# DATA SHEET

Three Phase Induction Motor - Squirrel Cage

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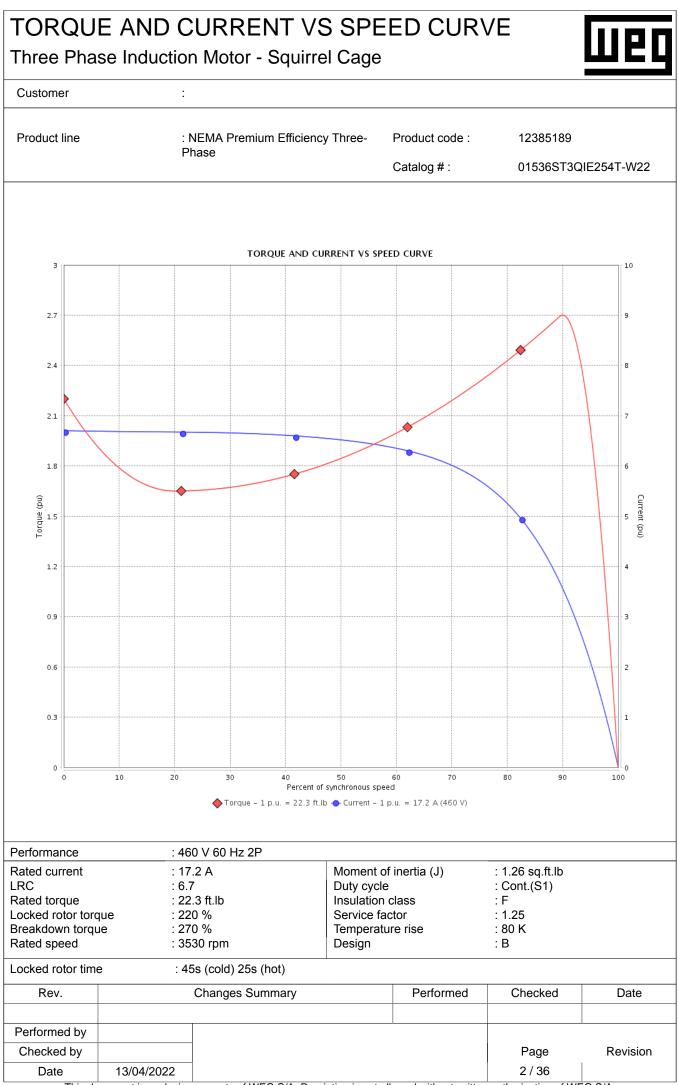
#### Customer

Product line			emium Efficien	icy Three	e-	Product code	e: 12	2385189	
		Phase				Catalog # :	0,	1536ST3QIE2	254T-W22
Frame Insulation class Duty cycle Ambient tempera Altitude Protection degre Design		: 254/6T : F : Cont.(S1) : -20°C to + : 1000 m.a. : IP55 : B	40°C	N R S A	Aountir Rotation Starting		:  :  ::	C411 - TEFC -1 Both (CW and Direct On Line 285 lb 1.26 sq.ft.lb	I CCW)
5			10	10		10	15	15	15
Output [HP] Poles		15 2	2	2		2	2	2	-
Frequency [Hz]		60	50	50		50	50	50	
Rated voltage [V]		460	380	400		415	380	400	
Rated current [A]		17.2	14.5	14.		13.7	20.7	19.6	19.1
. R. Amperes [A]		115	98.6	105	5	108	101	108	113
_RC [A]		6.7x(Code G)	6.8x(Code H)	7.5x(Co	ode J)	7.9x(Code J)	4.9x(Code D	)5.5x(Code E	)5.9x(Code I
No load current [A	.]	5.30	5.10	5.4	0	5.70	5.10	5.40	5.70
Rated speed [RPN	-	3530	2945	295	50	2955	2910	2920	2925
Slip [%]		1.94	1.83	1.6		1.50	3.00	2.67	2.50
Rated torque [ft.lb		22.3	17.8	17.		17.8	27.1	27.0	26.9
_ocked rotor torqu		220	200	229		250	170	190	210
Breakdown torque	e [%]	270	310	350		380	200	229	240
Service factor		1.25	1.25	1.2		1.25	1.00	1.00	
Temperature rise		80 K	80 K	80		80 K	80 K	80 K	
_ocked rotor time		45s (cold) 25s (hot)	55s (cold) 31s (hot)	50s (c 28s (ł	hot)	46s (cold) 26s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	20s (hot)
Noise level <sup>2</sup>		72.0 dB(A)	67.0 dB(A)	67.0 d	B(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
	25%								
Efficiency (%)	50%	89.5	90.3	90.		89.9	89.5	90.2	
2 ( )	75% 100%	91.0 91.0	90.5 90.5	90. 90.		90.8 90.8	90.2 89.5	90.2 90.2	
	25%	91.0	90.5	90.	/	90.0	69.5	90.2	90.2
	50%	0.77	0.73	0.6	0	0.67	0.83	0.81	0.70
Power Factor	75%	0.85	0.83	0.8	-	0.78	0.88	0.87	C nd CCW) ne 15 2 50 415 19.1 113 E) 5.9x(Code 5.70 2925 2.50 26.9 210 240 1.15 80 K ) 36s (cold 0 20s (hot 30) 67.0 dB(/ 90.2 91.0 90.2 90.8 90.2 9
	100%	0.88	0.87	0.8		0.84	0.90	0.90	
	10070	Drive end				tion loads	0.00	0.00	0.00
Bearing type Sealing Lubrication inter- Lubricant amour Lubricant type		: 6309 C3 : Inpro/Se : 19000 h : 13 g	3 6209 ( al Inpro/S	C3 Ma eal Ma	ax. tra			67 lb 52 lb	
Notes This revision repl must be eliminate (1) Looking the m (2) Measured at 1 (3) Approximate	ed. lotor from the Im and with t	shaft end. olerance of +3	3dB(A).	pc		re average va upply, subject			
manufacturing pro (4) At 100% of ful Rev.	ocess.		Summary			Performe	d Ch	ecked	Date
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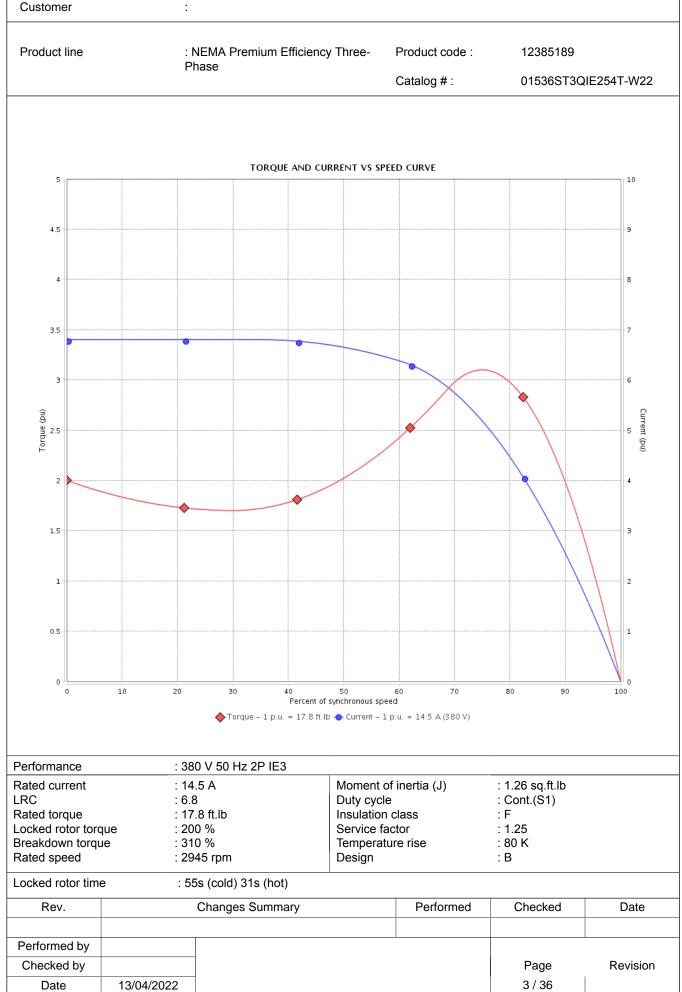
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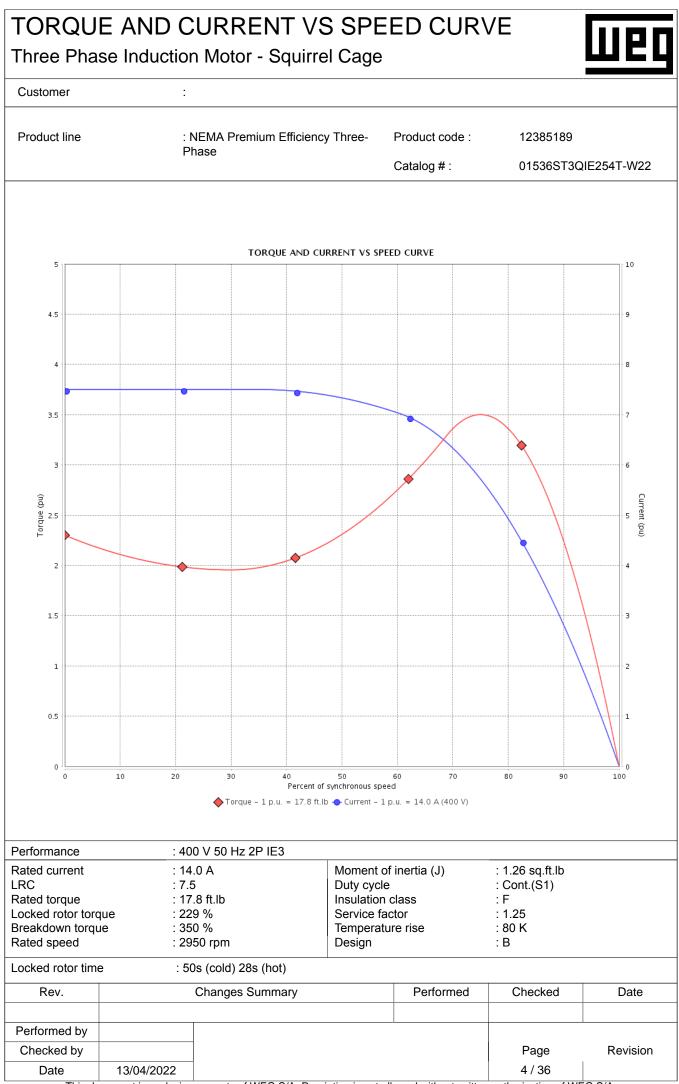
### TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage





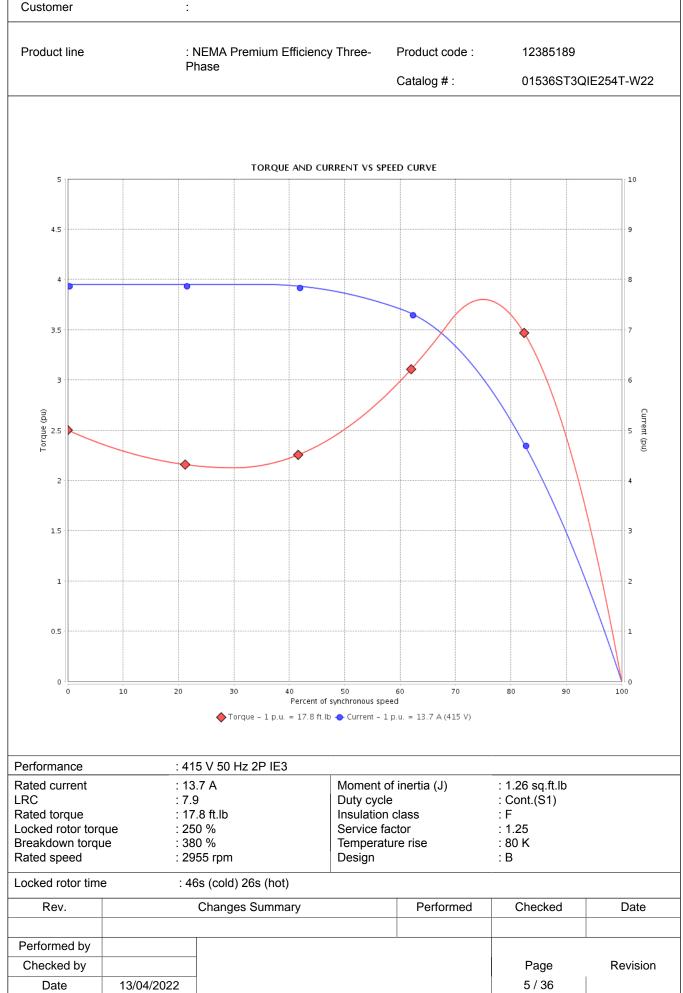
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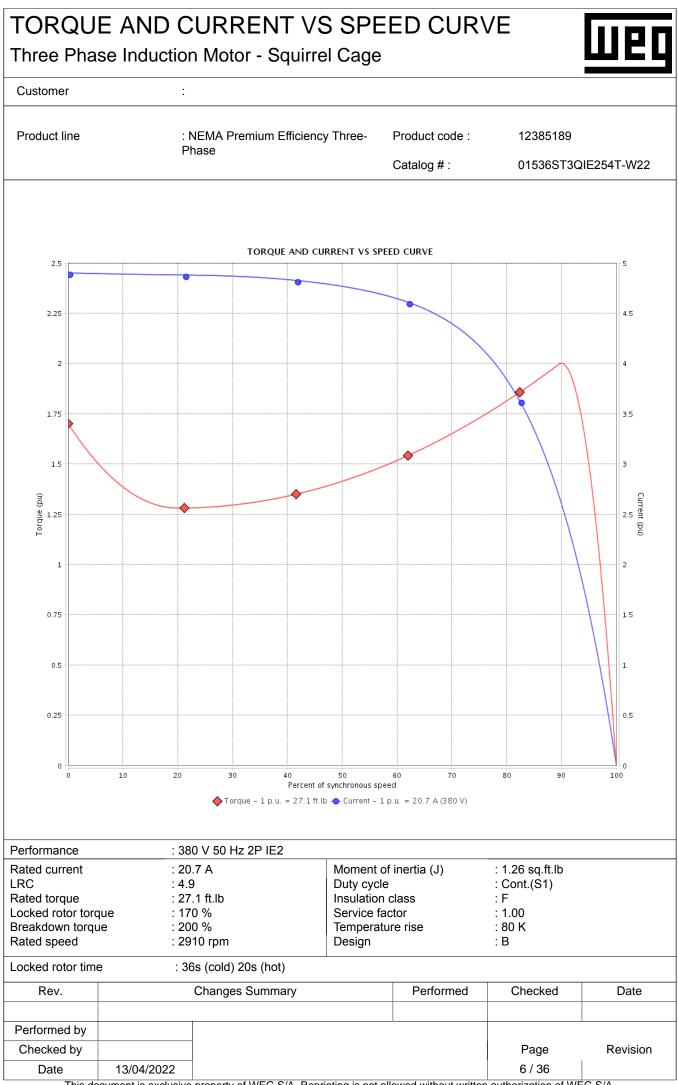
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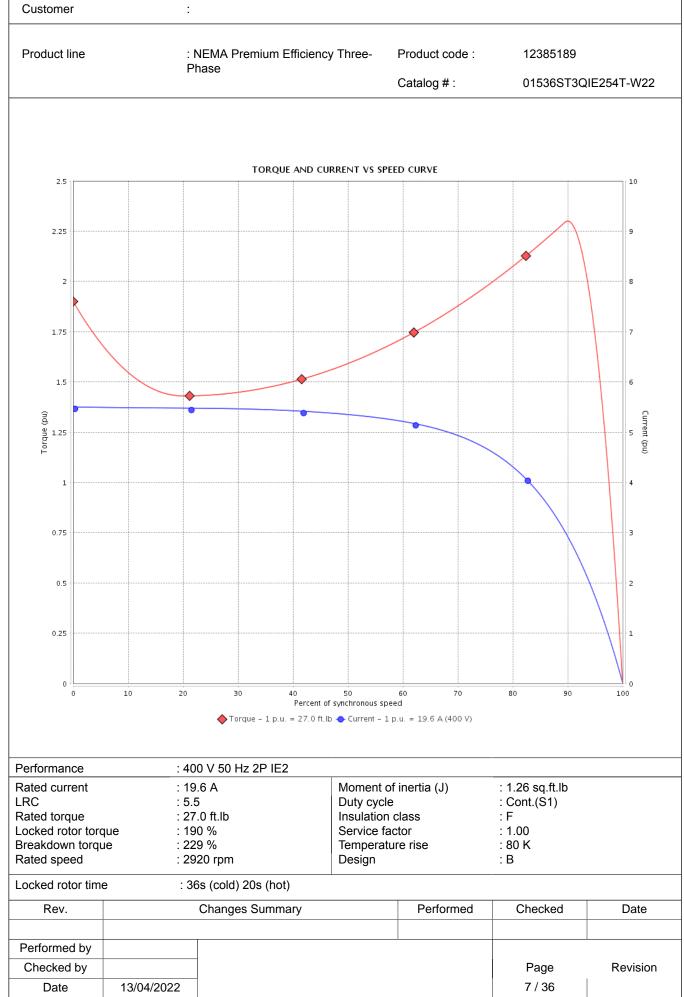


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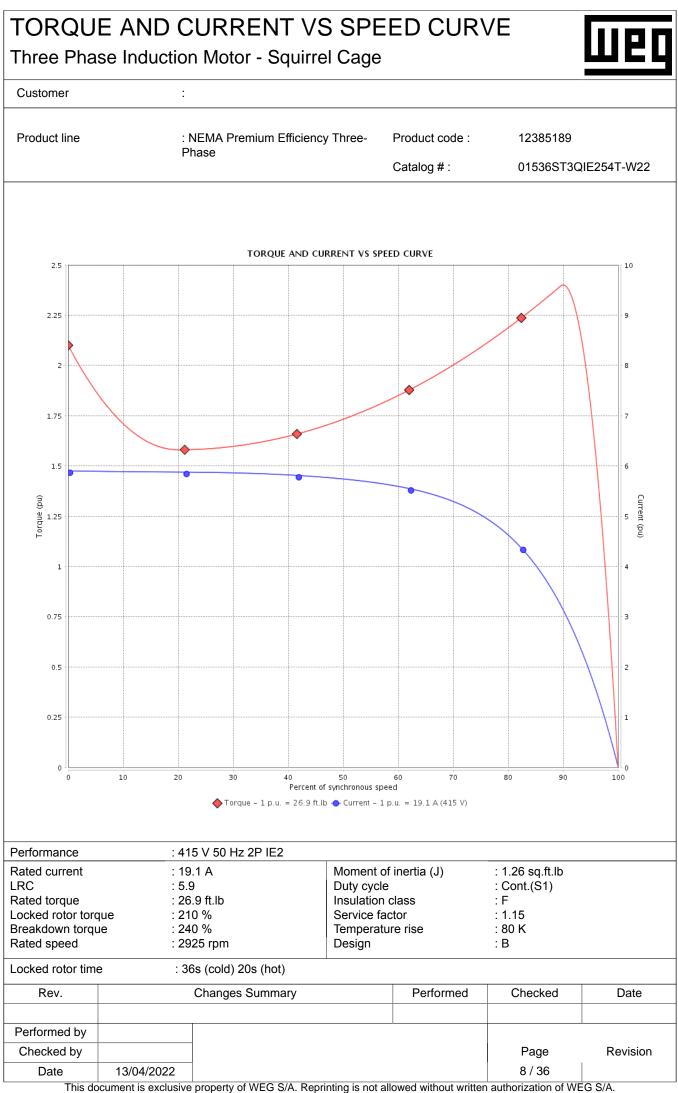


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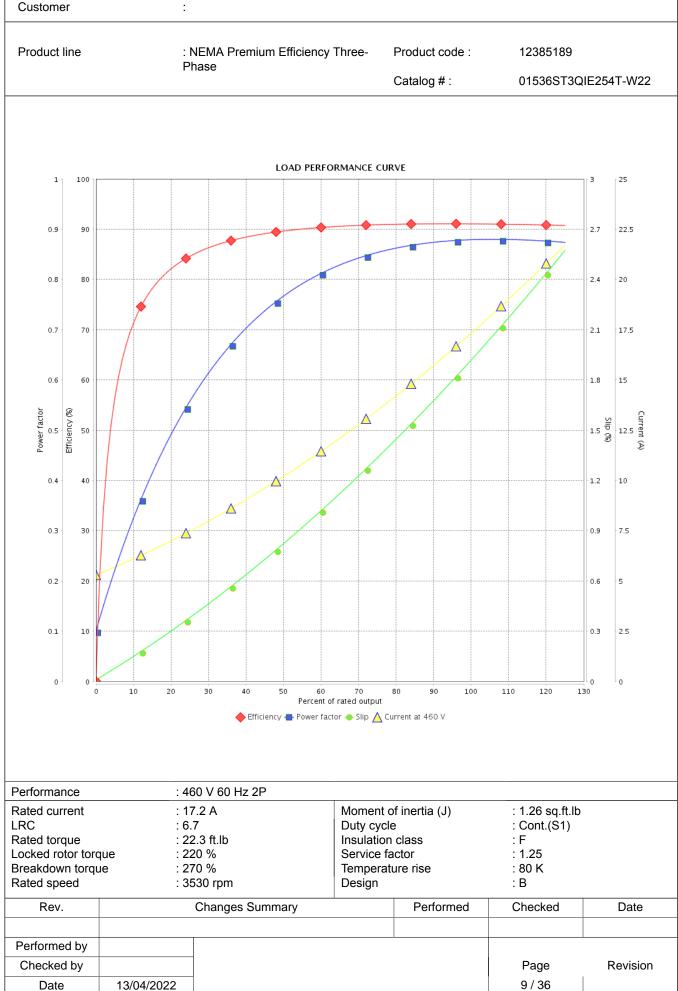


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Three Phase Induction Motor - Squirrel Cage

#### Customer



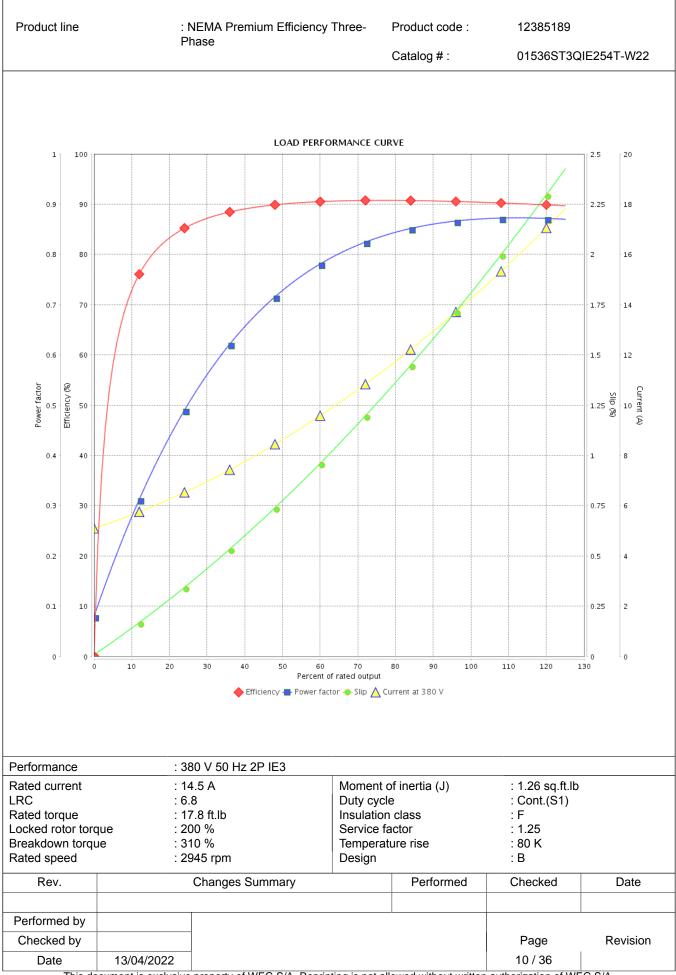
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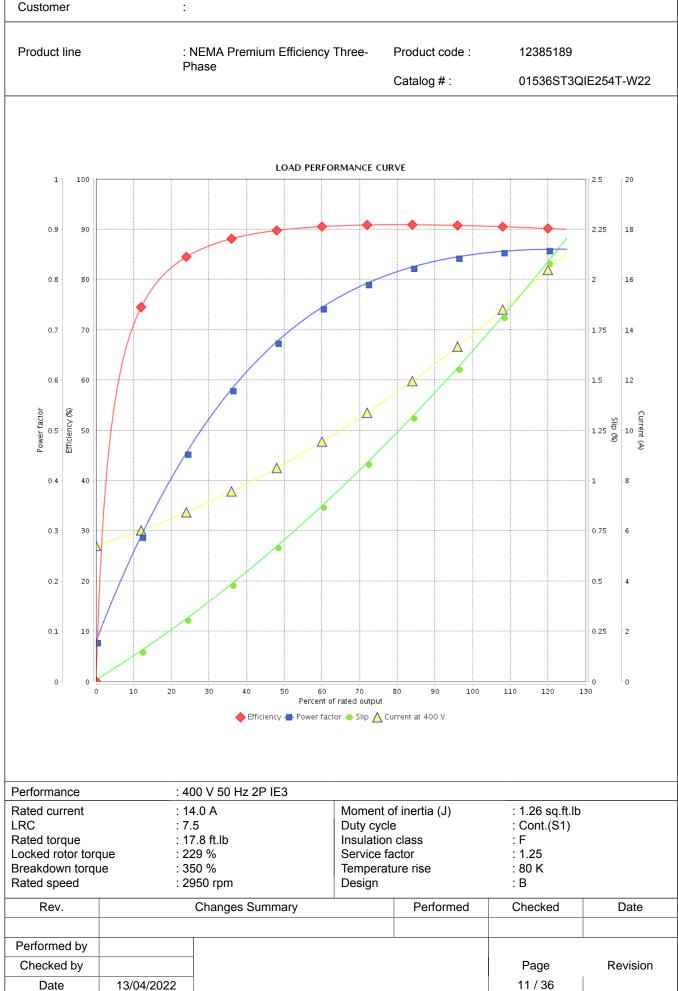


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Three Phase Induction Motor - Squirrel Cage

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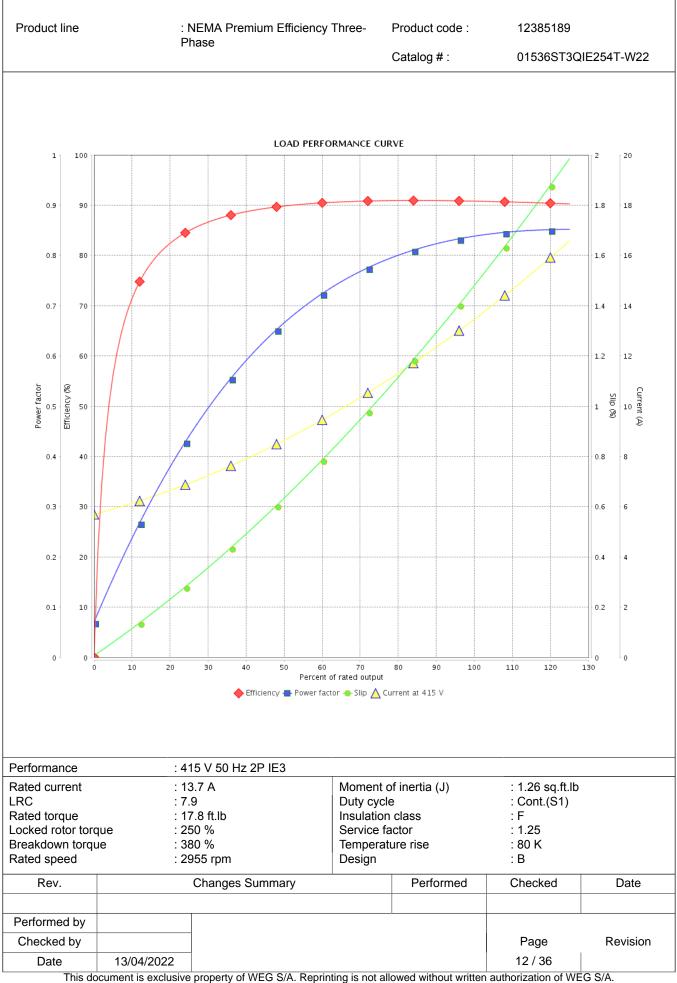
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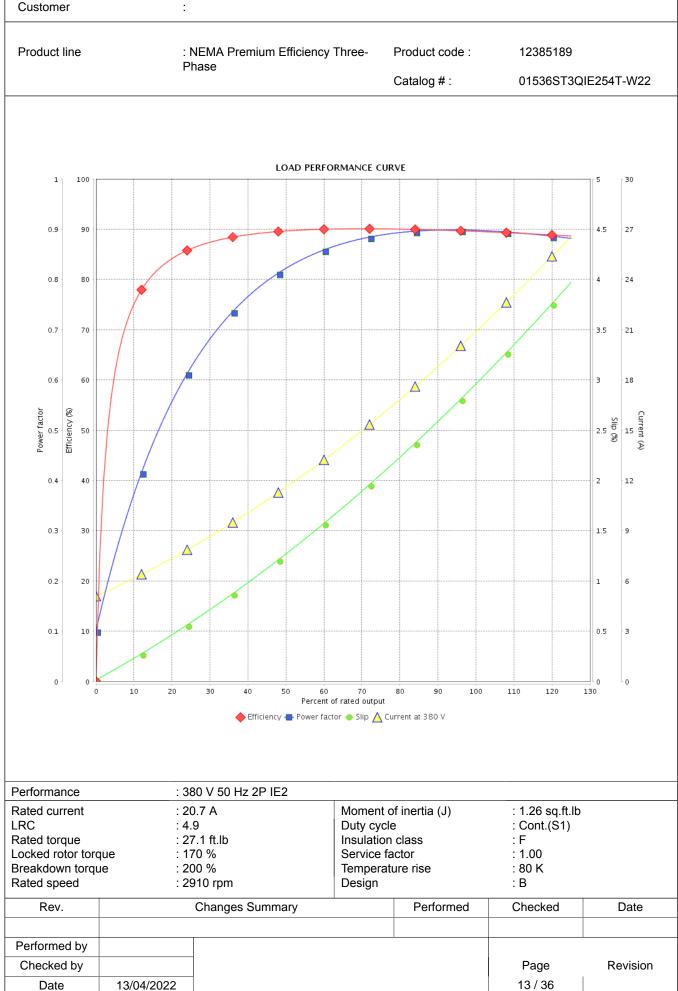


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#### Customer



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#### LOAD PERFORMANCE CURVE Three Phase Induction Motor - Squirrel Cage Customer : Product line : NEMA Premium Efficiency Three-Product code : 12385189 Phase Catalog # : 01536ST3QIE254T-W22 LOAD PERFORMANCE CURVE 100 25 1 4.5 22.5 0.9 90 0.8 80 4 20 Δ 17.5 3.5 0.7 70 $\boldsymbol{\Delta}$ 0.6 60 З 15 Δ Efficiency (%) Power factor 12.5 Current 2.5 🛞 0.5 50 Þ Δ 0.4 40 2 10 $\Delta$ $\wedge$ 0.3 30 1.5 7.5 $\wedge$ 0.2 20 1 5 0.1 10 0.5 2.5 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 : 19.6 A Rated current Moment of inertia (J) : 1.26 sq.ft.lb LRC Duty cycle : Cont.(S1) : 5.5 : 27.0 ft.lb Insulation class Rated torque : F Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 80 K Rated speed : 2920 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Page Checked by Revision

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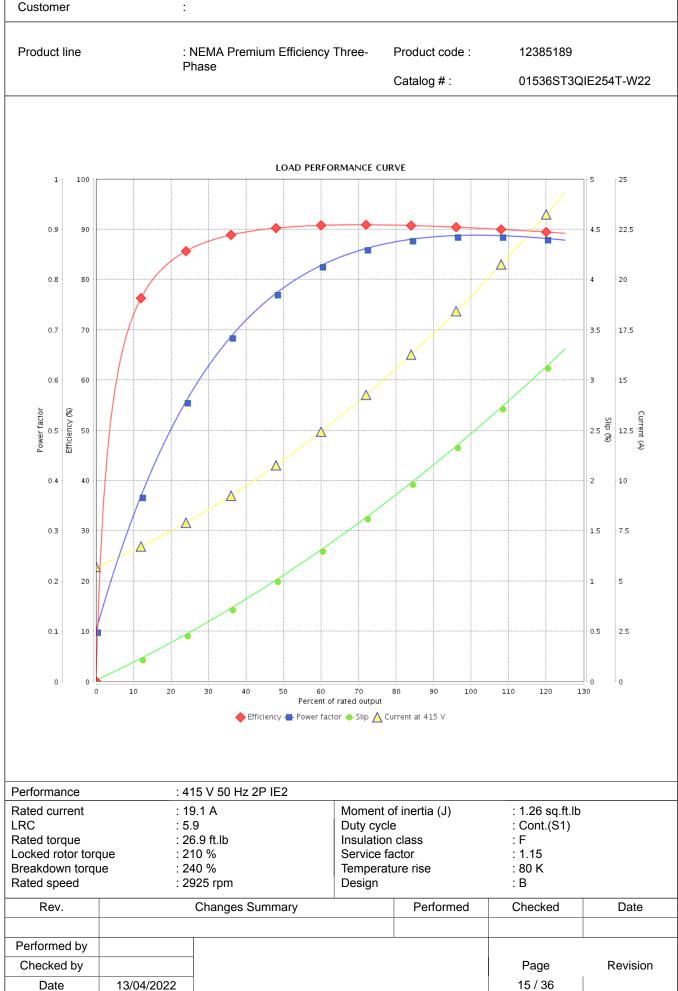
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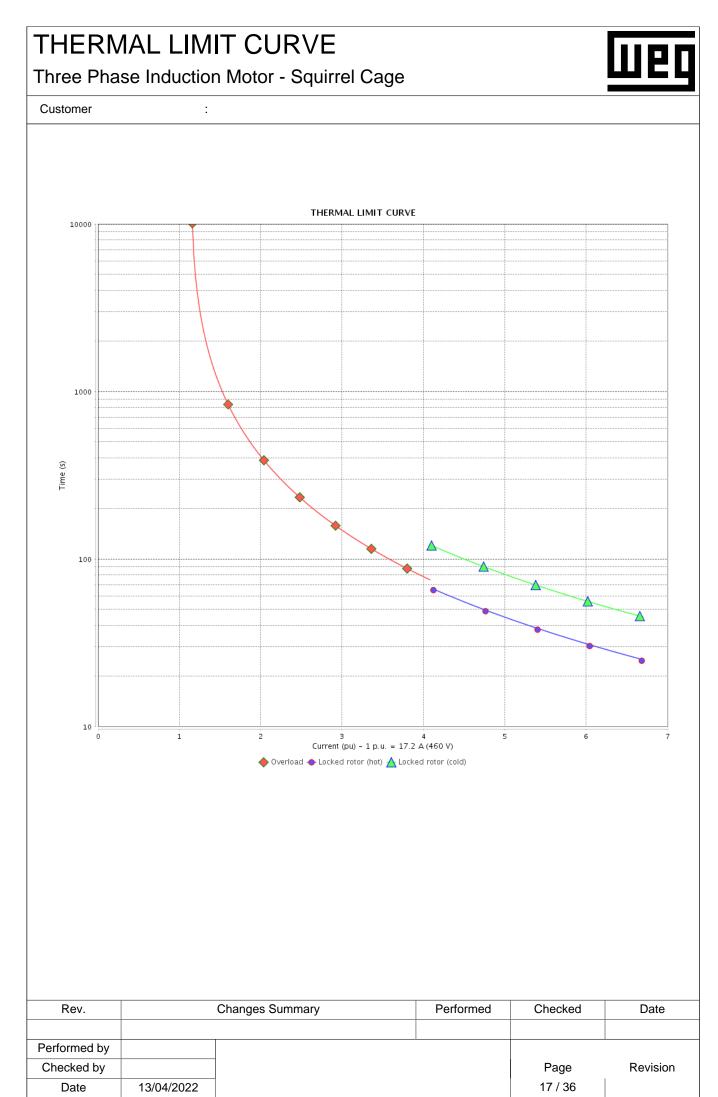
#### Customer



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Three Pha	se Inductio	on Motor - Squirrel	Cage			
Customer		:				
Product line		: NEMA Premium Efficiency	Three-	Product code :	12385189	
		Phase		Catalog # :	01536ST3QI	E254T_\\/22
Performance	:	460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: : gue : ie :	17.2 A 6.7 22.3 ft.lb 220 % 270 % 3530 rpm	Moment o Duty cycle Insulation Service fa Temperate Design	class ictor	: 1.26 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
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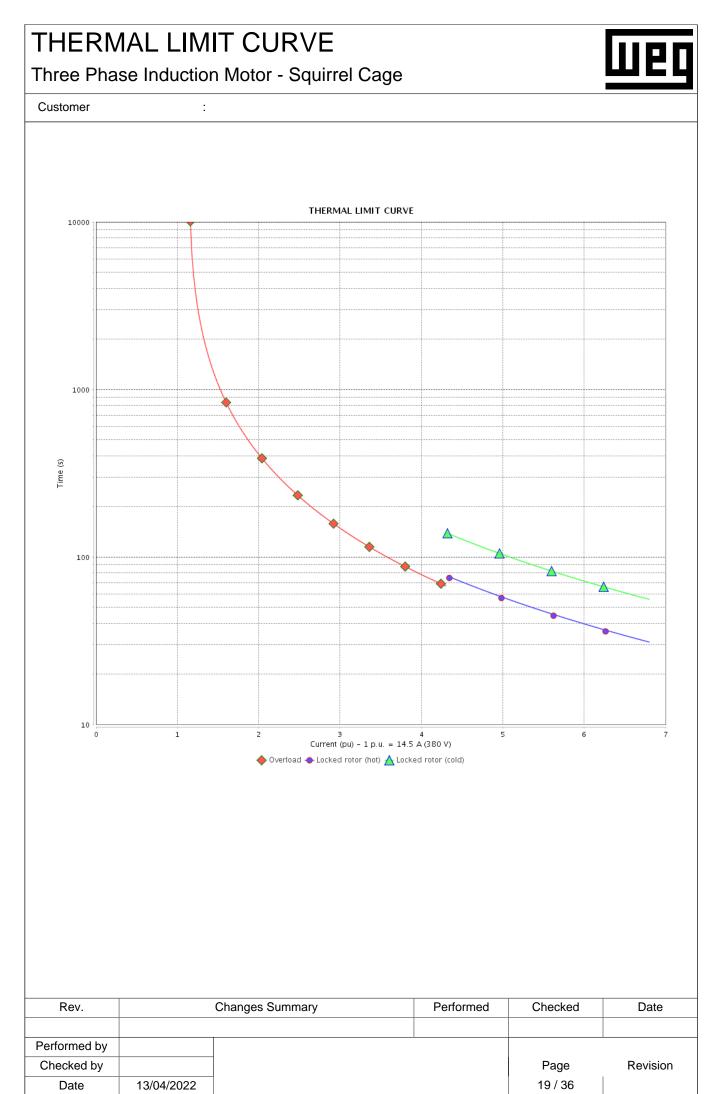


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Three Pha	se Inductio	n Motor - Squirrel	Cage			
Customer	:					
Product line		NEMA Premium Efficiency <sup>-</sup> hase	Three-	Product code :	12385189	
		hase		Catalog # :	01536ST3QI	E254T-W22
Performance		80 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 6 : 1 que : 2 Je : 3	4.5 A .8 7.8 ft.lb 00 % 10 % 945 rpm	Moment o Duty cycle Insulation Service fa Temperate Design	class ictor	: 1.26 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Heating constant						
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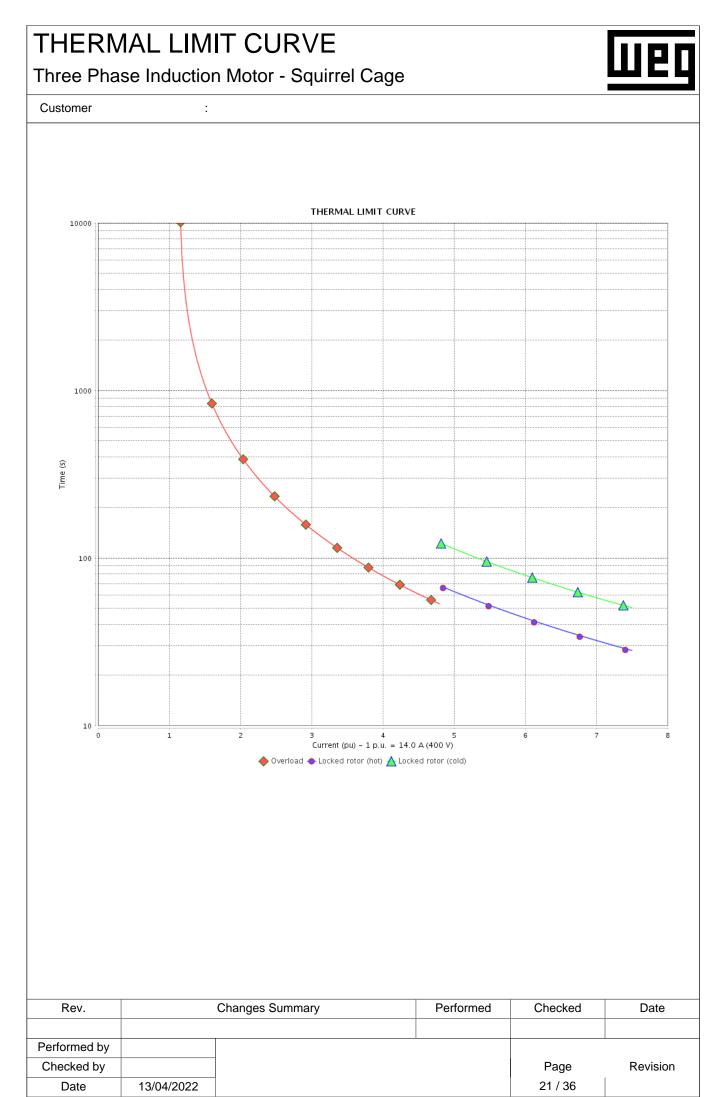


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Three Pha	se Inductio	n Motor - Squirrel	Cage			шсч
Customer	:					
Product line		NEMA Premium Efficiency <sup>-</sup> hase		Product code : Catalog # :	12385189 01536ST3QI	E254T-W22
Performance Rated current		00 V 50 Hz 2P IE3 4.0 A	Moment o	f inertia (J)	: 1.26 sq.ft.lb	
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 7 : 1 que : 2 ue : 3		Duty cycle Insulation Service fa Temperatu Design	e class ctor	: 1.26 sq.11.10 : Cont.(S1) : F : 1.25 : 80 K : B	
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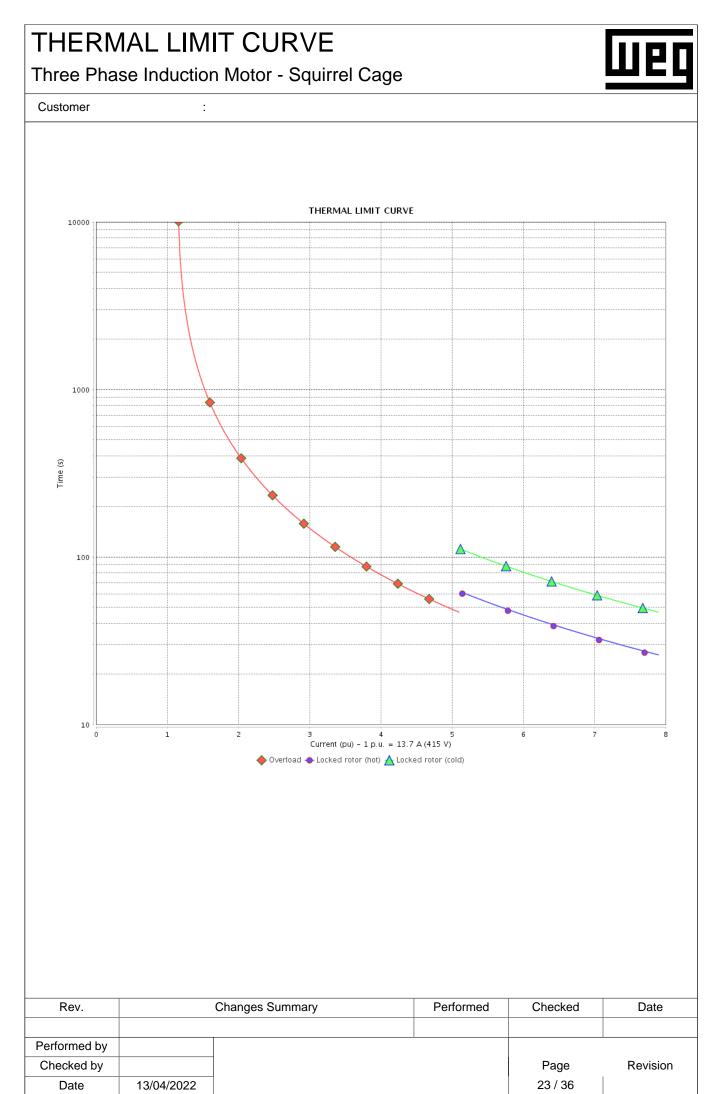


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Customer	:					
Product line		NEMA Premium Efficiency <sup>-</sup> Phase	Three-	Product code :	12385189	
	·			Catalog # :	01536ST3QII	E254T-W22
Performance		415 V 50 Hz 2P IE3 I3.7 A	Momonto	finartia (1)	: 1.26 og ft lb	
Rated current LRC Rated torque	: 7	13.7 A 7.9 17.8 ft.lb	Duty cycle		: 1.26 sq.ft.lb : Cont.(S1) : F	
Locked rotor tore	que : 2	250 %	Service fa	ictor	: 1.25	
Breakdown torqu Rated speed		380 % 2955 rpm	Temperati Design	ure rise	: 80 K : B	
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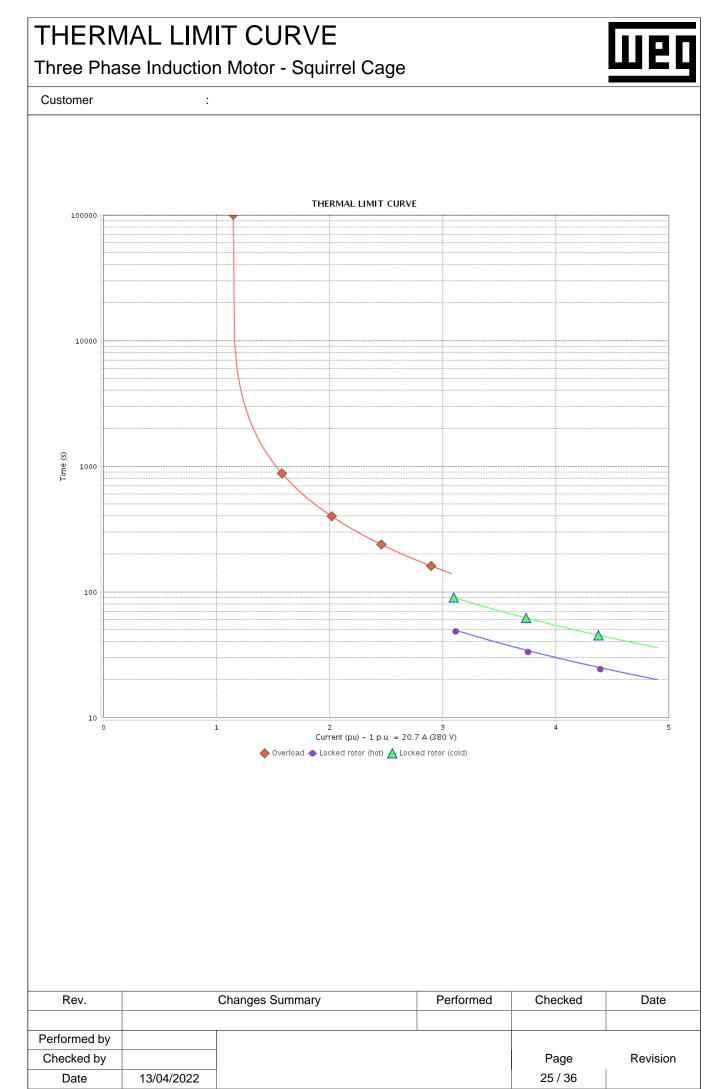


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Three Pha	se Inductio	n Motor - Squirrel	Cage			шсч
Customer	:					
Product line		NEMA Premium Efficiency <sup>-</sup> hase		Product code : Catalog # :	12385189 01536ST3QI	E254T-W22
Performance		80 V 50 Hz 2P IE2 0.7 A	Momento	finertia (I)	: 1 26 sq ft lb	
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 4 : 2 que : 1 ue : 2		Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 1.26 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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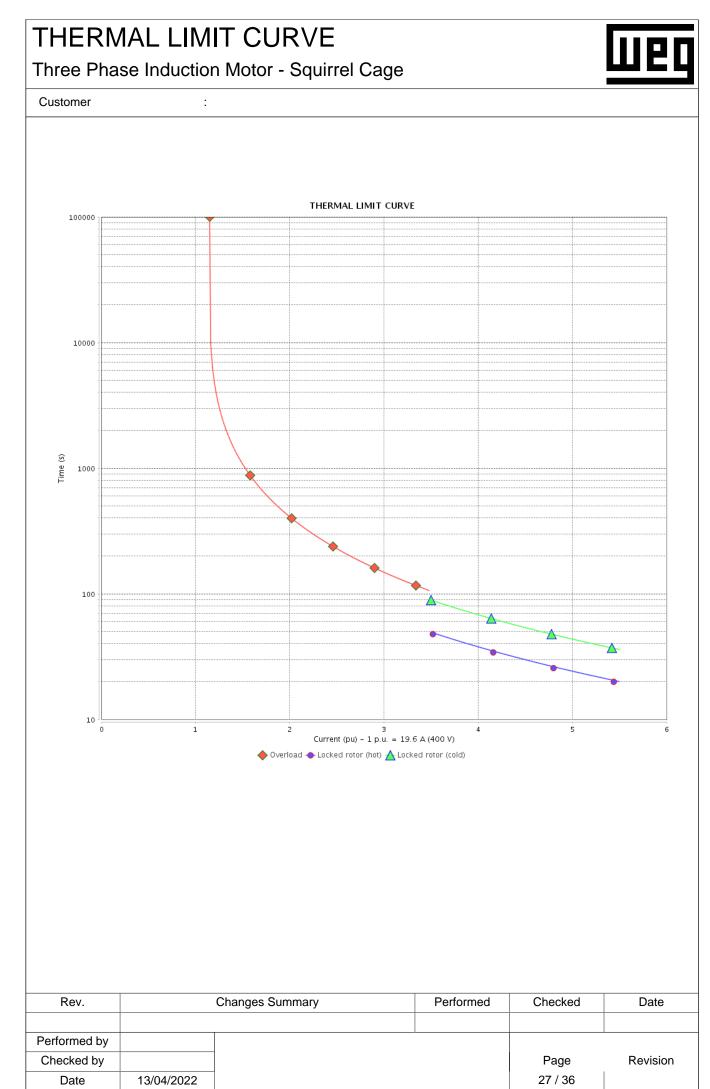


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Three Pha	se Inductio	n Motor - Squirrel	Cage			шсц
Customer	:					
Product line		NEMA Premium Efficiency <sup>-</sup> Phase		Product code : Catalog # :	12385189 01536ST3QI	E254T-W22
Performance Rated current	: 1	9.6 A	Moment o	f inertia (J)	: 1.26 sq.ft.lb	
LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 2 que : 1 Je : 2	5.5 27.0 ft.lb 90 % 229 % 2920 rpm	Duty cycle Insulation Service fa Temperatu Design	e class ictor	: Cont.(S1) : F : 1.00 : 80 K : B	
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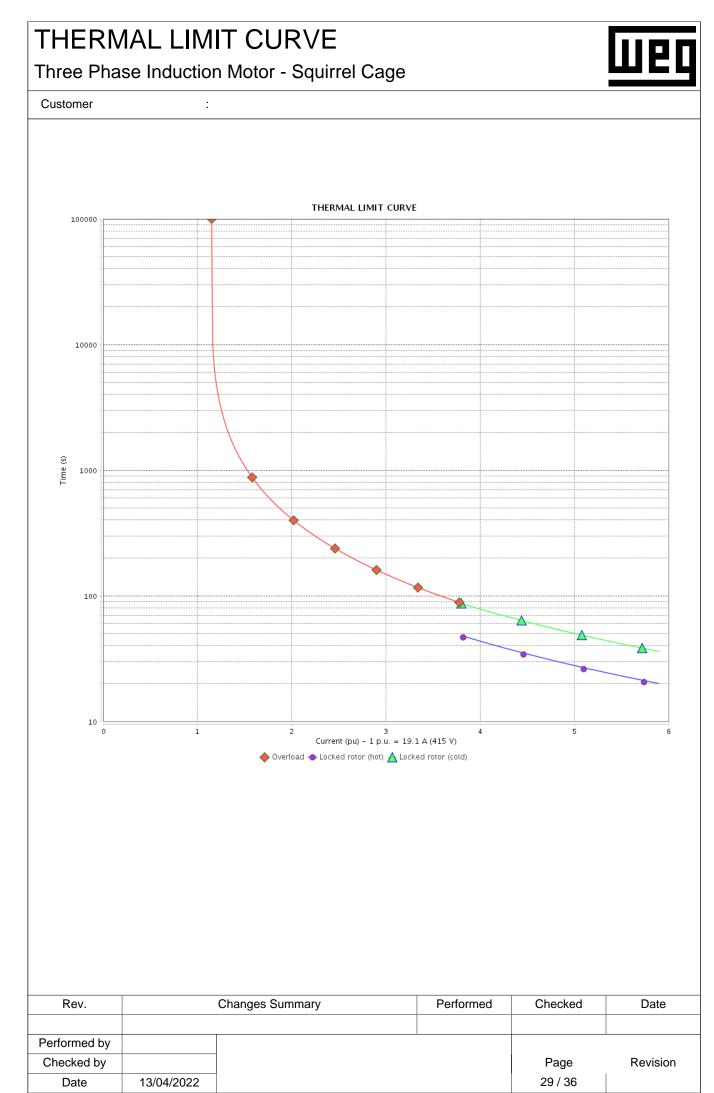


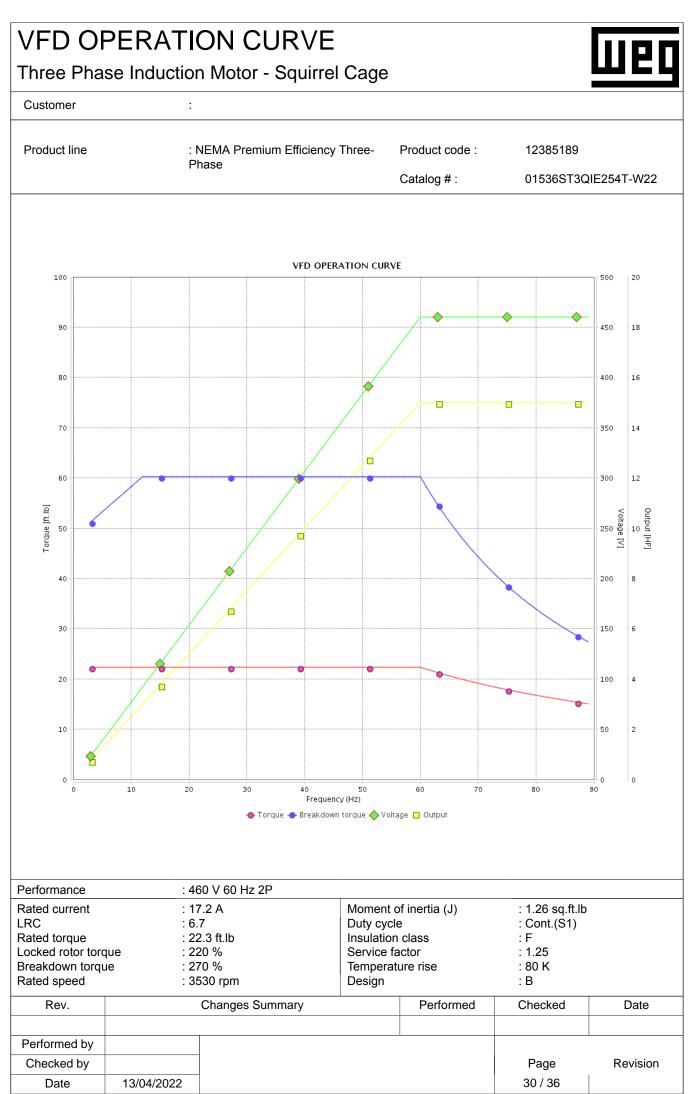
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Three Pha	se Inductio	n Motor - Squirrel	Cage			шсц
Customer	:					
Product line		NEMA Premium Efficiency <sup>-</sup> Phase		Product code : Catalog # :	12385189 01536ST3QI	E254T-W22
Performance		15 V 50 Hz 2P IE2	Manaata	finantia (1)	· 1 OC or ft lb	
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 5 : 2 que : 2 Je : 2	9.1 A .9 6.9 ft.lb 10 % 40 % 925 rpm	Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 1.26 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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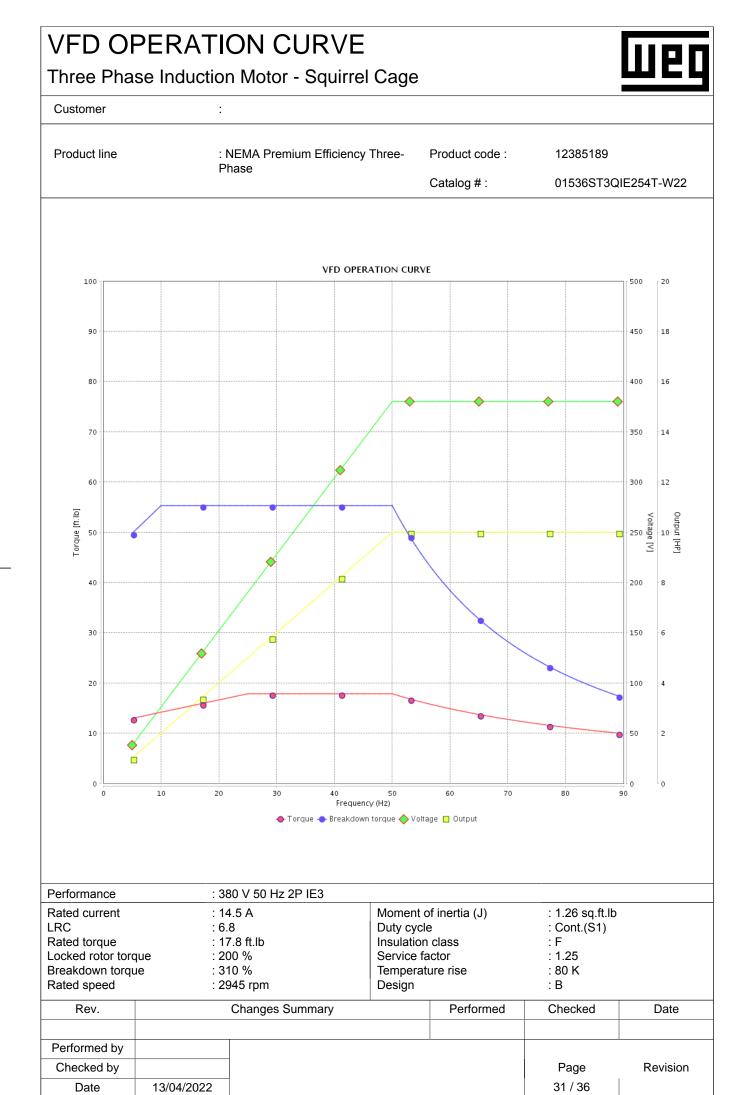
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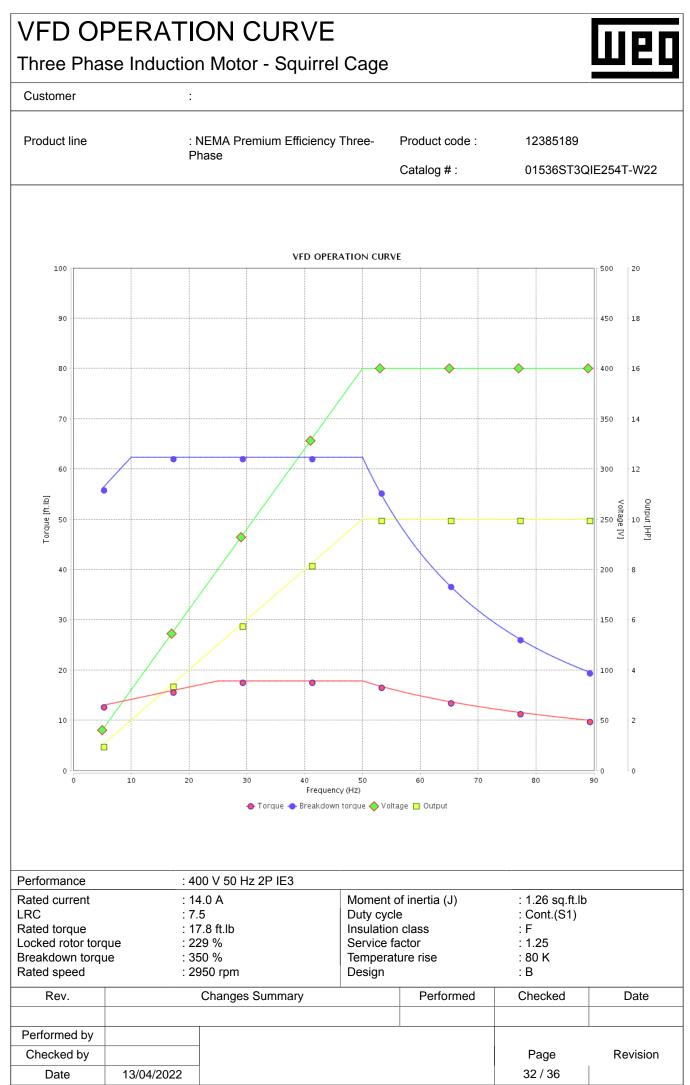
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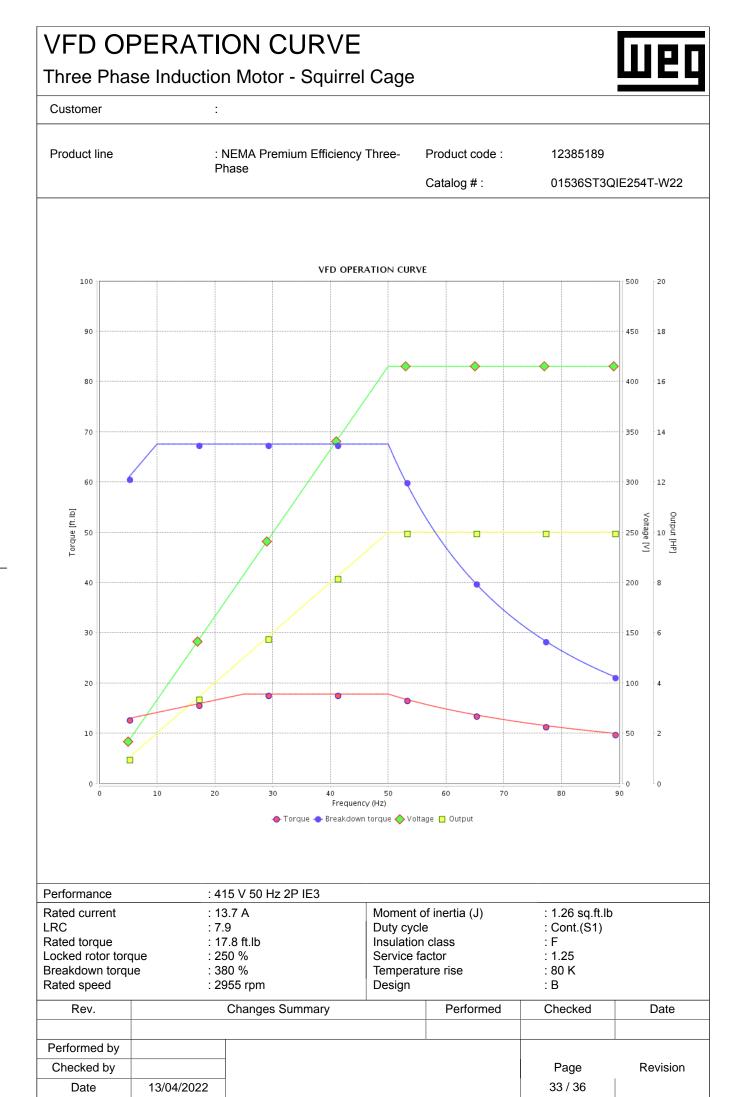
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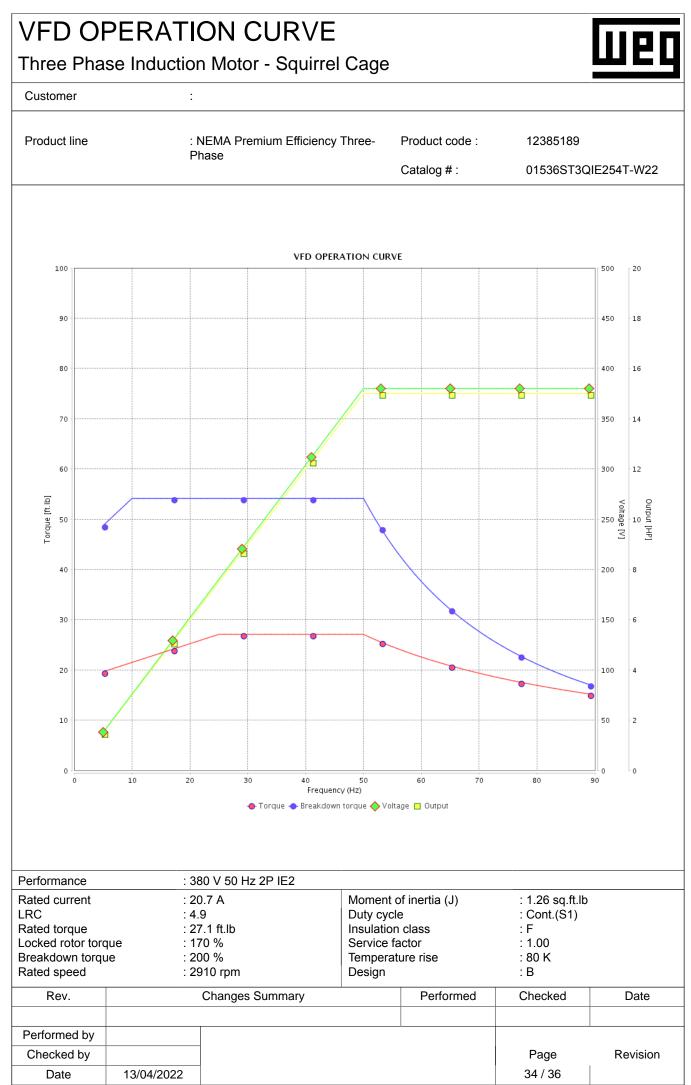


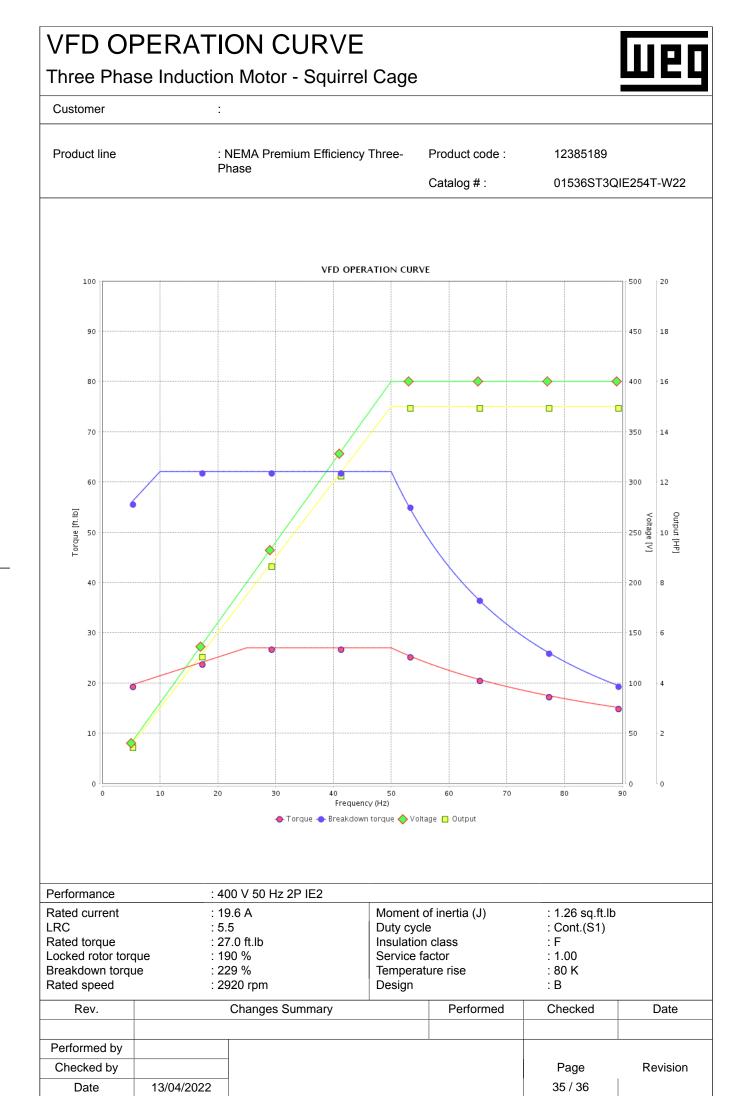


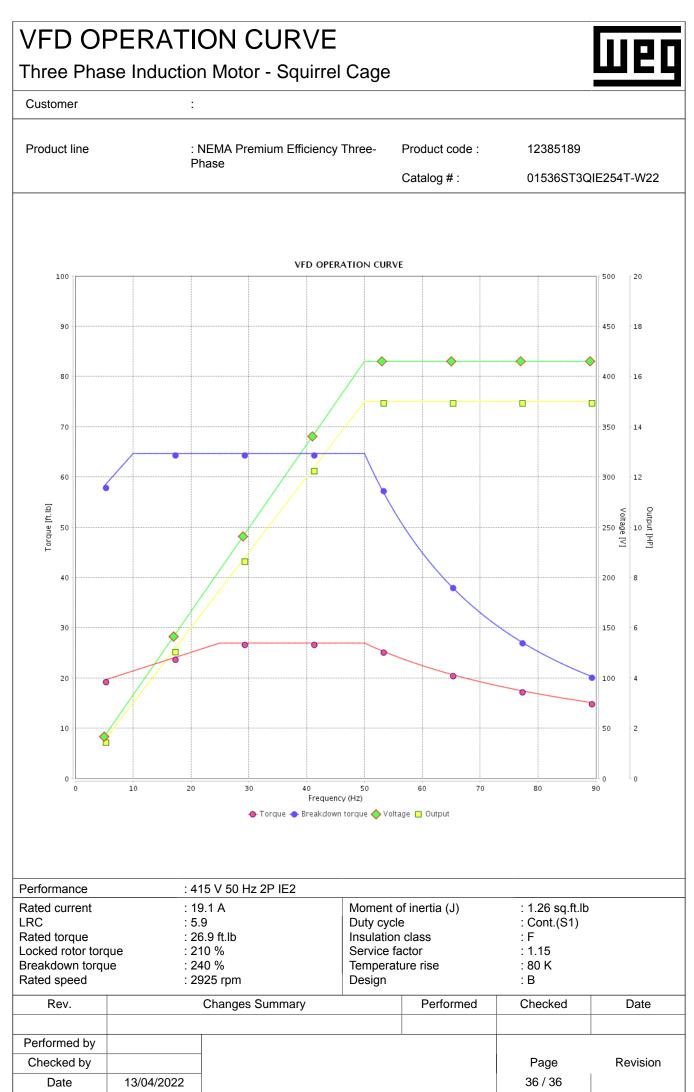


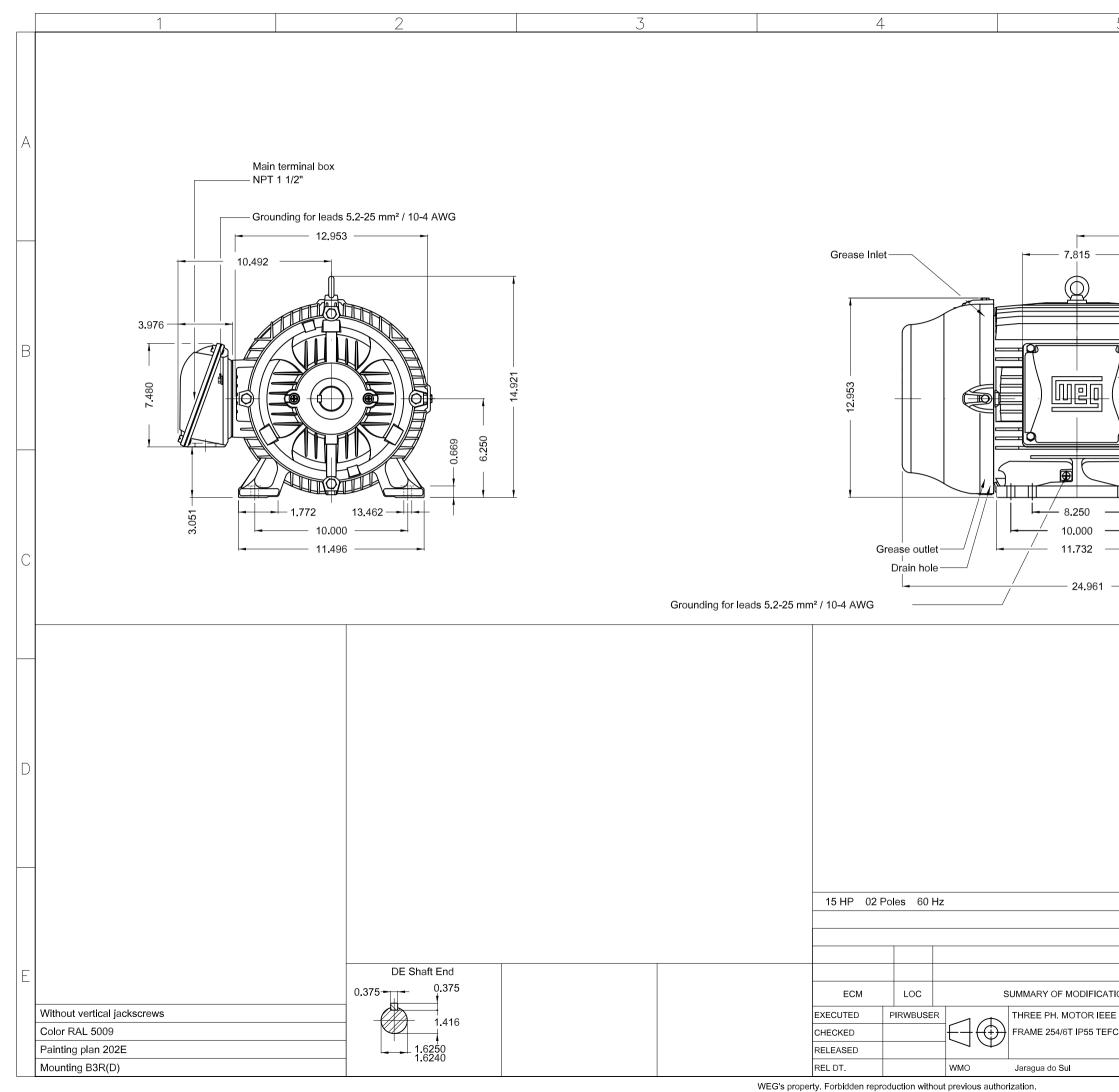












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