# DATA SHEET

Three Phase Induction Motor - Squirrel Cage

:

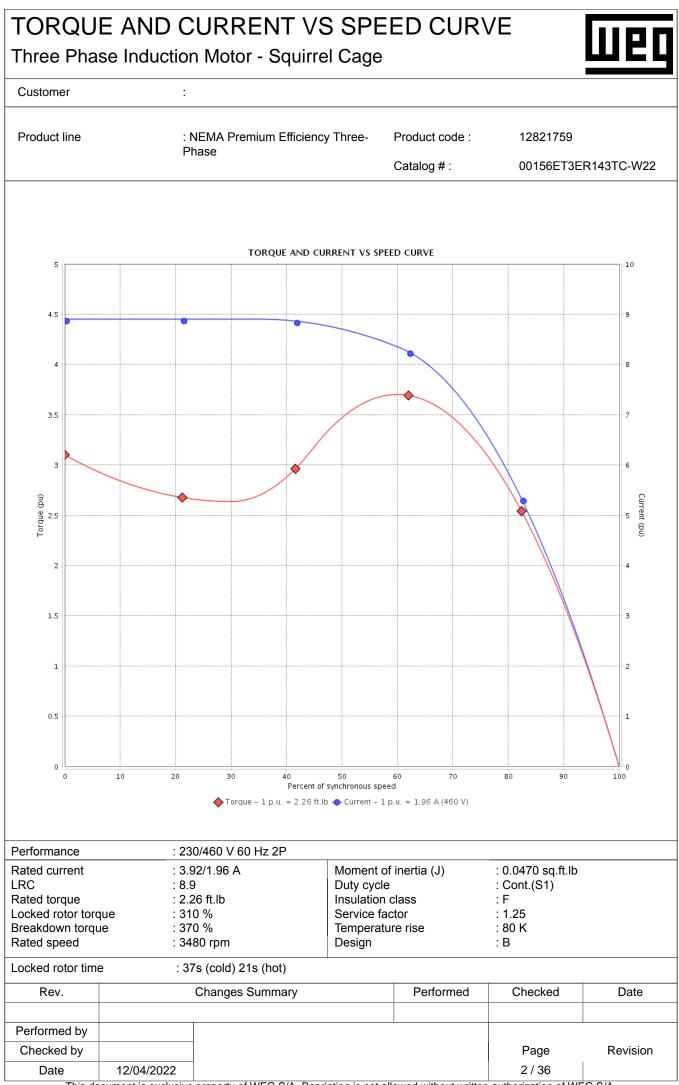
### Customer

Product line		: NEMA Premium Efficiency Three- Phase			iree-	Product code : Catalog # :		12821759 00156ET3ER143TC-W22		
			Flidse							
Frame Insulation class Duty cycle Ambient tempera Altitude Protection degre Design		: 143TC : F : Cont.(S1) : -20°C to +- : 1000 m.a.s : IP55 : B			Mountin Rotatio Starting Approx		:	IC411 - TEFC W-6 Both (CW and Direct On Line 42.9 lb 0.0470 sq.ft.lb	,	
Output [HP]		1.5	1		1	1	1.5	1.5	1.5	
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]		3.92/1.96	1.69		.66	1.65	2.36	2.24	2.21	
R. Amperes [A] _RC [A]		34.9/17.4 8.9x(Code L)	15.5 9.2x(Code M)	9.7>	l6.1 (Code M)	16.8 10.2x(Code N)	15.8 6.7x(Code I	16.6 H) 7.4x(Code J)	17.5 7.9x(Code I	
No load current [A	1	1.66/0.830	0.780		.840	0.900	0.780	0.840	0.900	
Rated speed [RPI		3480	2905		915	2920	2835	2860	2870	
Slip [%]	-	3.33	3.17		2.83	2.67	5.50	4.67	4.33	
Rated torque [ft.lb	]	2.26	1.81		.80	1.80	2.78	2.75	2.74	
Locked rotor torqu		310	340		380	420	220	260	280	
Breakdown torque		370	390	4	440	480	260	290	310	
Service factor		1.25	1.25		.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	
Locked rotor time		37s (cold) 21s (hot)	27s (cold) 15s (hot)		(cold) s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	
Noise level <sup>2</sup>	05%	68.0 dB(A)		_	20.4		00.0	01.0	04.7	
	25%	81.1	79.9		78.4	77.9	80.6	81.6	81.7	
Efficiency (%)	50% 75%	81.5 84.0	80.5 83.2		79.3 32.8	78.9 82.7	81.0 81.5	82.0 82.5	82.0 82.5	
	100%	84.0	83.4		33.4	83.4	81.5	82.5	82.5	
	25%	0.43	0.39		).35	0.33	0.51	0.46	02.3	
	50%	0.68	0.63		).58	0.55	0.75	0.70	0.40	
Power Factor	75%	0.78	0.74		).71	0.68	0.84	0.80	0.78	
	100%	0.84	0.81		).78	0.76	0.87	0.86	0.84	
		Drive end				tion loads				
Bearing type Sealing Lubrication inter		: 6205 ZZ : V'Ring : -		ZZ	Max. tra			52 lb 95 lb		
Lubricant amour Lubricant type	nt	: - : Mobi	- I Polyrex EM							
Notes USABLE @208V This revision repl must be eliminate	aces and ca		us one, which	1				on tests with si		
<ol> <li>Looking the m</li> <li>Measured at 2</li> <li>Approximate manufacturing pr</li> <li>At 100% of fu</li> </ol>	notor from the 1m and with weight subjectocess.	tolerance of +3 ct to changes a	fter		MG-1.					
Rev.		Changes	Summary			Performe	a Cl	necked	Date	
Performed by						1		I		
Charling										
Checked by Date	12/04/202							Page I / 36	Revision	

Шер

 Date
 12/04/2022
 1 / 36

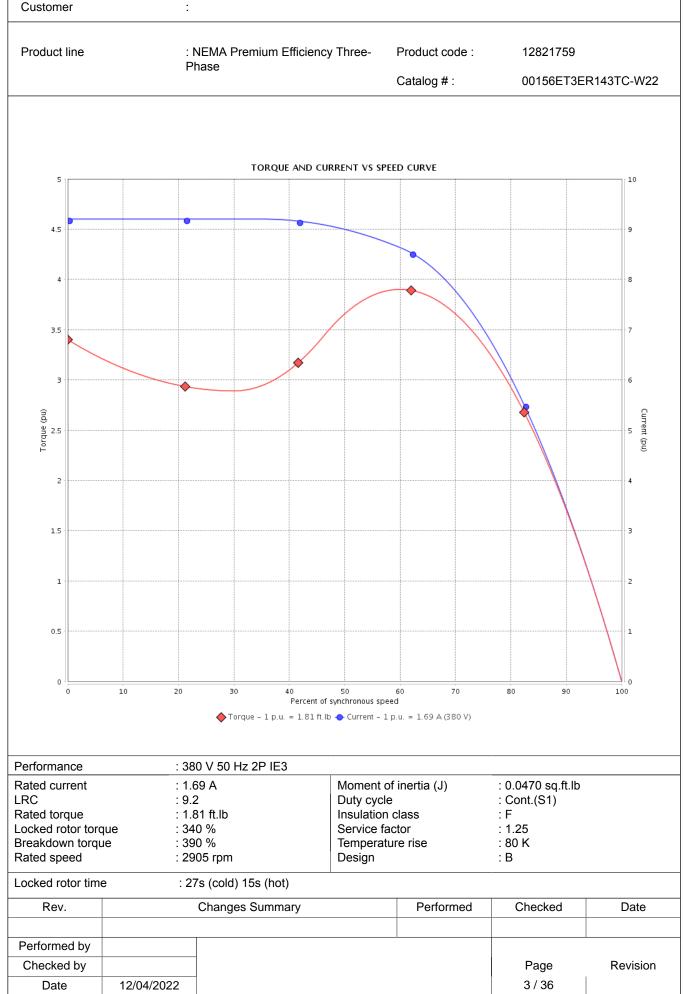
 This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.
 0 / 36



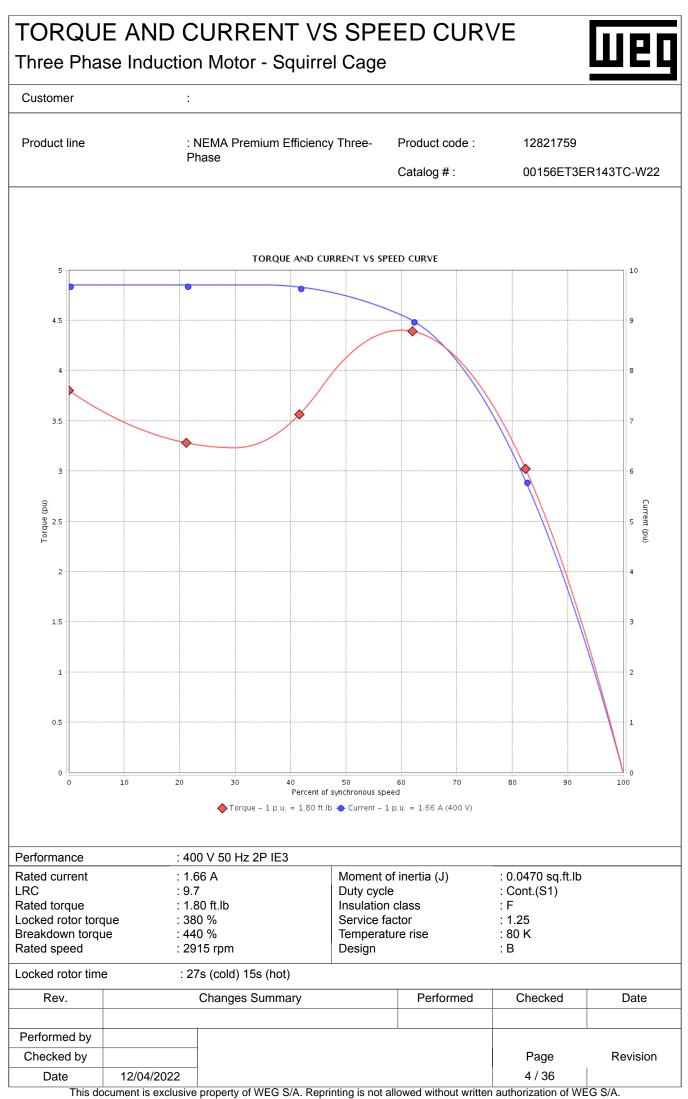
### TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

### Customer



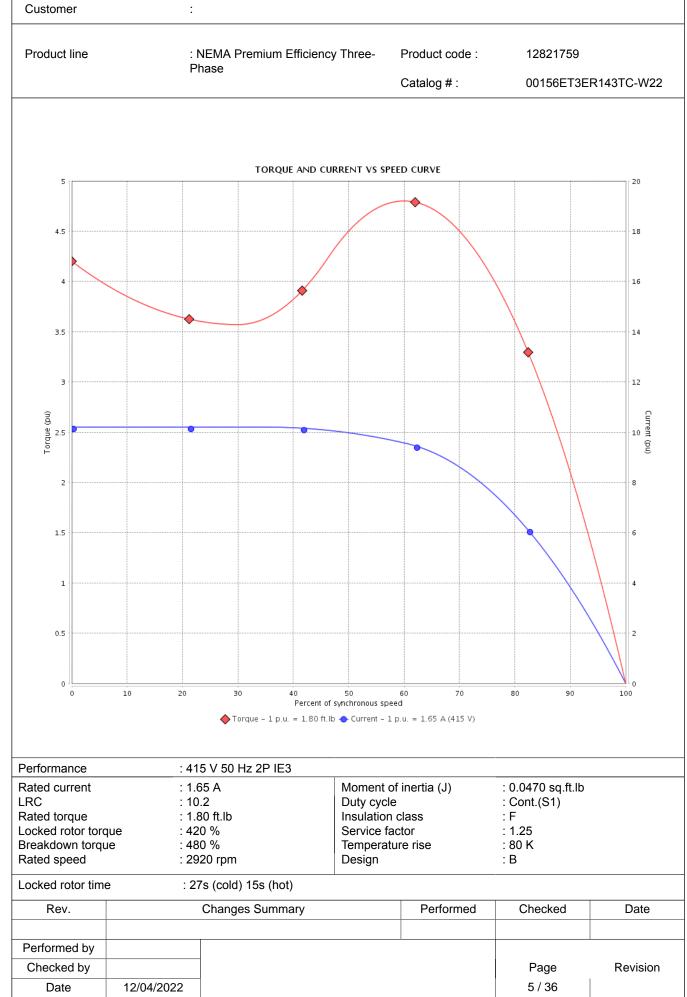
This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.



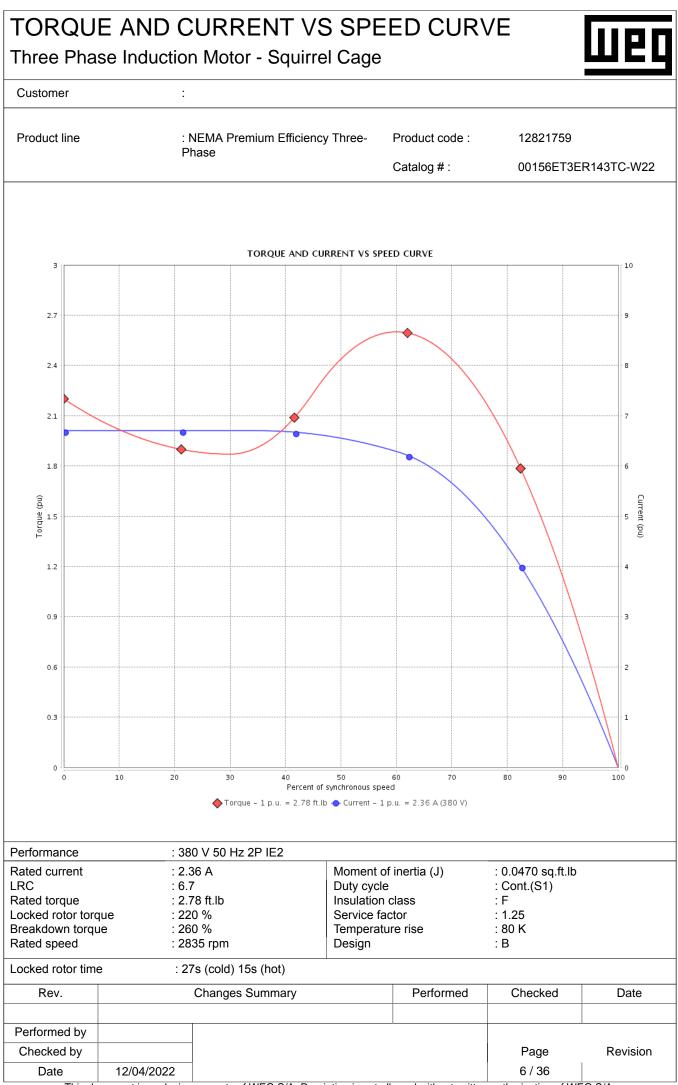
Subject to change without notice

## TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

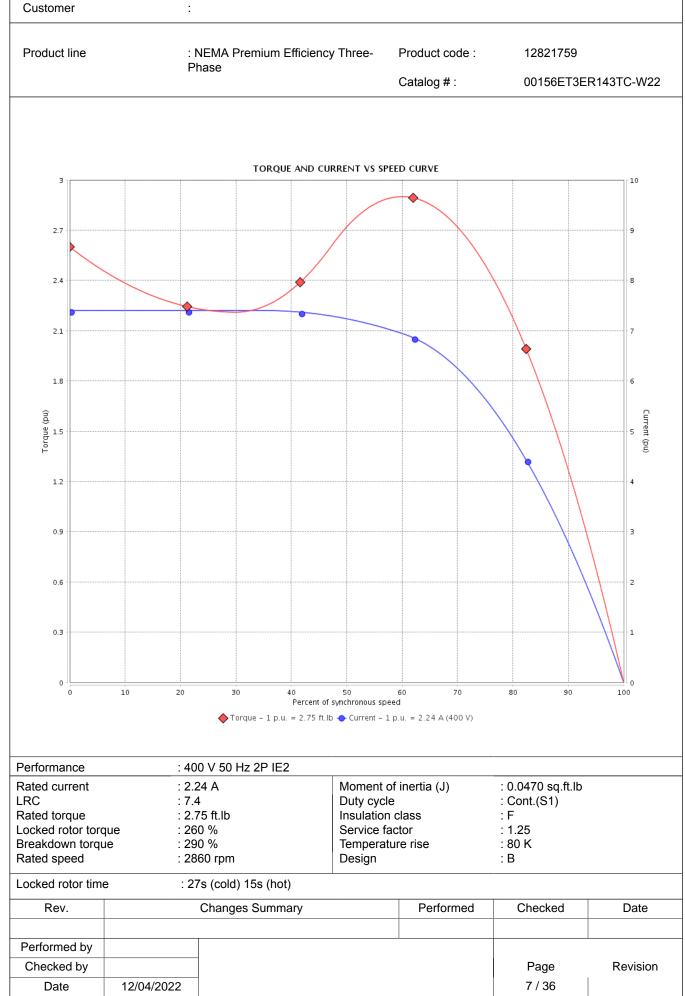


This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

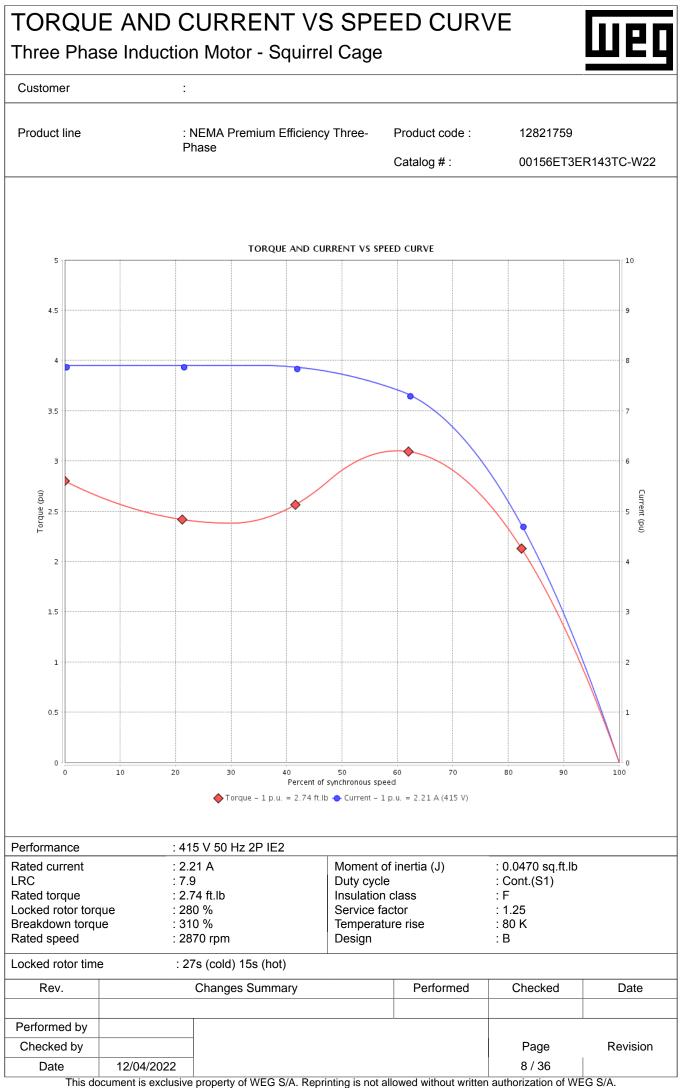


## TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



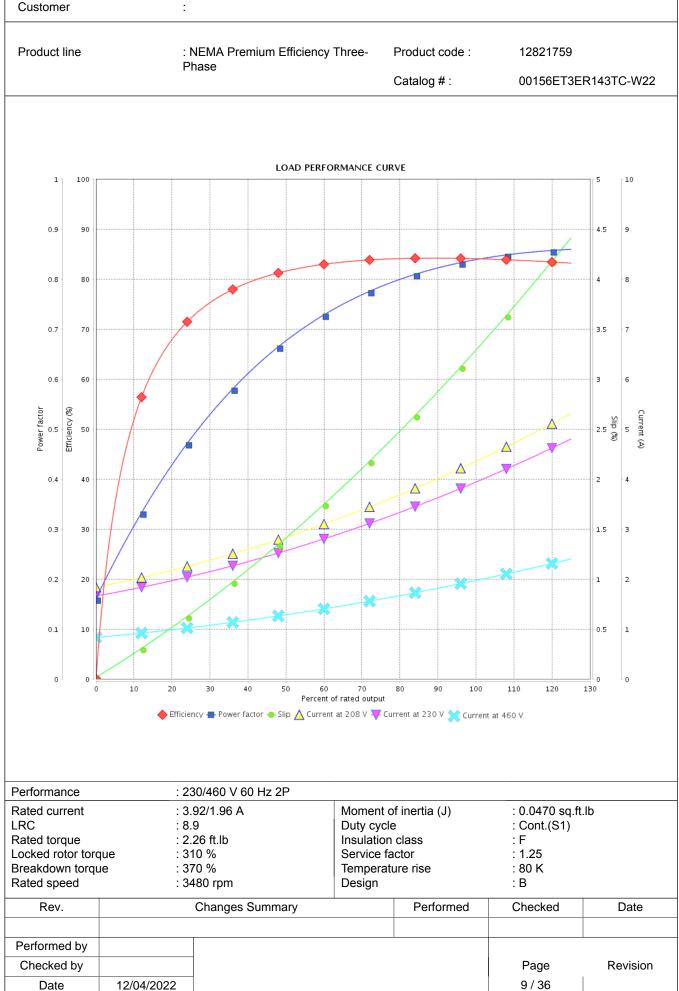
This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.



# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

### Customer



This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

#### LOAD PERFORMANCE CURVE Three Phase Induction Motor - Squirrel Cage Customer : Product line : NEMA Premium Efficiency Three-Product code : 12821759 Phase Catalog # : 00156ET3ER143TC-W22 LOAD PERFORMANCE CURVE 100 1 2 4.5 1.8 0.9 90 Λ 0.8 80 4 1.6 $\triangle$ 3.5 1.4 70 0.7 $\triangle$ 0.6 60 3 1.2 Efficiency (%) Power factor Current 2.5 % $\wedge$ 0.5 50 1 Þ $\wedge$ Δ 0.4 40 2 0.8 0.3 30 1.5 0.6 0.2 20 1 04 0.1 10 0.5 0.2 0 0 0 0 ó 10 20 110 120 130 30 40 50 60 70 80 90 100 Percent of rated output 🔶 Efficiency 🖶 Power factor 🔶 Slip 🛕 Current at 380 V Performance : 380 V 50 Hz 2P IE3 : 1.69 A Rated current Moment of inertia (J) : 0.0470 sq.ft.lb LRC Duty cycle : Cont.(S1) : 9.2 : 1.81 ft.lb Insulation class Rated torque : F Locked rotor torque : 340 % Service factor : 1.25 Breakdown torque : 390 % Temperature rise : 80 K Rated speed : 2905 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

Date 12/04/2022 10/36 This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

Revision

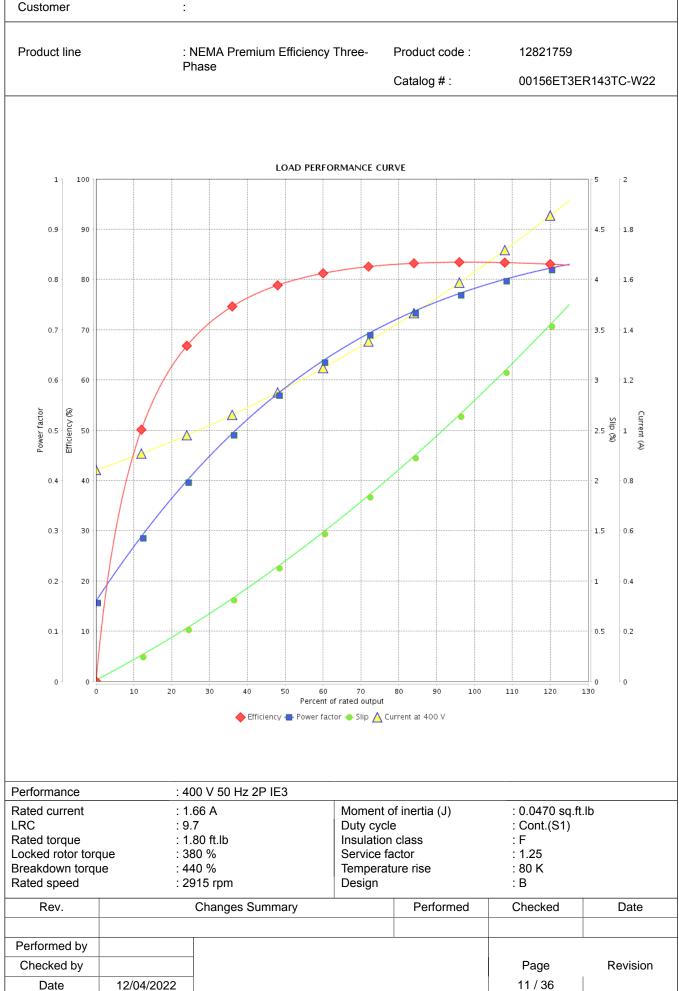
Page

Checked by

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

### Customer



This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

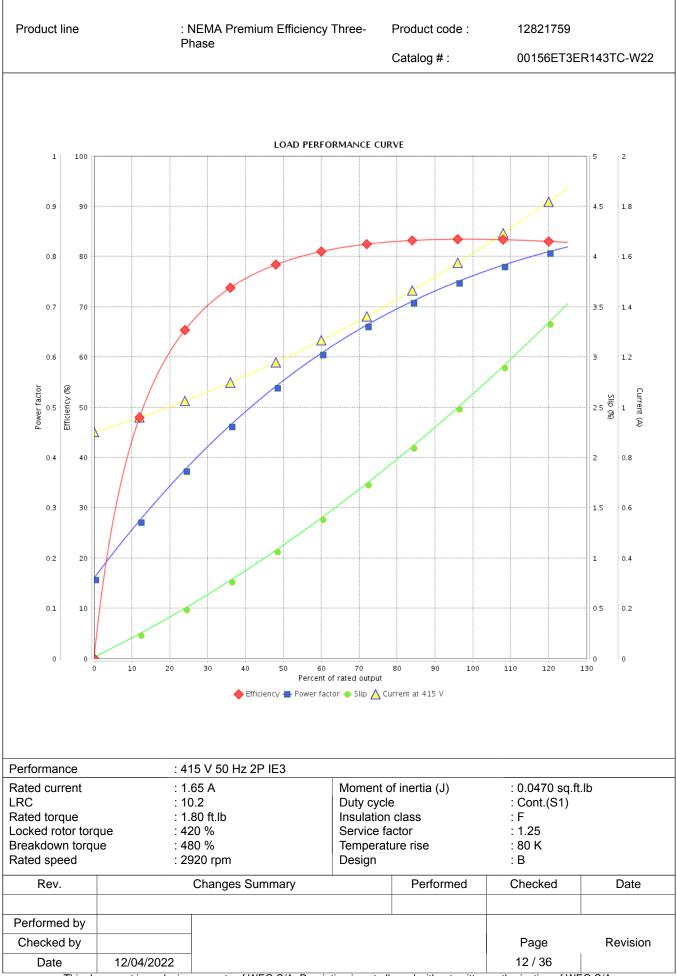
## LOAD PERFORMANCE CURVE

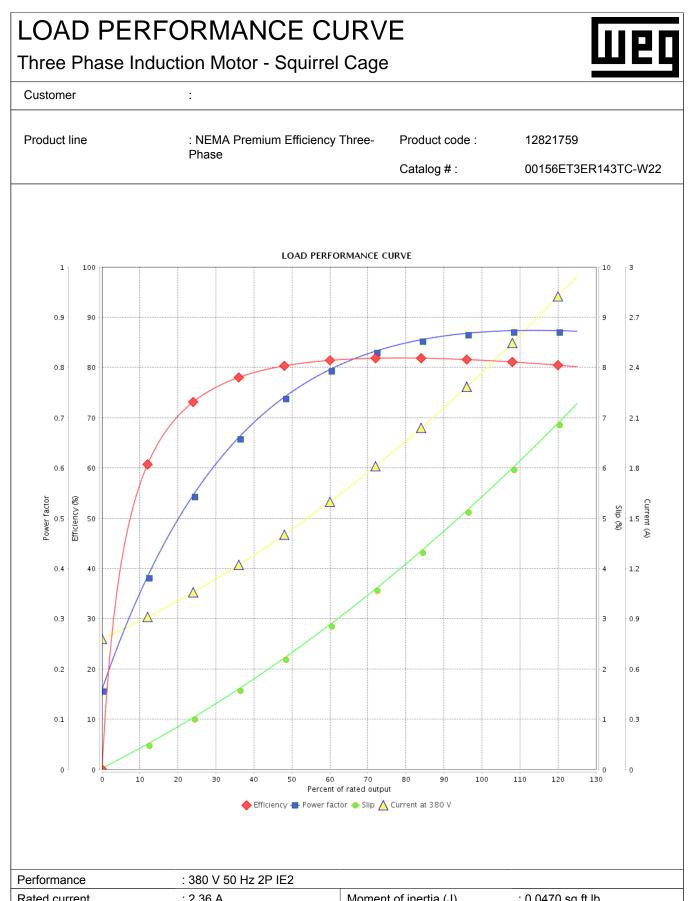
Three Phase Induction Motor - Squirrel Cage

:



Customer





Performance	: 3	80 V 50 Hz 2P IE2	-			
Rated current	: 2		A Moment of inertia (J) : 0.0470 sq.ft Duty cycle : Cont.(S1)		: 0.0470 sq.ft	.lb
LRC	: 6	5.7				
Rated torque	: 2	.78 ft.lb	Insulation	class	: F	
Locked rotor torqu	Locked rotor torque : 220 % Service factor		ctor	: 1.25		
Breakdown torque	e :2	.60 %	Temperati	Temperature rise		
Rated speed	: 2	2835 rpm Design		: B		
Rev.		Changes Summa	iry	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				13 / 36	

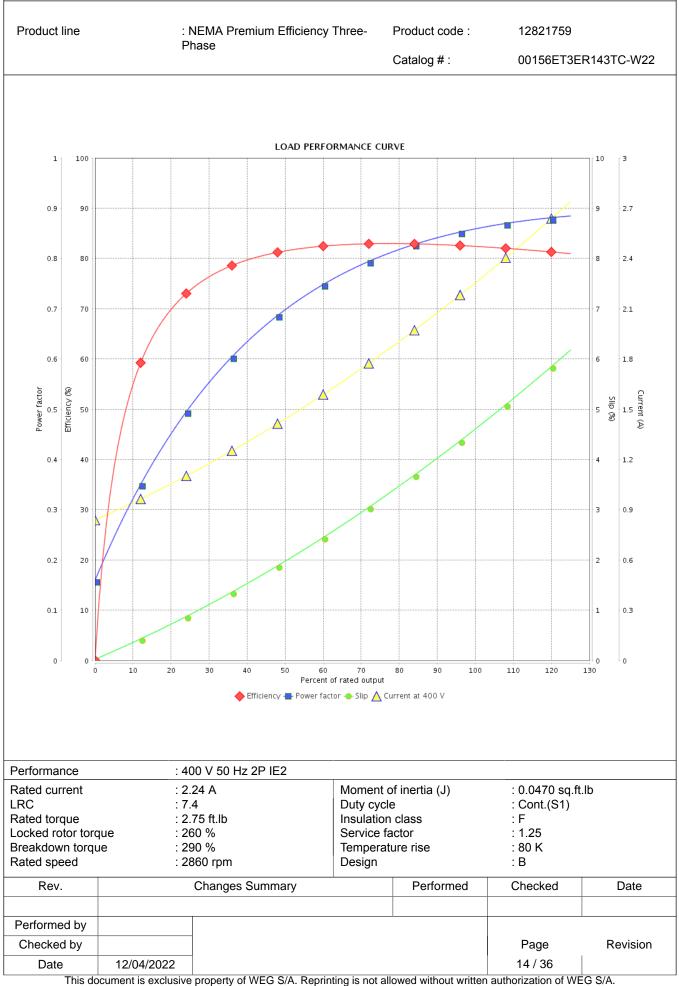
## LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

:



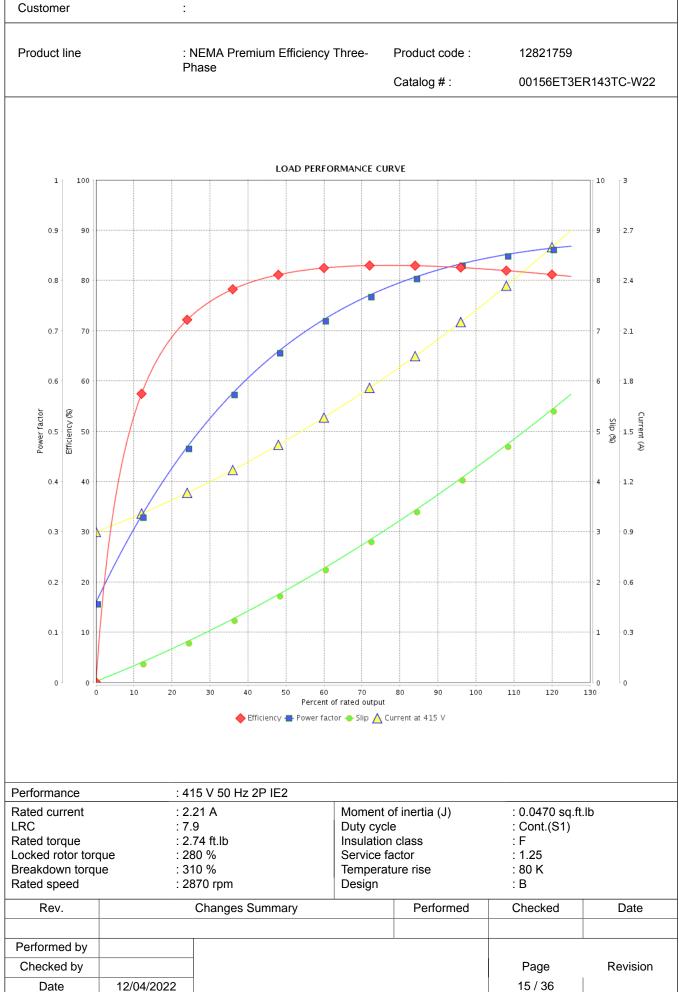
Customer



# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

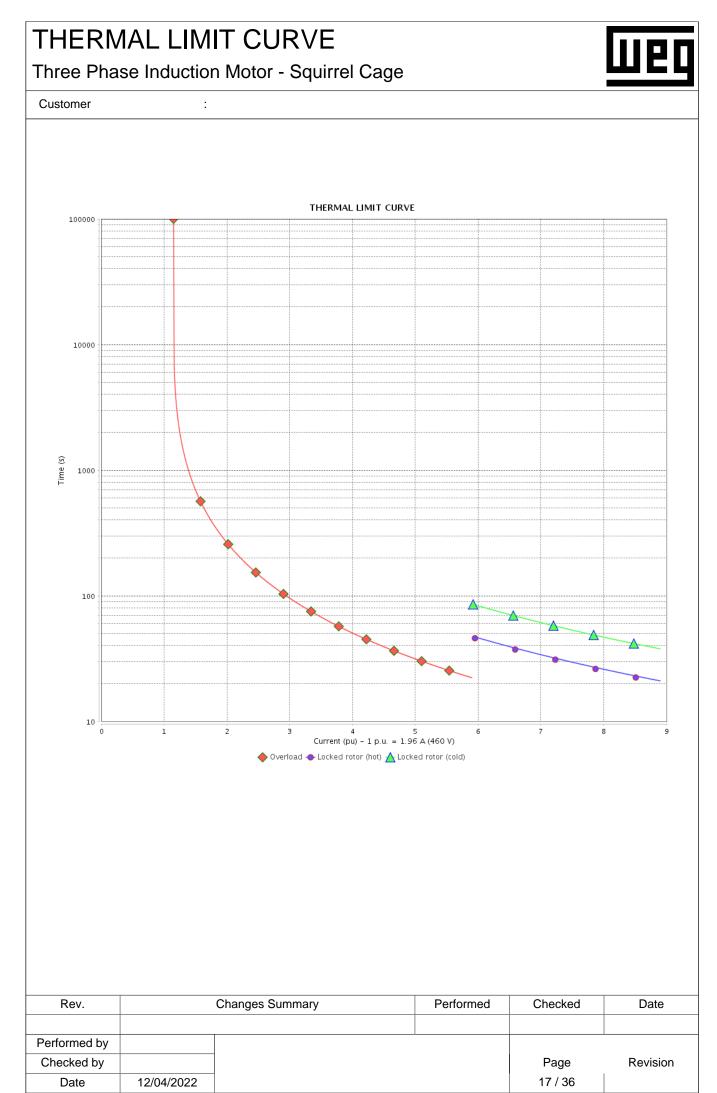
### Customer



This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

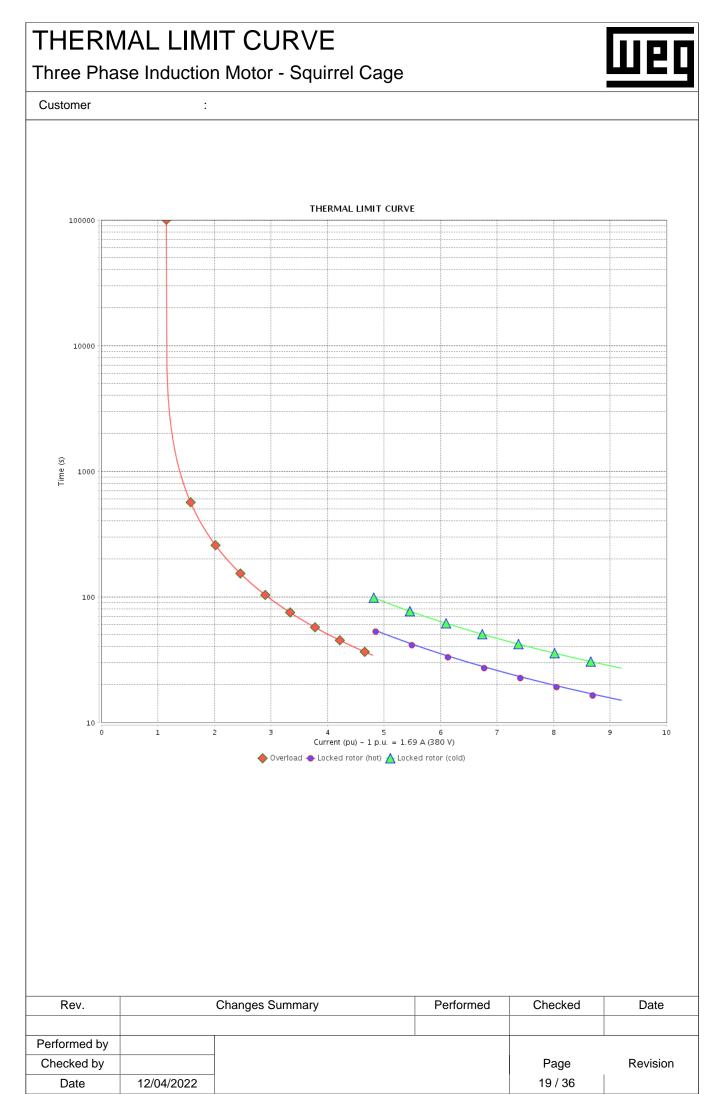
THERMAL	LIMIT CURVE		Шер
Three Phase In	duction Motor - Squirrel Cage	)	шсч
Customer	:		
Product line	: NEMA Premium Efficiency Three-	Product code :	12821759
	Phase	Catalog # :	00156ET3ER143TC-W22

Performance	: 23	30/460 V 60 Hz 2P				
Rated current: 3.92/1.96 ALRC: 8.9Rated torque: 2.26 ft.lbLocked rotor torque: 310 %Breakdown torque: 370 %Rated speed: 3480 rpm		Moment of Duty cycle Insulation Service fa Temperate Design	class ictor	: 0.0470 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	.lb	
Heating constan	t					
Cooling constant	t					
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				16 / 36	



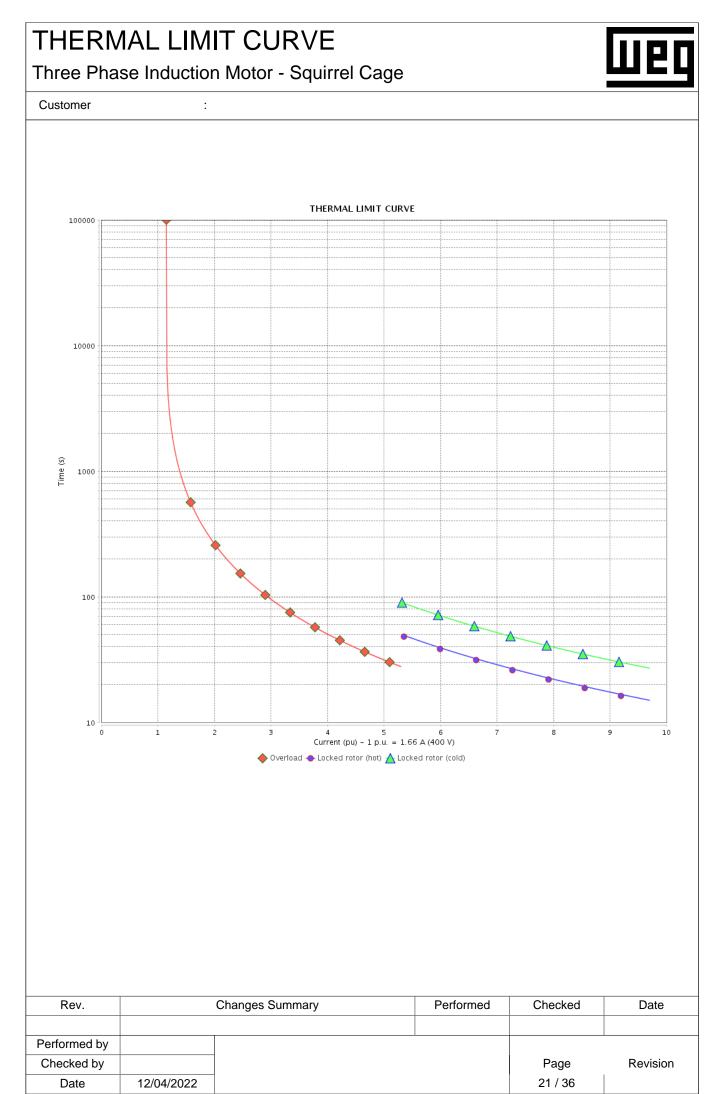
THERMAL L	IMIT CURVE		Шер
Three Phase Indu	uction Motor - Squirrel Cage	)	шсц
Customer	:		
Product line	: NEMA Premium Efficiency Three-	Product code :	12821759
	Phase	Catalog # :	00156ET3ER143TC-W22

Performance	: 3	380 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 9.2Duty cyclerque: 1.81 ft.lbInsulationotor torque: 340 %Service fawn torque: 390 %Temperateed: 2905 rpmDesign		class ictor	: 0.0470 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	:.lb	
Heating constant	t					
Cooling constant	t					
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				18 / 36	



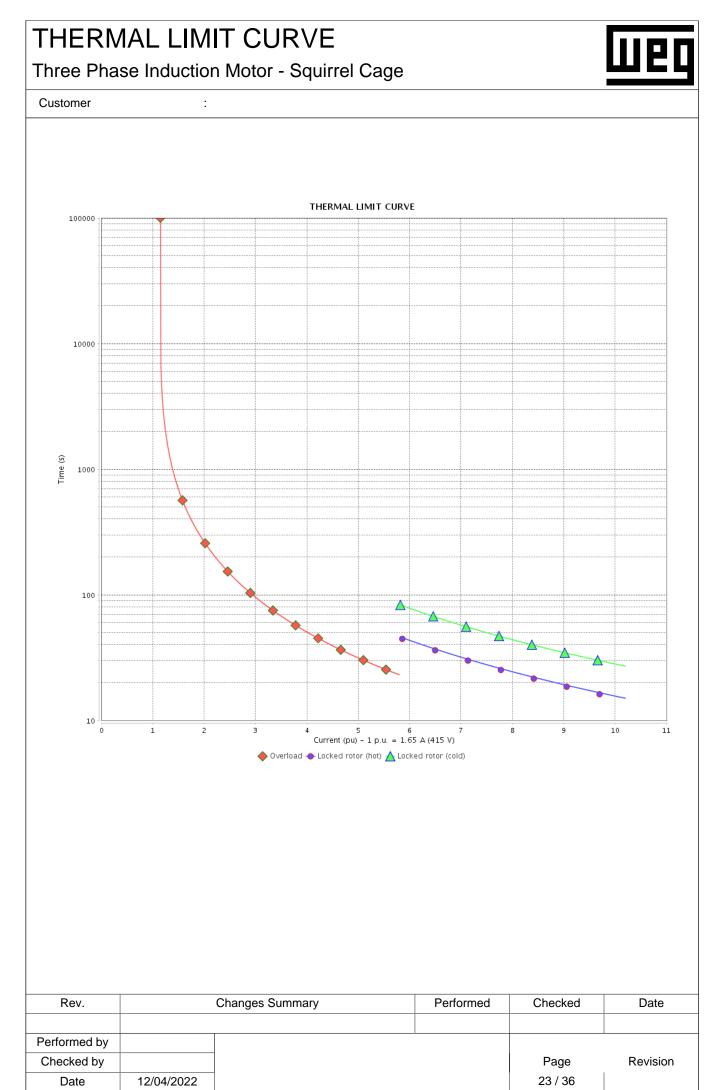
	LIMIT CURVE		Шер
Three Phase Ind	uction Motor - Squirrel Cage	<b>)</b>	
Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821759
	FildSe	Catalog # :	00156ET3ER143TC-W22

Performance	: 4	00 V 50 Hz 2P IE3				
Rated current: 1.66 ALRC: 9.7Rated torque: 1.80 ft.lbLocked rotor torque: 380 %Breakdown torque: 440 %Rated speed: 2915 rpmHeating constant		Moment o Duty cycle Insulation Service fa Temperatu Design	class ctor	: 0.0470 sq.ft. : Cont.(S1) : F : 1.25 : 80 K : B	lb	
Cooling constant	t					
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				20 / 36	2.24



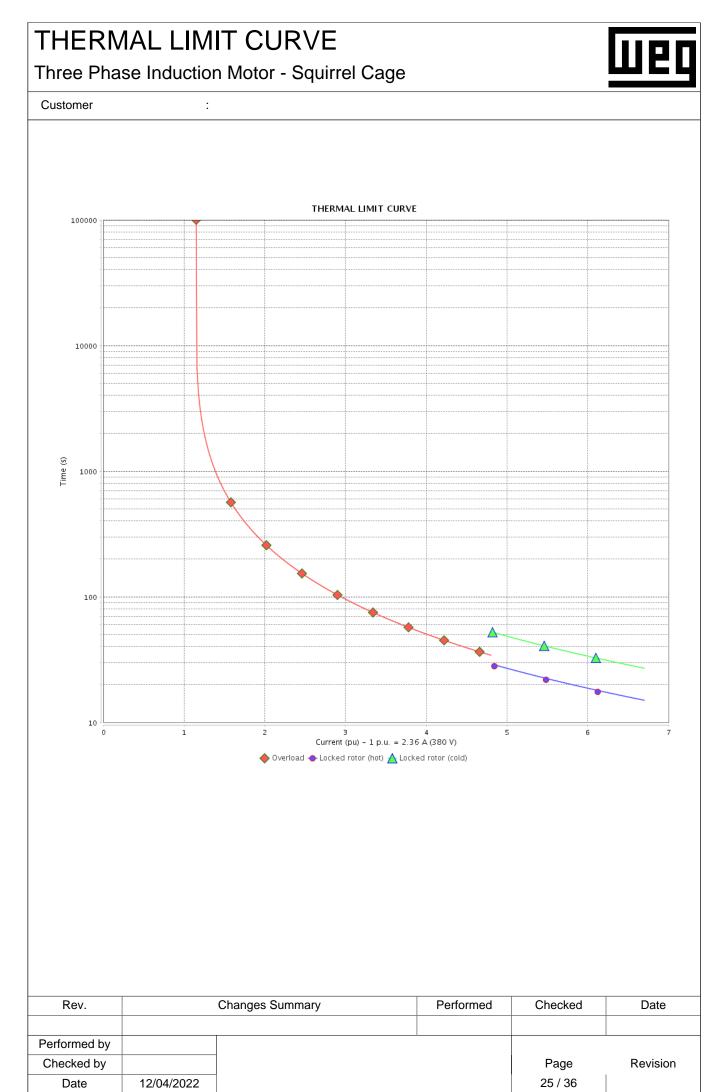
THERMAL LI	MIT CURVE		Шер
Three Phase Induc	tion Motor - Squirrel Cage	•	шсц
Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821759
		Catalog # :	00156ET3ER143TC-W22

Performance		: 415 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed		: 1.65 A : 10.2 : 1.80 ft.lb : 420 % : 480 % : 2920 rpm	Moment Duty cyc Insulation Service f Tempera Design	n class actor	: 0.0470 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	.lb
Heating constant						
Rev.		Changes Summa	ry	Performed	Checked	Date
Performed by Checked by					Page	Revision
Date	12/04/2022	sive property of WEG S/	A Reprinting is not a	llowed without written	22 / 36	



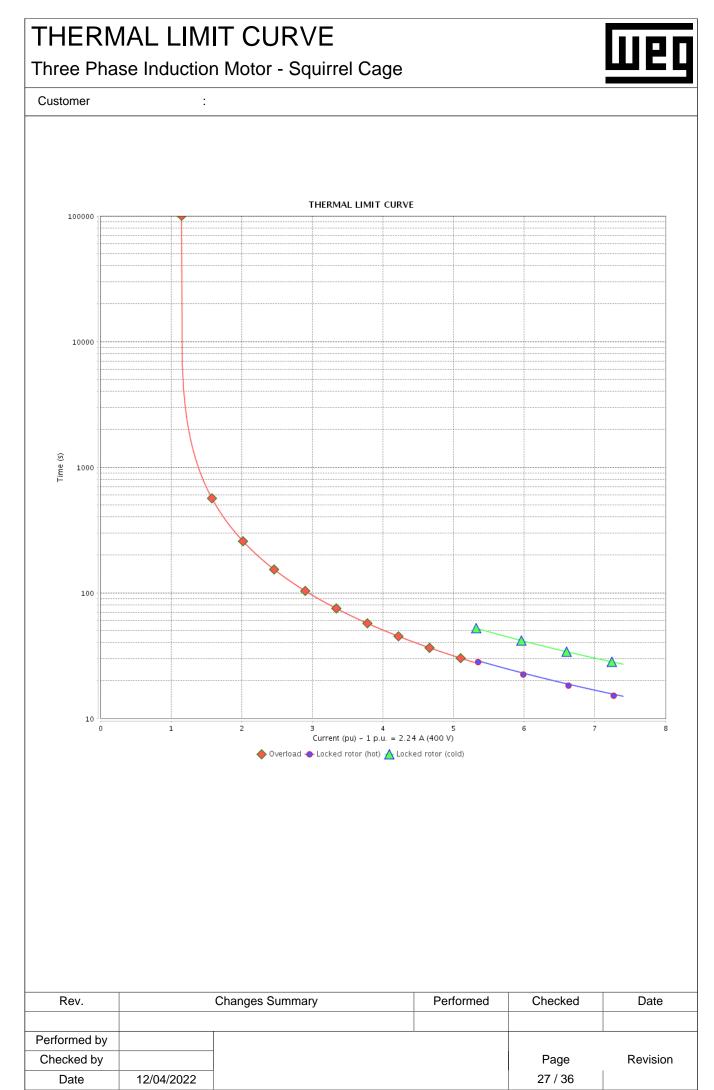
THERMAL L	IMIT CURVE		Шер
Three Phase Induc	ction Motor - Squirrel Cage	)	шсч
Customer	:		
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821759
	Thuộc thuộc thế thuộc thế thuộc thế thuộc thế	Catalog # :	00156ET3ER143TC-W22

Performance		: 380 V 50 Hz 2P IE2				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	que	: 2.36 A : 6.7 : 2.78 ft.lb : 220 % : 260 % : 2835 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0470 sq.ft : Cont.(S1) : F : 1.25 : 80 K : B	.lb
Heating constan						
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022	2			24 / 36	
This do	ocument is exclu	sive property of WEG S/A.	Reprinting is not al	lowed without written	authorization of WE	ËG S/A.



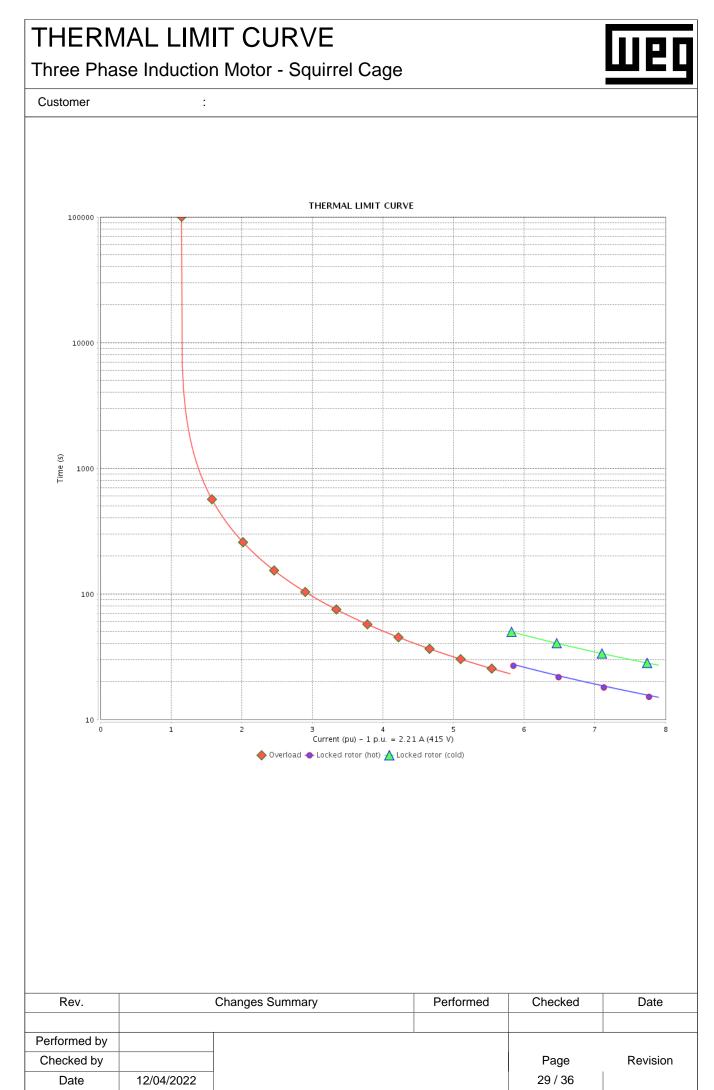
THERMAL LIMIT CURVE					
Three Phase Induc	tion Motor - Squirrel Cage	9	шсц		
Customer	:				
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821759		
		Catalog # :	00156ET3ER143TC-W22		

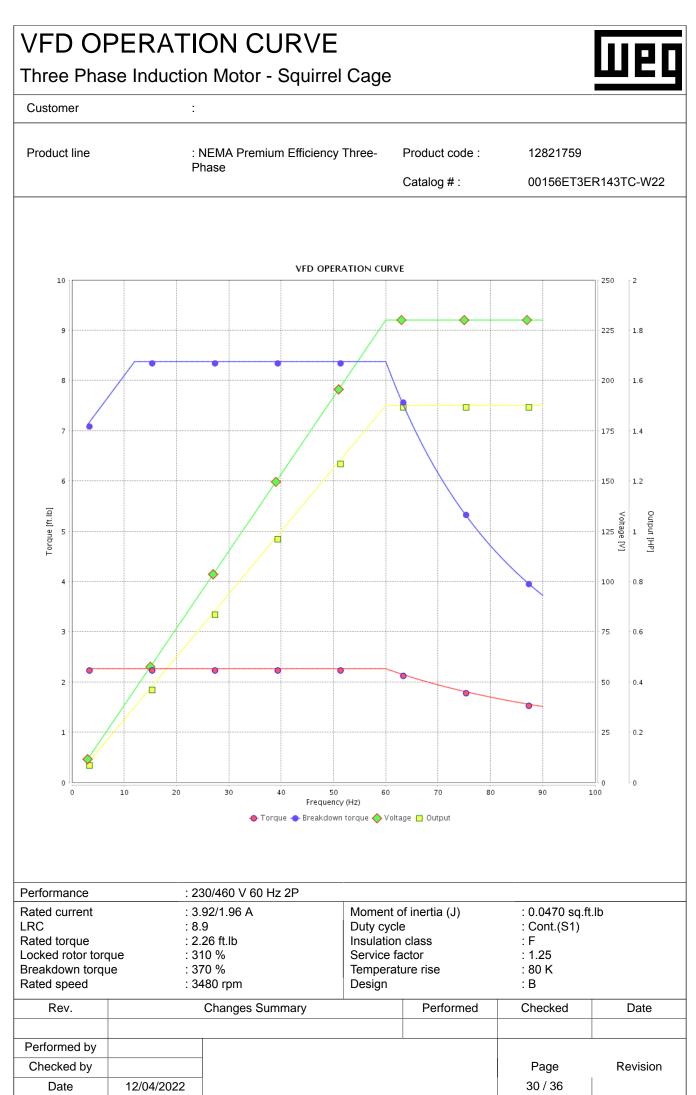
Performance		: 400 V 50 Hz 2P IE2					
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	and	: 2.24 A : 7.4 : 2.75 ft.lb : 260 % : 290 % : 2860 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0470 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Heating constant							
Rev.	Rev. Changes Summary		J.	Performed	Checked	Date	
Performed by							
Checked by					Page	Revision	
Date	12/04/2022	2			26 / 36		
This do	cument is exclu	sive property of WEG S/A.	Reprinting is not all	owed without written	authorization of WE	ËG S/A.	

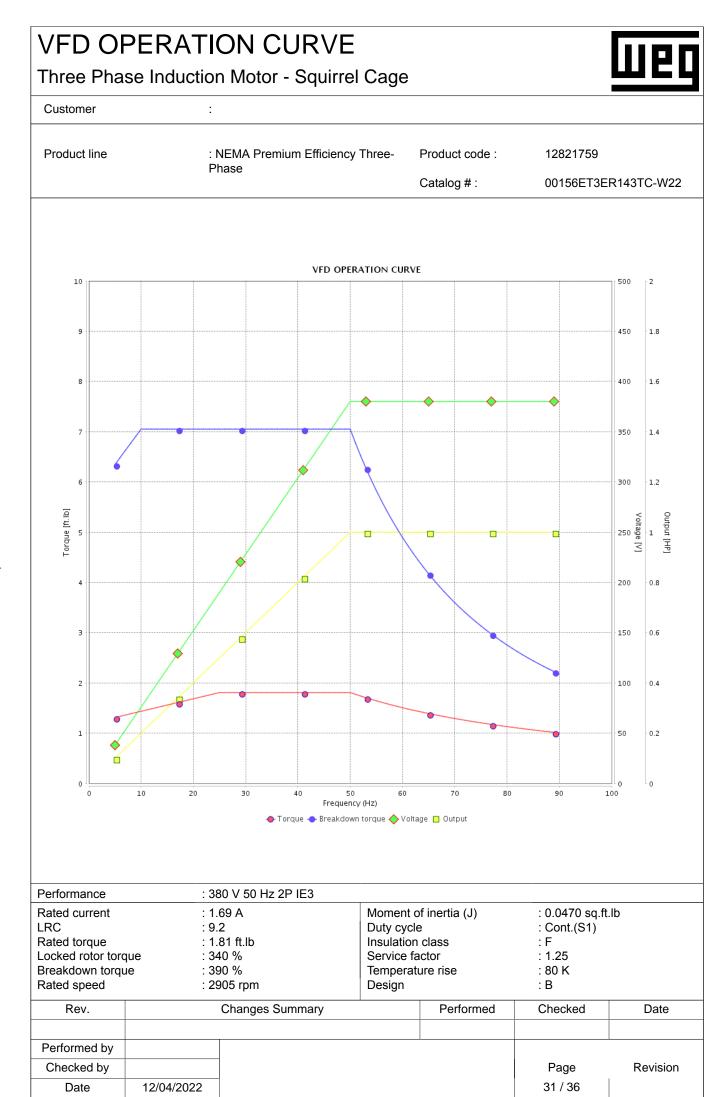


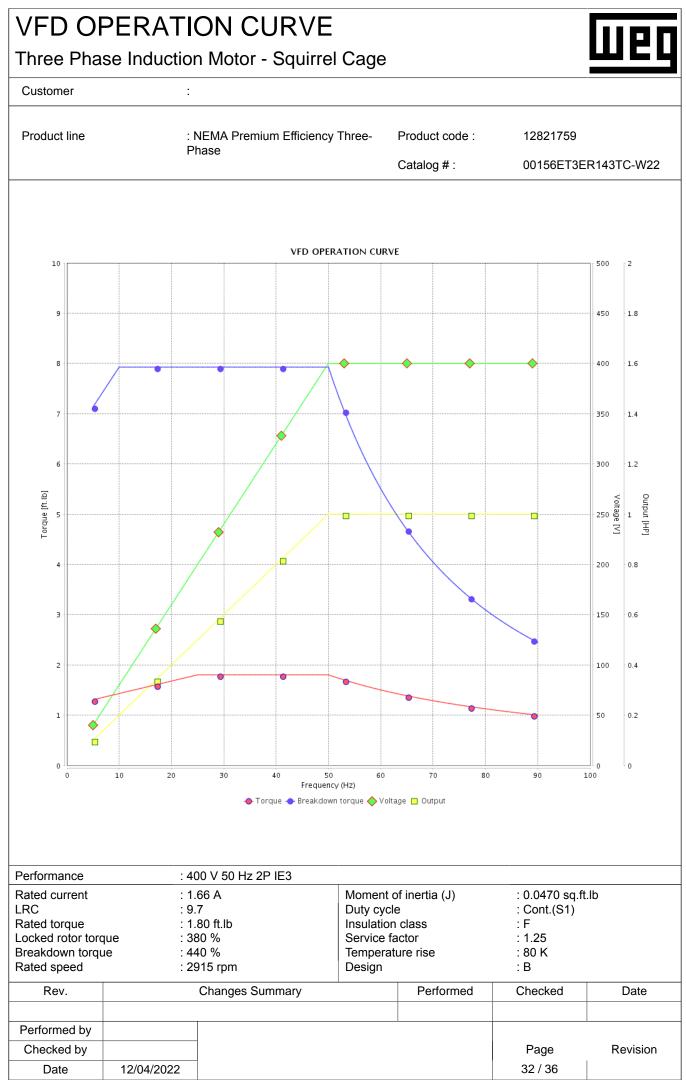
THERMAL LIMIT CURVE Three Phase Induction Motor - Squirrel Cage					
Customer	:				
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	12821759		
	1 Hubb	Catalog # :	00156ET3ER143TC-W22		

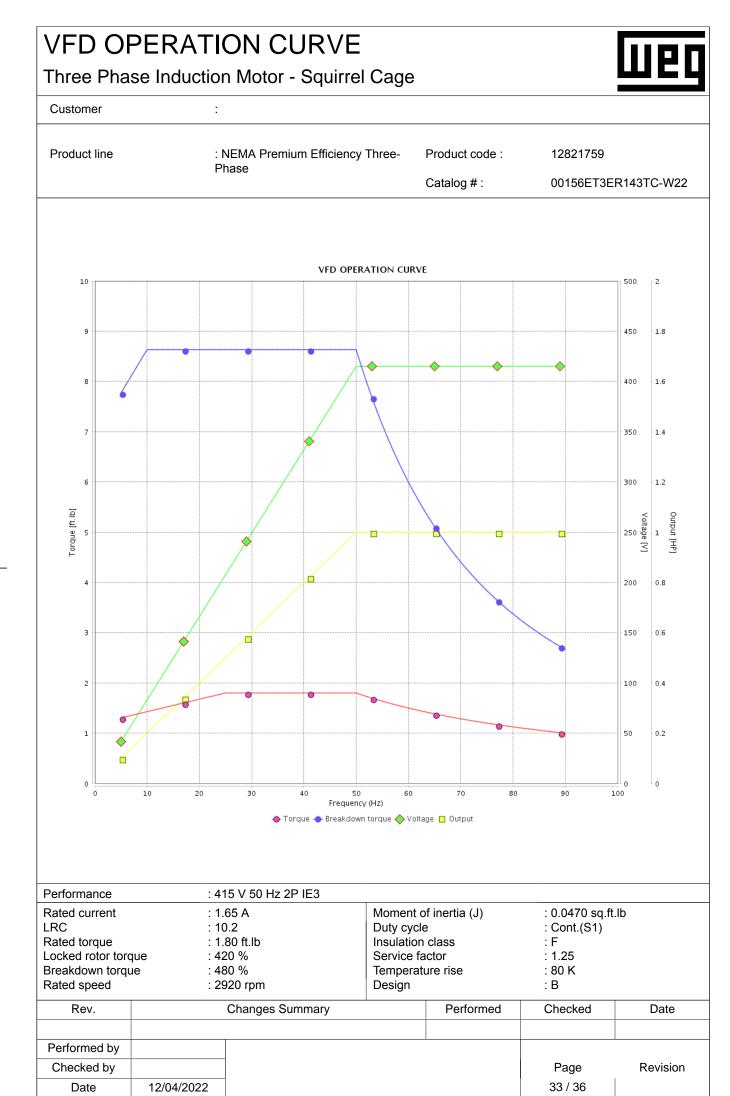
Performance		: 415 V 50 Hz 2P IE2				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	que	: 2.21 A : 7.9 : 2.74 ft.lb : 280 % : 310 % : 2870 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0470 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Heating constant	t					
Cooling constant	t					
Rev.	Changes Summary			Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022	2			28 / 36	
This do	cument is exclusion	sive property of WEG S/A. Rep	printing is not all	owed without written	authorization of WE	G S/A.

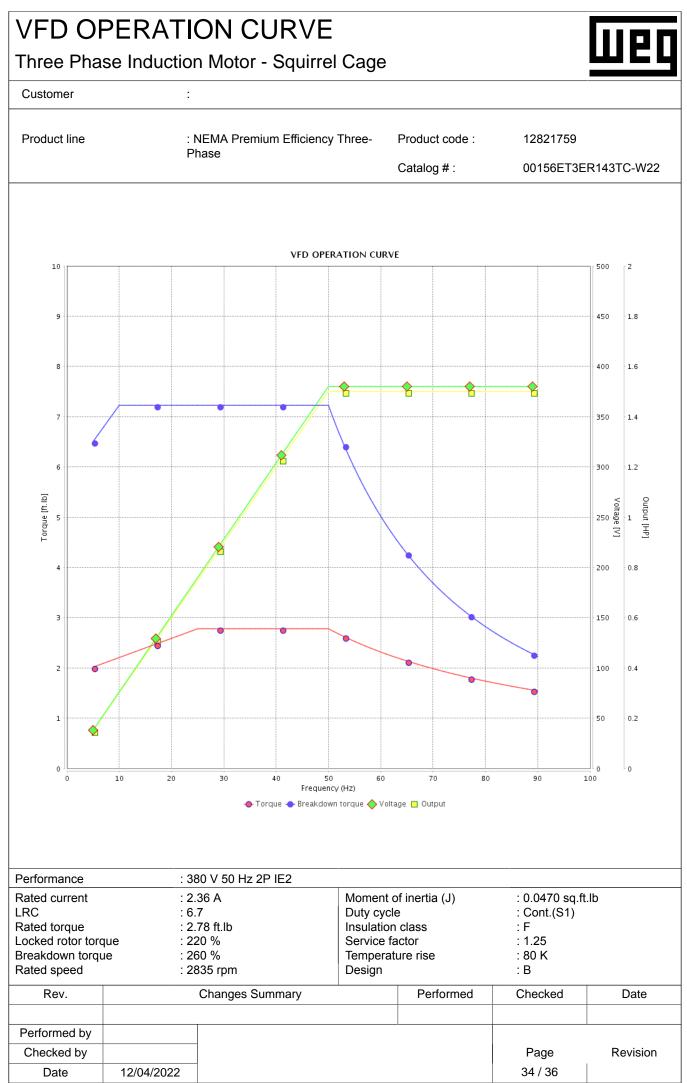


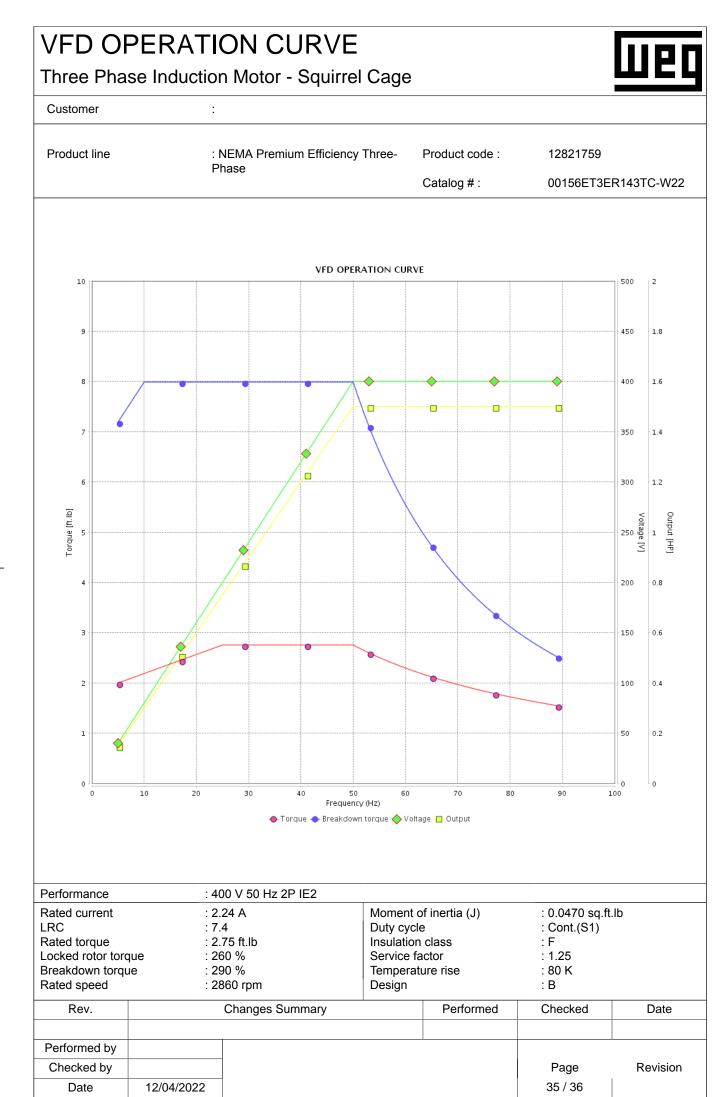


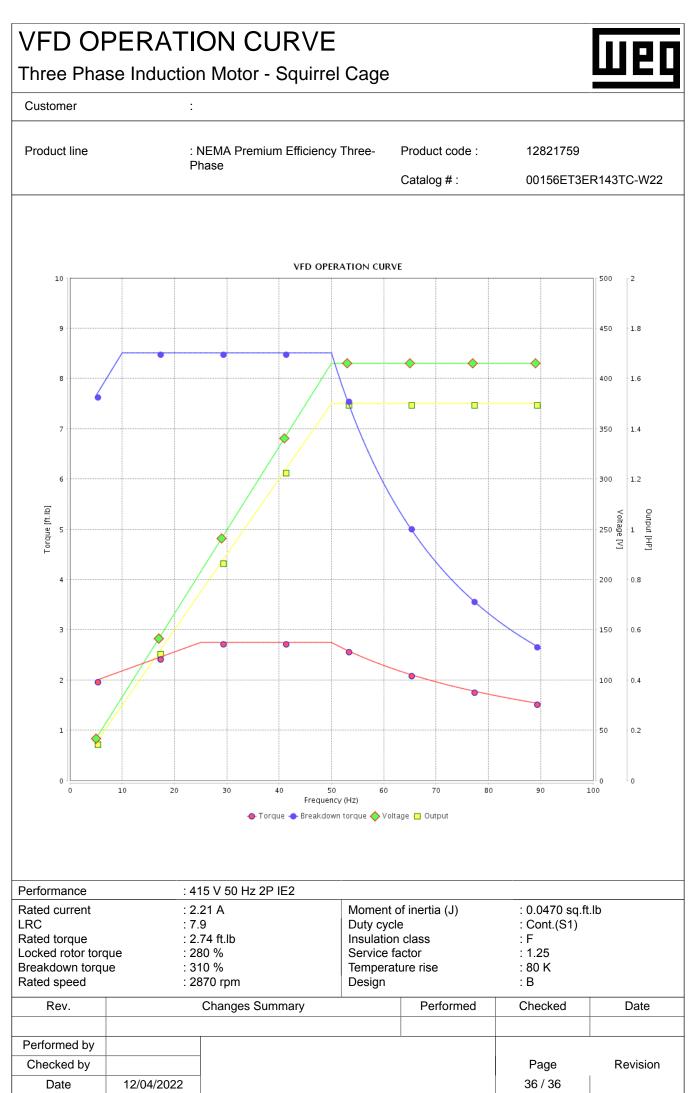




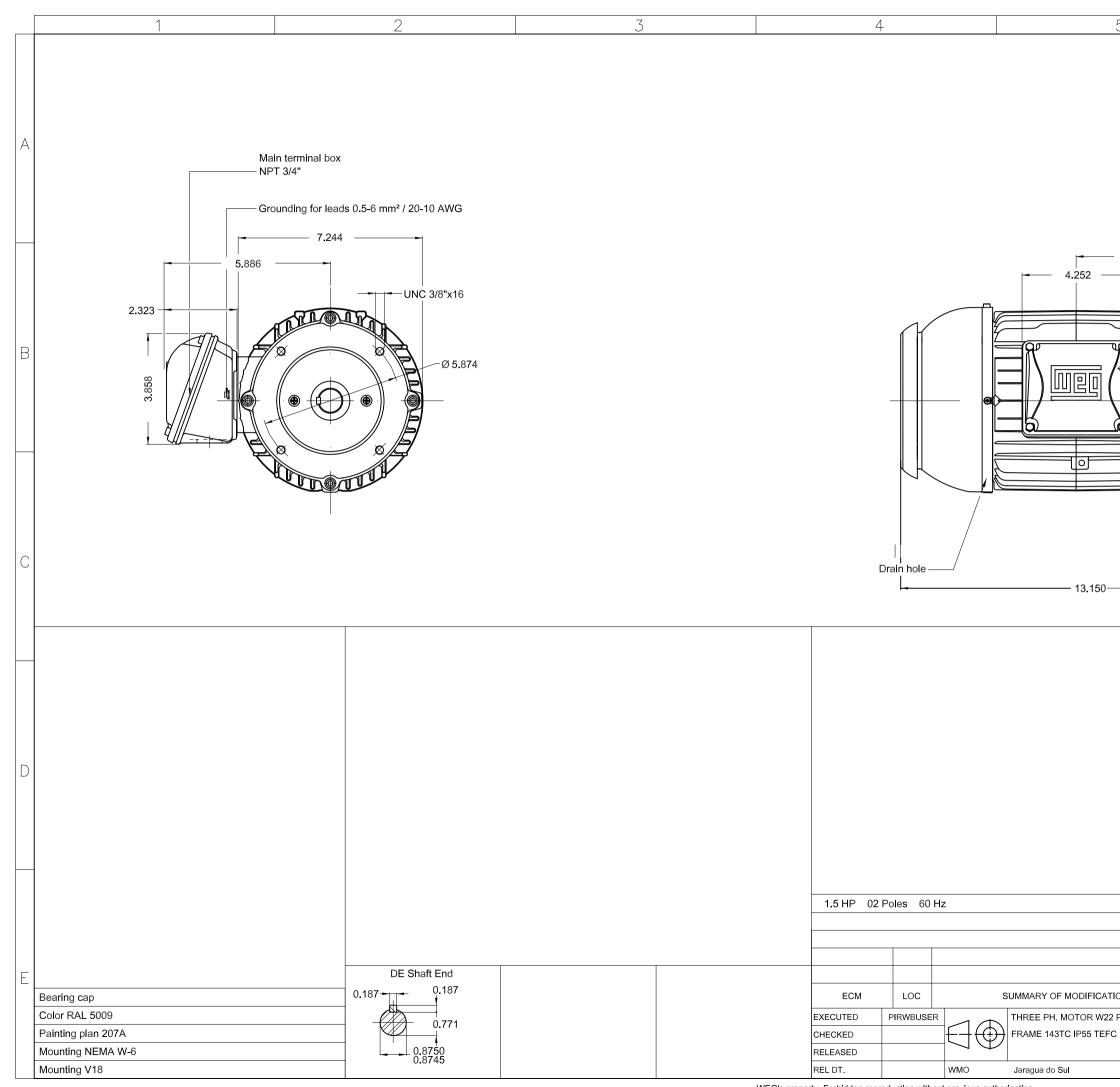








This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.



WEG's property. Forbidden reproduction without previous authorization.

5			6		
4.252	0.157	1.575	0 6.496		
					Dimensions in inches
				A	
	EXECUTED	CHECKED	RELEASED	DATE VE	R
PREM. EFF.		PREVI	EW	Weo	A3
		WDD		ШЕО	
Product	Engineering	SHEET	1 / 1		XME

