DATA SHEET

Three Phase Induction Motor - Squirrel Cage

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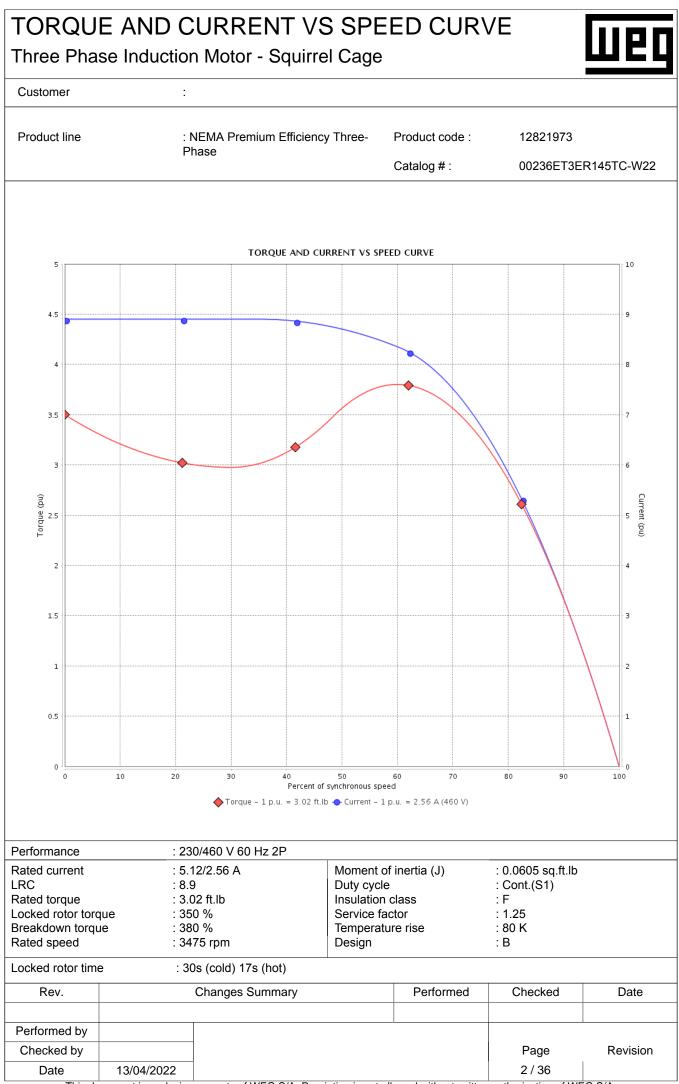
Customer

Product line		: NEMA Premium Efficiency Three- Phase			Product code :		12821973	
		Phase			Catalog # :	00	236ET3ER14	5TC-W22
Frame Insulation class Duty cycle Ambient tempera Altitude Protection degre Design		: 145TC : F : Cont.(S1) : -20°C to + : 1000 m.a.: : IP55 : B		Mounti Rotatio Starting Approx		: V : E : C : E	C411 - TEFC V-6 Both (CW and Direct On Line 51.2 lb 0.0605 sq.ft.lb	CCW)
Output [HP]		2	1.5	1.5	1.5	2	2	2
Poles		2	2	2	2	2	2	2
requency [Hz]		60	50	50	50	50	50	50
Rated voltage [V]		230/460	380	400	415	380	400	415
Rated current [A]		5.12/2.56	2.30	2.22	2.19	3.07	2.90	2.82
R. Amperes [A] _RC [A]		45.6/22.8 8.9x(Code L)	19.5 8.5x(Code K)	20.4 9.2x(Code L)	21.2 9.7x(Code M)	20.0 6.5x(Code H)	20.9 7.2x(Code J)	21.7 7.7x(Code
No load current [A	1	1.80/0.900	0.890	0.960	1.01	0.890	0.960	1.01
Rated speed [RPN		3475	2885	2895	2905	2835	2850	2865
Slip [%]	1	3.47	3.83	3.50	3.17	5.50	5.00	4.50
Rated torque [ft.lb]	3.02	2.73	2.72	2.71	3.70	3.69	3.67
Locked rotor torqu		350	370	409	450	270	300	330
Breakdown torque		380	370	420	459	270	310	340
Service factor		1.25	1.25	1.25	1.25	1.25	1.25	1.25
Temperature rise		80 K	80 K	80 K	80 K	80 K	80 K	80 K
ocked rotor time		30s (cold) 17s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²		68.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A
	25%	82.0	80.8	79.1	78.9	83.3	82.1	82.1
Efficiency (%)	50%	82.5	81.4	80.3	80.1	82.5	82.5	82.5
-) (-)	75%	85.5	83.3	83.1	83.1	84.0	84.0	84.0
	100% 25%	85.5 0.47	83.5 0.45	84.0 0.42	84.0 0.40	82.5 0.54	84.0 0.51	84.0 0.48
	25% 50%	0.47	0.45	0.42	0.40	0.54	0.51	0.48
Power Factor	50% 75%	0.71	0.69	0.66	0.64	0.79	0.76	0.73
	100%	0.80	0.87	0.78	0.70	0.80	0.89	0.88
Bearing type Sealing Lubrication inter Lubricant amour	val	Drive end 6205 ZZ V'Ring - -	Non drive 6204 2 V'Rin -	<u>end</u> Founda ZZ Max. tra	tion loads	: 8	3 lb 34 lb	
Lubricant type Notes	′ 5.60A SF 1.		I Polyrex EM					
USABLE @208V								
This revision repl must be eliminate (1) Looking the m (2) Measured at ((3) Approximate v manufacturing pro-	ed. notor from the 1m and with t weight subjec ocess.	e shaft end. tolerance of +3	dB(A).				on tests with sinces stipulated	
This revision repl must be eliminate (1) Looking the m (2) Measured at (3) Approximate v manufacturing pro	ed. notor from the 1m and with t weight subjec ocess.	e shaft end. tolerance of +3 ct to changes a	dB(A).	power s		t to the tolera		
This revision repl must be eliminate (1) Looking the m (2) Measured at 1 (3) Approximate manufacturing pro (4) At 100% of ful	ed. notor from the 1m and with t weight subjec ocess.	e shaft end. tolerance of +3 ct to changes a	dB(A). after	power s	upply, subjec	t to the tolera	nces stipulated	d in NEMA

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 Date
 13/04/2022
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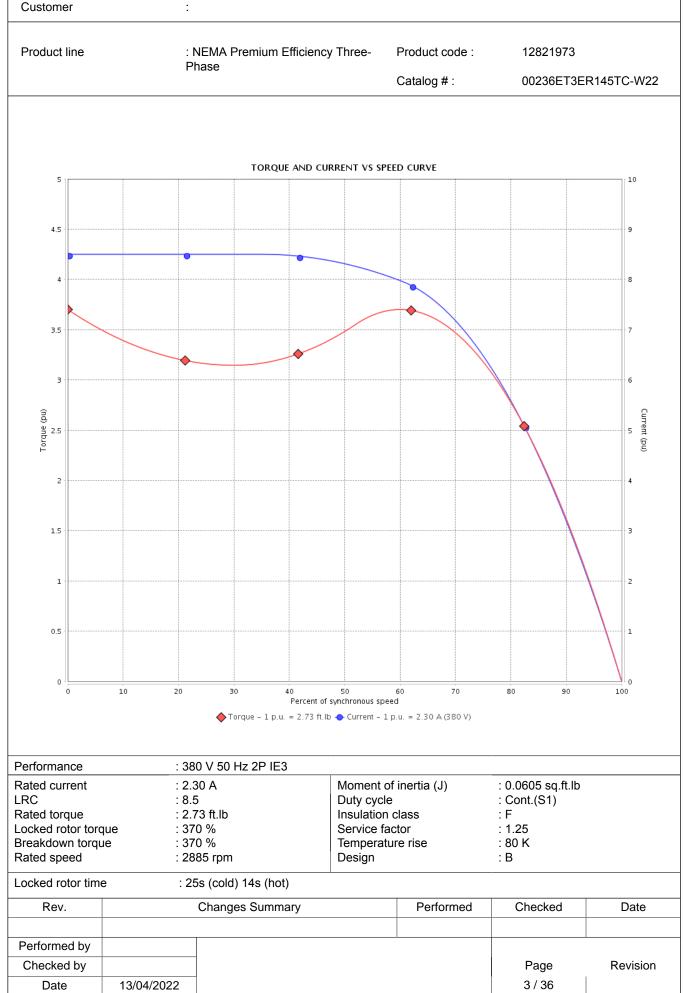
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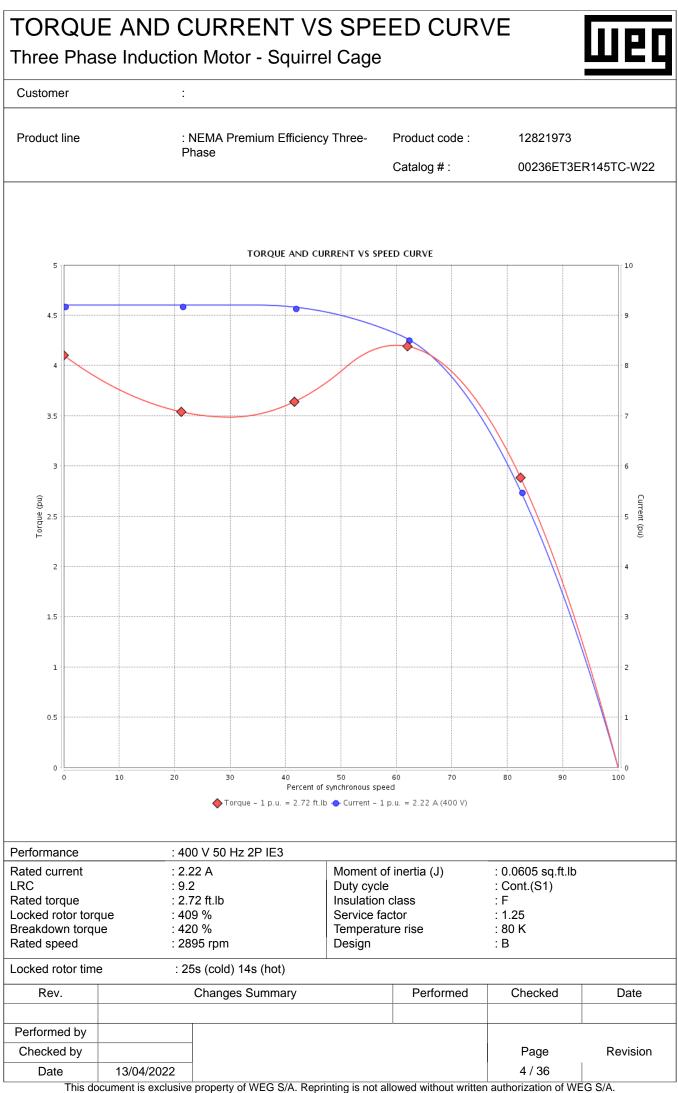
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

Customer



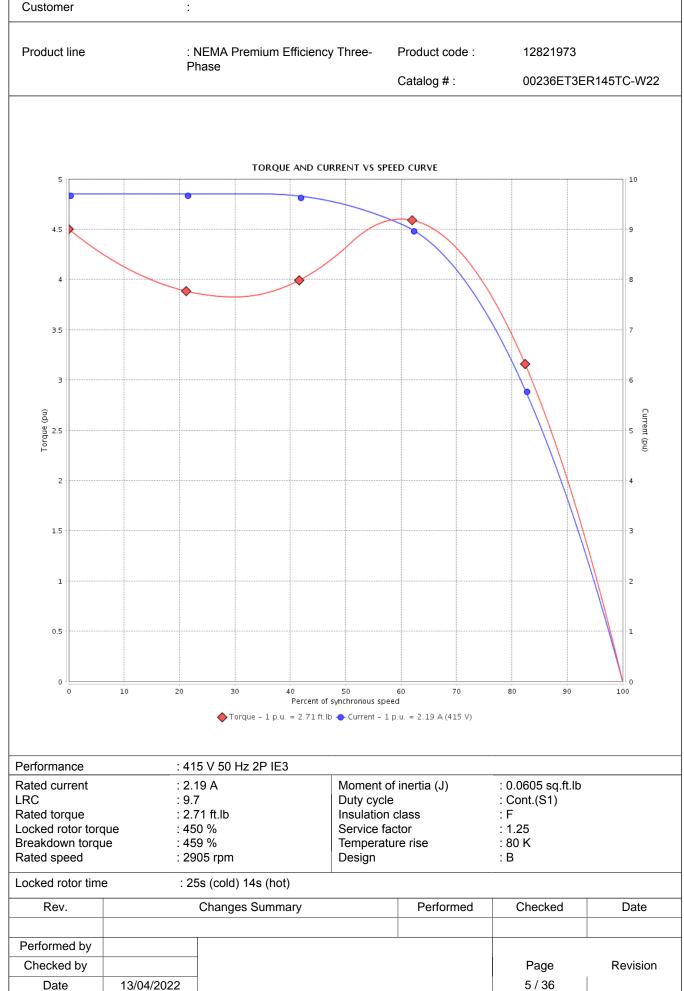
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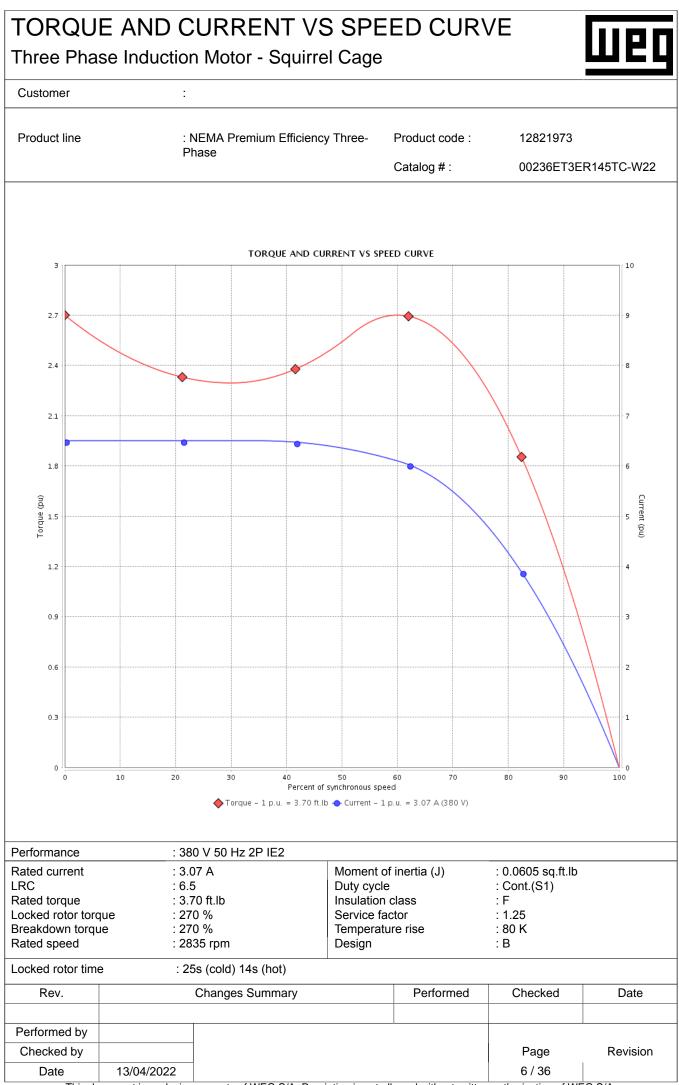
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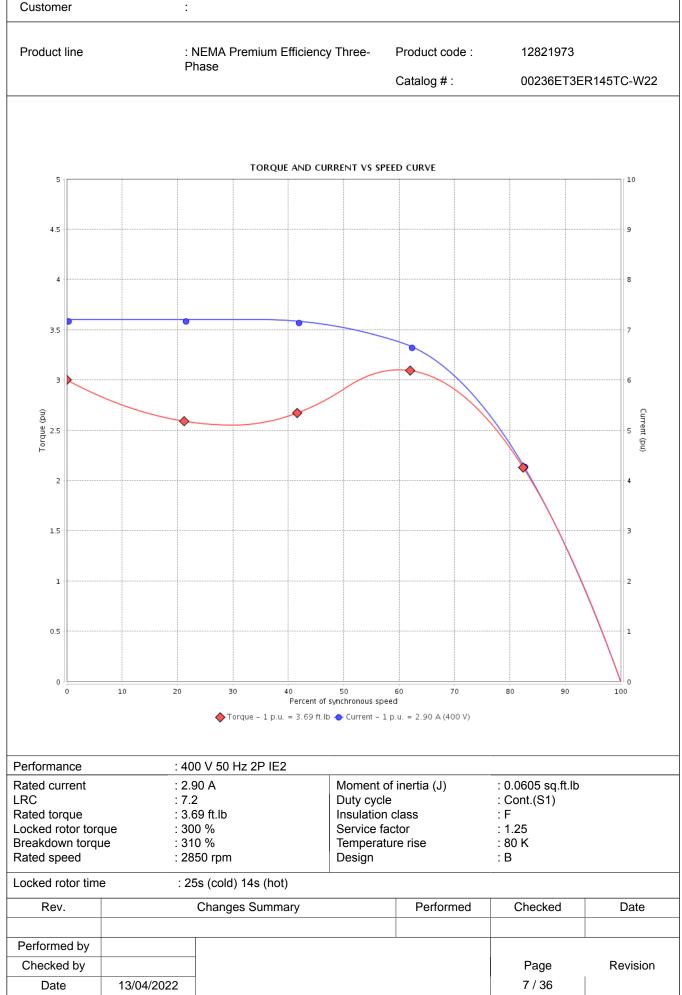
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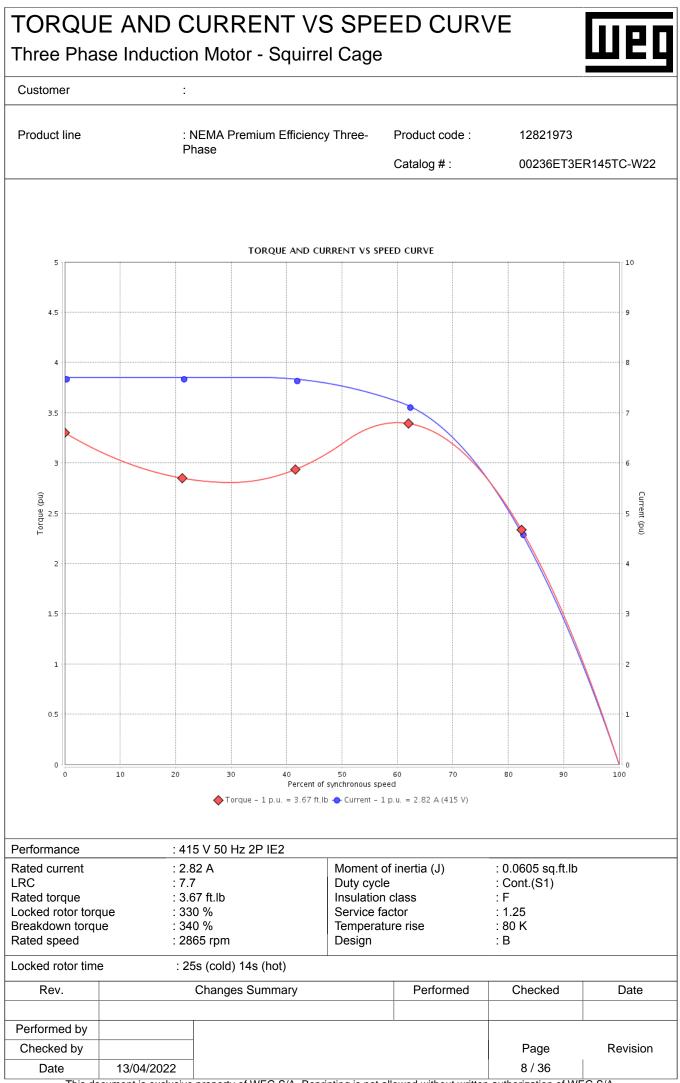
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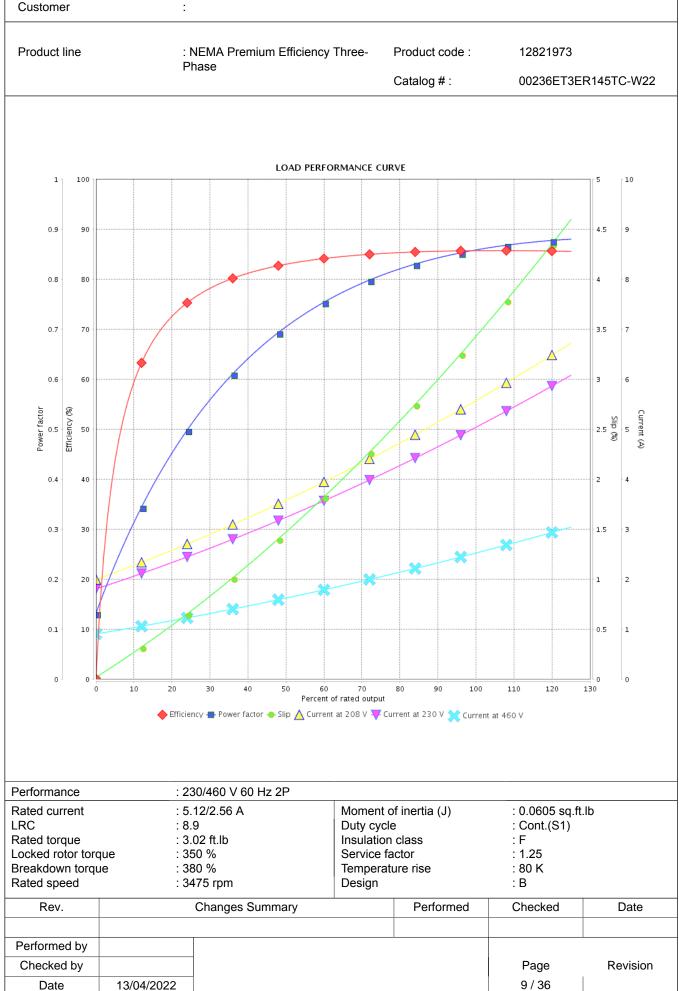


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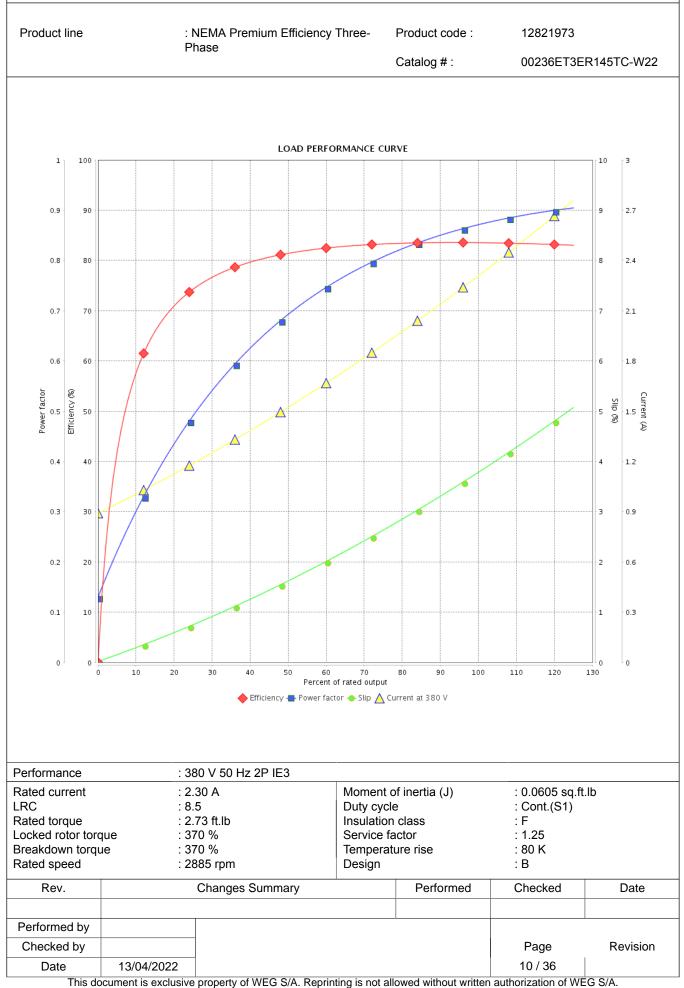
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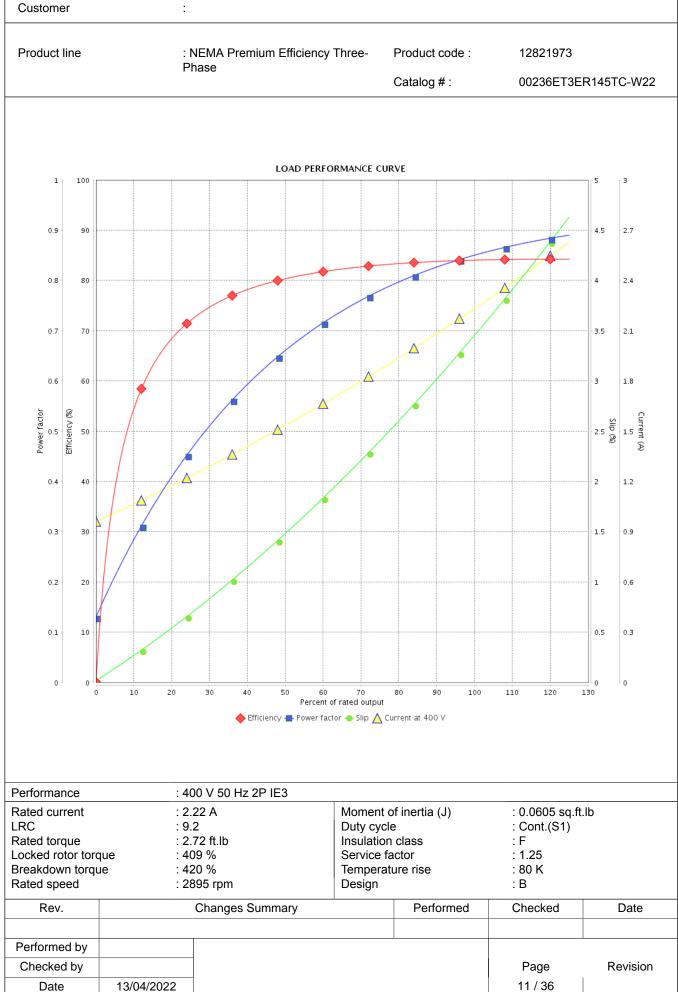


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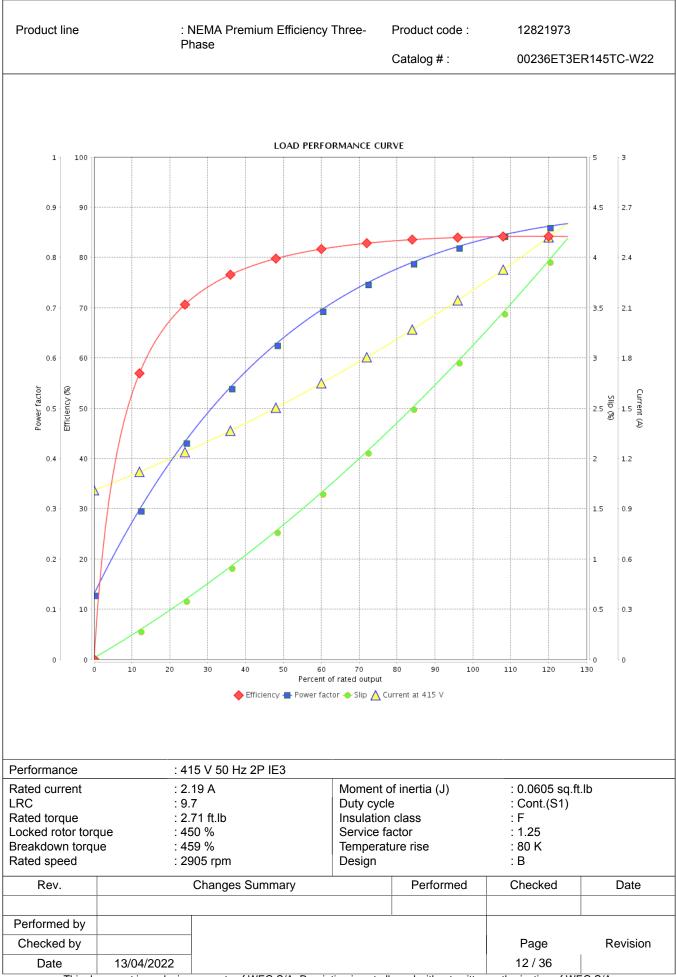
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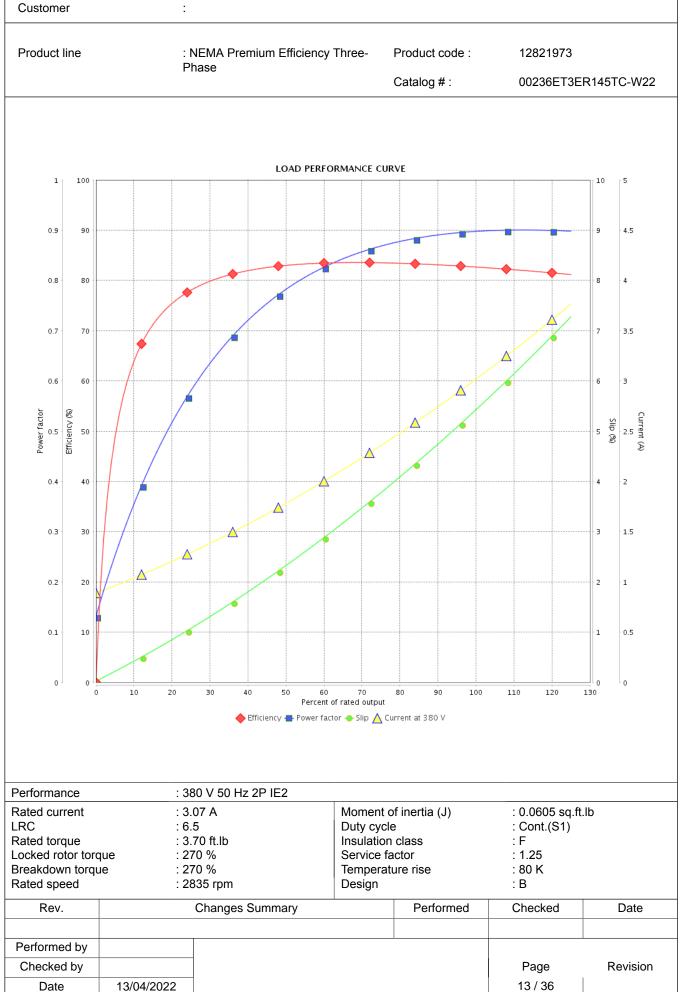


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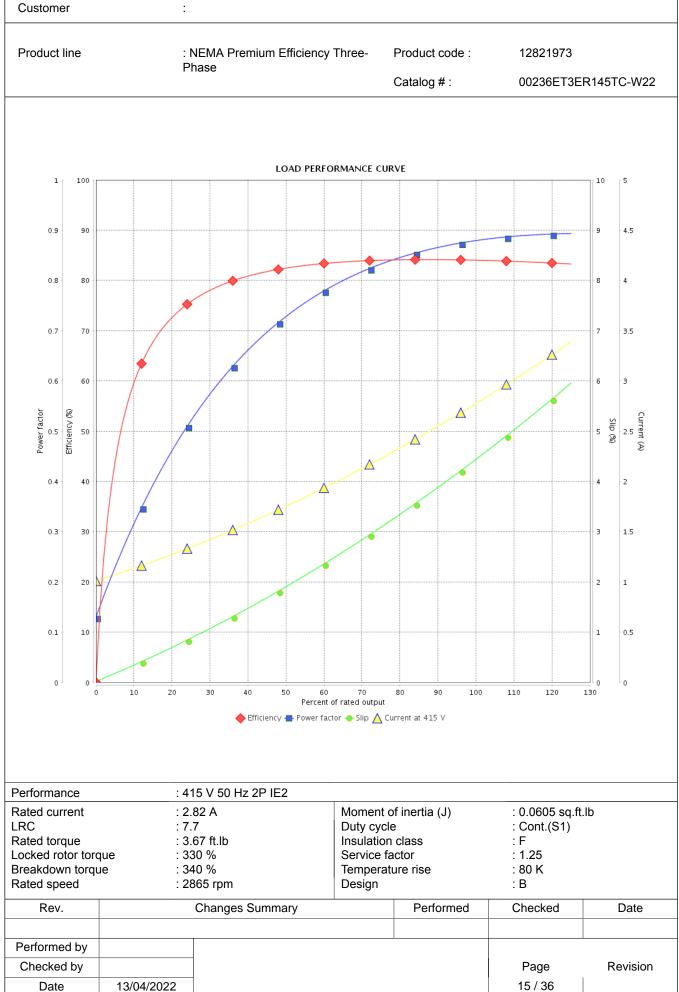
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LOAD PERFORMANCE CURVE Three Phase Induction Motor - Squirrel Cage Customer : Product line : NEMA Premium Efficiency Three-Product code : 12821973 Phase Catalog # : 00236ET3ER145TC-W22 LOAD PERFORMANCE CURVE 100 1 10 5 4.5 0.9 90 9 0.8 80 8 4 3.5 70 7 0.7 0.6 60 6 З Δ Power factor Efficiency (%) 2.5 Current Slip (%) 5 0.5 50 \wedge Þ 0.4 40 4 > \wedge 0.3 30 З 1.5 Δ \wedge 0.2 20 2 1 0.1 10 1 0.5 0 0 0 0 ó 10 20 100 110 120 130 30 40 50 60 70 80 90 Percent of rated output 🔶 Efficiency 🖶 Power factor 🔶 Slip 🛆 Current at 400 V Performance : 400 V 50 Hz 2P IE2 : 2.90 A Rated current Moment of inertia (J) : 0.0605 sq.ft.lb LRC : 7.2 Duty cycle : Cont.(S1) : 3.69 ft.lb Insulation class Rated torque : F Locked rotor torque : 300 % Service factor : 1.25 Breakdown torque : 310 % Temperature rise : 80 K Rated speed : 2850 rpm Design : B Rev. Performed Checked Date **Changes Summary**

Performed by Page Checked by Revision 14/36 Date 13/04/2022 This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

Three Phase Induction Motor - Squirrel Cage

Customer

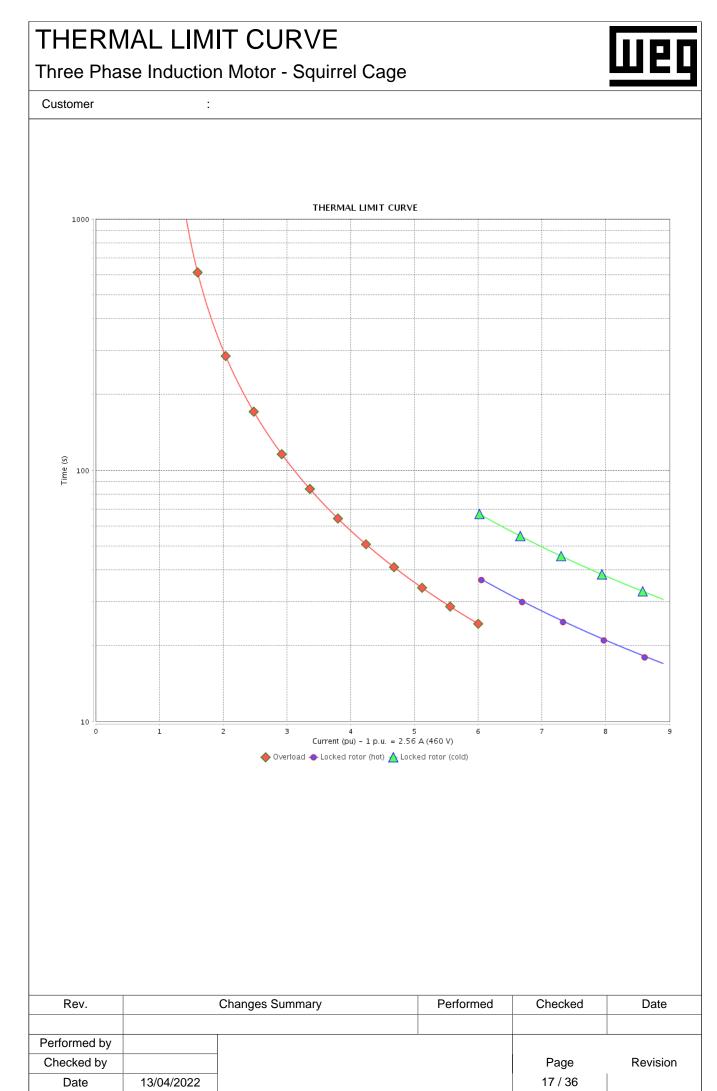


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LIMIT CURVE			
Three Phase Induction Motor - Squirrel Cage			
:			
: NEMA Premium Efficiency Three- Phase	Product code :	12821973	
1 11000	Catalog # :	00236ET3ER145TC-W22	
	nduction Motor - Squirrel Cage	induction Motor - Squirrel Cage : : : NEMA Premium Efficiency Three- Product code : Phase	

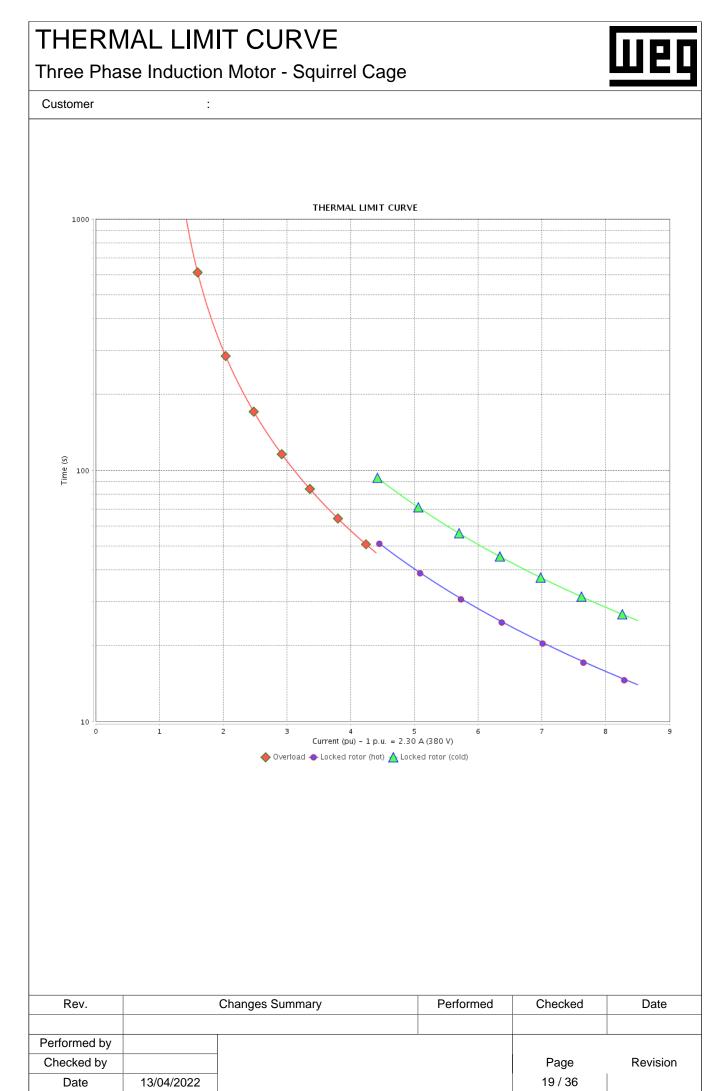
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Performance	: 2	230/460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor torq Breakdown torqu Rated speed	: 8 : 3 ue : 3 e : 3	5.12/2.56 A 3.9 3.02 ft.lb 350 % 380 % 3475 rpm	Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 0.0605 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	lb
Heating constant						
Cooling constant						
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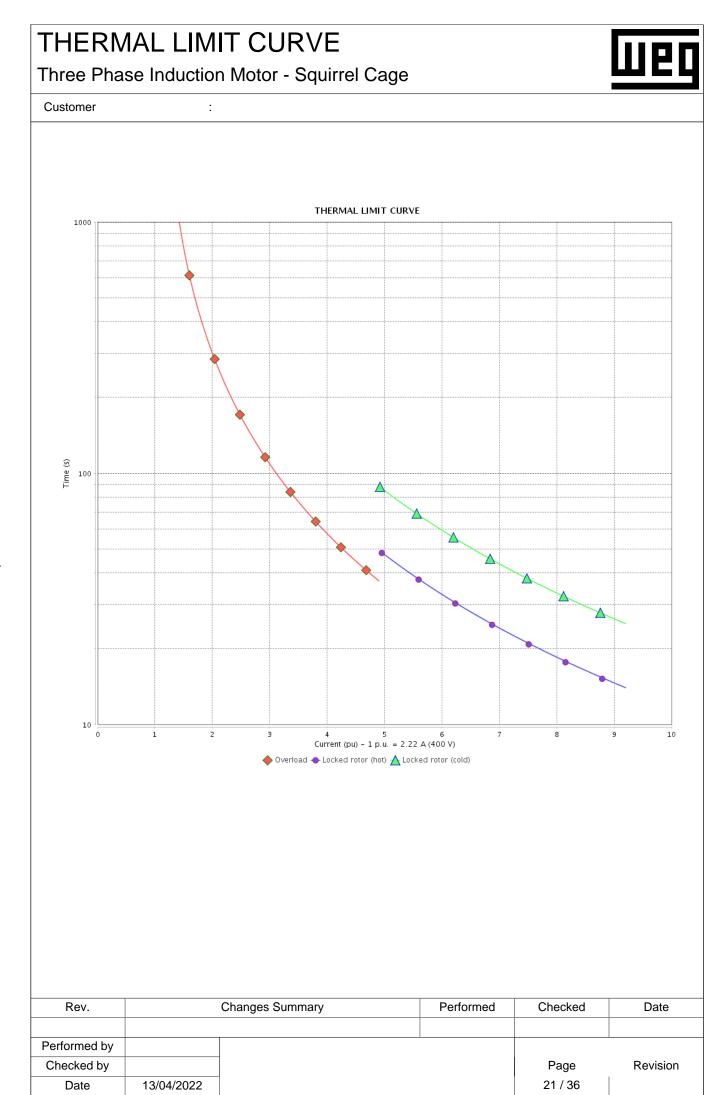
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Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821973
		Catalog # :	00236ET3ER145TC-W22

Performance	: 3	80 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 8 : 2 jue : 3 ie : 3	2.30 A 3.5 2.73 ft.lb 370 % 370 % 2885 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0605 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Heating constant	t					
Cooling constant						
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Checked by					Page	Revision
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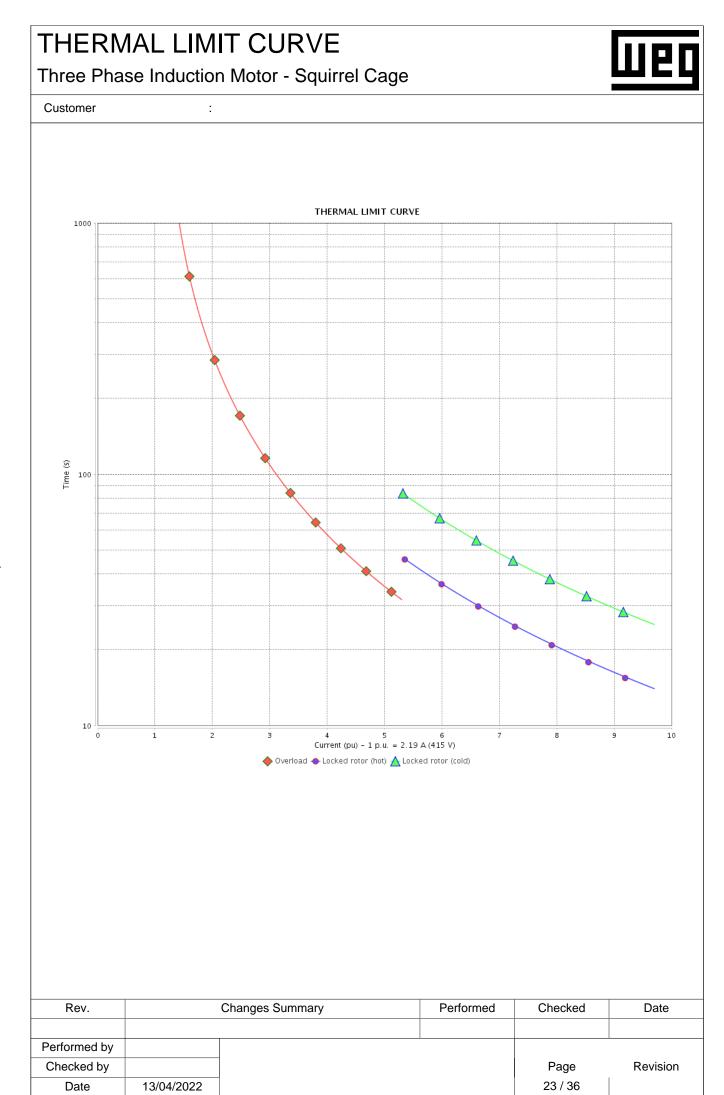
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Customer	:					
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821973			
		Catalog # :	00236ET3ER145TC-W22			

Performance	: 4	00 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 9 : 2 que : 4 Je : 4	2.22 A 9.2 2.72 ft.lb 99 % 920 % 1895 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0605 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	lb
Heating constant						
Rev.	Changes Summary			Performed	Checked	Date
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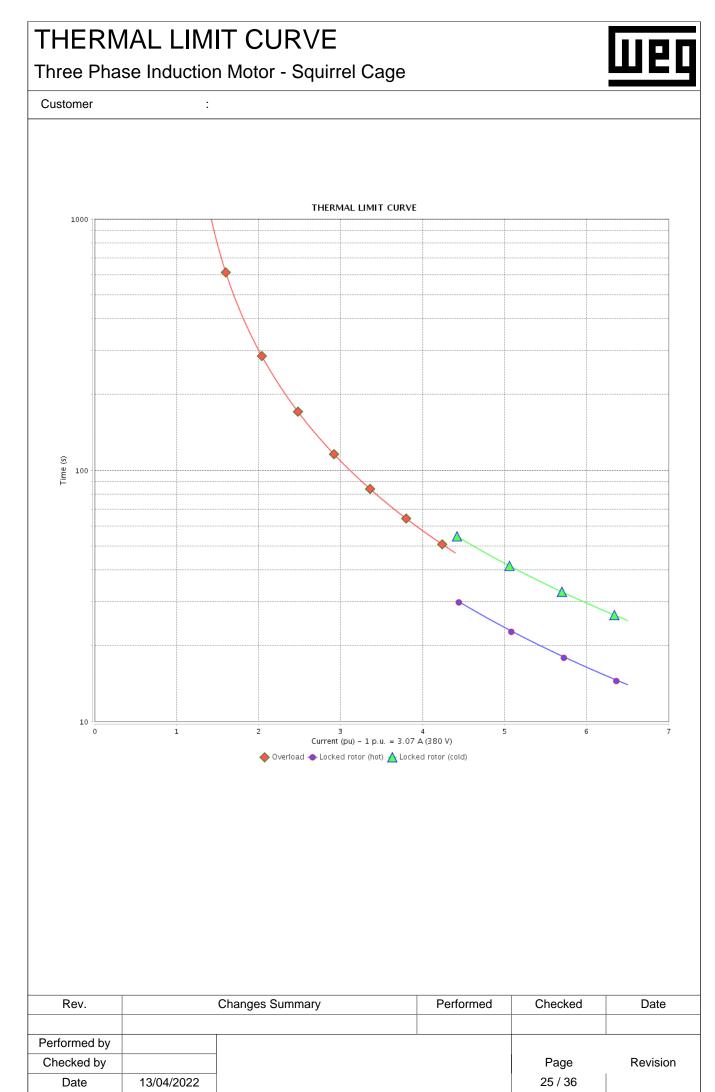
THERMAL LI Three Phase Induc	Шед		
Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code : Catalog # :	12821973 00236ET3ER145TC-W22

Performance	: 4	15 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 9 : 2 que : 4 ie : 4	.19 A .7 .71 ft.lb 50 % 59 % 905 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0605 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	.lb
Heating constant						
Cooling constant						
Rev.	Rev. Changes Summary			Performed	Checked	Date
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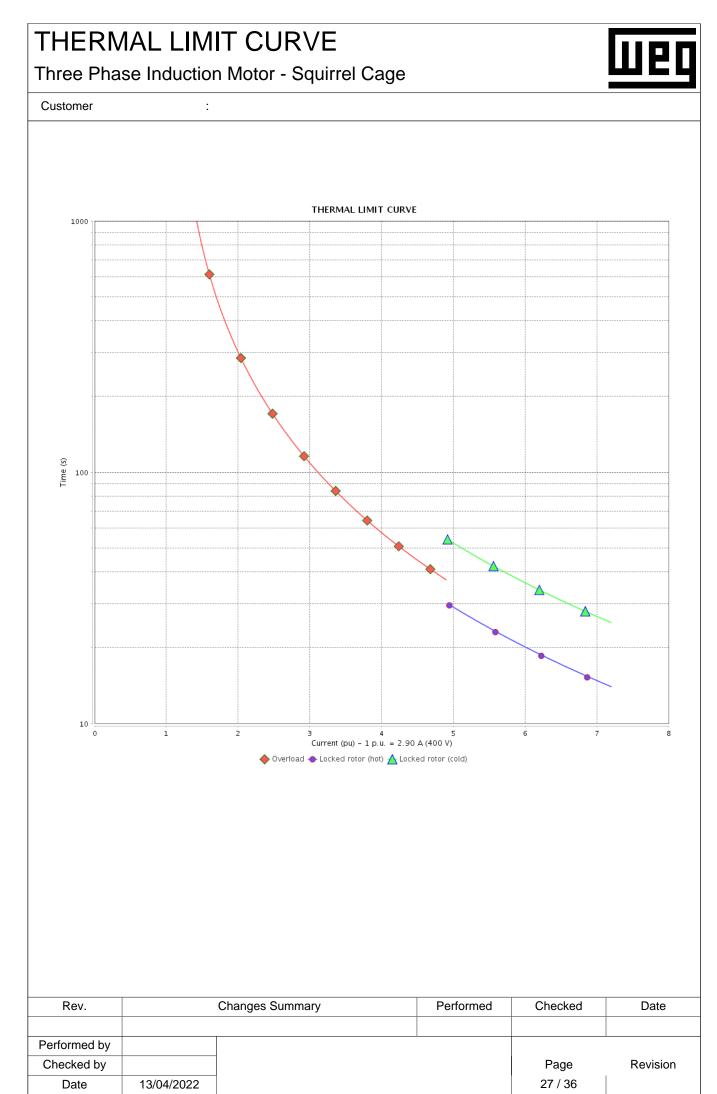
Three Phase Induct		шсч				
Customer	:					
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821973			
	T Hase	Catalog # :	00236ET3ER145TC-W22			

Performance	: 3	380 V 50 Hz 2P IE2				
Rated current LRC Rated torque Locked rotor torc Breakdown torqu Rated speed	: 6 : 3 que : 2 Je : 2	3.07 A 3.5 3.70 ft.lb 270 % 270 % 2835 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0605 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	lb
Heating constant	t					
Cooling constant	t					
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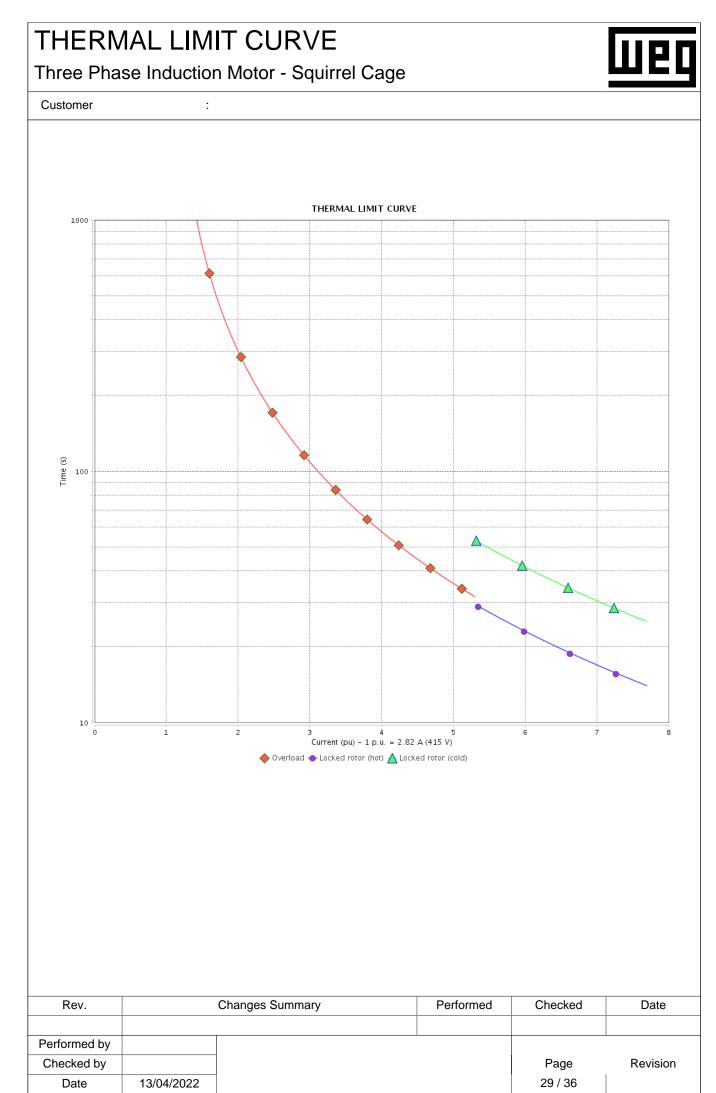
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Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821973
		Catalog # :	00236ET3ER145TC-W22

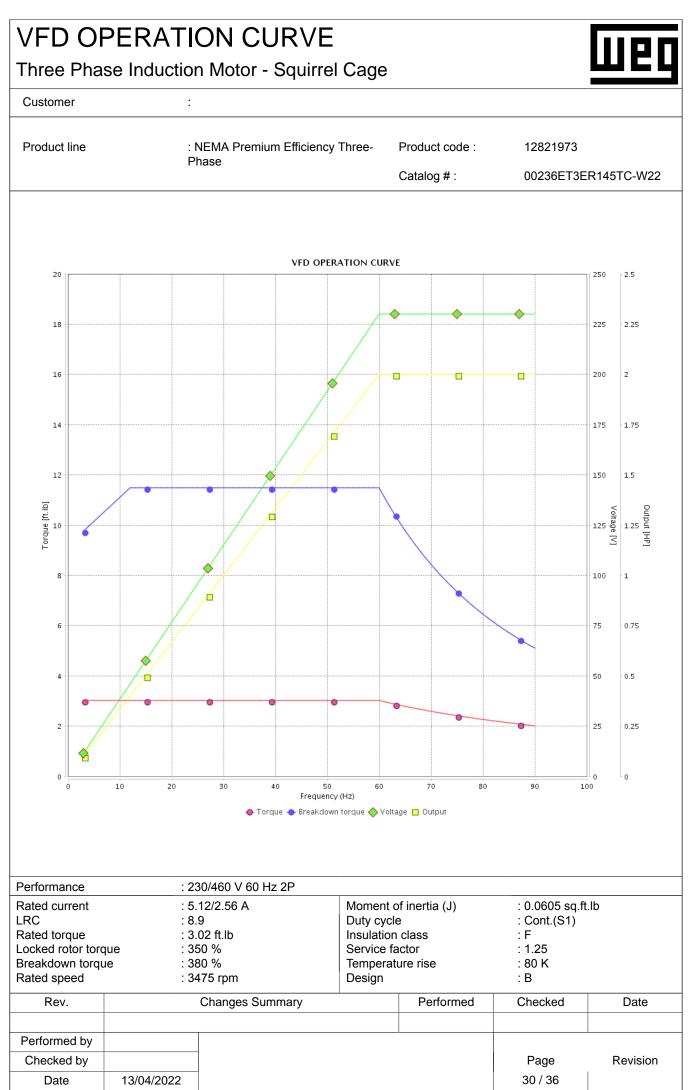
Performance	: 4	00 V 50 Hz 2P IE2				
Rated current LRC Rated torque Locked rotor torq Breakdown torqu Rated speed	: 7 : 3 ue : 3 e : 3	.90 A .2 .69 ft.lb 00 % 10 % 850 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0605 sq.ft. : Cont.(S1) : F : 1.25 : 80 K : B	b
Heating constant						
Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
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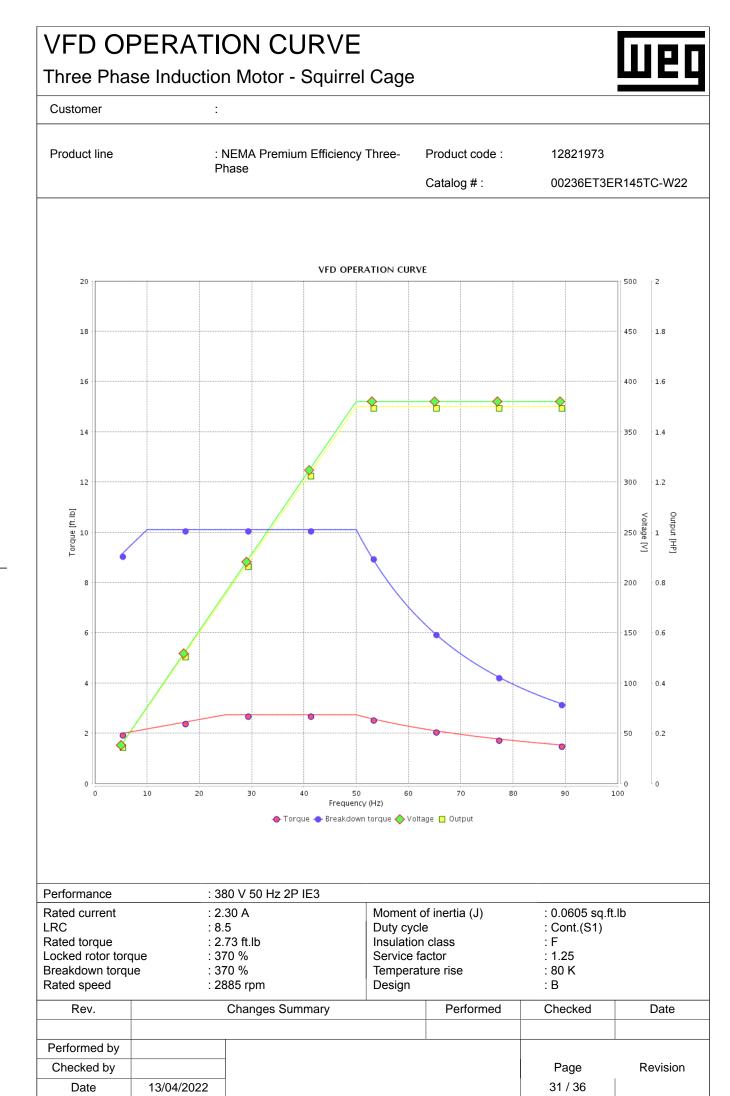


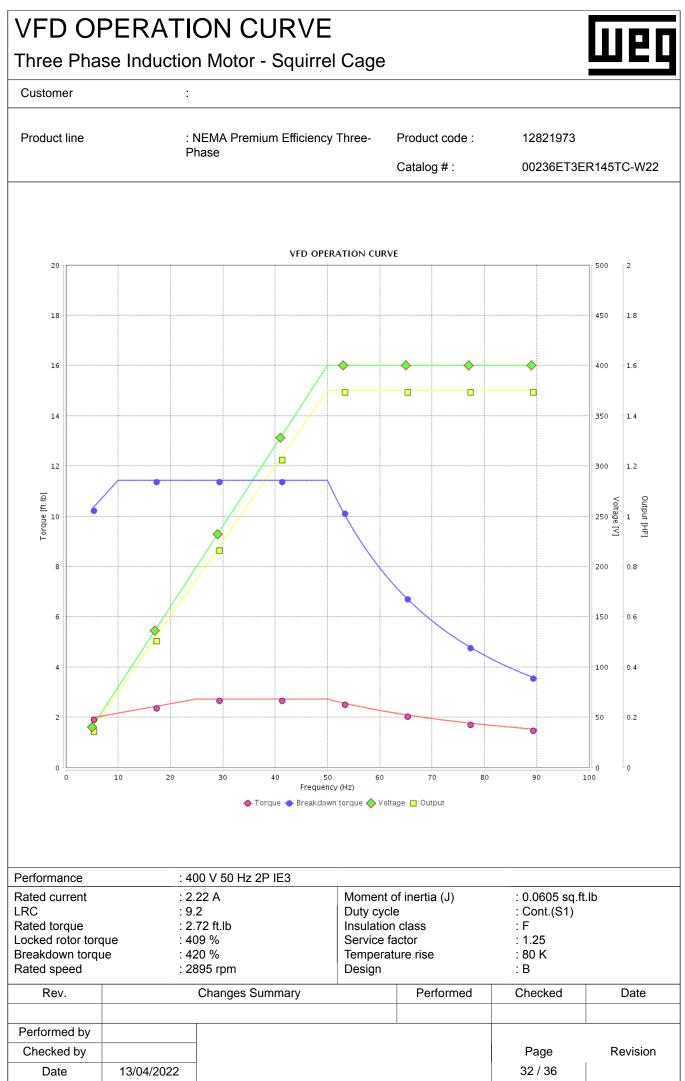
THERMAL LIMIT CURVE Three Phase Induction Motor - Squirrel Cage						
Customer						
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821973			
	Flidse	Catalog # :	00236ET3ER145TC-W22			

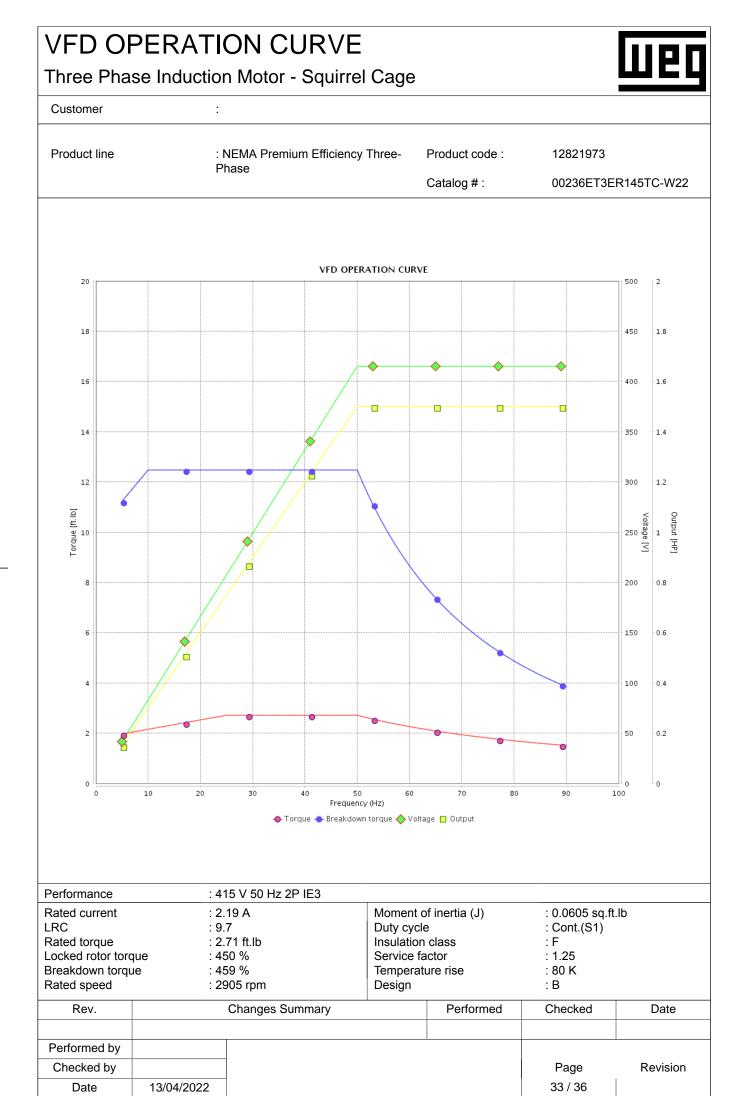
Performance	:	415 V 50 Hz 2P IE2				
Rated current LRC Rated torque Locked rotor torq Breakdown torqu Rated speed	ue :	2.82 A 7.7 3.67 ft.lb 330 % 340 % 2865 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0605 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	lb
Heating constant						
Cooling constant						
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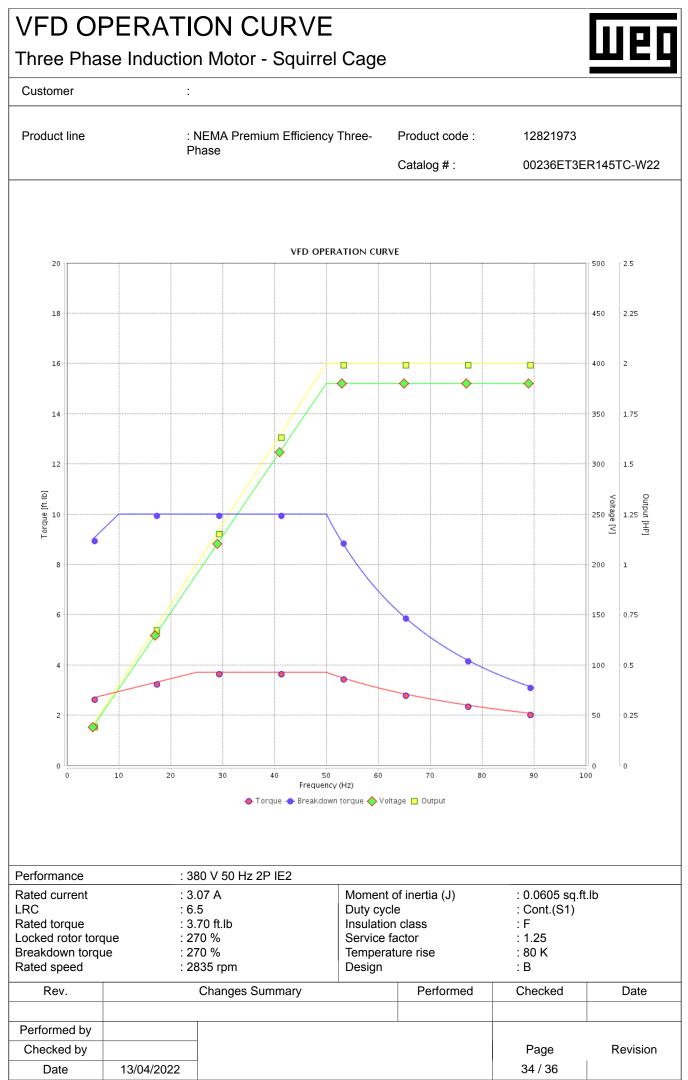


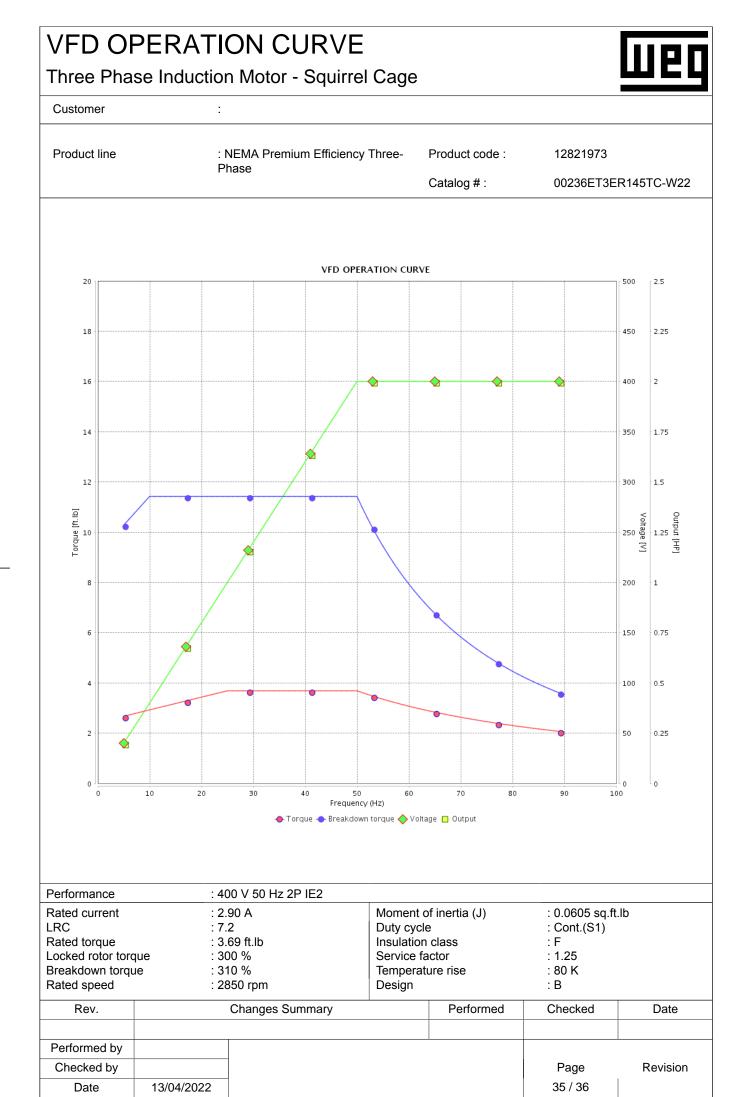


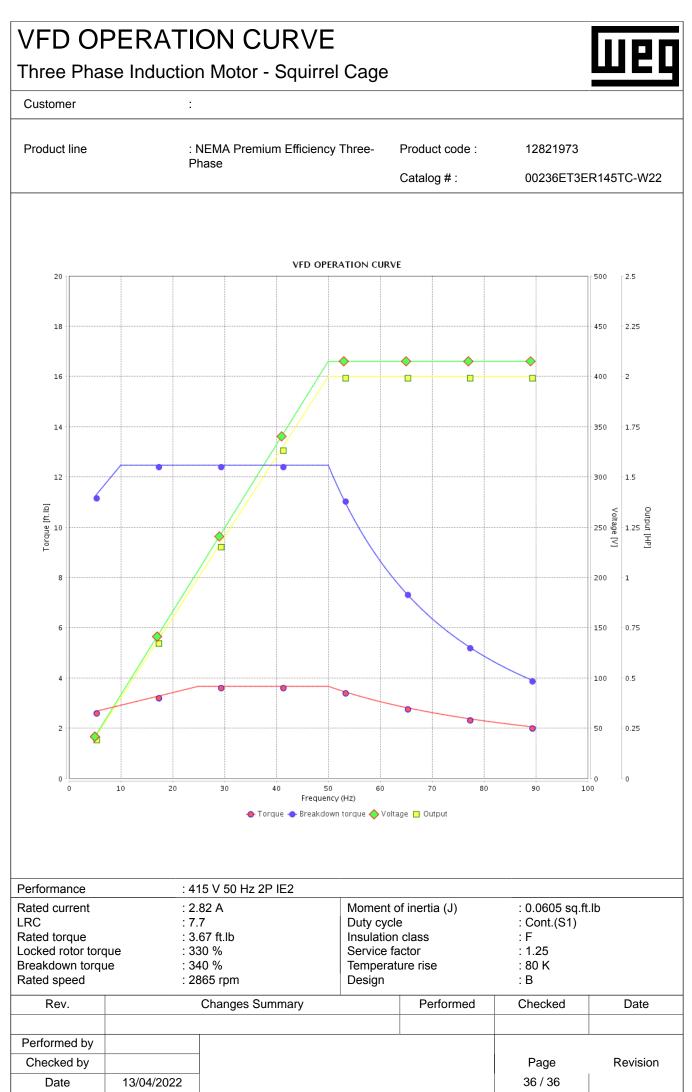


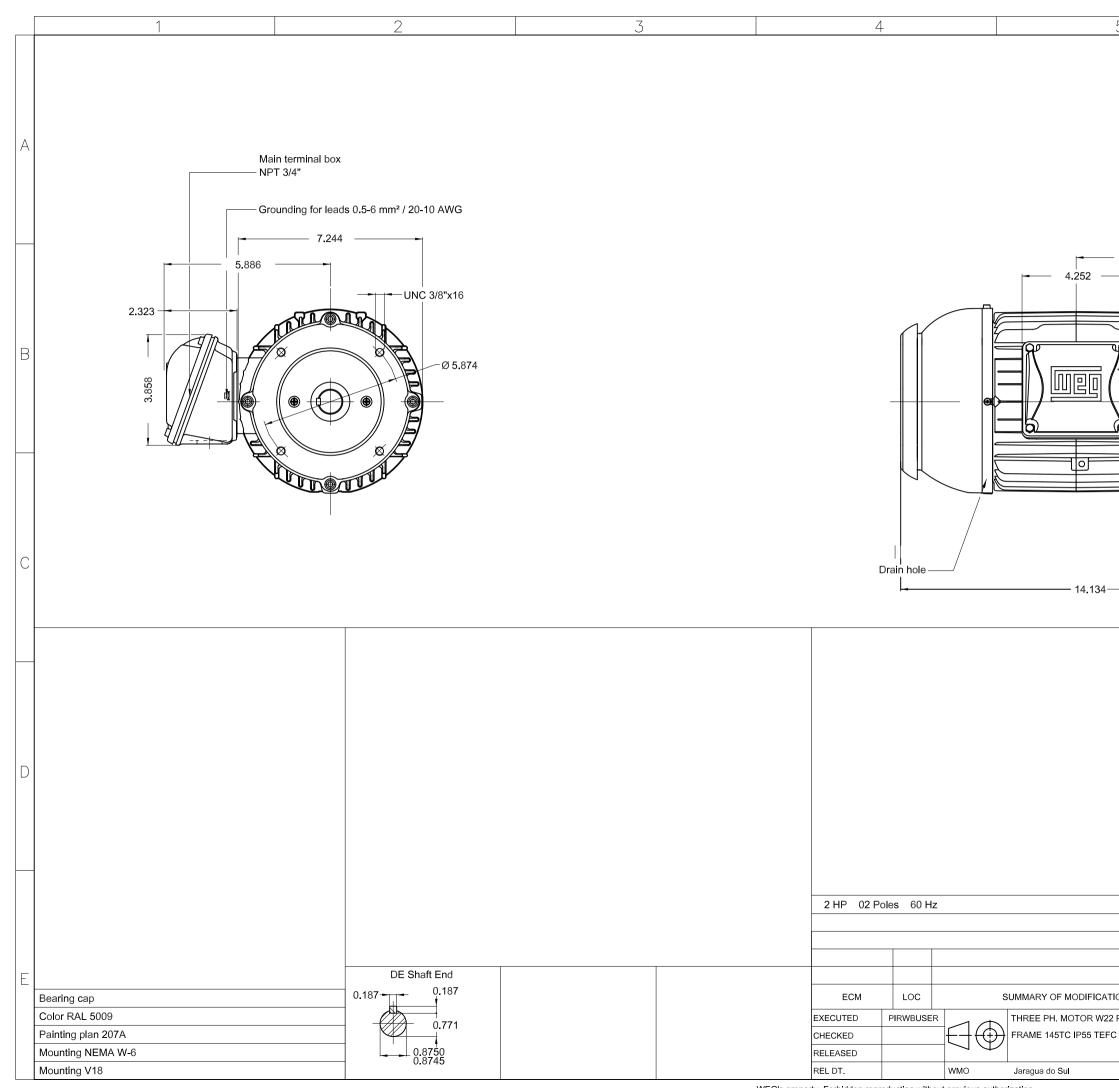












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4.750	0.157	1.575 - 2.250 Drain hole	6.496 - A			
IONS	EXECUTED	CHECKED	RELEASED	DATE	A	Dimensions in inches
IONS PREM. EFF.	EXECUTED	CHECKED				A3
Produc	t Engineering	WDD SHEET	1 / 1	Ше		XME

