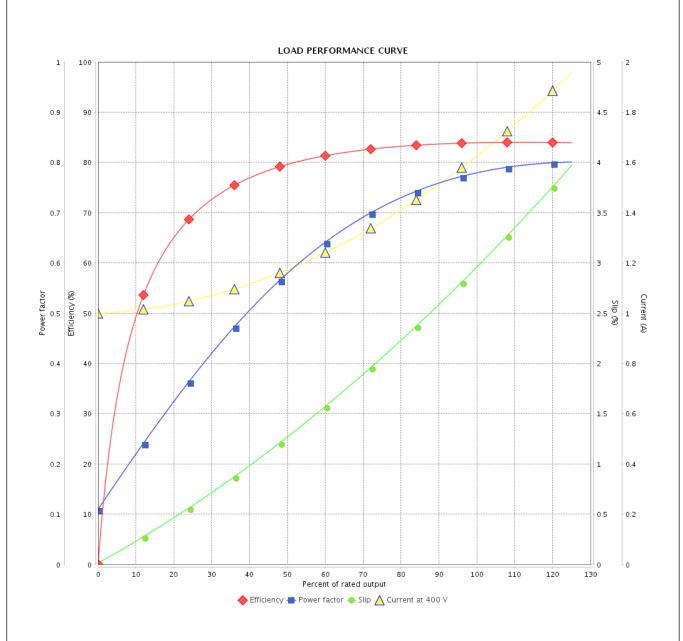
Product line : NEMA Premium Efficiency Three- Produ

Phase

Product code: 12373466

Catalog #: 00118ST3QIE143T-W22

8 / 21



Performance	: 400 V 50 Hz 4P IE3				
Rated current LRC Rated torque Locked rotor torque	: 1.65 A : 7.0 : 3.61 ft.lb : 240 %	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1172 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Breakdown torque Rated speed	: 240 % : 290 % : 1455 rpm				
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

11/04/2022

Date

Three Phase Induction Motor - Squirrel Cage



Customer

Checked by

Date

11/04/2022

Product line : NEMA Premium Efficiency Three- Product code : 12373466

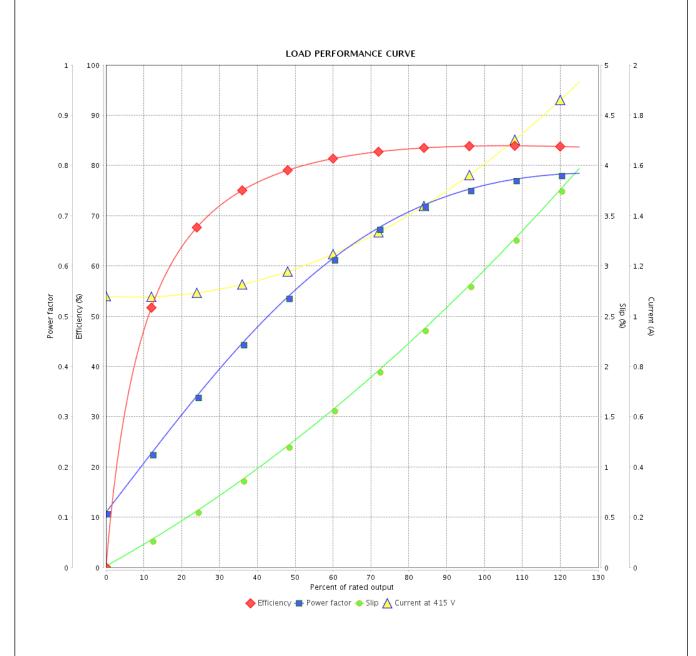
Phase

Catalog #: 00118ST3QIE143T-W22

Page

9/21

Revision



Performance	: 415 V 50 Hz 4P IE3				
Rated current : 1.63 A Moment of LRC : 7.4 Duty cycle Rated torque : 3.61 ft.lb Insulation of Service fact and Service fact a		e class actor	: 0.1172 sq.ft.ll : Cont.(S1) : F : 1.25 : 80 K : B	b	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

Three Phase Induction Motor - Squirrel Cage

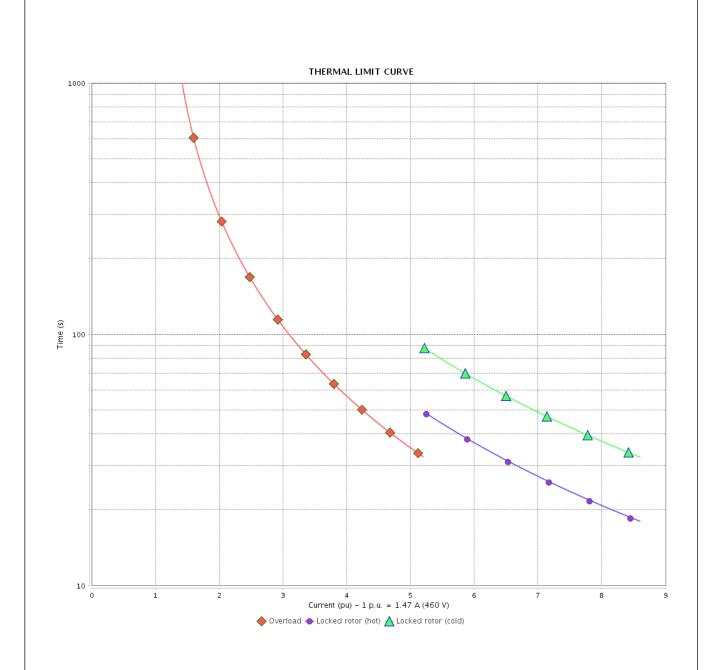


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Product line		: NEMA Premium Efficiency	Three	Product code :	12373466	
1 Toddot IIIIc		Phase				
				Catalog # :	00118ST3QI	E143T-W22
Performance		: 460 V 60 Hz 4P				
Rated current		: 1.47 A : 8.6	Moment o	of inertia (J)	: 0.1172 sq.ft.l	b
LRC Rated torque		: 8.6 : 2.98 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor torc	jue :	: 290 %	Service fa	actor	: 1.25	
Breakdown torqu		: 350 %	Temperati	ure rise	: 80 K	
Rated speed		: 1760 rpm	Design		: B	
Heating constant						
Cooling constant		01 0			<u> </u>	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2022				10 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer



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

Three Phase Induction Motor - Squirrel Cage

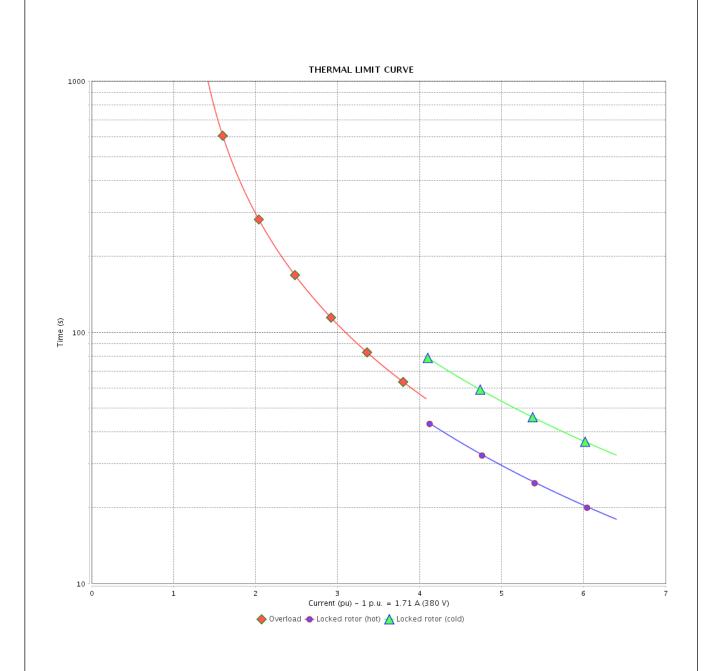


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Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	12373466 00118ST3QII	≣143T-W22
Performance		: 380 V 50 Hz 4P IE3				
Rated current LRC		: 1.71 A : 6.4	Moment of Duty cycle	of inertia (J) e	: 0.1172 sq.ft.ll : Cont.(S1)	0
Rated torque		: 3.62 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		: 220 % : 250 %	Service fa Temperat		: 1.25 : 80 K	
Rated speed		: 1450 rpm	Design		: B	
Heating constan						
Cooling constant	t	Changes Summary		Performed	Checked	Date
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Performed by						
Checked by					Page	Revision
Date	11/04/2022				12 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			13 / 21	

Three Phase Induction Motor - Squirrel Cage

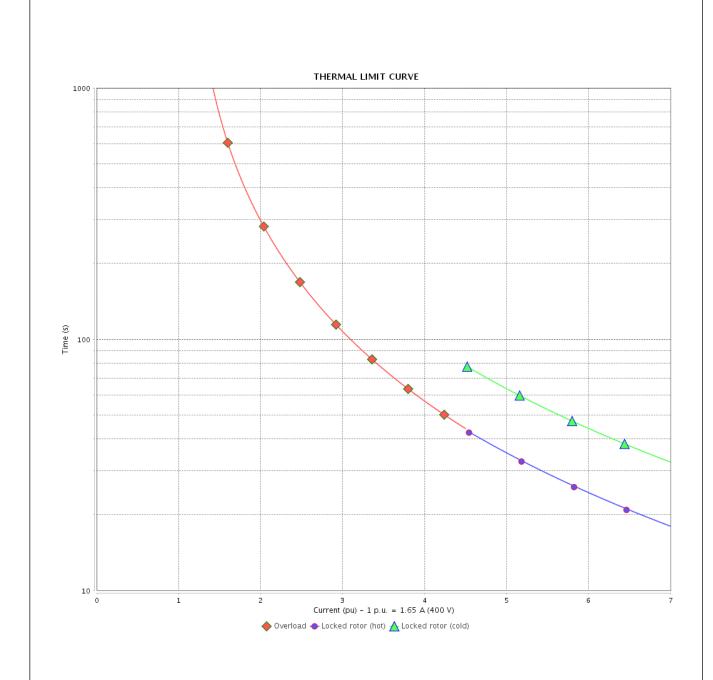


Customer	:				
Product line	: NEMA Premium Efficiency	Three-	Product code :	12373466	
	Phase		Catalog # :	00118ST3QI	F143T-W22
Performance	: 400 V 50 Hz 4P IE3				
Rated current	: 1.65 A		f inertia (J)	: 0.1172 sq.ft.l	b
LRC Rated torque	: 7.0 : 3.61 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor torque	: 240 %	Service fa	ctor	: 1.25	
Breakdown torque Rated speed	: 290 % : 1455 rpm	Temperatu Design	ire rise	: 80 K : B	
Heating constant	<u> </u>				
Cooling constant					
Rev.	Changes Summary		Performed	Checked	Date
Performed by				Dave	Devision-
Checked by Date 11/04/2	022			Page 14 / 21	Revision

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2022			15 / 21	

Three Phase Induction Motor - Squirrel Cage

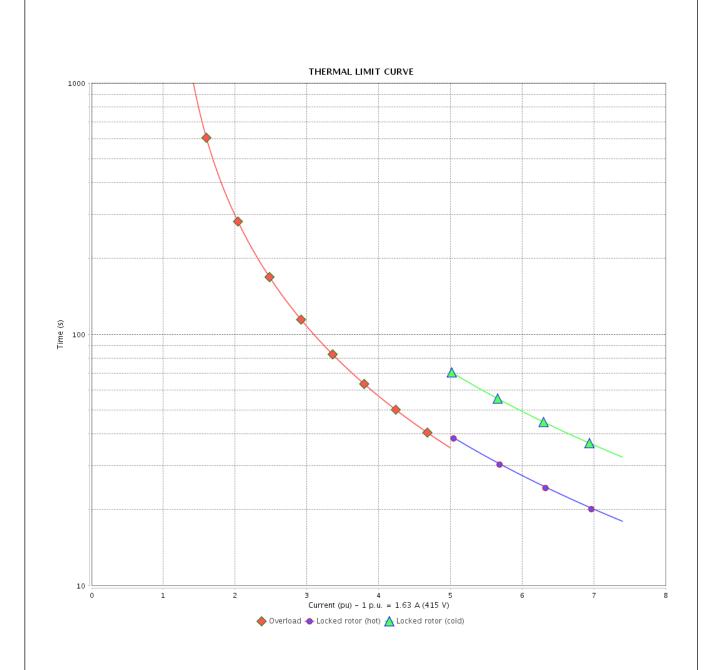


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Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	12373466 00118ST3QII	E143T-W22
Performance		: 415 V 50 Hz 4P IE3	I			
Rated current LRC		: 1.63 A : 7.4	Moment of Duty cycle	of inertia (J) e	: 0.1172 sq.ft.ll : Cont.(S1)	b
Rated torque		: 3.61 ft.lb : 260 %	Insulation Service fa	class	: F : 1.25	
Locked rotor tord Breakdown torqu		: 260 % : 310 %	Temperat		: 1.25 : 80 K	
Rated speed		: 1455 rpm	Design		: B	
Heating constan						
Cooling constant	t	Changes Cummers		Dorform ad	Chaolard	Doto
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2022				16 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by			·		•
Checked by				Page	Revision
Date	11/04/2022			17 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer :

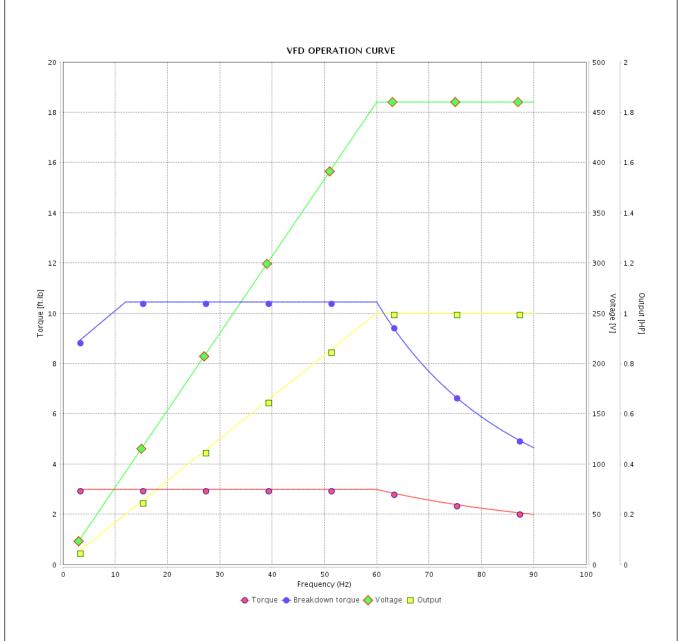
Product line : NEMA Premium Efficiency Three- Produc

Phase

Product code: 12373466

Catalog #: 00118ST3QIE143T-W22

18/21



Performance	: 460 V 60 Hz 4P				
Rated current	ted current : 1.47 A Moment of inertia (J)		inertia (J)	: 0.1172 sq.ft.lb	
LRC	: 8.6	Duty cycle		: Cont.(S1)	
Rated torque	: 2.98 ft.lb	Insulation c	lass	: F	
Locked rotor torque	: 290 %	Service fact	tor	: 1.25	
Breakdown torque	: 350 %	: 350 % Temperature rise Design		: 80 K : B	
Rated speed	: 1760 rpm				
Rev.	Changes Summary		Performed	Checked	Date
Denfermentler					
Performed by					
Checked by				Page	Revision

11/04/2022

Date

Three Phase Induction Motor - Squirrel Cage



Customer

Checked by

Date

11/04/2022

Product line : NEMA Premium Efficiency Three- Product code : 12373466

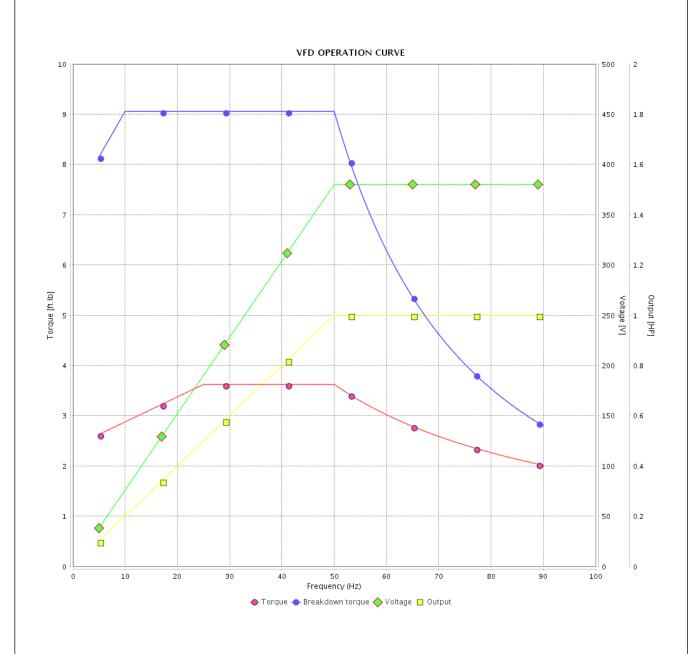
Phase

Catalog #: 00118ST3QIE143T-W22

Page

19/21

Revision



Performance	: 380 V 50 Hz 4P IE3				
Rated current	: 1.71 A	Moment of	f inertia (J)	: 0.1172 sq.ft.lb	
LRC	: 6.4	Duty cycle	;	: Cont.(S1)	
Rated torque	: 3.62 ft.lb	Insulation class		:F	
Locked rotor torque	: 220 %	Service factor		: 1.25	
Breakdown torque	: 250 %	Temperature rise		: 80 K	
Rated speed : 1450 rpm		Design		: B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

Three Phase Induction Motor - Squirrel Cage



Customer :

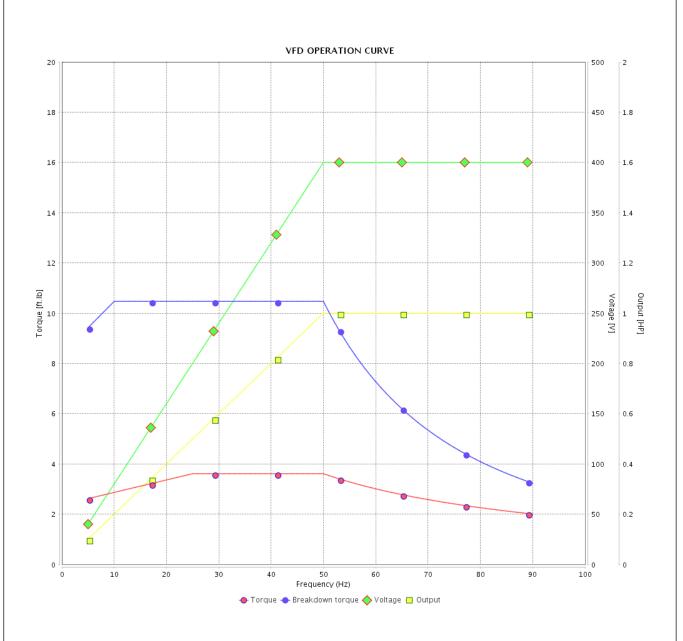
Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12373466

Catalog #: 00118ST3QIE143T-W22

20 / 21



Performance	: 400 V 50 Hz 4P IE3			
Rated current : 1.65 A Moment of inertia (J) RC : 7.0 Duty cycle Rated torque : 3.61 ft.lb Insulation class ocked rotor torque : 240 % Service factor Breakdown torque : 290 % Temperature rise Rated speed : 1455 rpm Design		: 0.1172 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B		
Rev.	Changes Summary	Performed	Checked	Date
Performed by Checked by			Page	Revision

11/04/2022

Date

Three Phase Induction Motor - Squirrel Cage

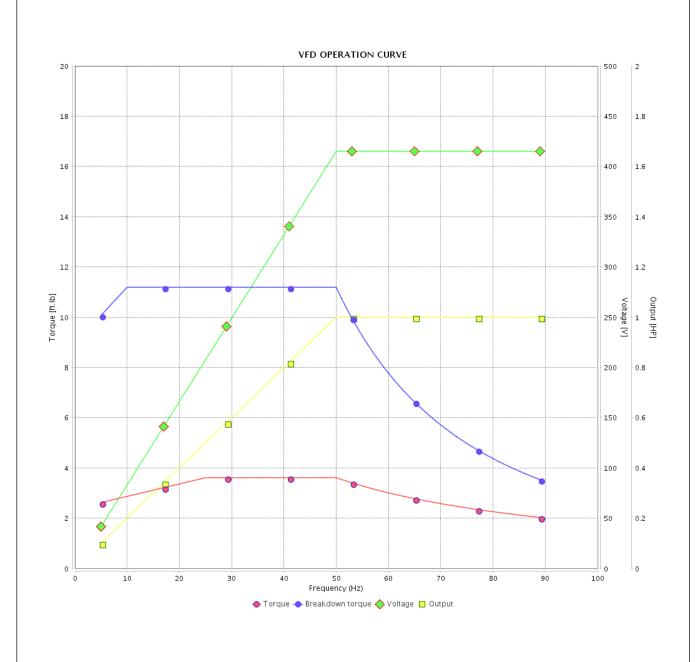


Customer

Product line : NEMA Premium Efficiency Three- Product code : 12373466

Phase

Catalog #: 00118ST3QIE143T-W22



Performance	: 4	15 V 50 Hz 4P IE3				
Rated current	: 1.	Moment of inertia (J)		f inertia (J)	: 0.1172 sq.ft.lb	
LRC	: 7.	4	Duty cycle	•	: Cont.(S1)	
Rated torque	: 3.	61 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 26	60 %	Service fa	ctor	: 1.25	
Breakdown torque	e : 3°	10 %	Temperature rise		: 80 K	
Rated speed : 1		155 rpm	Design		: B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2022				21 / 21	

