DATA SHEET

Three Phase Induction Motor - Squirrel Cage

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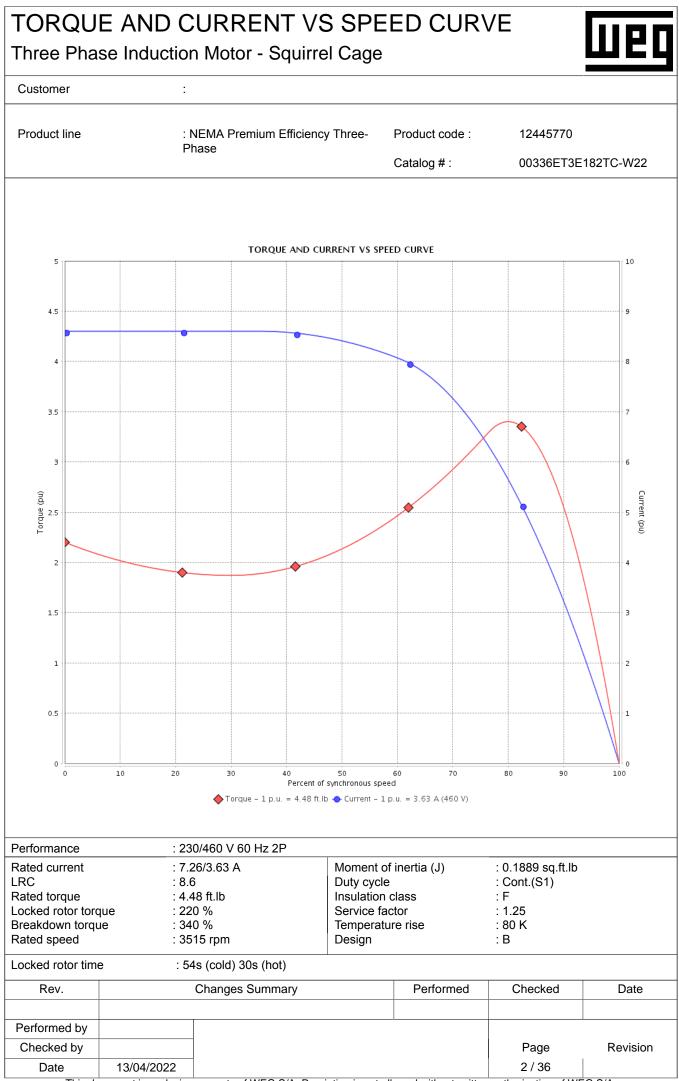
Customer

Product line		: NEMA Premium Efficiency Three- Phase			Product code :		12445770	
		Pilase			Catalog # :		336ET3E182	TC-W22
Frame Insulation class Duty cycle Ambient tempera Altitude Protection degre Design		: 182/4TC : F : Cont.(S1) : -20°C to + : 1000 m.a.: : IP55 : B		Mount Rotatio Startin Approx		: F : E : C : S	C411 - TEFC ⁻ -1 3oth (CW and Direct On Line 01.9 lb 0.1889 sq.ft.lb	,
Output [HP]		3	2	2	2	3	3	3
Poles		2	2	2	2	2	2	2
Frequency [Hz]		60	50	50	50	50	50	50
Rated voltage [V]		230/460	380	400	415	380	400	415
Rated current [A]		7.26/3.63	3.09	3.00	2.96	4.34	4.17	4.02
. R. Amperes [A]		62.4/31.2	29.7	32.1	32.9	29.5	31.7	32.6
_RC [A]		8.6x(Code K)	9.6x(Code L)	10.7x(Code M)	11.1x(Code N)	6.8x(Code H)	7.6x(Code J)	8.1x(Code 、
No load current [A	.]	2.60/1.30	1.15	1.20	1.30	1.25	1.35	1.30
Rated speed [RPN		3515	2930	2940	2945	2885	2900	2910
Slip [%]		2.36	2.33	2.00	1.83	3.83	3.33	3.00
Rated torque [ft.lb]	4.48	3.58	3.57	3.57	5.46	5.43	5.41
_ocked rotor torqu	ie [%]	220	240	280	320	180	200	220
Breakdown torque	e [%]	340	380	440	459	250	280	310
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		54s (cold) 30s (hot)	68s (cold) 38s (hot)	63s (cold) 35s (hot)	57s (cold) 32s (hot)	55s (cold) 31s (hot)	52s (cold) 29s (hot)	48s (cold) 27s (hot)
Noise level ²		66.0 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%							
Efficiency (%)	50%	82.5	81.0	80.6	79.7	84.0	84.0	84.0
	75%	86.5	84.5	84.5	84.1	86.5	86.5	86.5
	100%	86.5	85.8	85.8	85.9	85.5	85.5	86.5
	25%	0.75						
Power Factor	50%	0.75	0.68	0.65	0.63	0.80	0.77	0.75
	75%	0.84	0.79	0.77	0.75	0.87	0.86	0.84
	100%	0.88	0.86	0.84	0.82	0.90	0.89	0.88
Bearing type Sealing Lubrication interv Lubricant amoun Lubricant type		Drive end : 6207 ZZ : V'Ring : - : - : Mobi		ZZ Max. tr	ation loads action ompression		1 lb 53 lb	
Notes USABLE @208V	8.01A SF 1.	.15 SFA 9.21A						
This revision repla must be eliminate (1) Looking the m (2) Measured at 1 (3) Approximate v manufacturing pro	ed. lotor from the Im and with t weight subjee	e shaft end. tolerance of +3	8dB(A).		are average va supply, subjec			
must be eliminate (1) Looking the m (2) Measured at 1 (3) Approximate v manufacturing pro (4) At 100% of ful	ed. lotor from the Im and with t weight subject ocess.	e shaft end. tolerance of +3 ct to changes a	8dB(A). after	powers	supply, subjec	t to the tolera	nces stipulate	d in NEMA
must be eliminate (1) Looking the m (2) Measured at 1 (3) Approximate v	ed. lotor from the Im and with t weight subject ocess.	e shaft end. tolerance of +3 ct to changes a	8dB(A).	powers		t to the tolera		
must be eliminate (1) Looking the m (2) Measured at 1 (3) Approximate v manufacturing pro (4) At 100% of ful	ed. lotor from the Im and with t weight subject ocess.	e shaft end. tolerance of +3 ct to changes a	8dB(A). after	powers	supply, subjec	t to the toleran	nces stipulate	d in NEMA
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 Date
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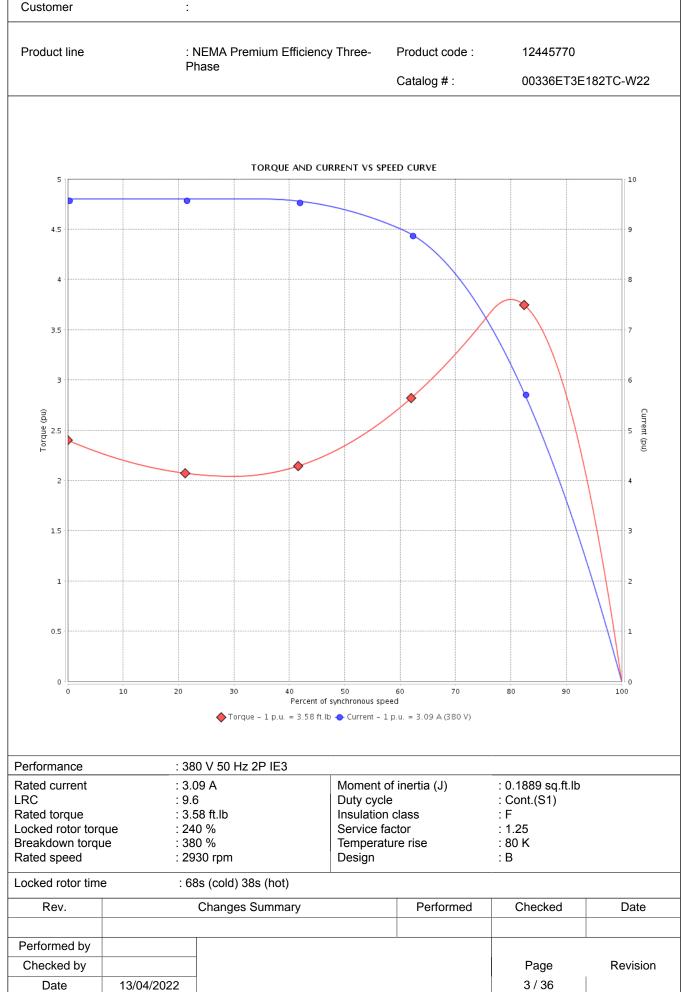
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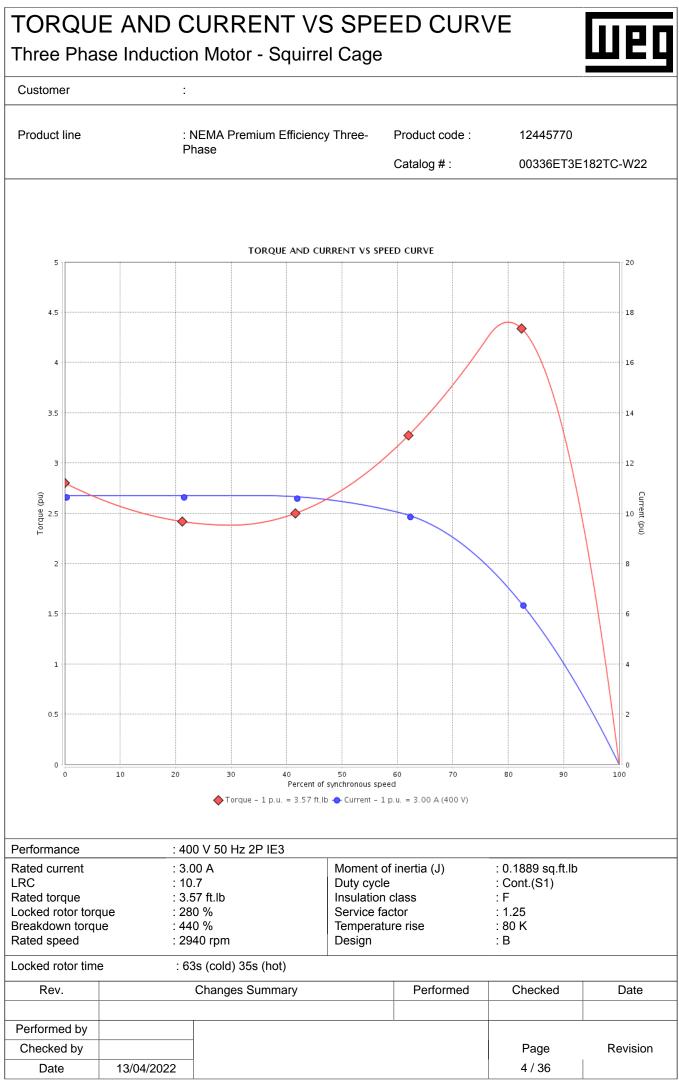
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

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TORQUE AND CURRENT VS SPEED CURVE

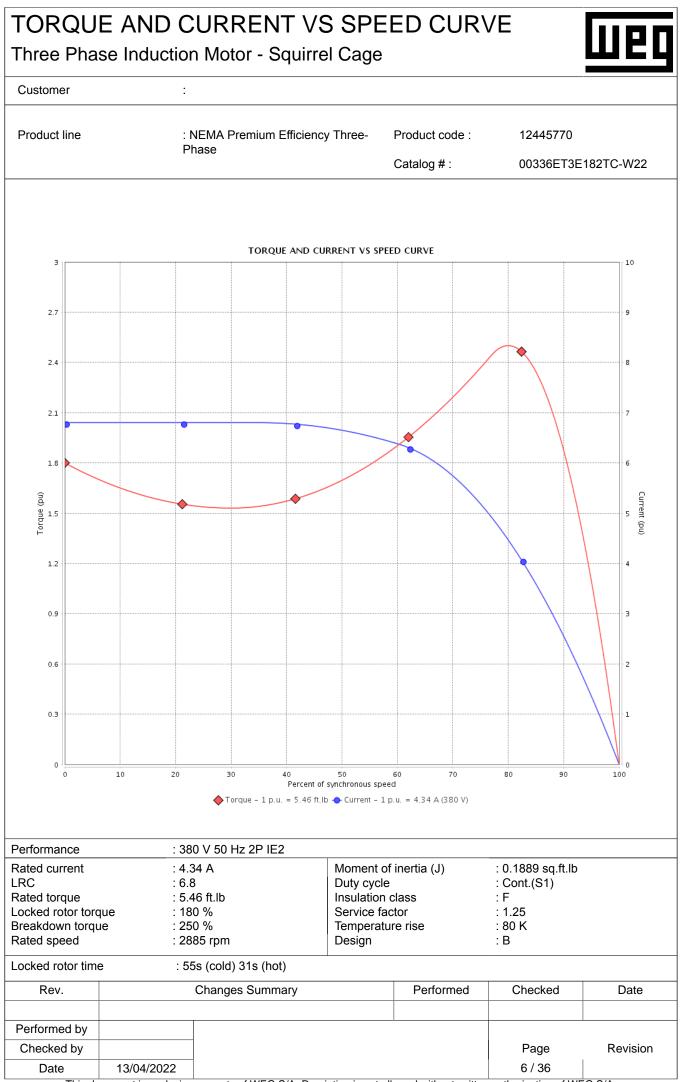
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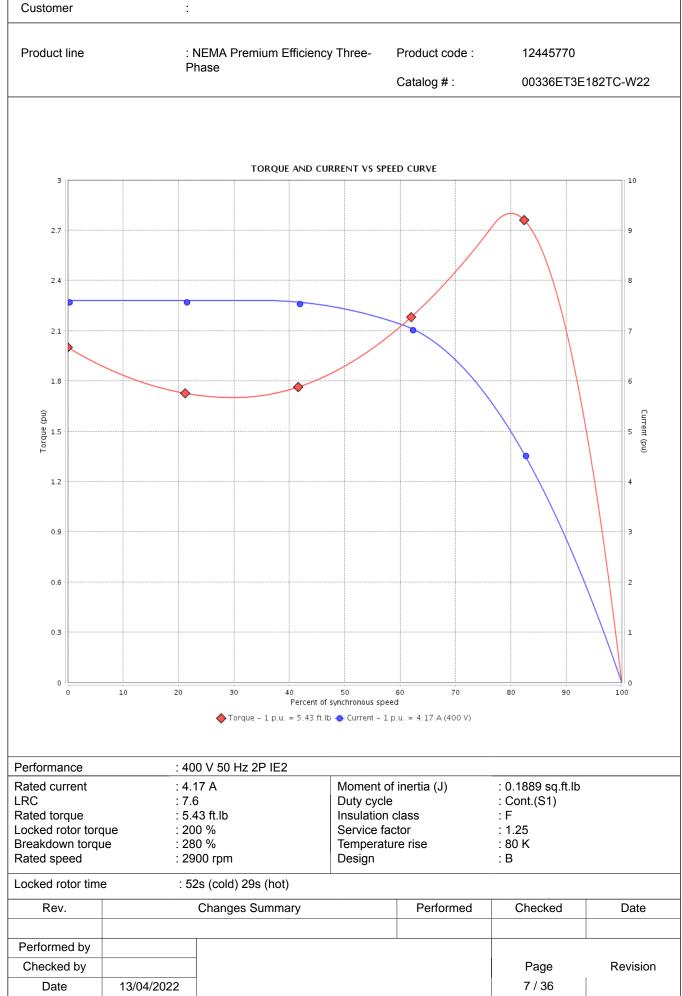
Product line	: NEMA Premium E	Efficiency Three-	Product code :	12445770		
	Phase		Catalog # :	00336ET3E1	00336ET3E182TC-W22	
5	TORQU	E AND CURRENT VS S	PEED CURVE		20	
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4.5 -					18	
4					16	
3.5					14	
3					12	
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(în bud 2.5					10 Unrent (pu)	
10 1					u)	
2				X	8	
1.5					6	
1					4	
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	20 30	40 50 Percent of synchronous s	60 70	80 90	100	
	♦ Torque - 1 p.u.	= 3.57 ft.lb 🔶 Current –				
erformance	: 415 V 50 Hz 2P IE3	3				
ated current RC	: 2.96 A : 11.1	Moment Duty cyc	of inertia (J)	: 0.1889 sq.ft.lb		
ated torque	: 3.57 ft.lb	Insulatio	n class	: Cont.(S1) : F		
ocked rotor torque reakdown torque	: 320 % : 459 %	Service Tempera		: 1.25 : 80 K		
ated speed	: 2945 rpm	Design		: B		
ocked rotor time	: 57s (cold) 32s (hot					
Rev.	Changes Summ	ary	Performed	Checked	Date	
Performed by						
Checked by				Page	Revision	



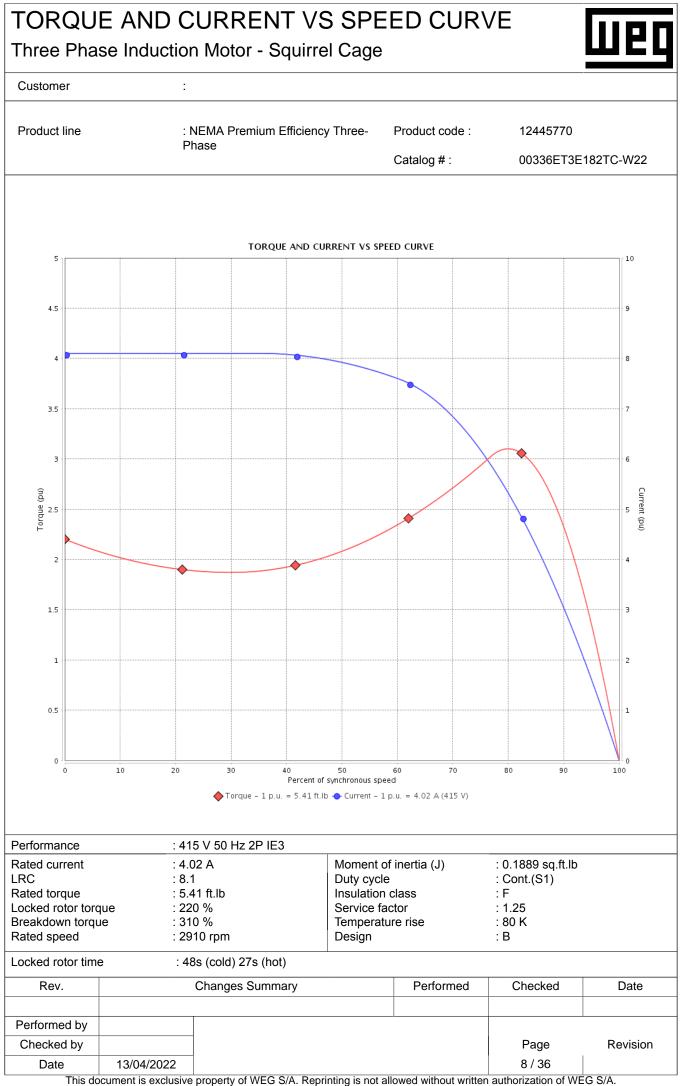
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



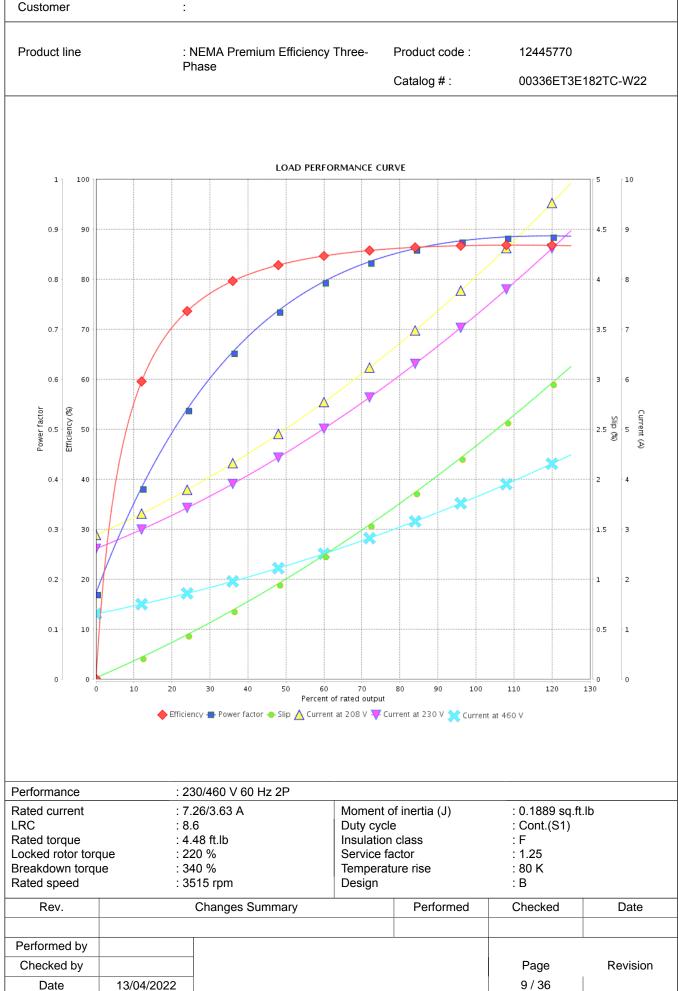


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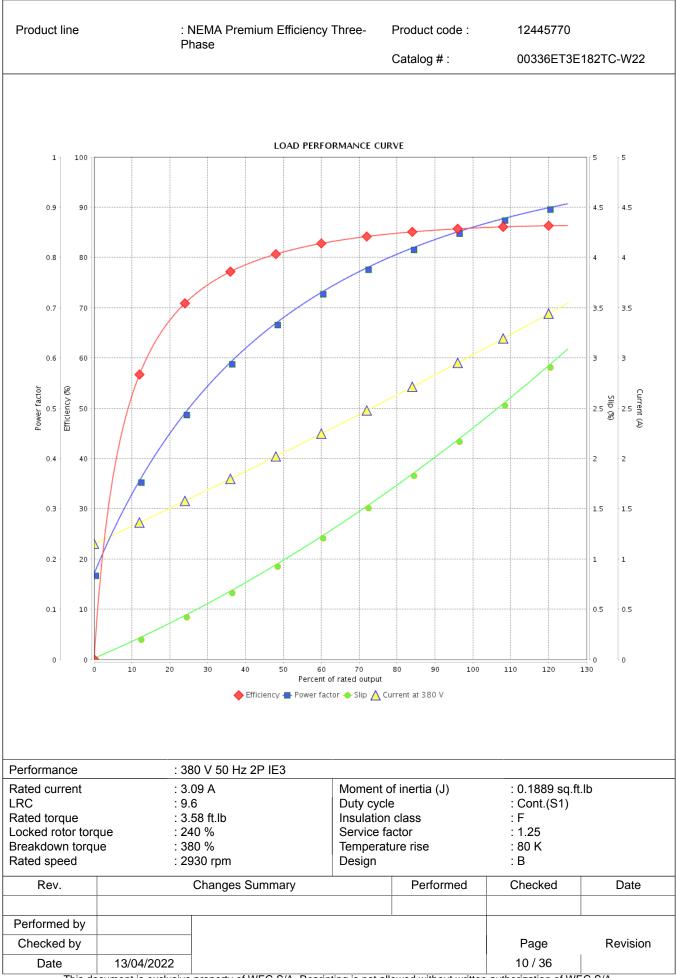
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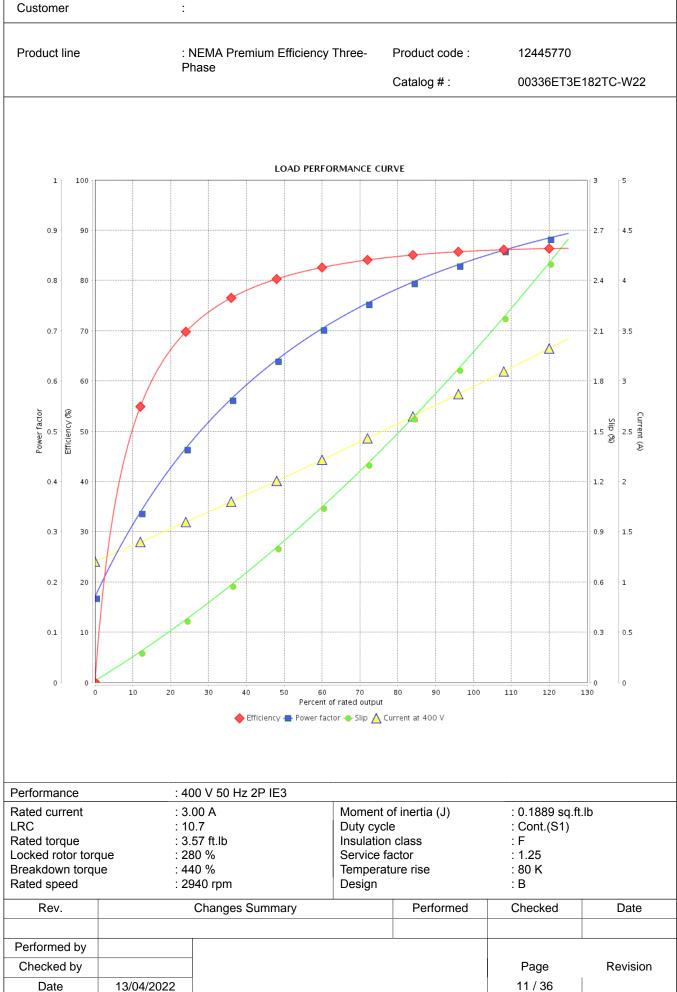
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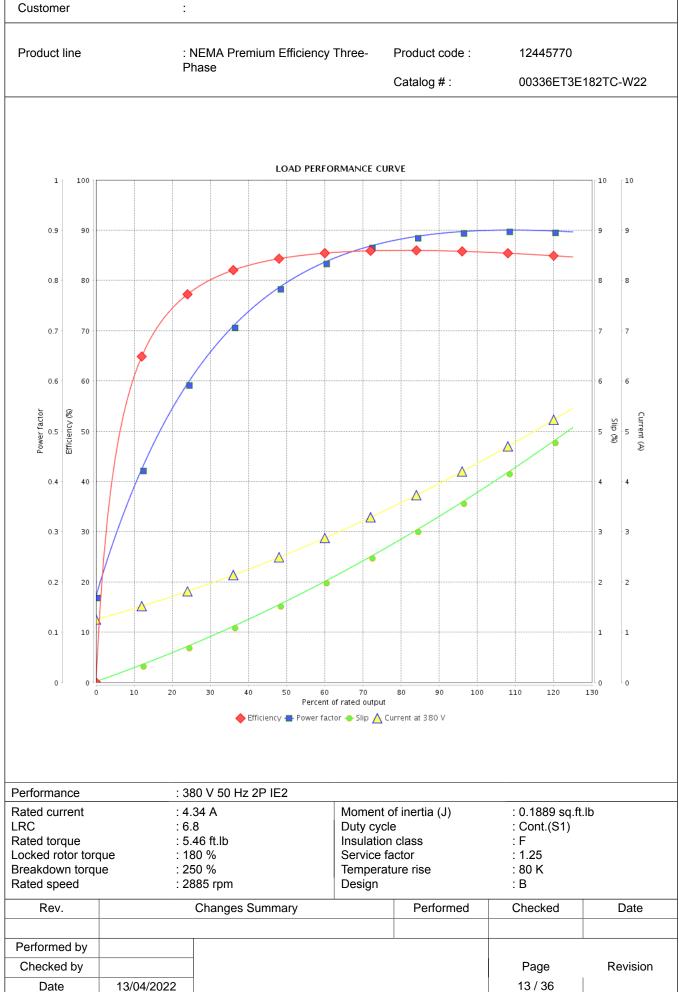
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LOAD PERFORMANCE CURVE Three Phase Induction Motor - Squirrel Cage Customer : Product line : NEMA Premium Efficiency Three-Product code : 12445770 Phase Catalog # : 00336ET3E182TC-W22 LOAD PERFORMANCE CURVE 100 1 2.5 5 4.5 0.9 90 2.25 0.8 80 2 4 3.5 1.75 70 0.7 0.6 60 1.5 з Δ Power factor Efficiency (%) \wedge 2.5 Current 1.25 Slip 0.5 50 Þ 0.4 40 1 2 \wedge Δ 0.3 30 0.75 1.5 0.2 20 0.5 1 0.1 10 0.25 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 415 V Performance : 415 V 50 Hz 2P IE3 Rated current : 2.96 A Moment of inertia (J) : 0.1889 sq.ft.lb LRC : 11.1 Duty cycle : Cont.(S1) Insulation class Rated torque : 3.57 ft.lb : F Locked rotor torque : 320 % Service factor : 1.25 Breakdown torque : 459 % Temperature rise : 80 K Rated speed : 2945 rpm Design : B Rev. Performed Checked Date **Changes Summary**

Performed by Checked by Revision Page Date 13/04/2022 12/36

Three Phase Induction Motor - Squirrel Cage

Customer



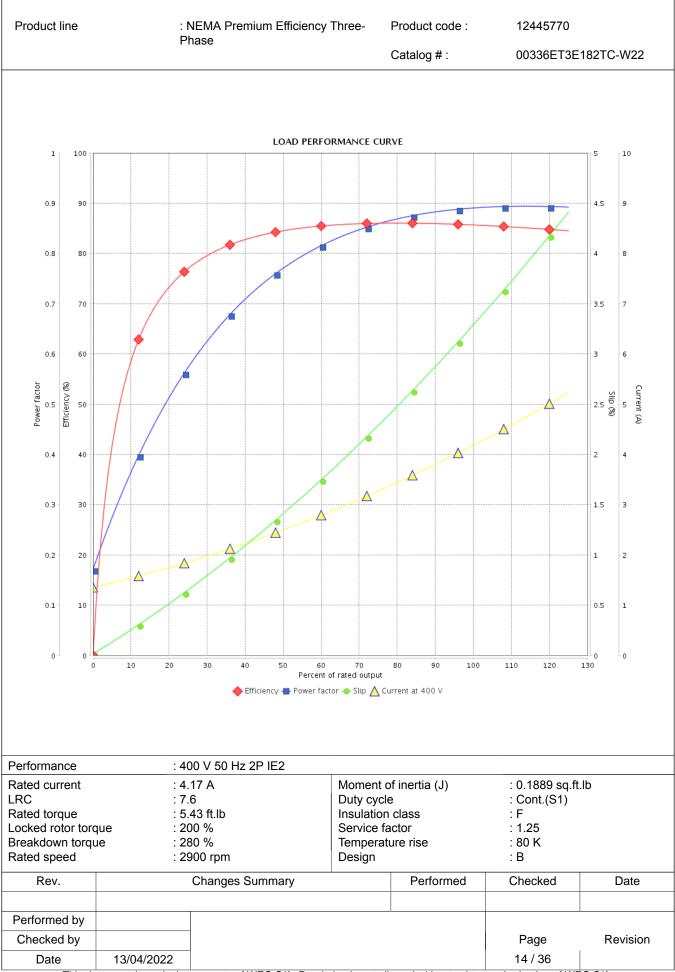
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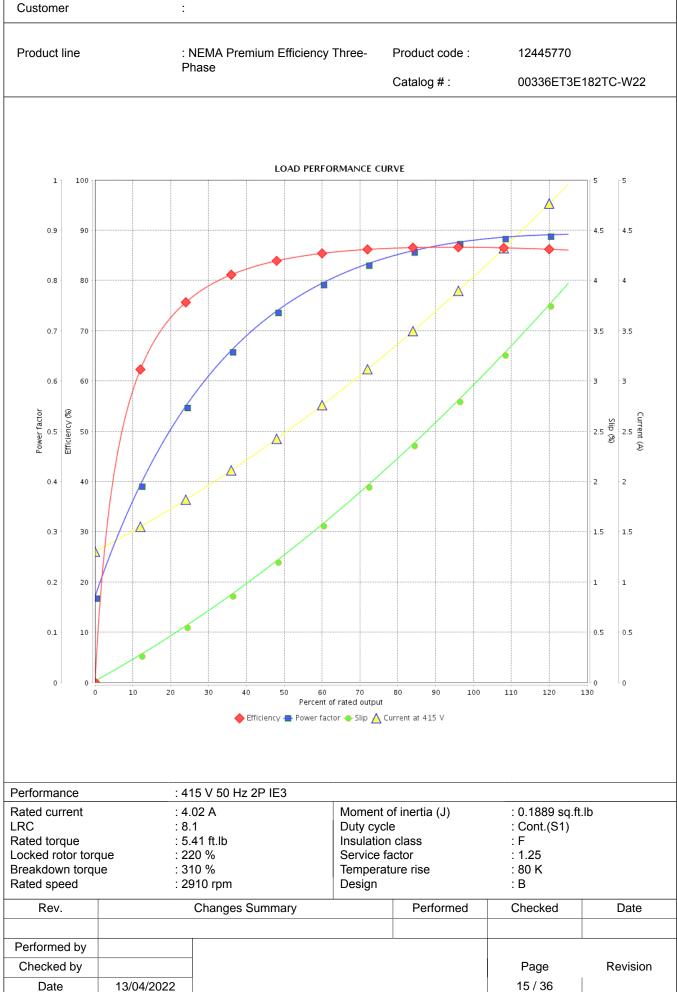


Customer



Three Phase Induction Motor - Squirrel Cage

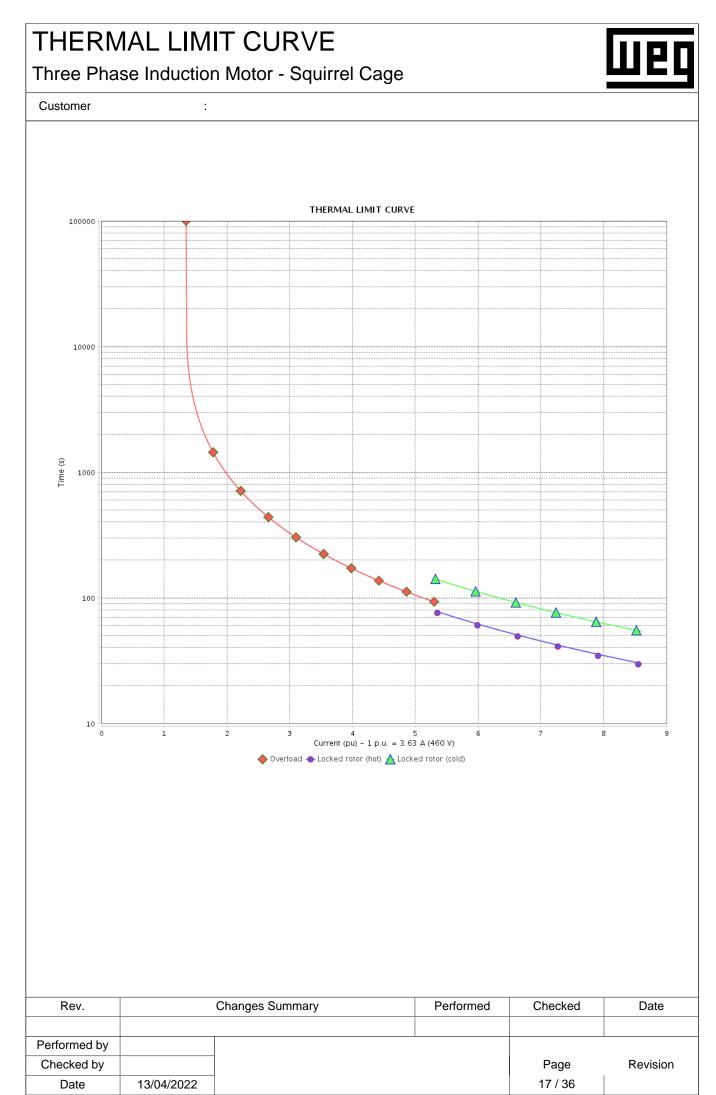
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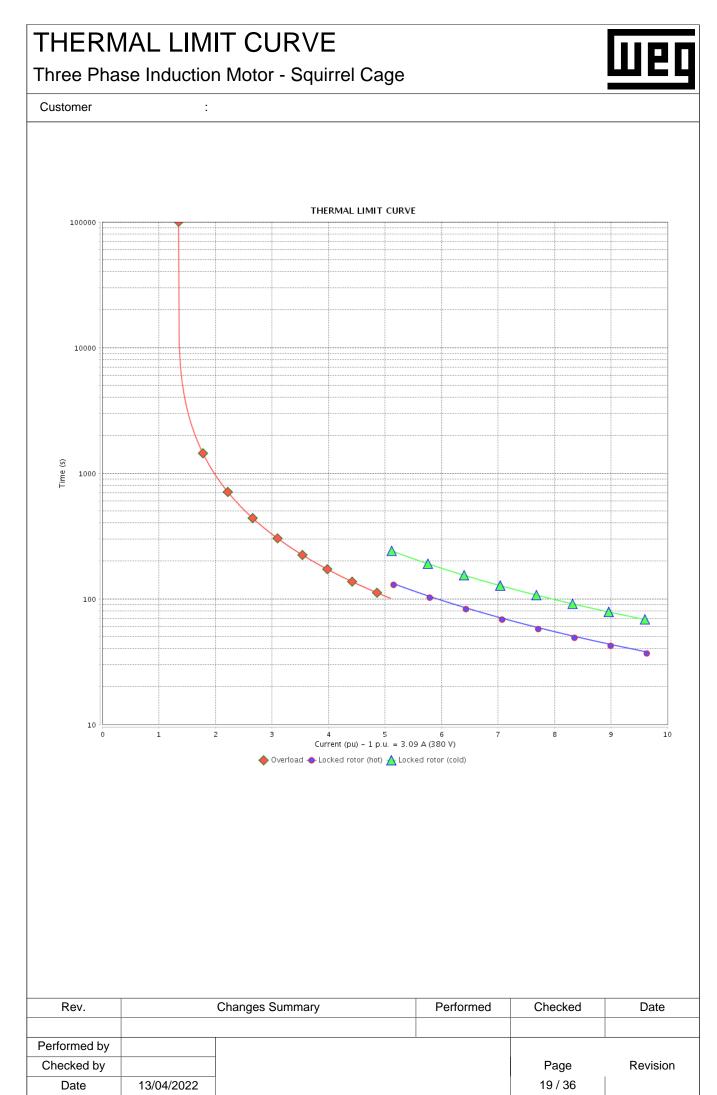
THERMAL LIMIT CURVE							
Three Phase Induc	tion Motor - Squirrel Cage)	шеч				
Customer	:						
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12445770				
	Thase	Catalog # :	00336ET3E182TC-W22				

Performance		: 230/460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	que	: 7.26/3.63 A : 8.6 : 4.48 ft.lb : 220 % : 340 % : 3515 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1889 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	lb
Heating constant	t					
Cooling constant	t					
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Performed by						
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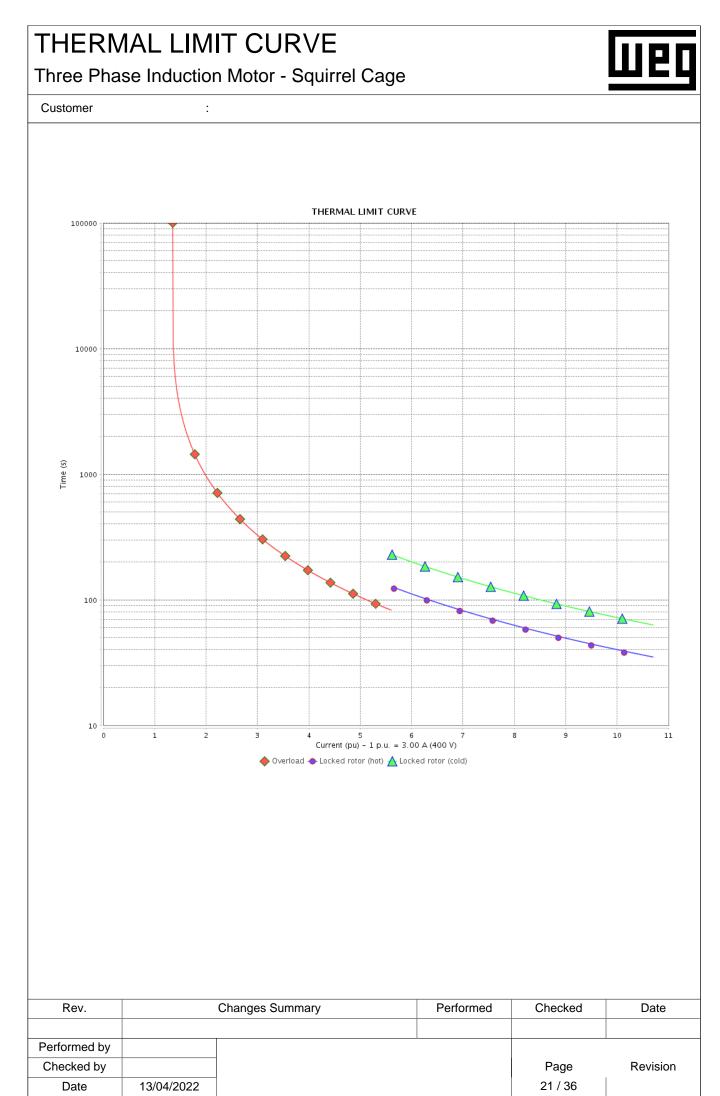
THERMAL LIMIT CURVE							
Three Phase Induc	ction Motor - Squirrel Cage)	шеч				
Customer	:						
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12445770				
	T HOO	Catalog # :	00336ET3E182TC-W22				

Performance	: 3	880 V 50 Hz 2P IE3	·			
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 9 : 3 jue : 2 ie : 3	8.09 A 9.6 3.58 ft.lb 240 % 380 % 2930 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1889 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Heating constant	t					
Cooling constant	t					
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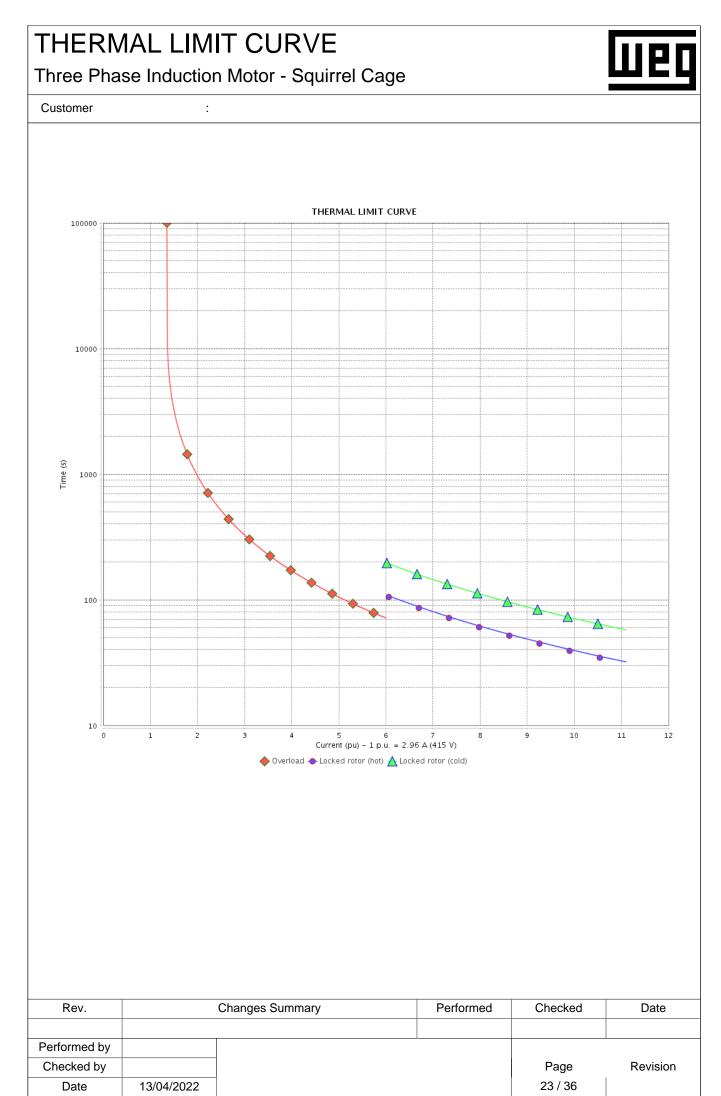
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Three Phase Induc	tion Motor - Squirrel Cage	;	Шео				
Customer	:						
Product line	: NEMA Premium Efficiency Three-	Product code :	12445770				
	Phase	Catalog # :	00336ET3E182TC-W22				

Performance	: 4	00 V 50 Hz 2P IE3			·	
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 1 : 3 que : 2 Je : 4	8.00 A 0.7 8.57 ft.lb 80 % 40 % 940 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1889 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	i.lb
Heating constan	t				·	
Cooling constant	t					
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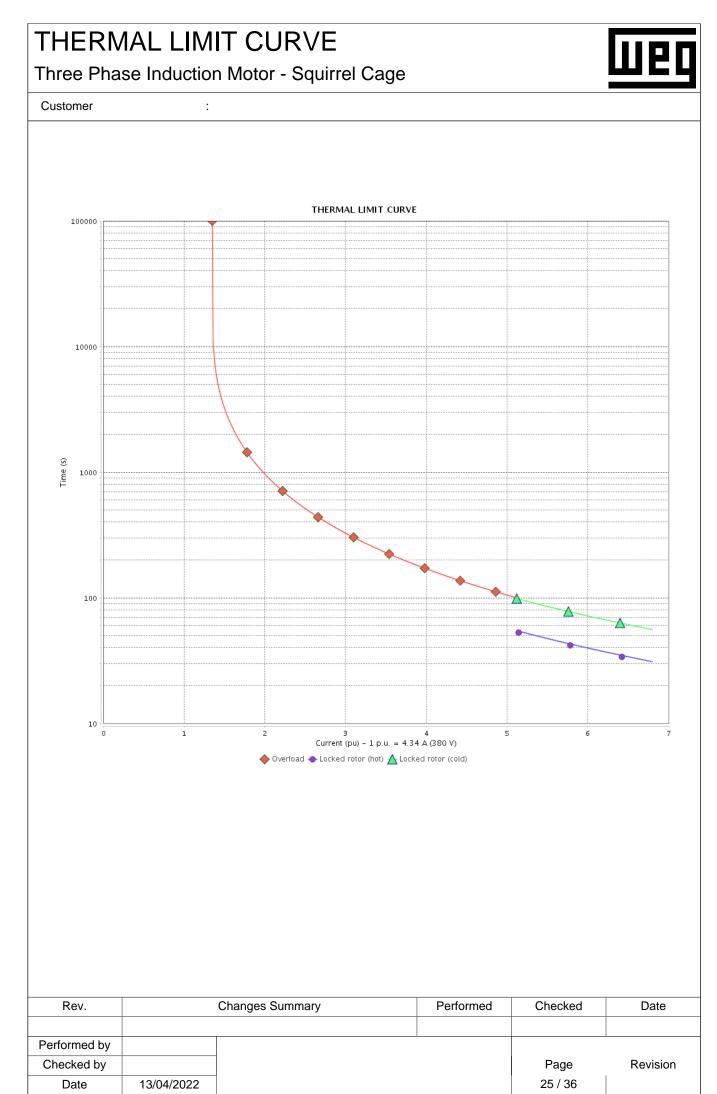
THERMAL LIMIT CURVE							
Three Phase Induction Motor - Squirrel Cage							
:							
: NEMA Premium Efficiency Three- Phase	Product code :	12445770					
	Catalog # :	00336ET3E182TC-W22					
	tion Motor - Squirrel Cage	: : NEMA Premium Efficiency Three- Product code : Phase					

Performance		: 415 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	que	: 2.96 A : 11.1 : 3.57 ft.lb : 320 % : 459 % : 2945 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1889 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	.lb
Heating constant	t					
Cooling constant	t					
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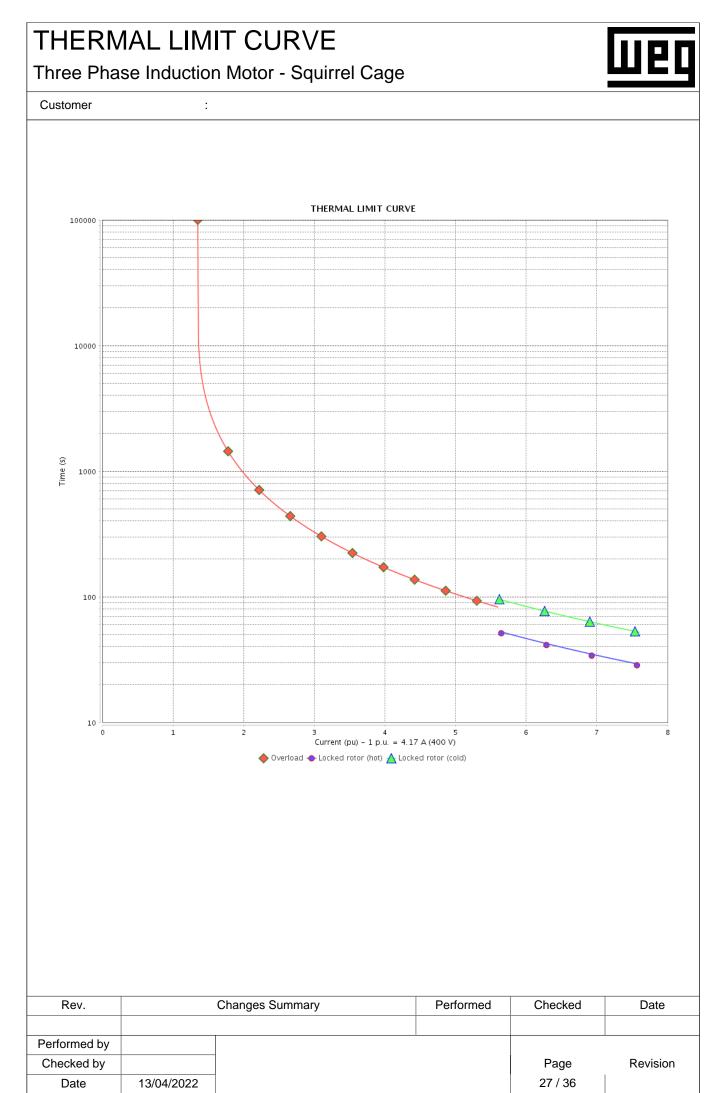
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Three Phase Induc	tion Motor - Squirrel Cage)	шсч				
Customer	:						
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12445770				
		Catalog # :	00336ET3E182TC-W22				

Performance	: 38	80 V 50 Hz 2P IE2				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 6 : 5 que : 1 ue : 2	.34 A .8 .46 ft.lb 80 % 50 % 885 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1889 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	lb
Heating constan	t					
Cooling constant	t					
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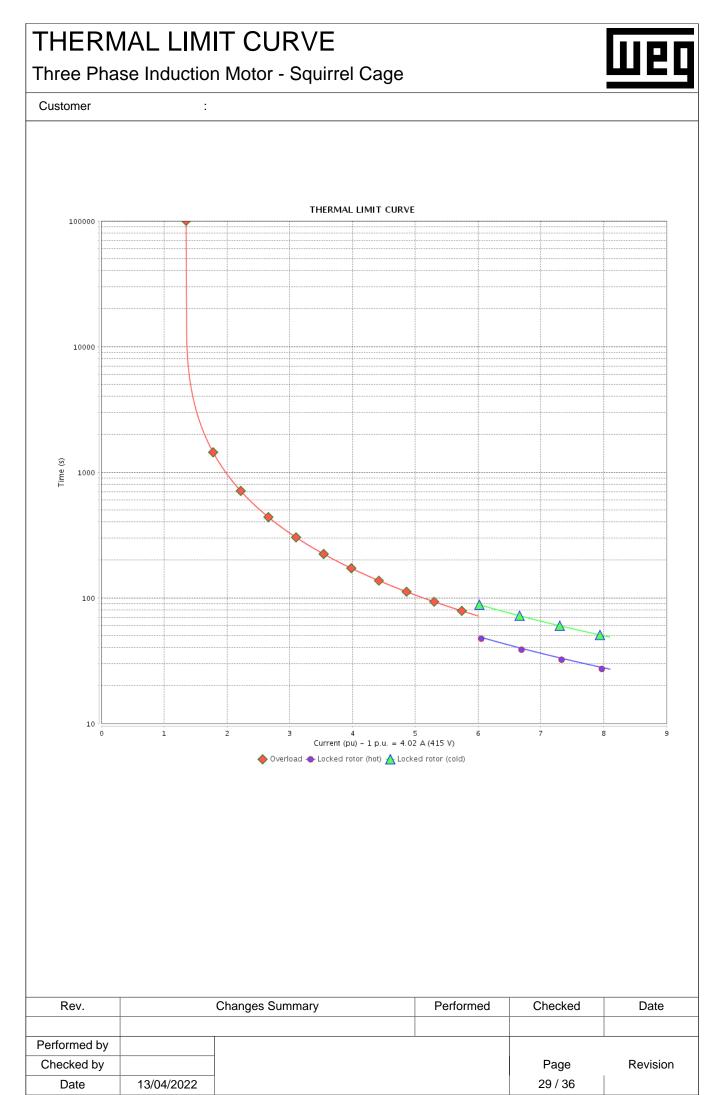
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Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12445770
		Catalog # :	00336ET3E182TC-W22

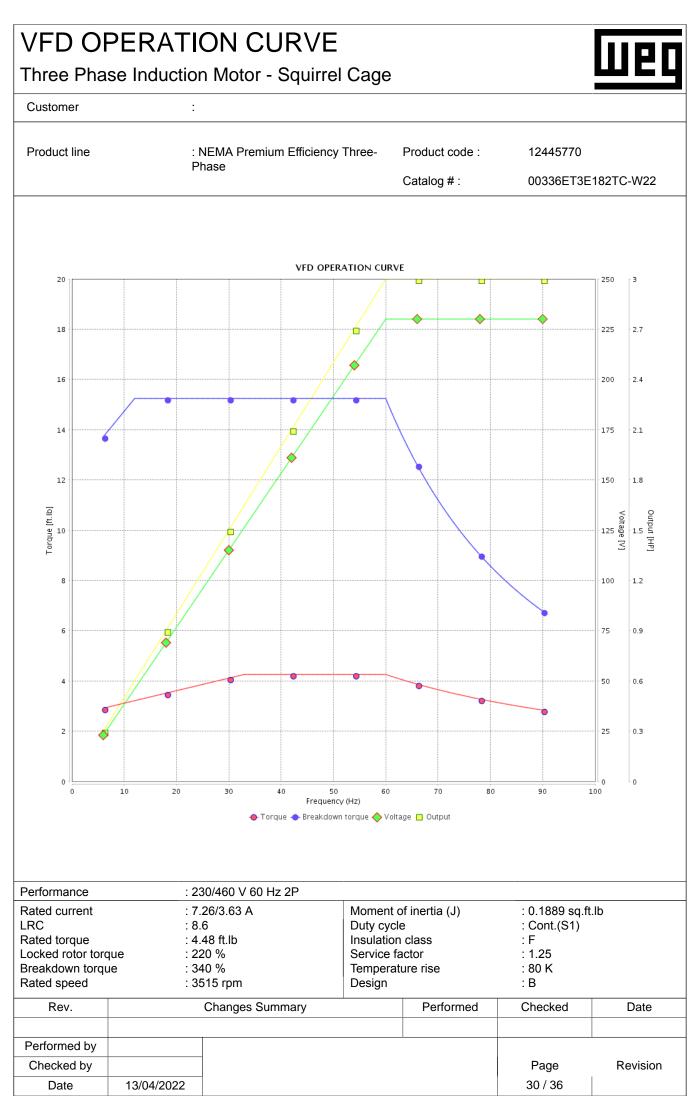
Performance	: 4	400 V 50 Hz 2P IE2				
LRC: 7.6Duty ofRated torque: 5.43 ft.lbInsulaLocked rotor torque: 200 %ServiorBreakdown torque: 280 %Temper		Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 0.1889 sq.ft. : Cont.(S1) : F : 1.25 : 80 K : B	lb	
Heating constant	t					
Cooling constant						
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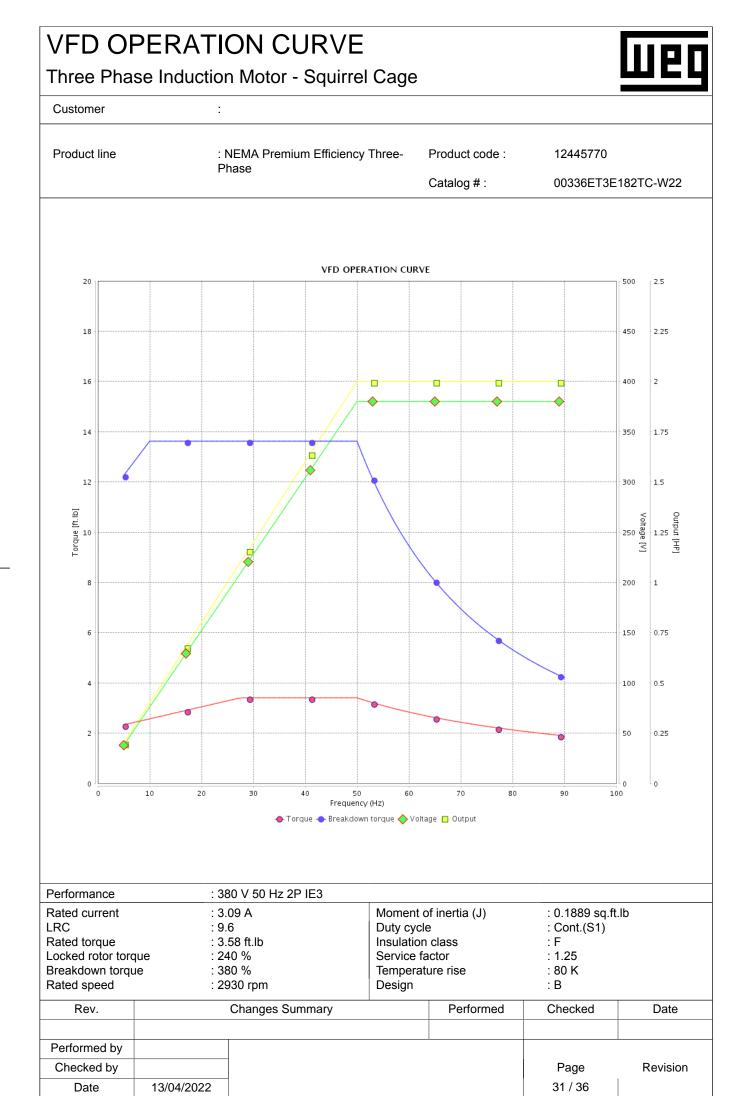


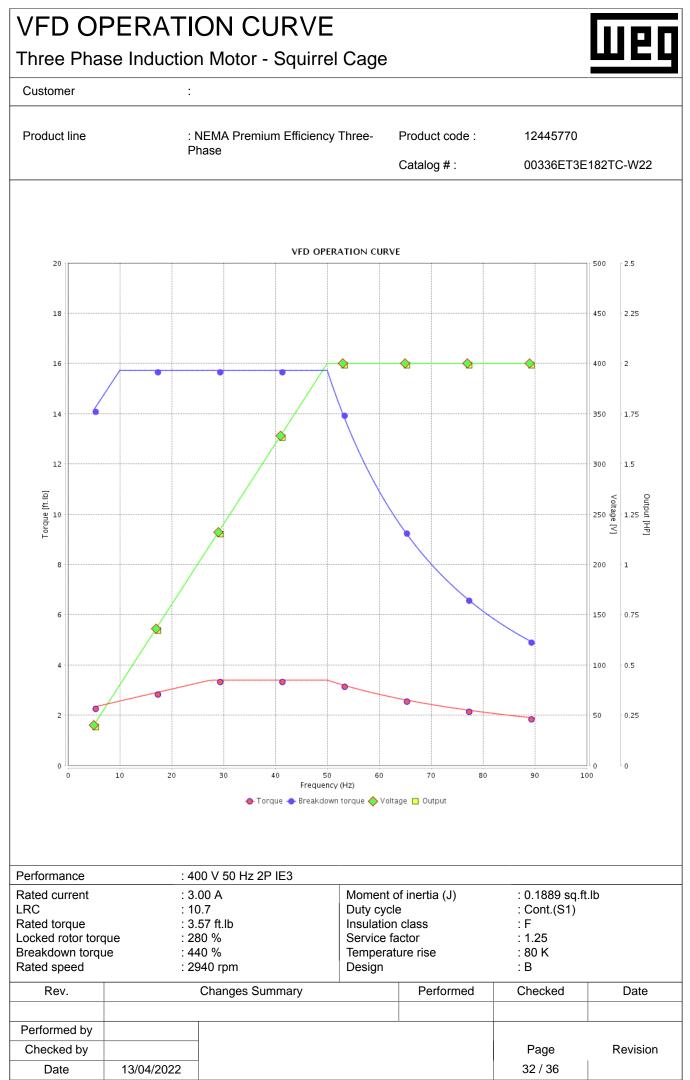
THERMAL LIMIT CURVE Three Phase Induction Motor - Squirrel Cage			Шед
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Customer	:		
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		Catalog # :	00336ET3E182TC-W22

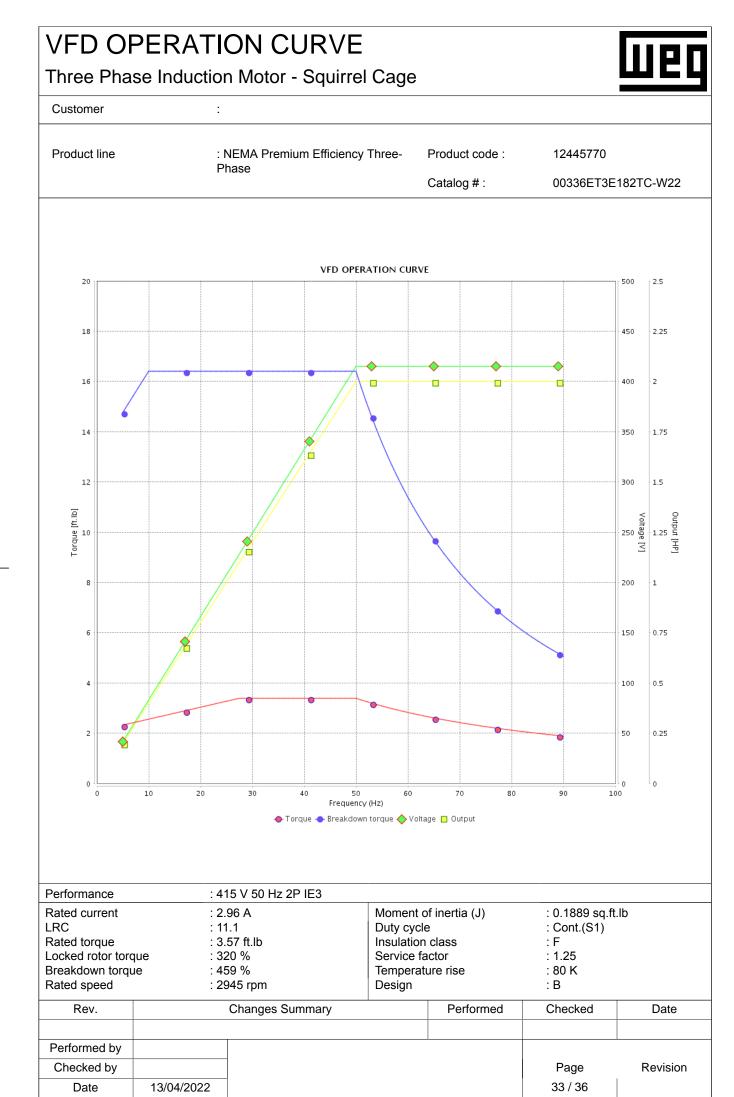
Performance	: 4	: 415 V 50 Hz 2P IE3				
Rated current: 4LRC: 6Rated torque: 6Locked rotor torque: 7Breakdown torque: 7Rated speed: 7		.02 A .1 .41 ft.lb 20 % 10 % 910 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1889 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Heating constant						
Cooling constant						
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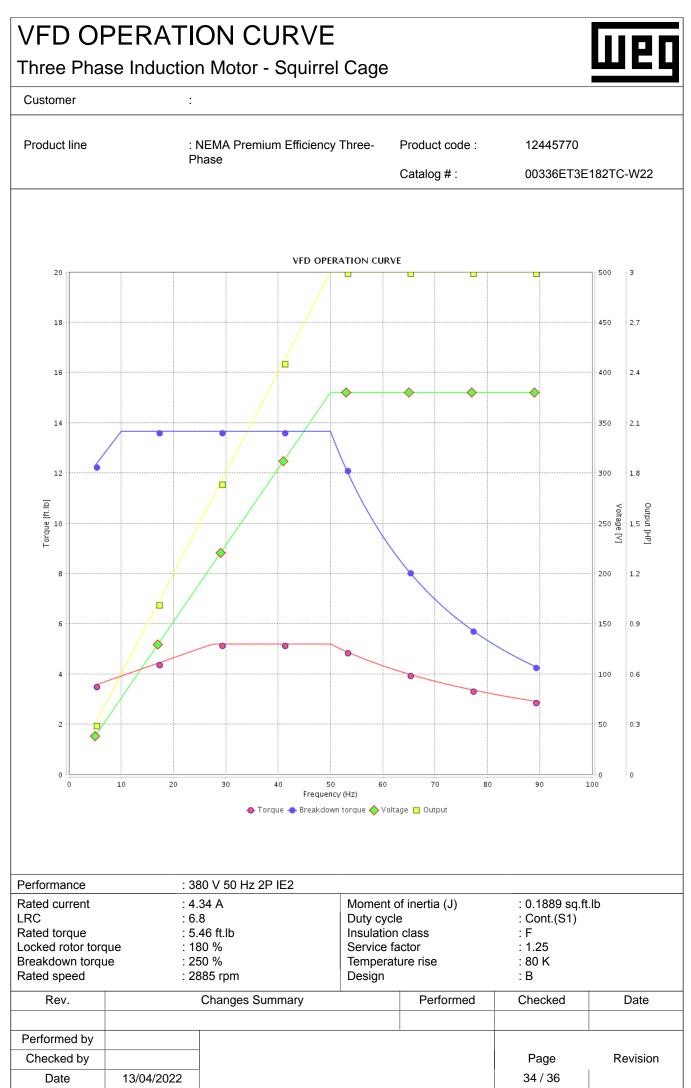


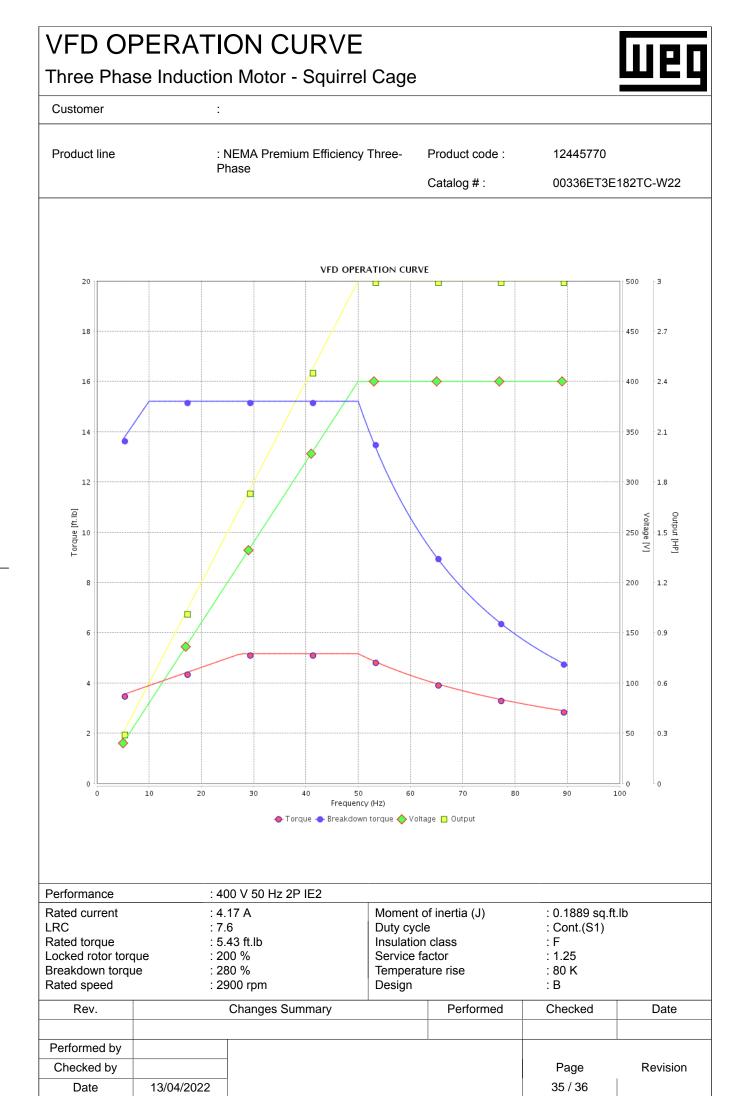


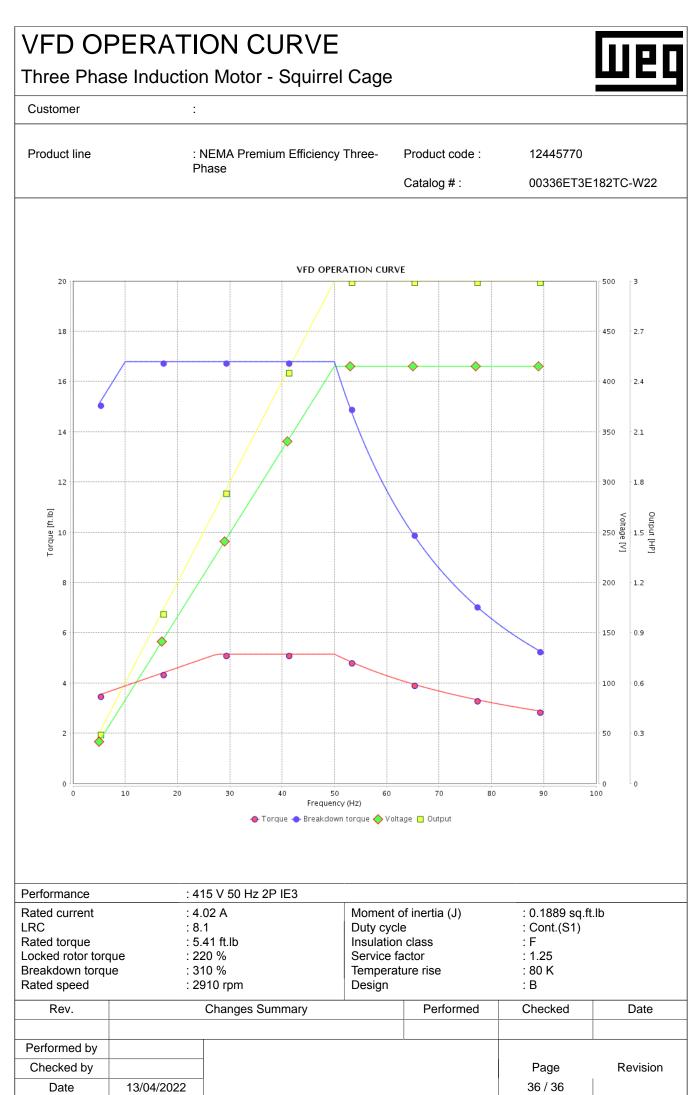


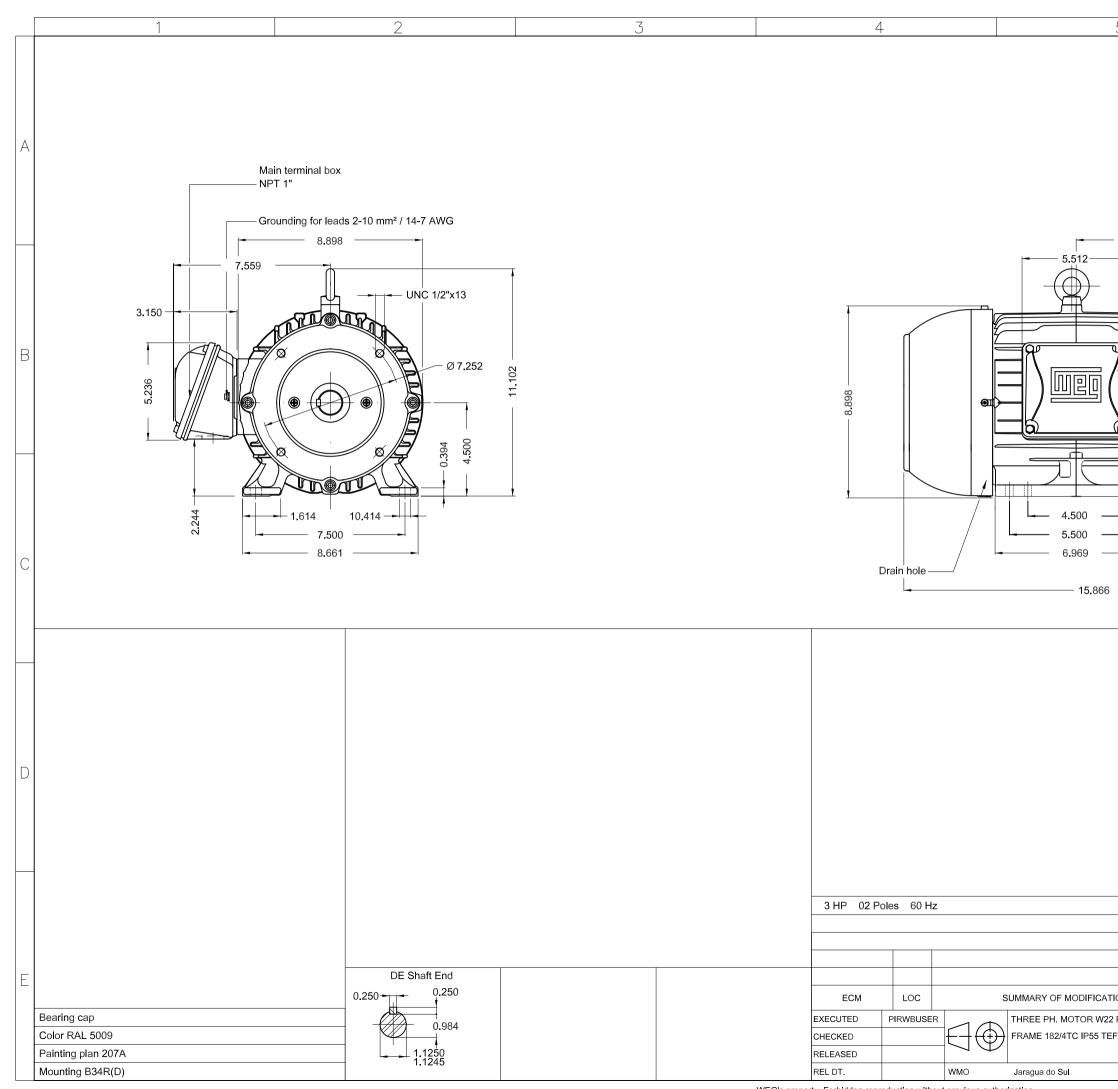












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						Dimensions in inches
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