DATA SHEET

Three Phase Induction Motor - Squirrel Cage

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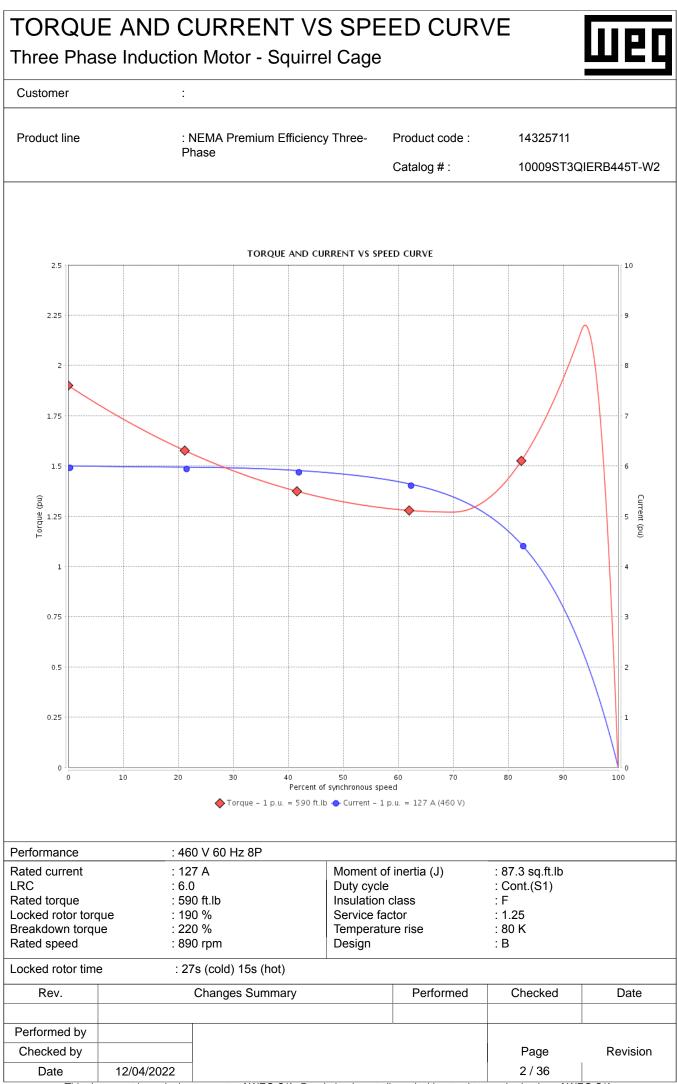
Customer

Product line		: NEMA Pre Phase	mium Efficier	cy Three-	Three- Product code : 14325711			
		FildSe			Catalog # :	10	009ST3QIER	B445T-W2
Frame		: 444/5T			ling method		C411 - TEFC	
Insulation class		: F			Inting		-1	0014/
Duty cycle	- 4	: Cont.(S1)	40%0		ation ¹		Both (CW and	,
Ambient temper	ature	: -20°C to +			ting method		Direct On Line	
Protection degre		: 1000 m.a. : IP55	5.1.		rox. weight³ nent of inertia (J		1780 lb 37.3 sq.ft.lb	
Design	e	: IF 55 : B		IVIOI	nent of mentia (J) . (07.5 SQ.ILID	
Dutput [HP]		100	75	75	75	100	100	100
Poles		8	8	8	8	8	8	8
Frequency [Hz]		60	50	50	50	50	50	50
Rated voltage [V]		460	380	400	415	380	400	415
Rated current [A]		127	118	116	115	152	147	144
. R. Amperes [A]		762	717	778	806	714	779	806
_RC [A]		6.0x(Code	6.1x(Code		J) 7.0x(Code J)			5.6x(Code
lo lood current [/	.1	G)	G)	64.0	07.0	EE O	64.0	G)
No load current [A		56.0	55.0	61.0	67.0	55.0	61.0	67.0
Rated speed [RPI	vij	890	740	740	740	735	740	740
Slip [%]	1	1.11	1.33	1.33	1.33	2.00	1.33	1.33
Rated torque [ft.lb _ocked rotor torqu		590 190	532 200	532 229	532 250	714 150	710 170	710 190
Locked rotor torque Breakdown torque		220	200	229	250	150	200	220
Service factor	<pre>[/0]</pre>	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time		27s (cold)	21s (cold)	21s (colo	l) 21s (cold)	21s (cold)	21s (cold)	21s (cold
		15s (hot)	12s (hot)	12s (hot		12s (hot)	12s (hot)	12s (hot)
Noise level ²		63.0 dB(A)	59.0 dB(A)	59.0 dB(/	, , ,	59.0 dB(A)	59.0 dB(A)	59.0 dB(A
	25%	93.5	92.9	91.5	90.6	94.0	92.9	92.2
Efficiency (%)	50%	93.6	92.9	91.9	91.2	93.6	93.0	92.4
J (***)	75%	94.1	93.4	93.0	92.6	93.0	93.0	93.0
	100%	94.1	93.2	93.2	93.1	92.4	93.0	93.0
	25% 50%	0.38	0.36	0.32	0.29	0.44	0.40	0.37
Power Factor	50% 75%	0.63	0.59 0.72	0.55	0.51	0.69	0.65	0.61
	100%	0.74	0.72	0.68	0.65	0.78	0.75	0.73
	100%				udation loads	0.01	0.79	0.78
Bearing type		: NU-319 (-	070 #	
				- IVIAA	traction		272 lb 052 lb	
Sealing Lubrication inter	val	: Inpro/Se : 15000 h	•		compression	: 5	002 ID	
Lubrication Inter		. 15000 r : 45 g	i 20000 34 g					
Lubricant type			I Polyrex EM					
Notes								
								
This revision repl		ncel the previo	us one, which		e are average v			
must be eliminate					er supply, subjec	t to the tolera	nces stipulate	d in NEMA
(1) Looking the n				MG-	1.			
(2) Measured at(3) Approximate								
manufacturing pr		or to onanyes a						
		01	Summony		Perform	ed Che	ecked	Date
(4) At 100% of fu Rev.		Changes	Summary					
(4) At 100% of fu Rev.		Cnanges	Summary					
(4) At 100% of fu Rev. Performed by			Summary					
(4) At 100% of fu Rev.			Summary			P	age	Revision

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 Date
 12/04/2022
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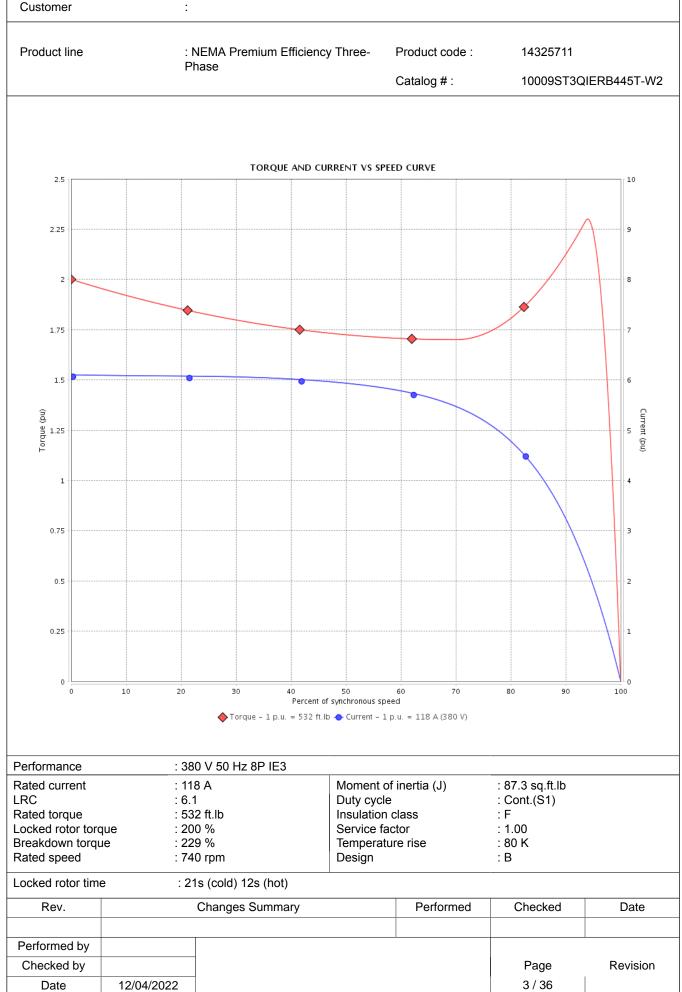


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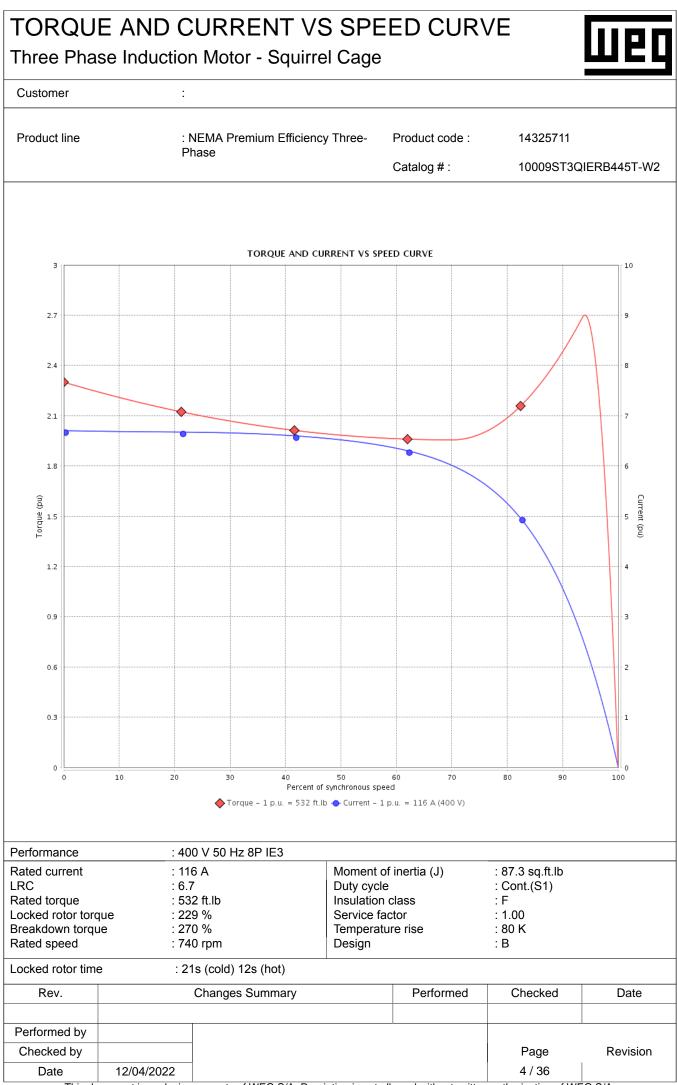
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

Customer



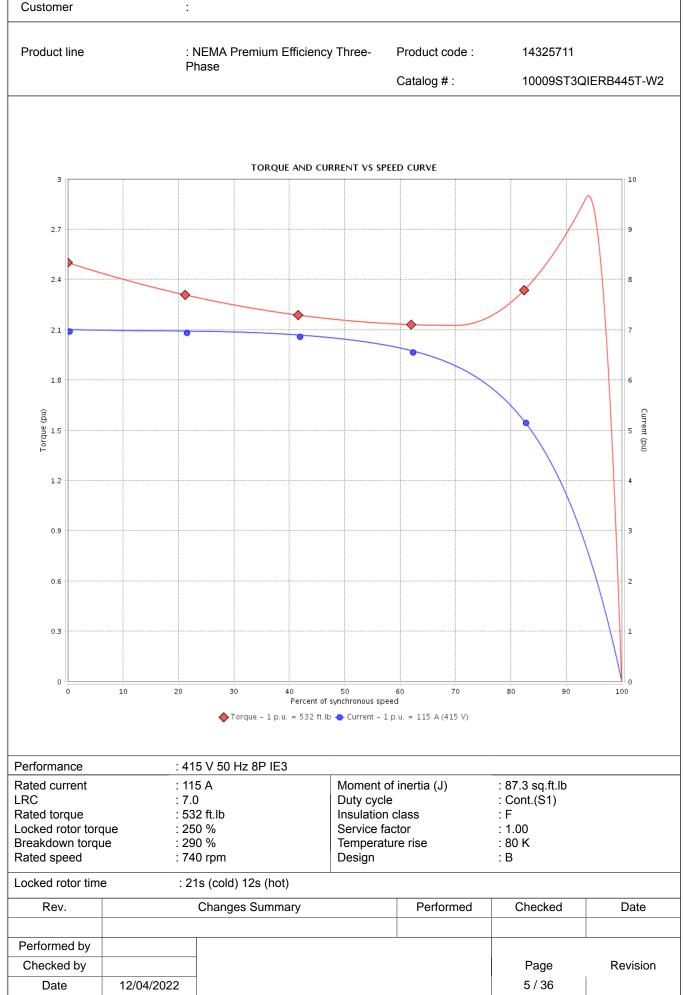
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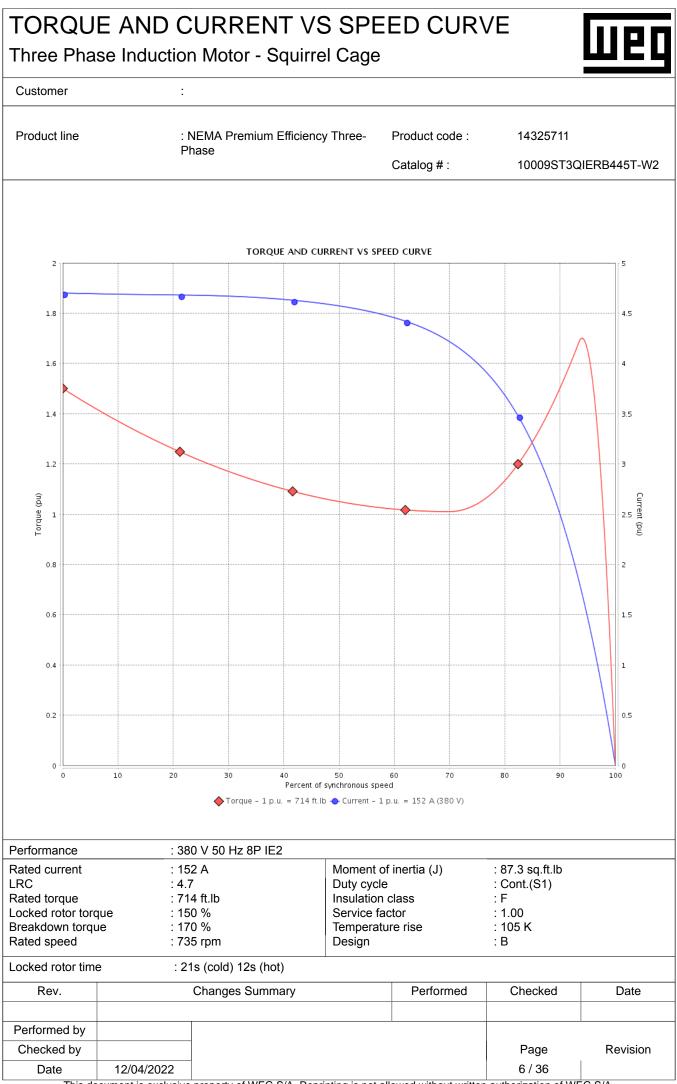
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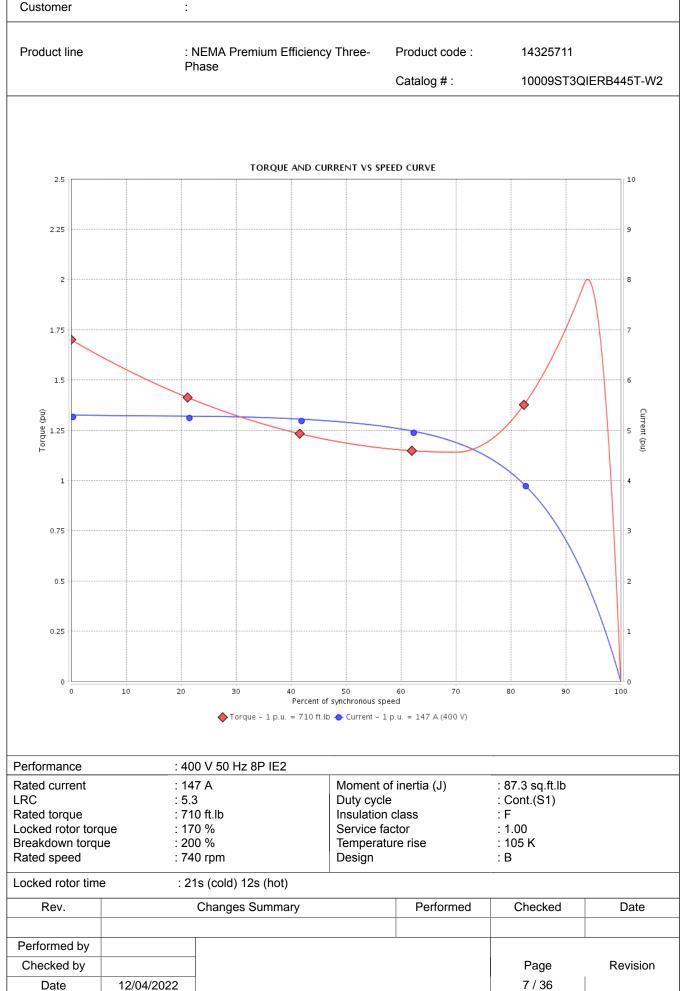
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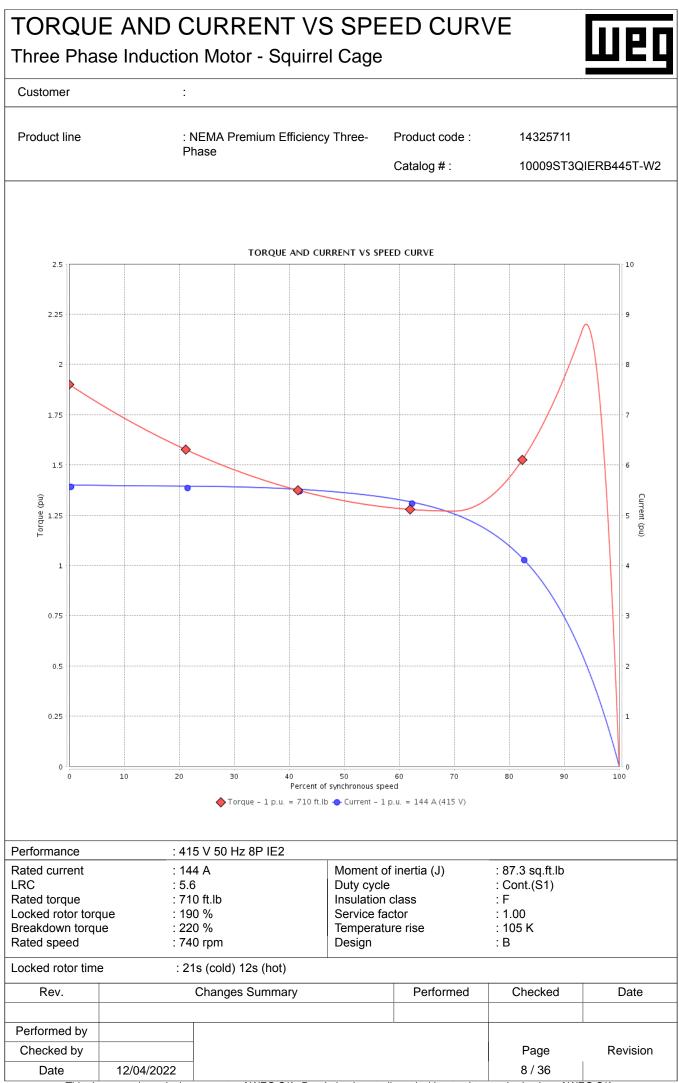
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Customer

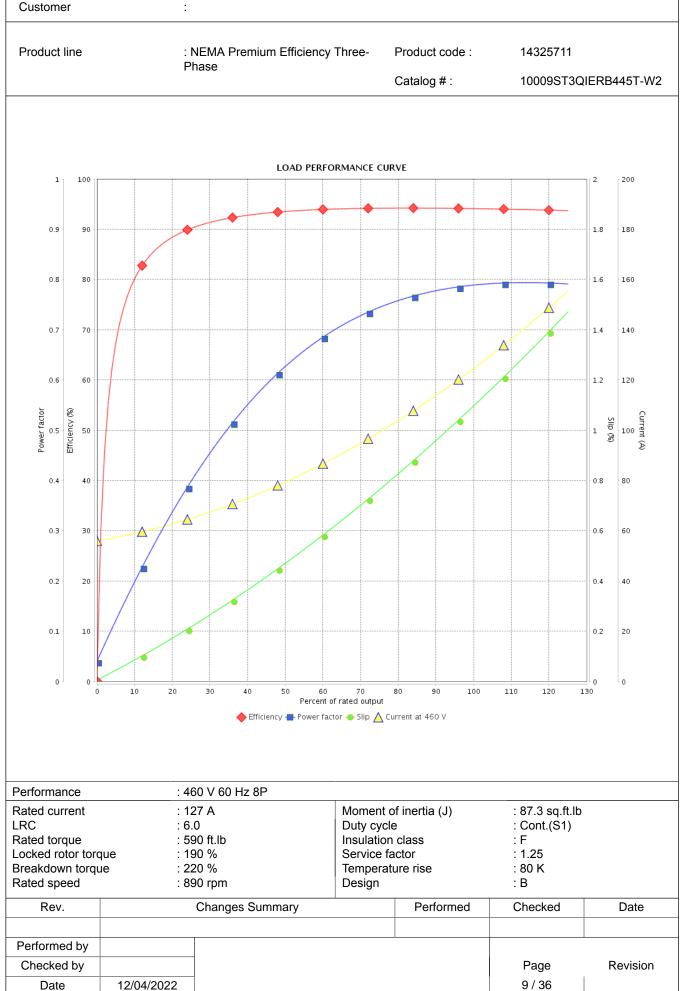


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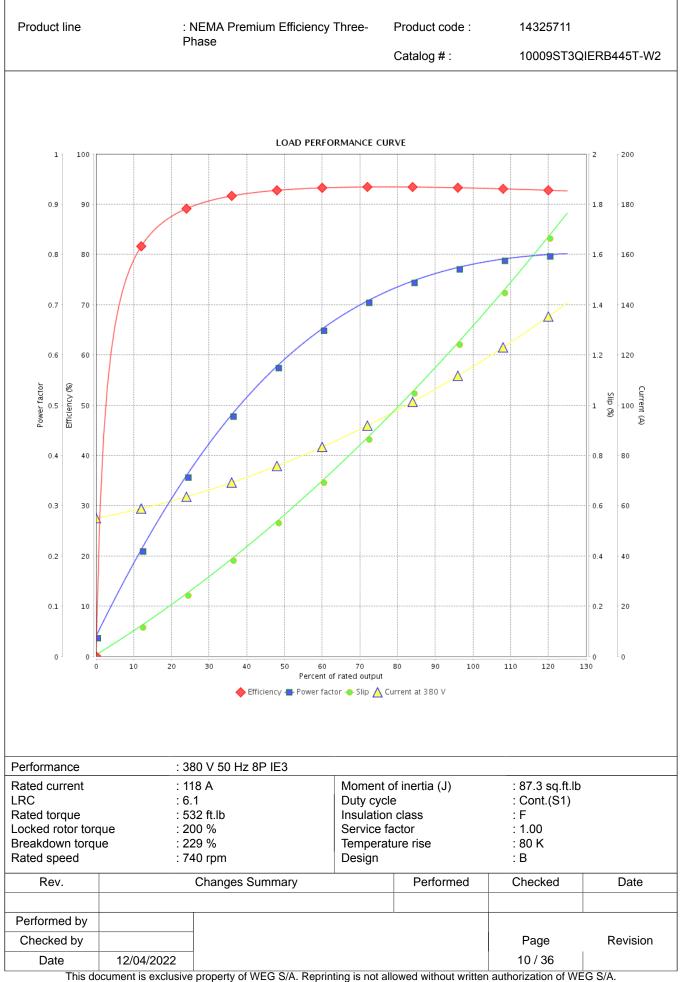
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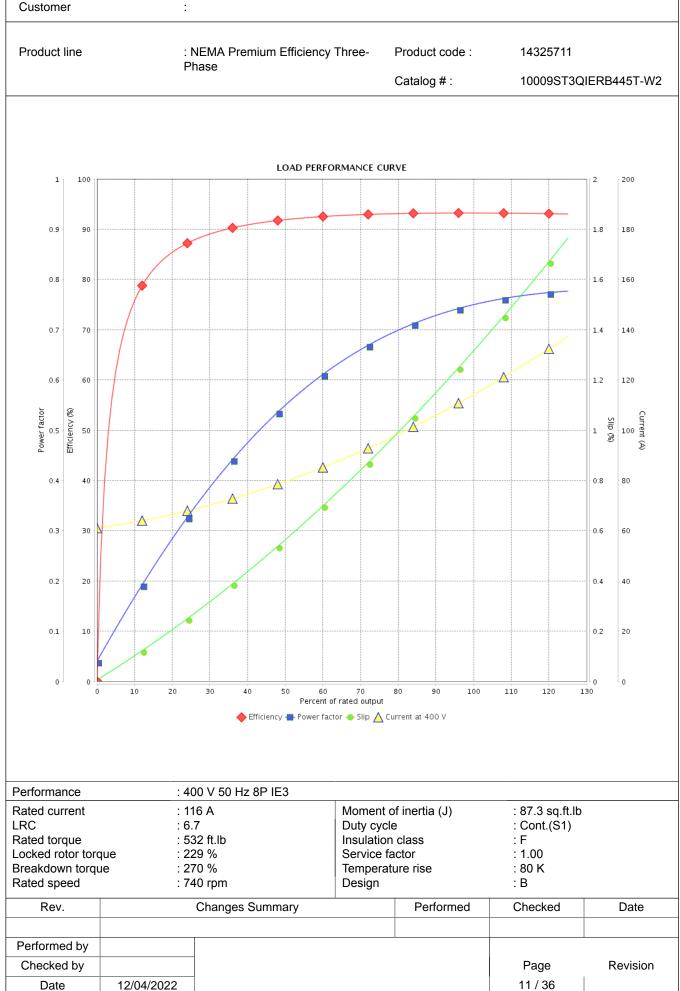


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Customer



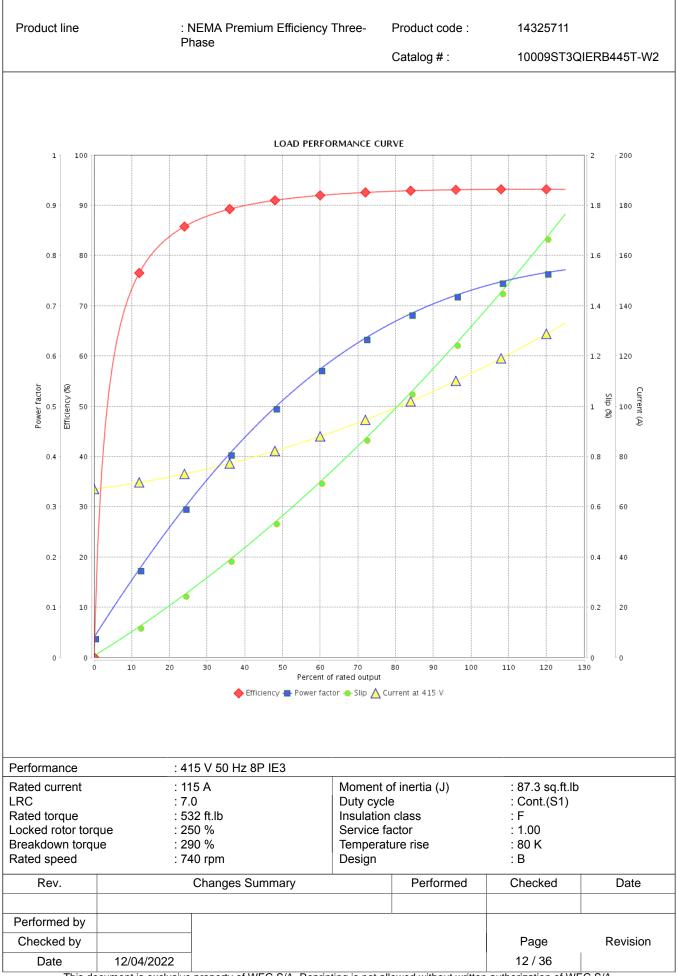
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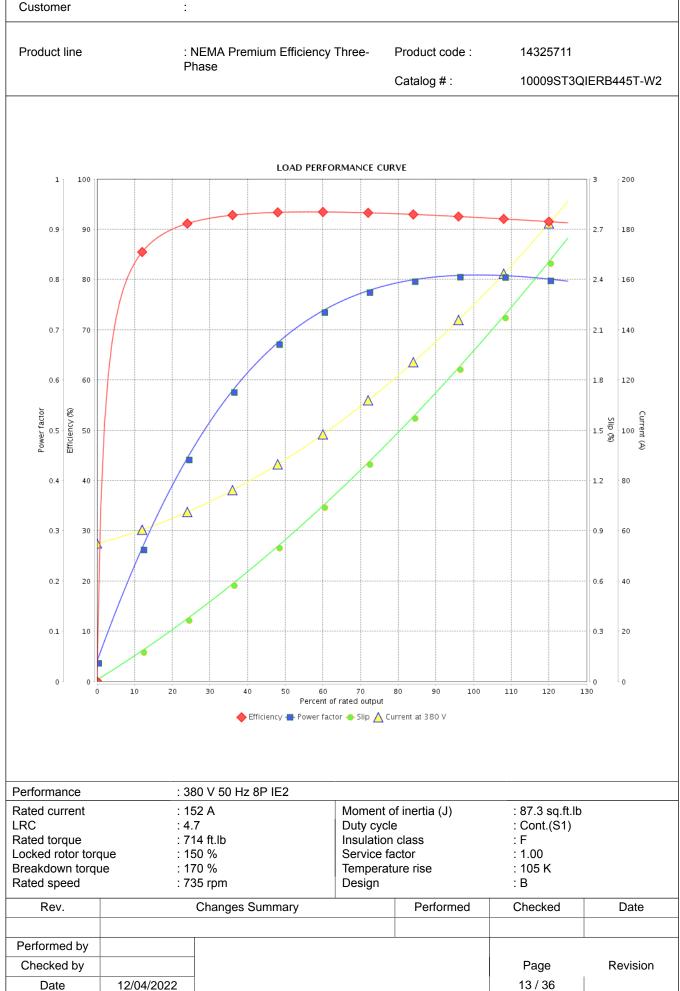


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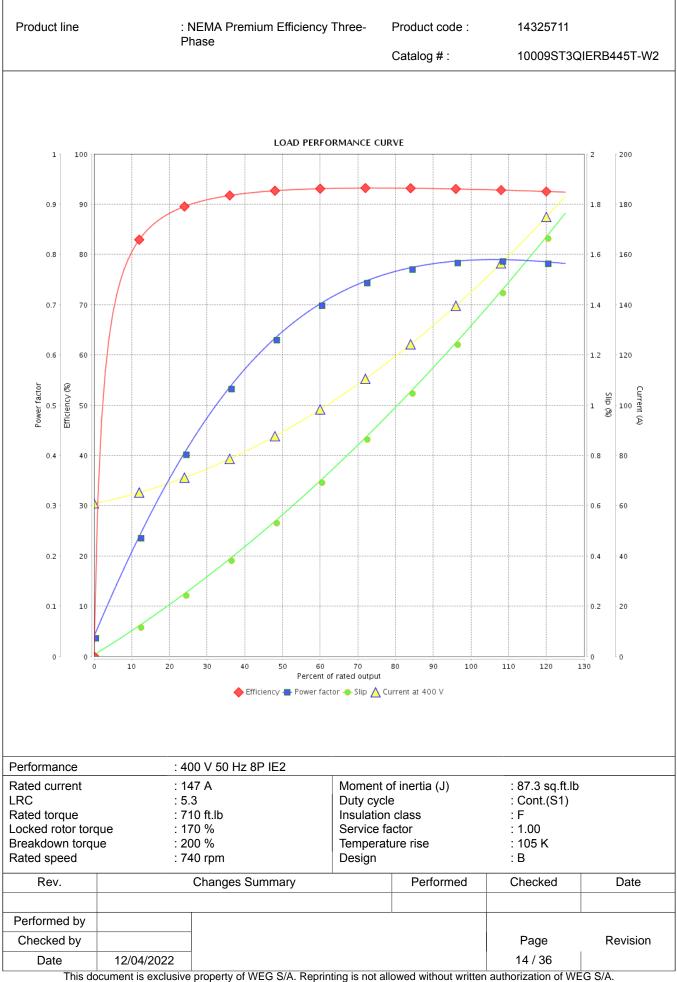
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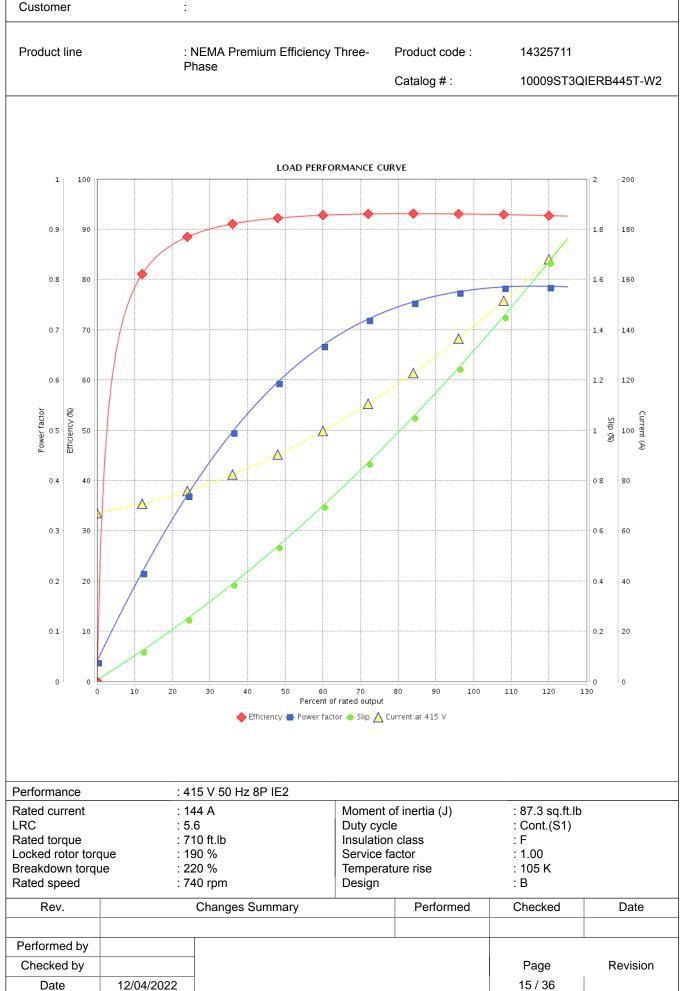
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Three Phase Induction Motor - Squirrel Cage

Customer



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THERMAL L	IMIT CURVE		Wer
Three Phase Indu	uction Motor - Squirrel Cage)	шсі
Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	14325711
		Catalog # :	10009ST3QIERB445T-W2

Heating constant	
Cooling constant	

Locked rotor torque

Breakdown torque

Performance

Rated current

Rated torque

Rated speed

LRC

	•				
Cooling constant	t				
Rev.		Changes Summary	Performed	Checked	Date
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: 460 V 60 Hz 8P

: 127 A

: 590 ft.lb

: 190 %

: 220 %

: 890 rpm

: 6.0

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Moment of inertia (J)

Duty cycle Insulation class

Design

Service factor

Temperature rise

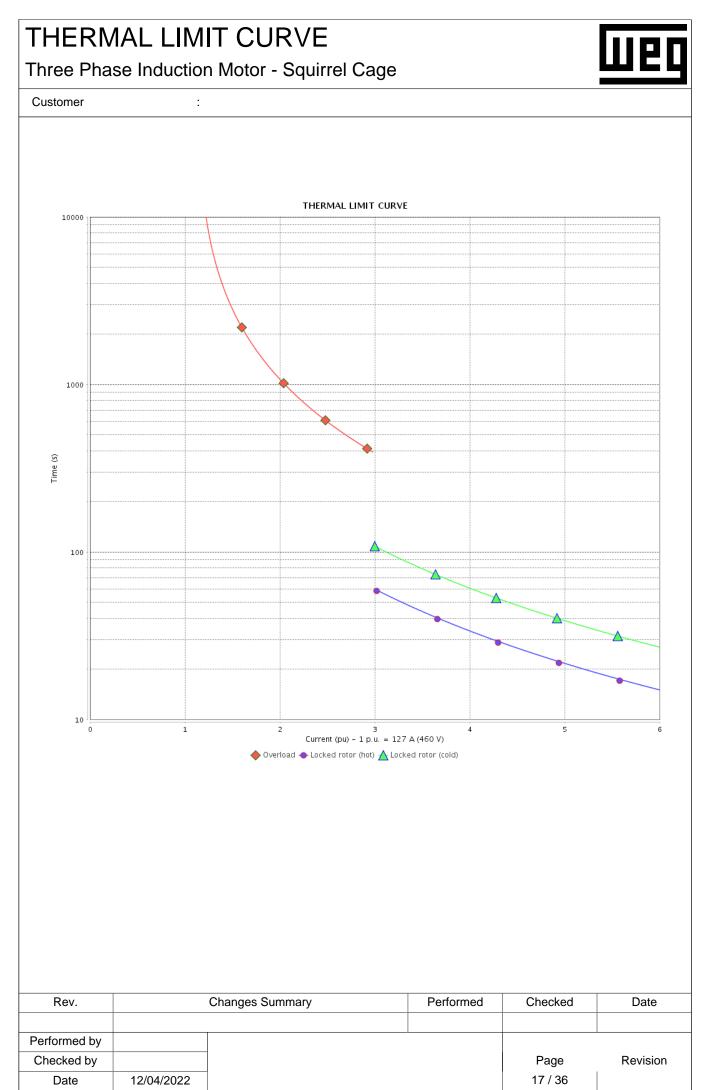
: 87.3 sq.ft.lb : Cont.(S1)

: F

: B

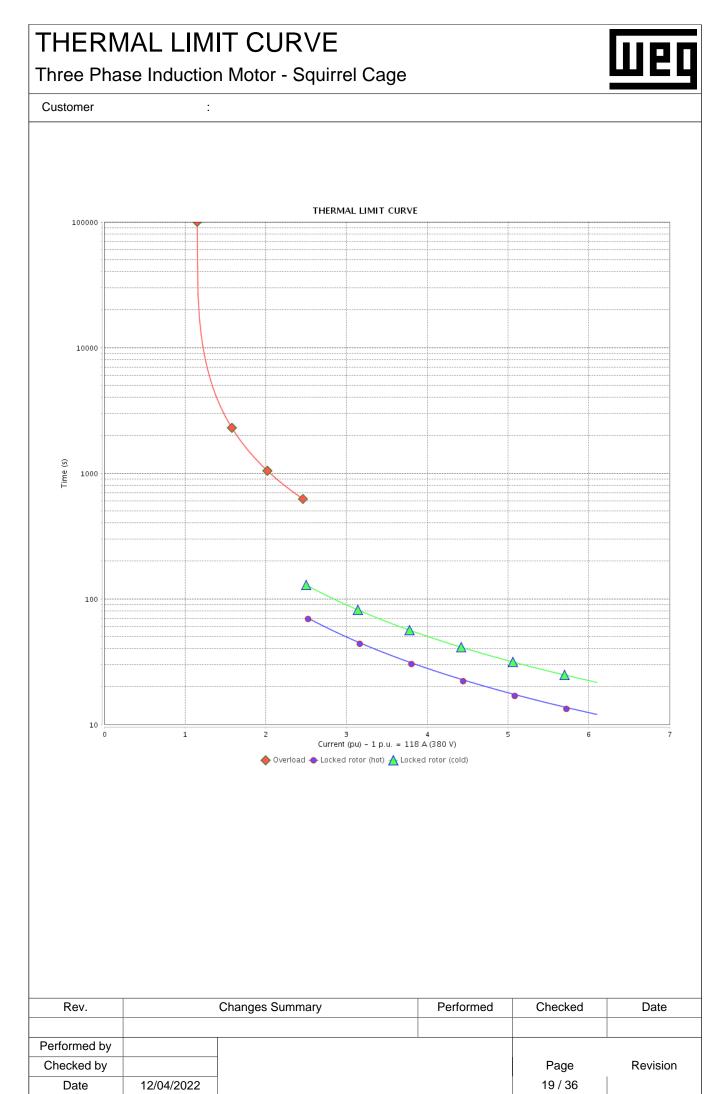
: 1.25

: 80 K



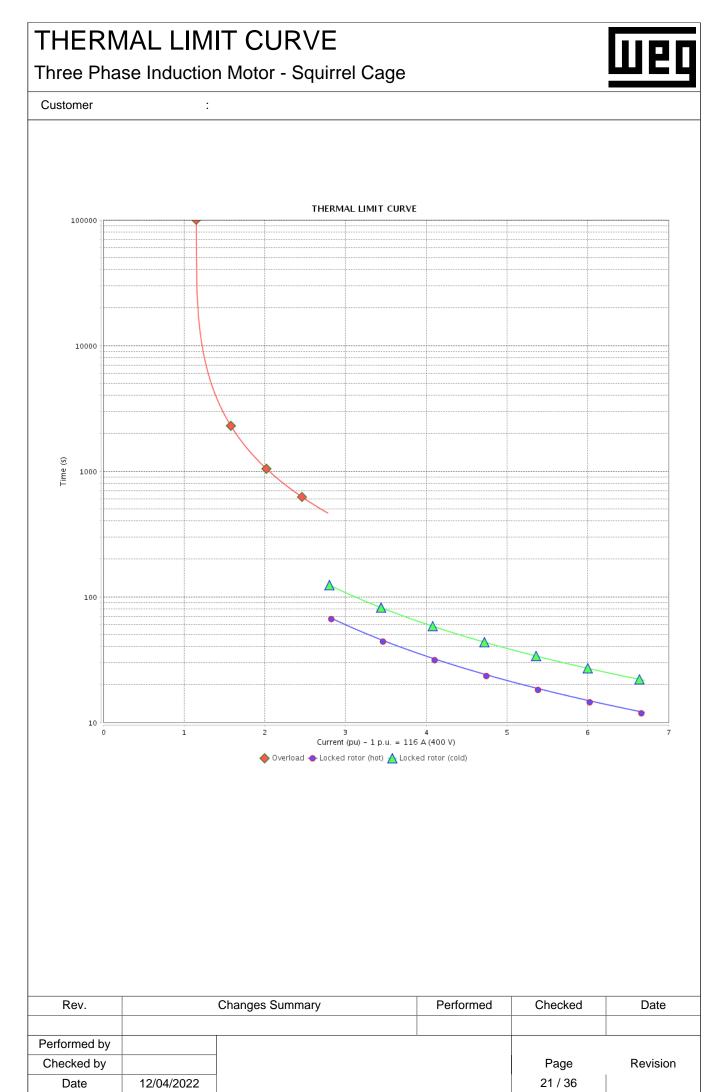
MIT CURVE		Шер
tion Motor - Squirrel Cage)	шеч
:		· · · · · · · · · · · · · · · · · · ·
Product line : NEMA Premium Efficiency Three- Product code : 14325711 Phase Catalog # : 10009ST3QIERE	Product code :	14325711
	10009ST3QIERB445T-W2	
	tion Motor - Squirrel Cage	tion Motor - Squirrel Cage : : NEMA Premium Efficiency Three- Product code : Phase

Performance	:	: 380 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	que	: 118 A : 6.1 : 532 ft.lb : 200 % : 229 % : 740 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		
Heating constant						
Rev.	Changes Summary			Performed	Checked	Date
Performed by						
Checked by					Page	Revision
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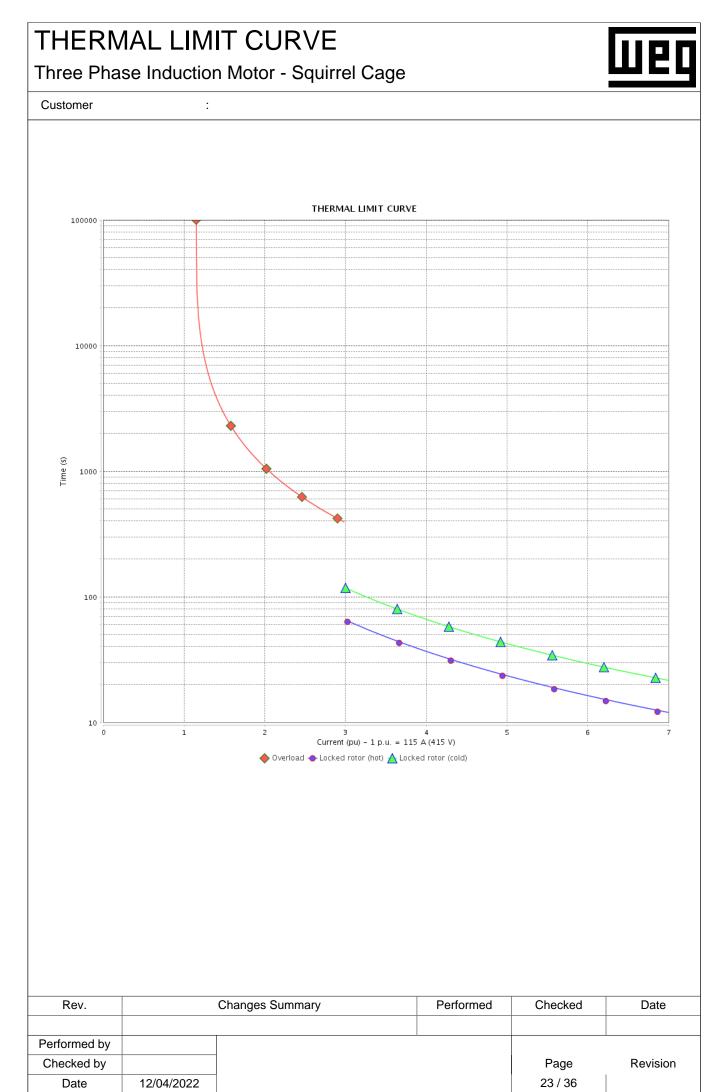
THERMAL LIMIT CURVE						
tion Motor - Squirrel Cage	2	шсч				
:						
: NEMA Premium Efficiency Three- Phase	Product code :	14325711				
	Catalog # :	10009ST3QIERB445T-W2				
	tion Motor - Squirrel Cage	: : NEMA Premium Efficiency Three- Product code : Phase				

: 4	400 V 50 Hz 8P IE3				
: 6 : 5 ue : 2 e : 2	.7 32 ft.lb 29 % 70 %	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
ev. Changes Summary			Performed	Checked	Date
				Page	Revision
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	: 1 : 6 : 5 : 2 : 2 : 7	: 116 A : 6.7 : 532 ft.lb : 229 % : 270 % : 740 rpm Changes Summary	: 116 A Moment o : 6.7 Duty cycle : 532 ft.lb Insulation ie : 229 % : 270 % Temperate : 740 rpm Design	: 116 A Moment of inertia (J) : 6.7 Duty cycle : 532 ft.lb Insulation class : 229 % Service factor : 270 % Temperature rise : 740 rpm Design	: 116 A Moment of inertia (J) : 87.3 sq.ft.lb : 6.7 Duty cycle : Cont.(S1) : 532 ft.lb Insulation class : F : 229 % Service factor : 1.00 : 270 % Temperature rise : 80 K : 740 rpm Design : B Performed Page



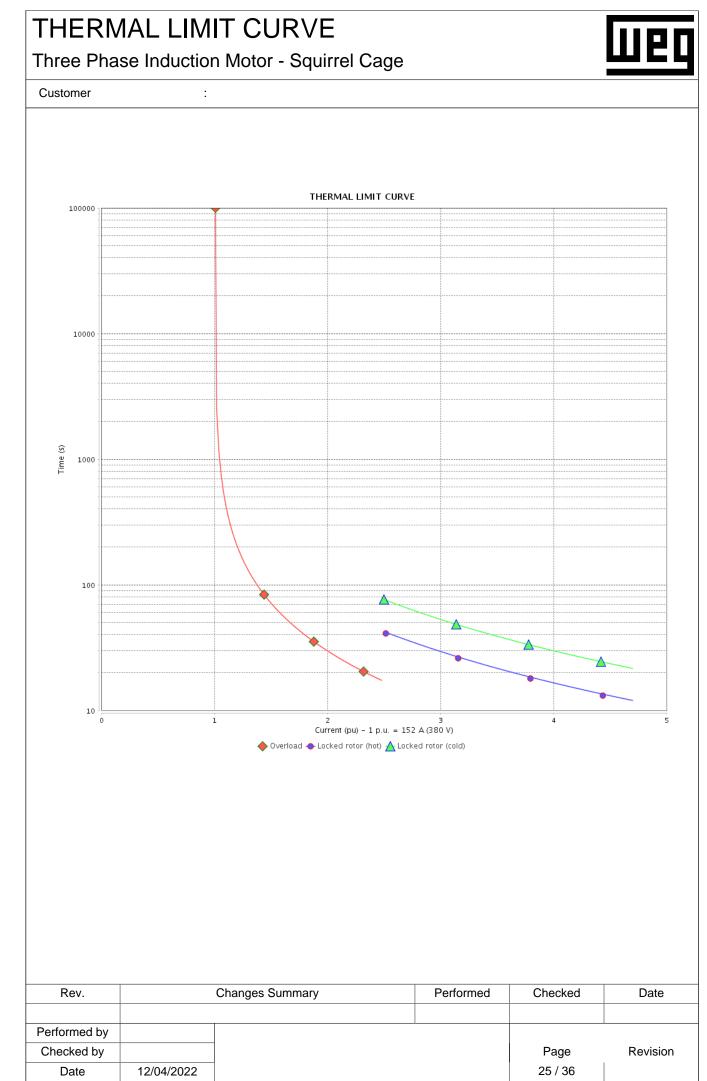
	LIMIT CURVE	•	Шер
Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code : Catalog # :	14325711 10009ST3QIERB445T-W2

Performance	: 4	15 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 7 : 5 jue : 2 ie : 2	15 A 7.0 332 ft.lb 250 % 290 % 740 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Heating constant						
Cooling constant	t					
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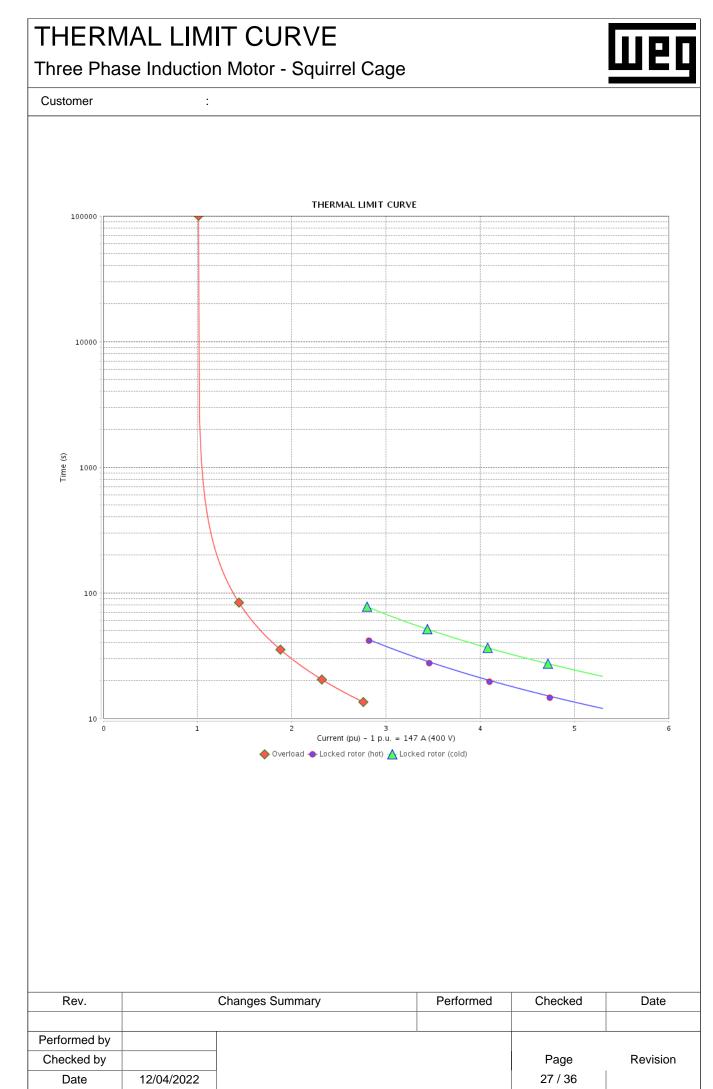
THERMAL	THERMAL LIMIT CURVE						
Three Phase In	duction Motor - Squirrel Cage)	шсц				
Customer	:						
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	14325711				
		Catalog # :	10009ST3QIERB445T-W2				

Performance	:	380 V 50 Hz 8P IE2				
Rated current LRC Rated torque Locked rotor torc Breakdown torqu Rated speed	jue :	152 A 4.7 714 ft.lb 150 % 170 % 735 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B	
Heating constant	t					
Cooling constant	:					
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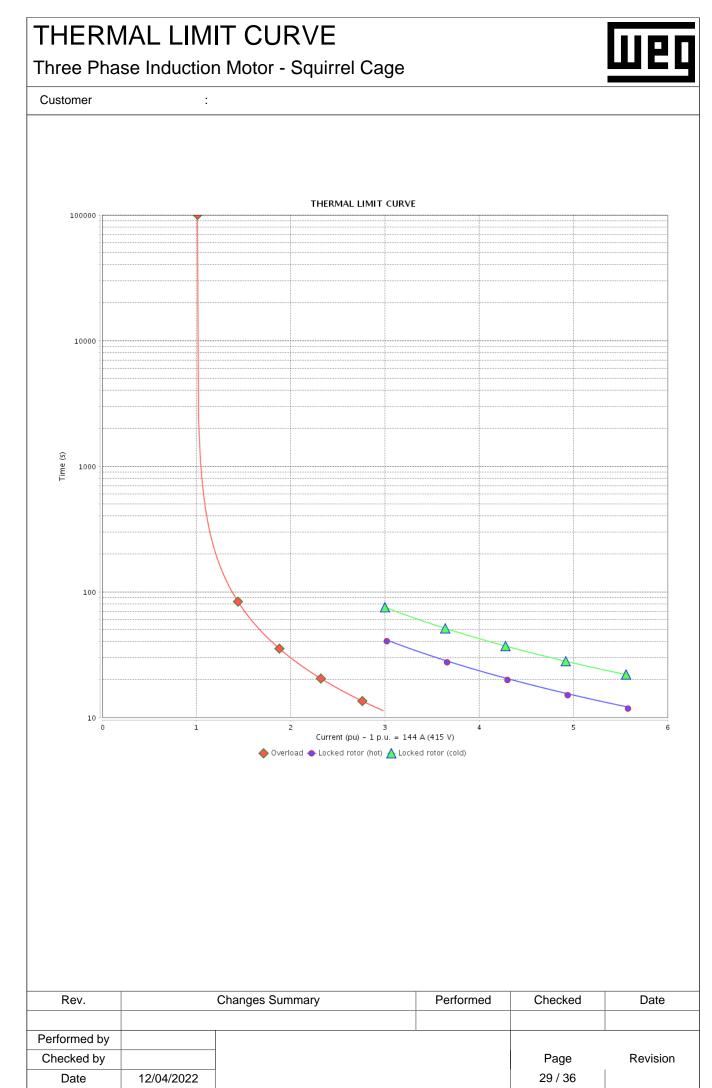
THERMAL LIMIT CURVE Image: Customer Squirrel Cage Customer : Image: Customer Squirrel Cage Product line Image: State Sta				
Customer : Product line : NEMA Premium Efficiency Three- Phase	THERMAL	LIMIT CURVE		lion
Product line : NEMA Premium Efficiency Three- Product code : 14325711 Phase	Three Phase Induction Motor - Squirrel Cage			шсч
Phase	Customer	:		
	Product line	: NEMA Premium Efficiency Three- Phase	Product code :	14325711
		1 11000	Catalog # :	10009ST3QIERB445T-W2

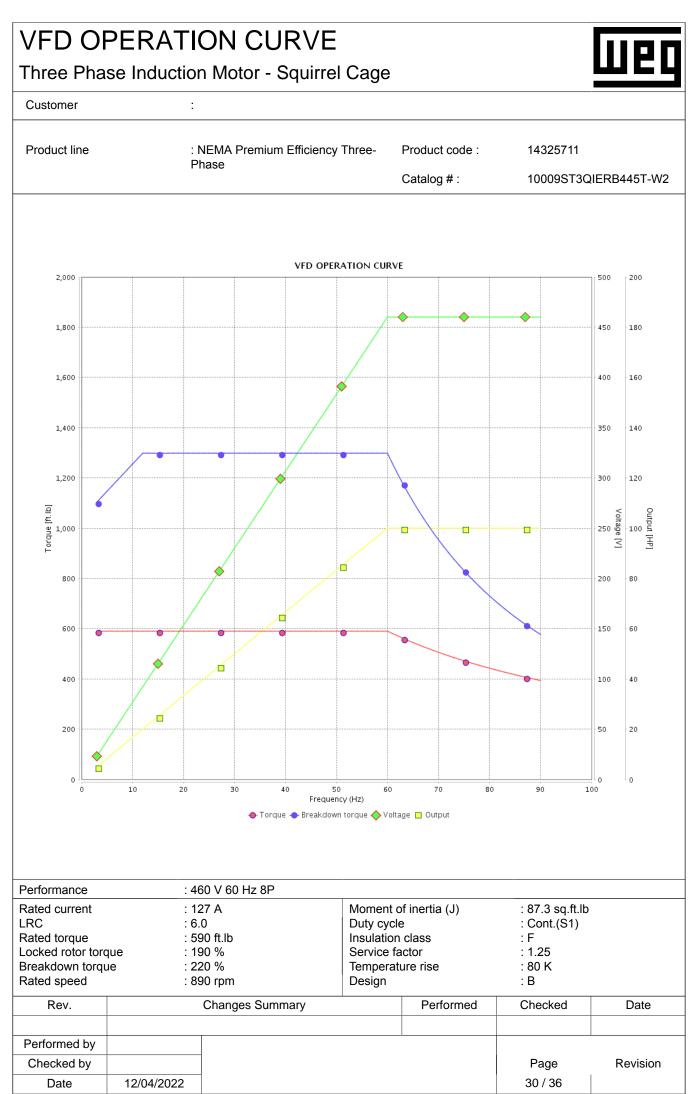
Performance	: 40	00 V 50 Hz 8P IE2				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 5 : 7 que : 1 ue : 20	47 A 3 10 ft.lb 70 % 00 % 40 rpm	Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B	
Heating constant	t					
Cooling constant	t					
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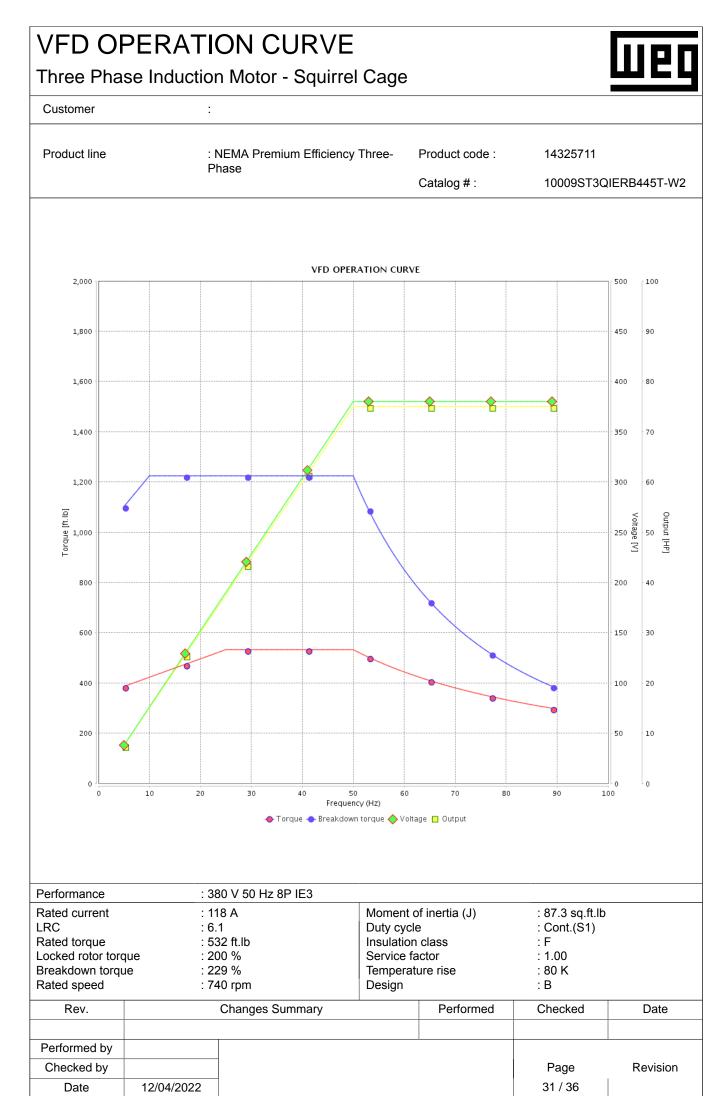


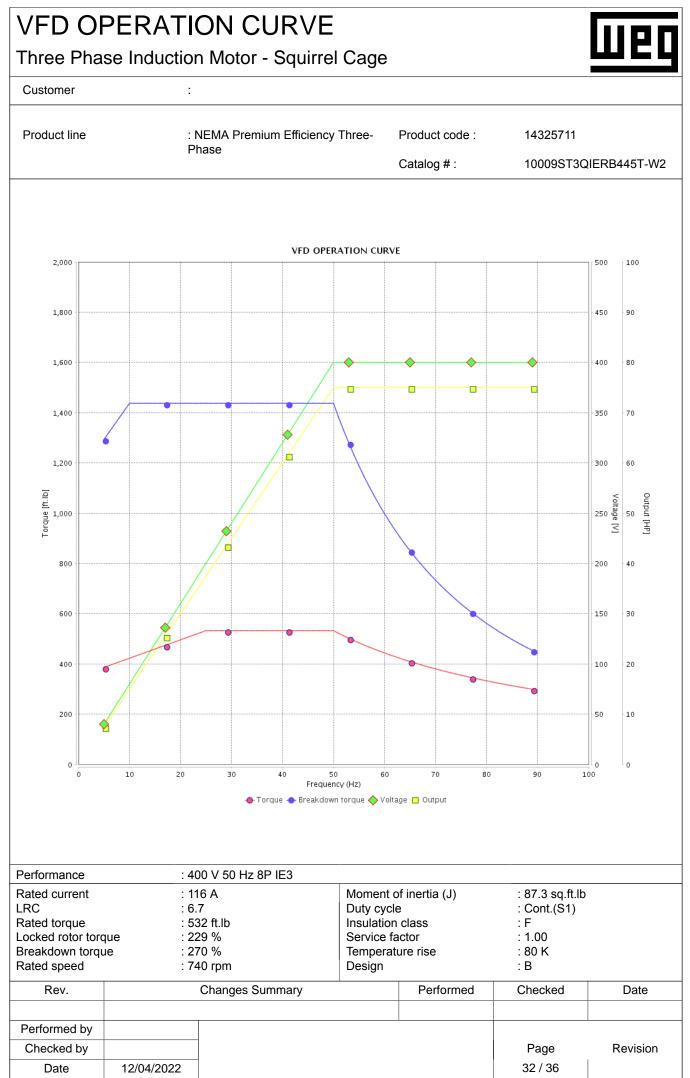
THERMAL	LIMIT CURVE		Шер
Three Phase Ind	luction Motor - Squirrel Cage	;	
Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	14325711
	Filase	Catalog # :	10009ST3QIERB445T-W2

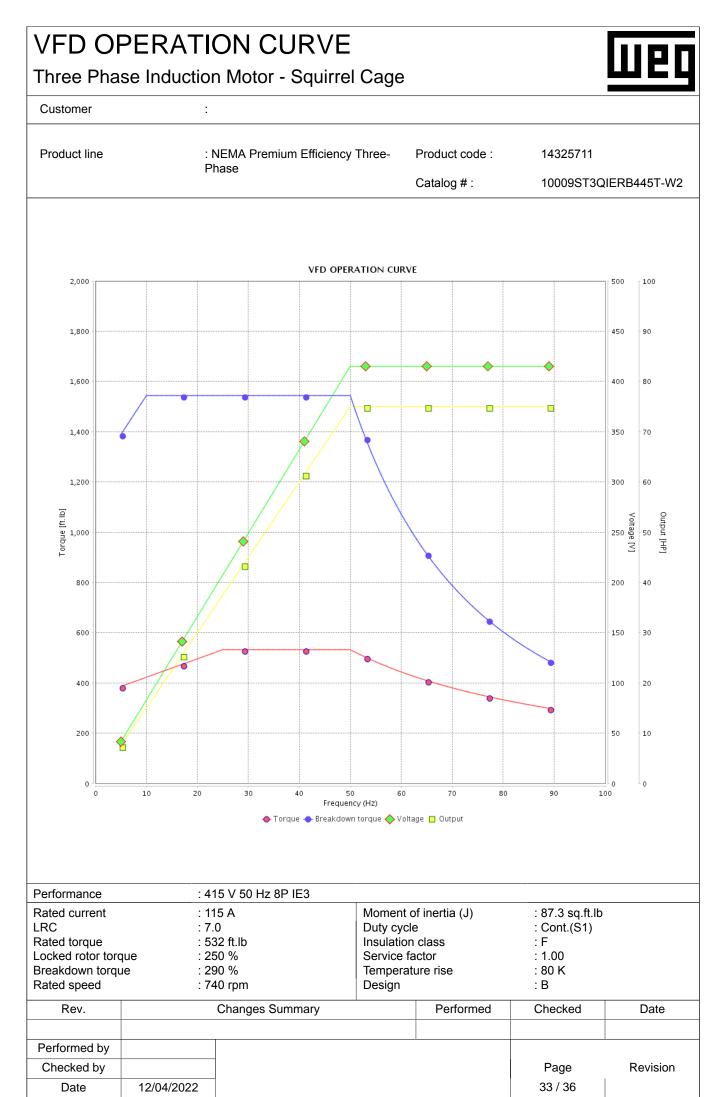
Performance	: 4	15 V 50 Hz 8P IE2				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 5 : 7 jue : 1 je : 2	44 A 6.6 10 ft.lb 90 % 220 % 40 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 87.3 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B	
Heating constant	t					
Cooling constant	t					
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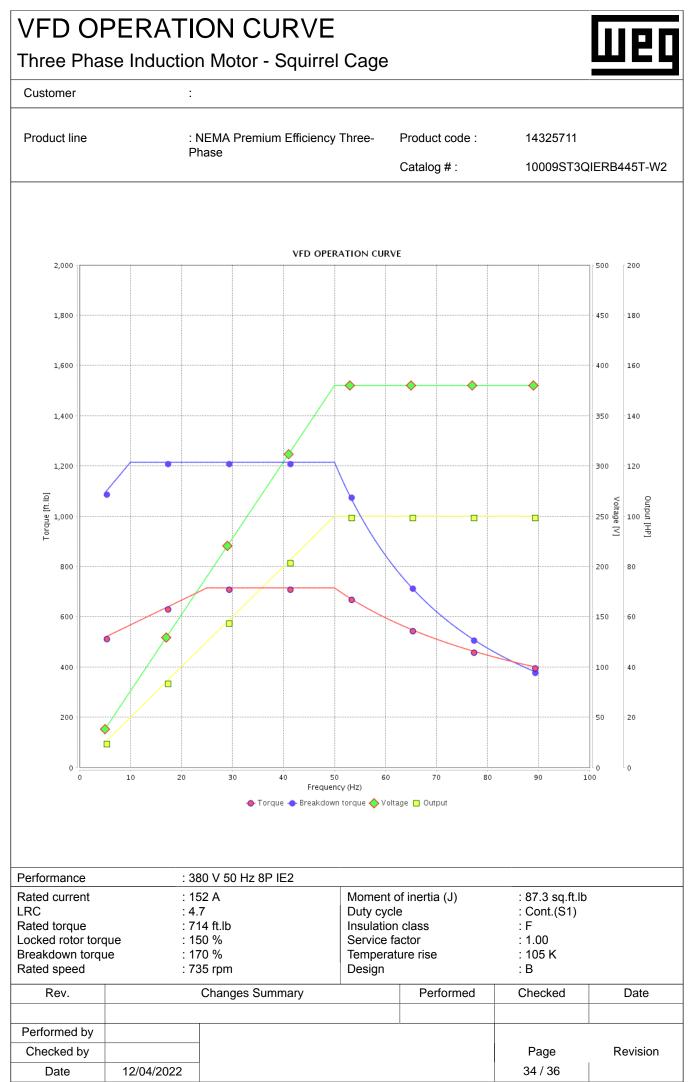


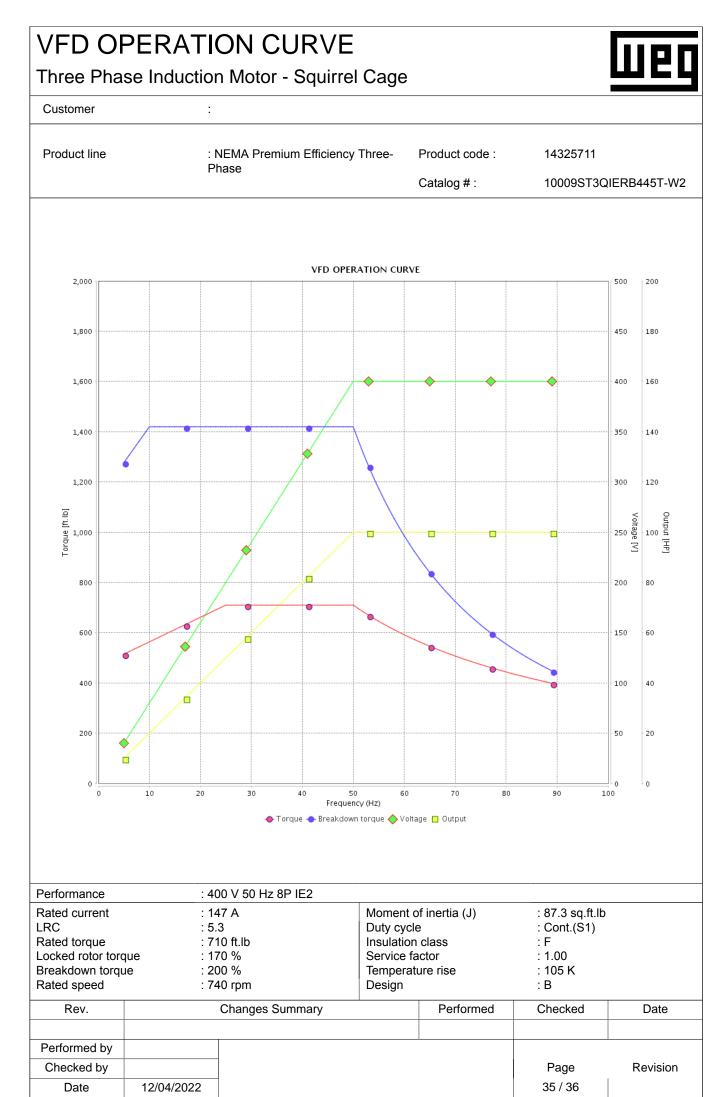


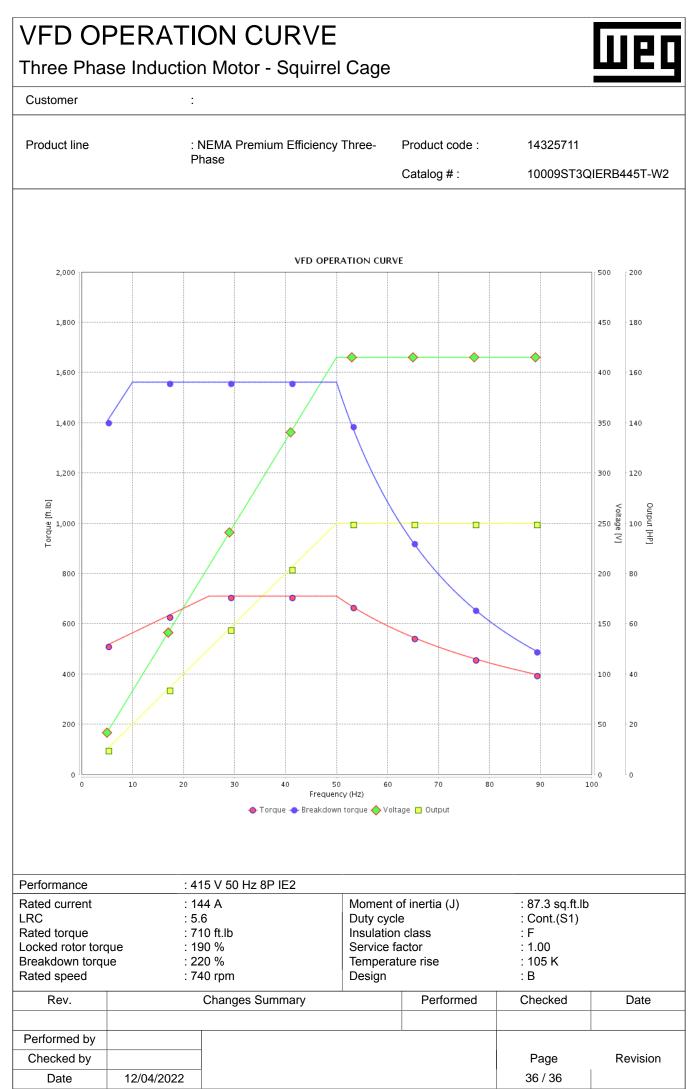


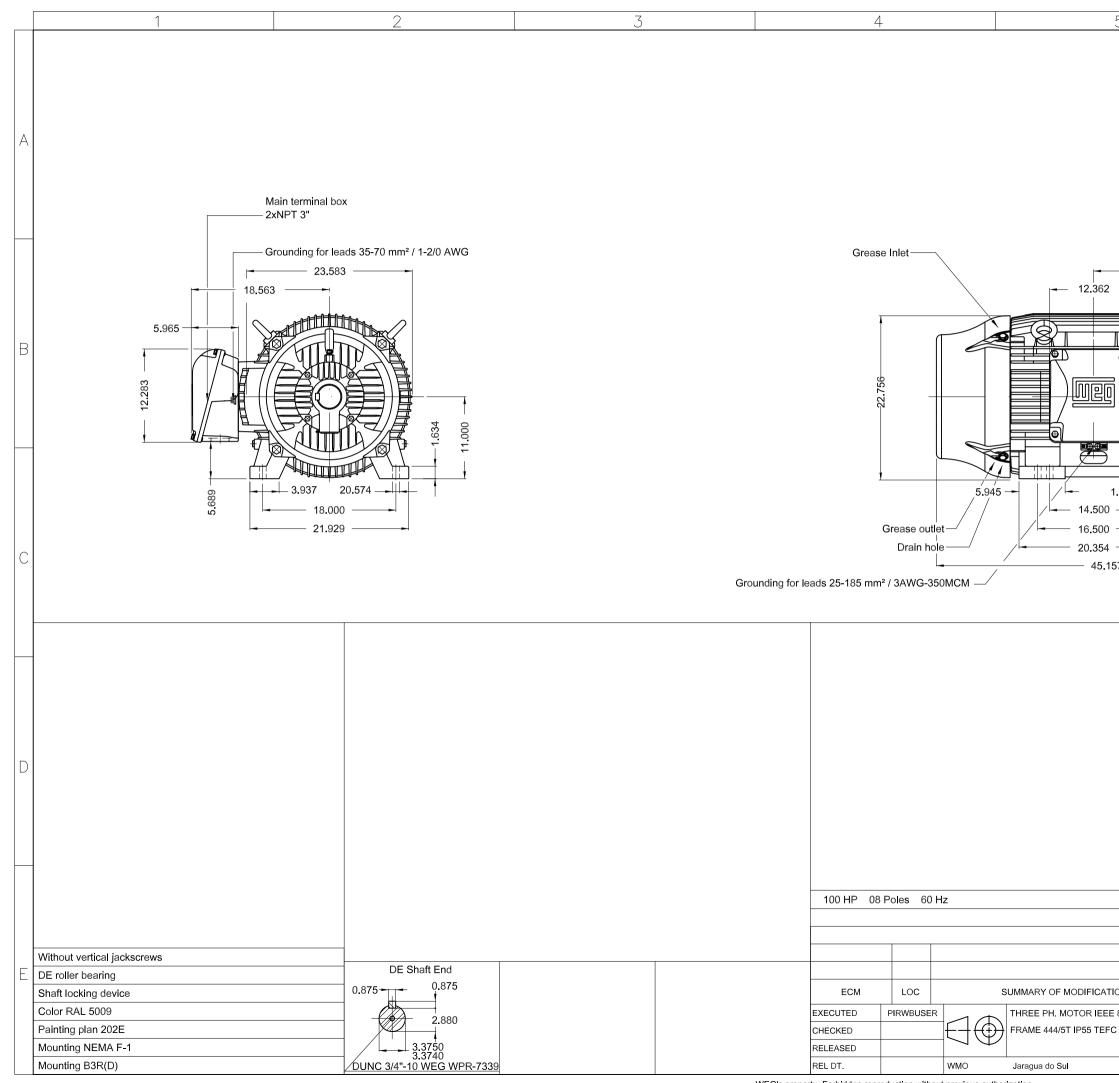












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7.500-		– 8.500 – Grease outlet			
		-Drain hole			
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