# DATA SHEET

Three Phase Induction Motor - Squirrel Cage

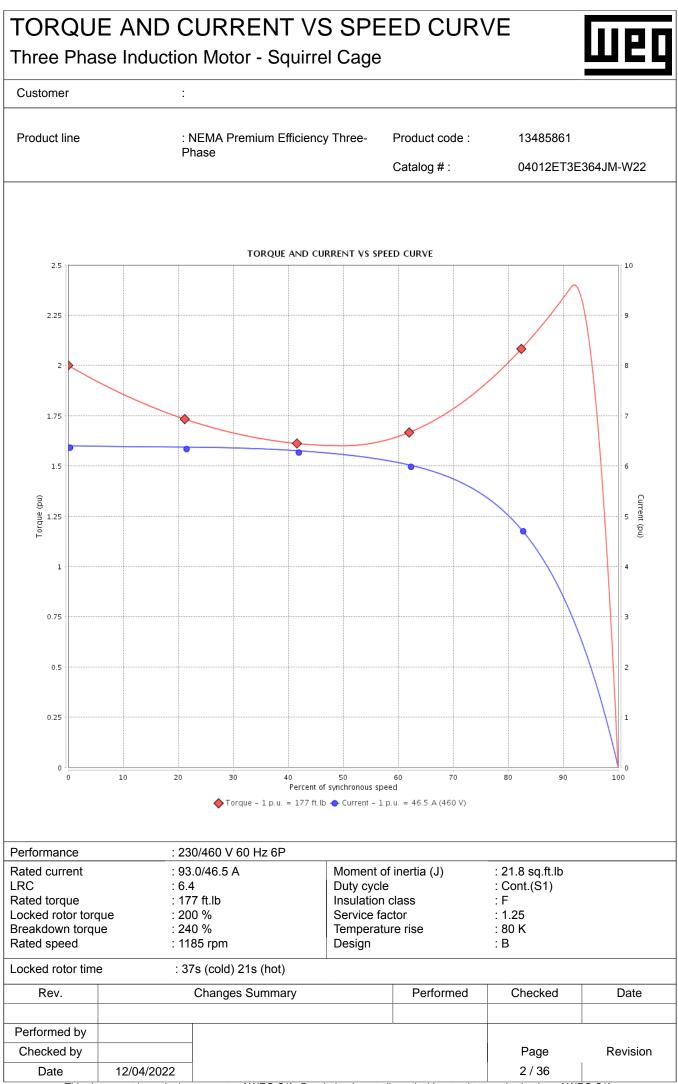
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#### Customer

Product line : NEMA Premium Efficiency Three Phase		hree-	Product code : 13485861						
						Catalog # :	04	012ET3E364	JM-W22
Frame Insulation class Duty cycle Ambient temper Altitude Protection degre Design		: 364/5JM : F : Cont.(S1) : -20°C to + : 1000 m.a. : IP55 : B			Mounti Rotatio Starting Approx		: F : E : C : S	C411 - TEFC F-1 Both (CW and Direct On Line 015 lb 21.8 sq.ft.lb	,
Output [HP]		40	30	1	30	30	40	40	40
Poles		6	6		6	6	6	6	6
Frequency [Hz]		60	50		50	50	50	50	50
Rated voltage [V]		230/460	380		400	415	380	400	415
Rated current [A]		93.0/46.5	42.0		40.2	39.6	56.5	53.9	52.2
L. R. Amperes [A]		595/298	269		289	305	277	296	313
LRC [A]		6.4x(Code G)	6.4x(Code G)	7.2x(	(Code H)	7.7x(Code J)	4.9x(Code E)	5.5x(Code F	) 6.0x(Code G)
No load current [A		34.0/17.0	16.8		17.9	18.7	16.8	17.9	18.7
Rated speed [RPI		1185	985		985	990	980	980	985
Slip [%]		1.25	1.50		1.50	1.00	2.00	2.00	1.50
Rated torque [ft.lb		177	160		160	159	214	214	213
Locked rotor torqu		200	210		240	270	160	180	200
Breakdown torque	e [%]	240	250		280	310	190	210	229
Service factor		1.25	1.00		1.00	1.00	1.00	1.00	1.00
Temperature rise		80 K	80 K		80 K	80 K	80 K	80 K	80 K
Locked rotor time		37s (cold) 21s (hot)	32s (cold) 18s (hot)	18	s (cold) s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level <sup>2</sup>		66.0 dB(A)	63.0 dB(A)		0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
	25%	93.1	92.5		92.2	91.6	93.5	93.4	92.9
Efficiency (%)	50%	93.6	92.4		92.3	91.9	93.0	93.0	93.0
	75%	93.6	92.8		93.1	93.0	92.4	93.0	93.0
	100%	94.1	92.5		93.0	93.2	91.7	92.4	93.0
	25%	0.47	0.43		0.41	0.38	0.53	0.50	0.47
Power Factor	50% 75%	0.73 0.82	0.68		0.66	0.63	0.78	0.76	0.73
	100%	0.82	0.80 0.86		0.79 0.85	0.76 0.83	0.85 0.88	0.84	0.82
	100%	1		<u> </u>			0.00	0.07	0.00
Bearing type		<u>Drive end</u> : 6314 C			Founda Max. tra	tion loads	· 1'	221 lb	
Sealing Lubrication inter	val	: Lip Sea : 17000 h	•			mpression		136 lb	
Lubricant amour Lubricant type		: 27 g : Mobi	27 g I Polyrex EM						
Notes USABLE @208V 103A SF 1.10 SFA 113A									
This revision replaces and cancel the previous one, which must be eliminated. These are average values based on tests with sinusoida power supply, subject to the tolerances stipulated in NEI (1) Looking the motor from the shaft end.   (1) Looking the motor from the shaft end. MG-1.   (2) Measured at 1m and with tolerance of +3dB(A). MG-1.   (3) Approximate weight subject to changes after manufacturing process. MG-1.									
Rev.		Changes	Summary			Performe	d Che	ecked	Date
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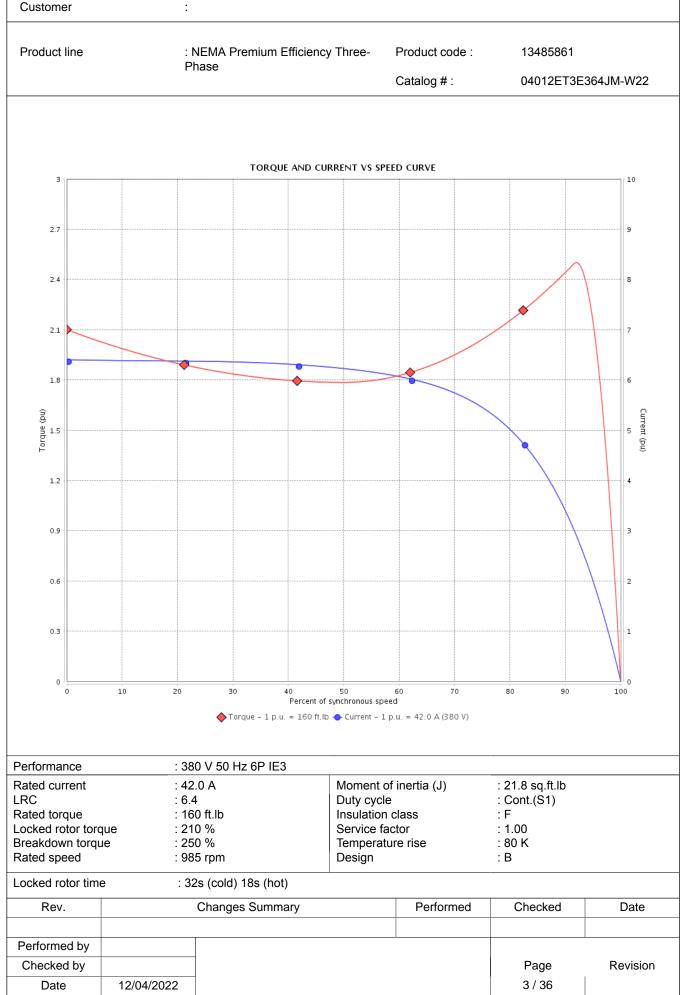
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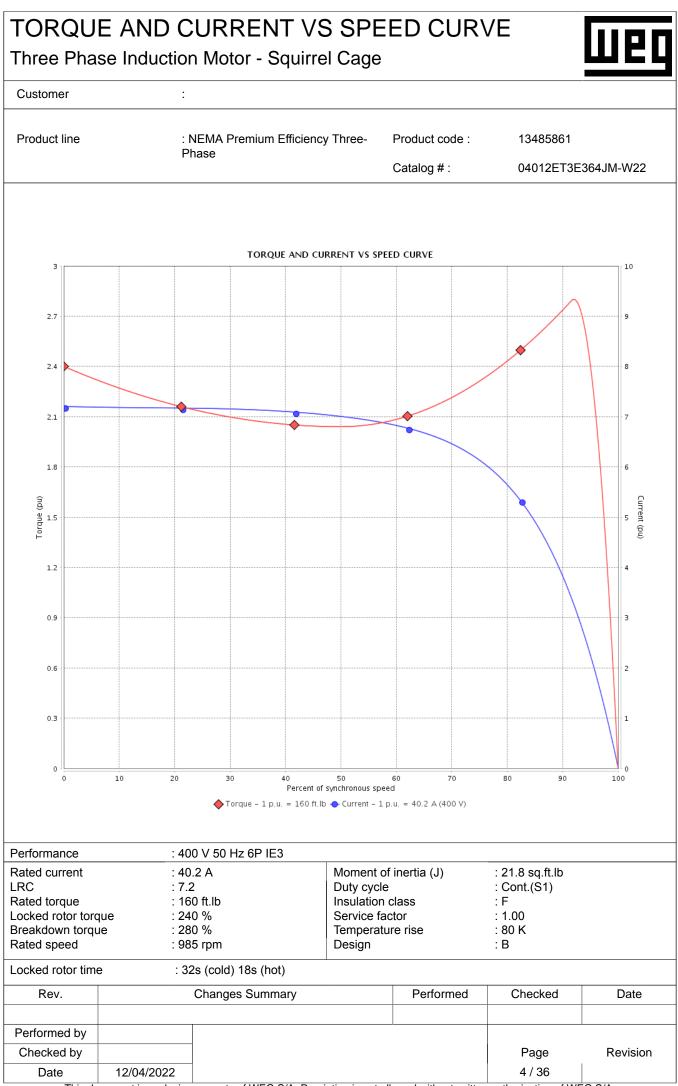
### TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage





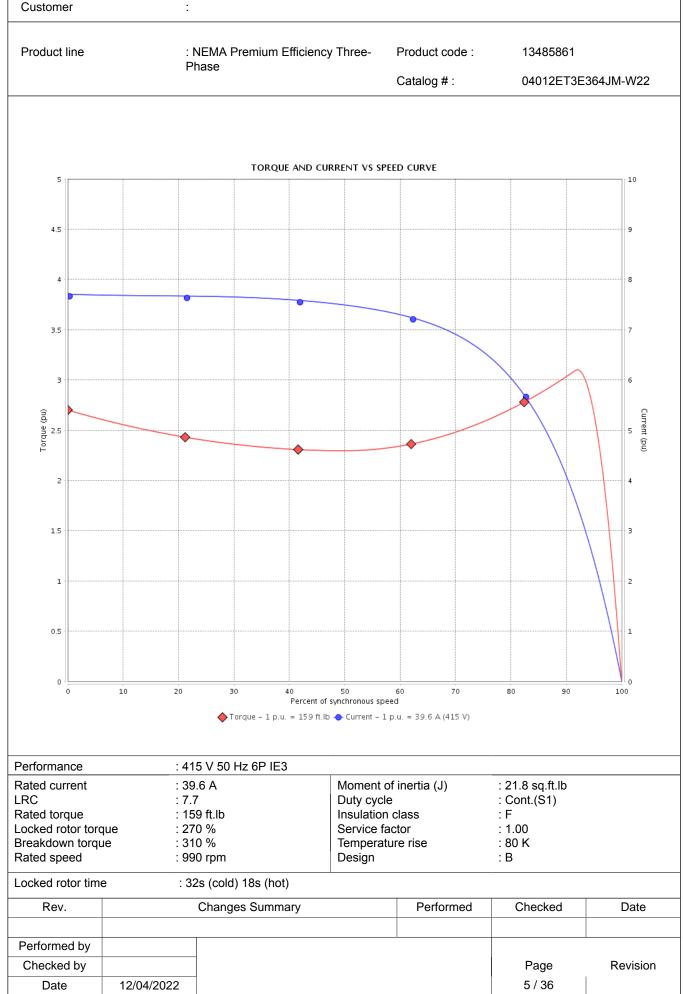
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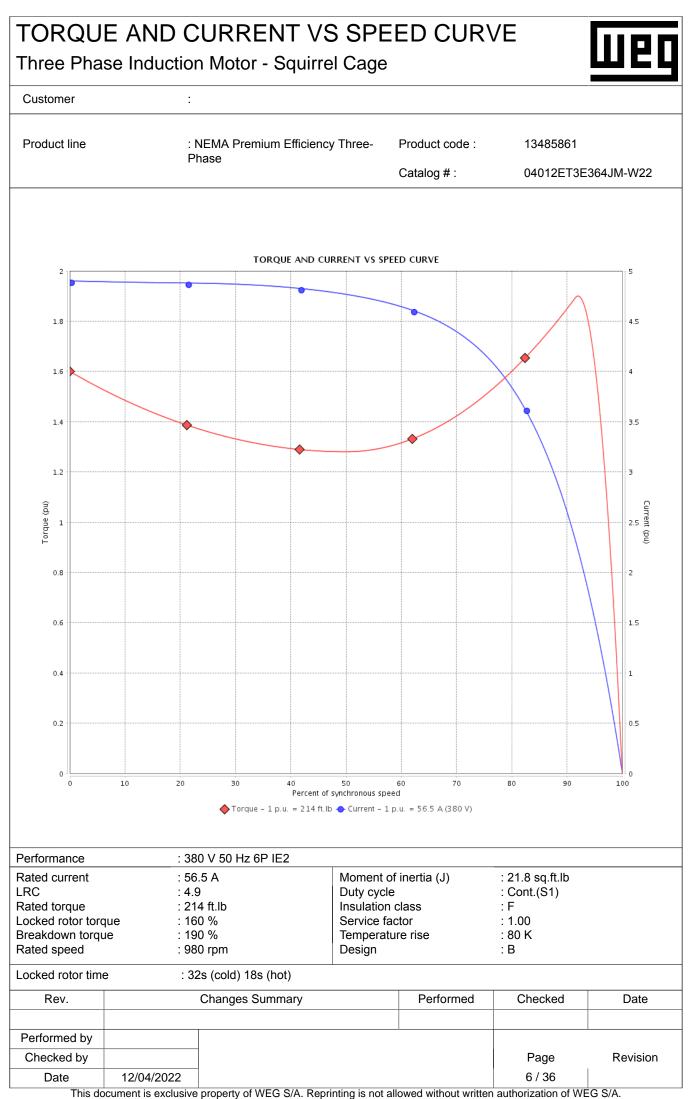
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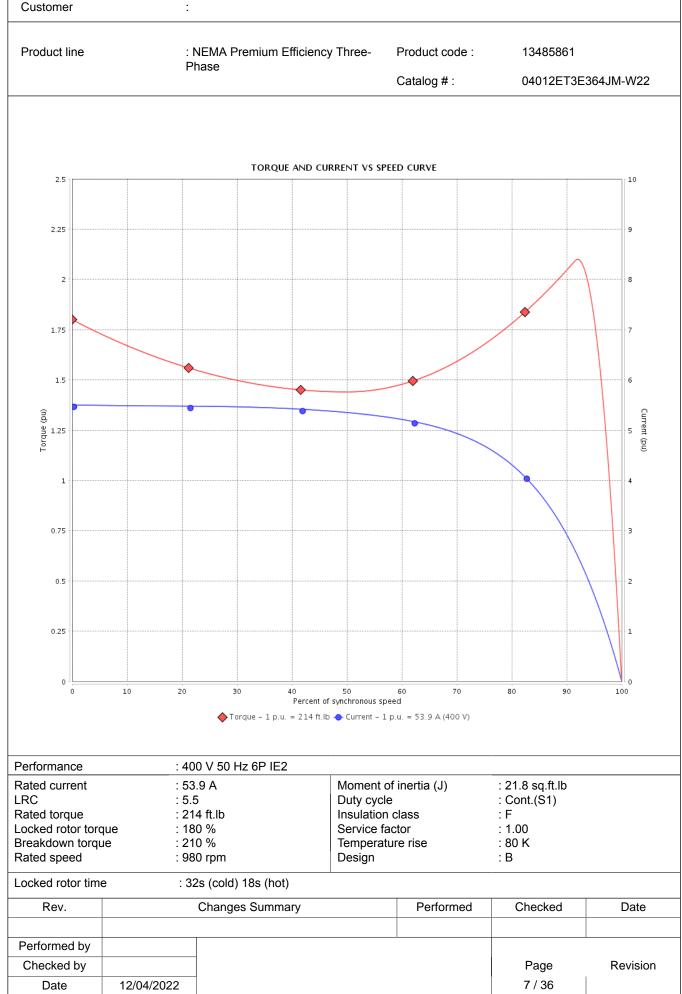


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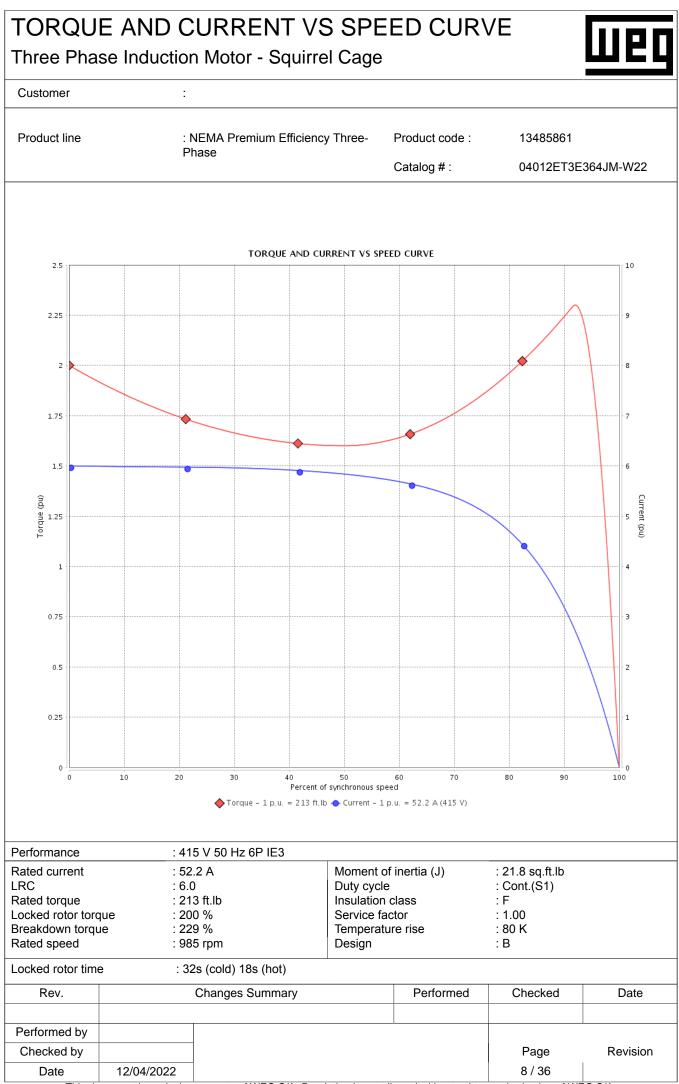
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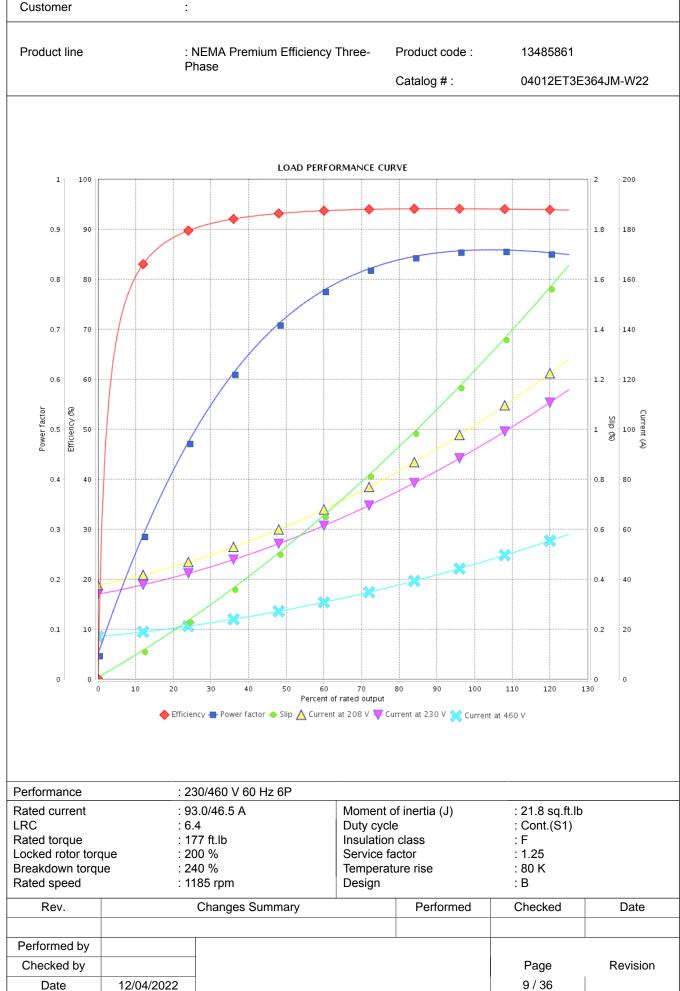
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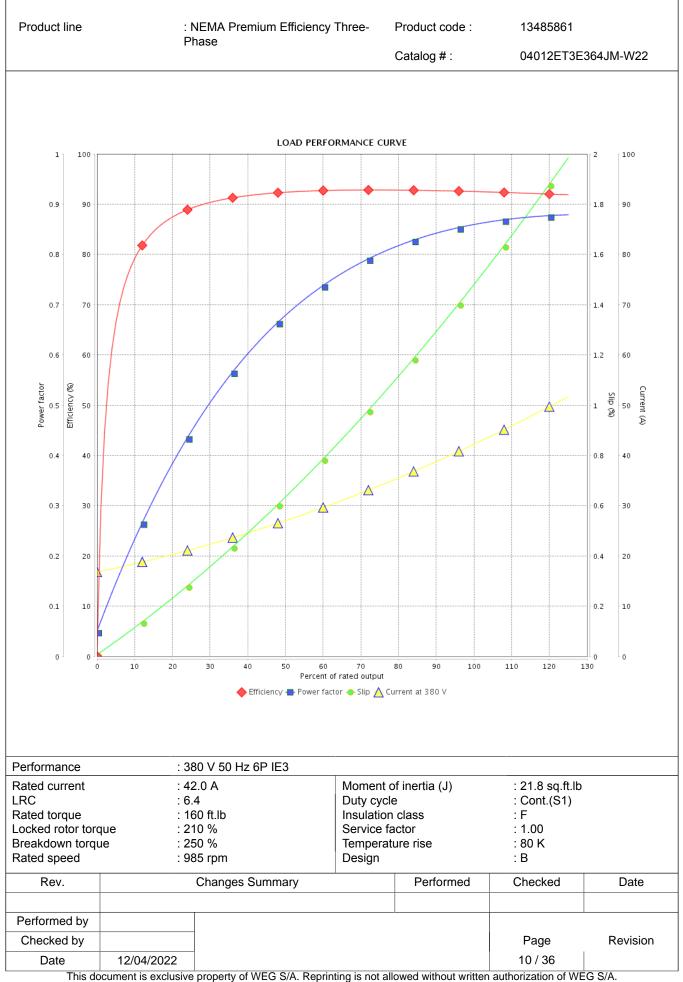
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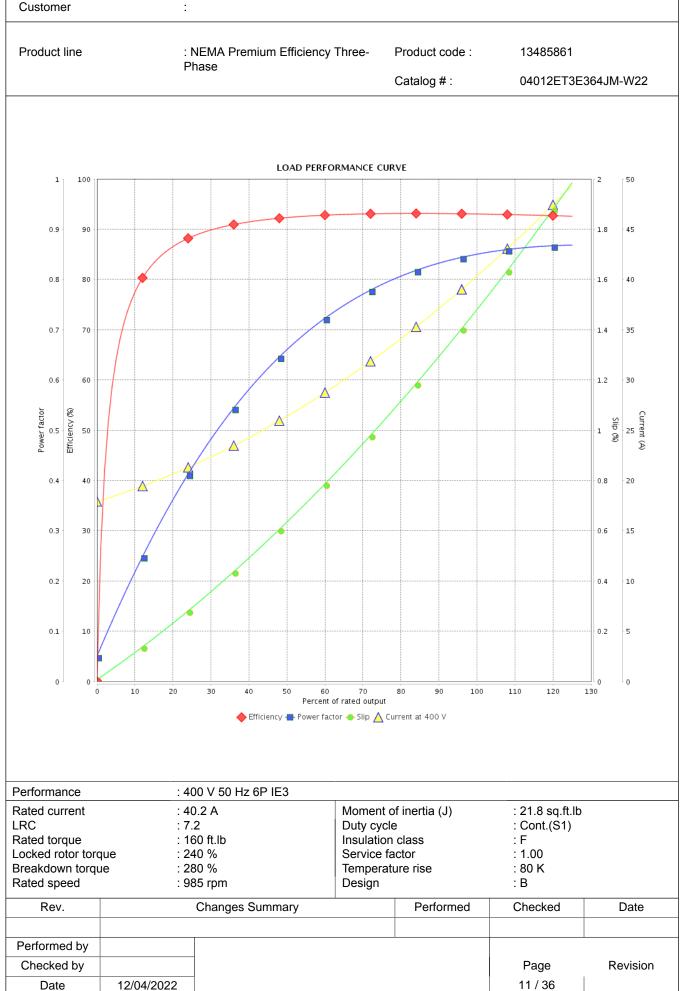


Customer



Three Phase Induction Motor - Squirrel Cage

#### Customer



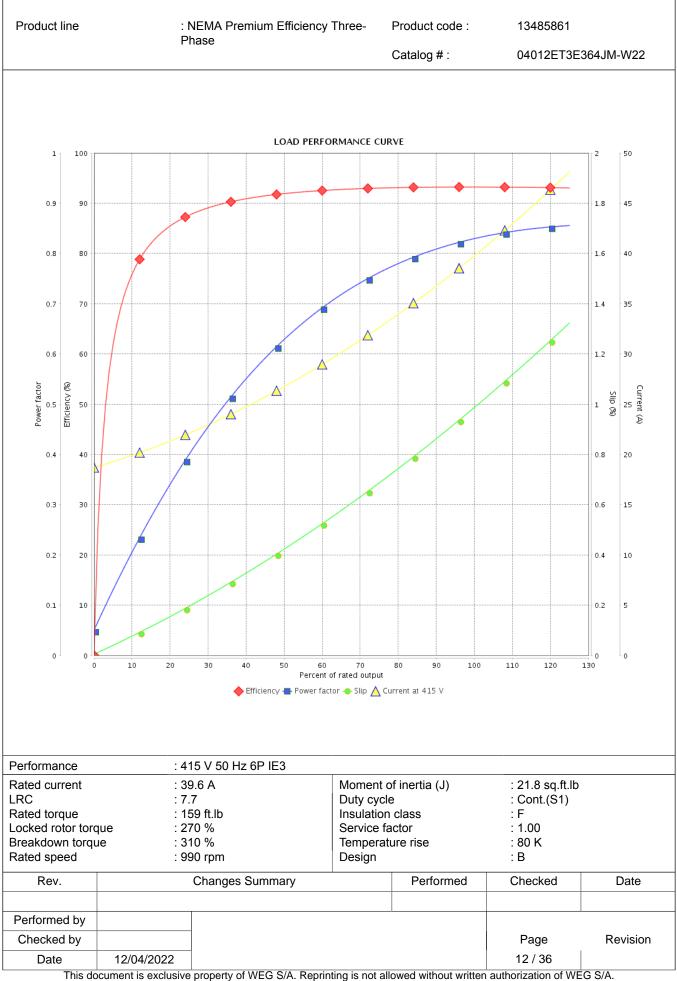
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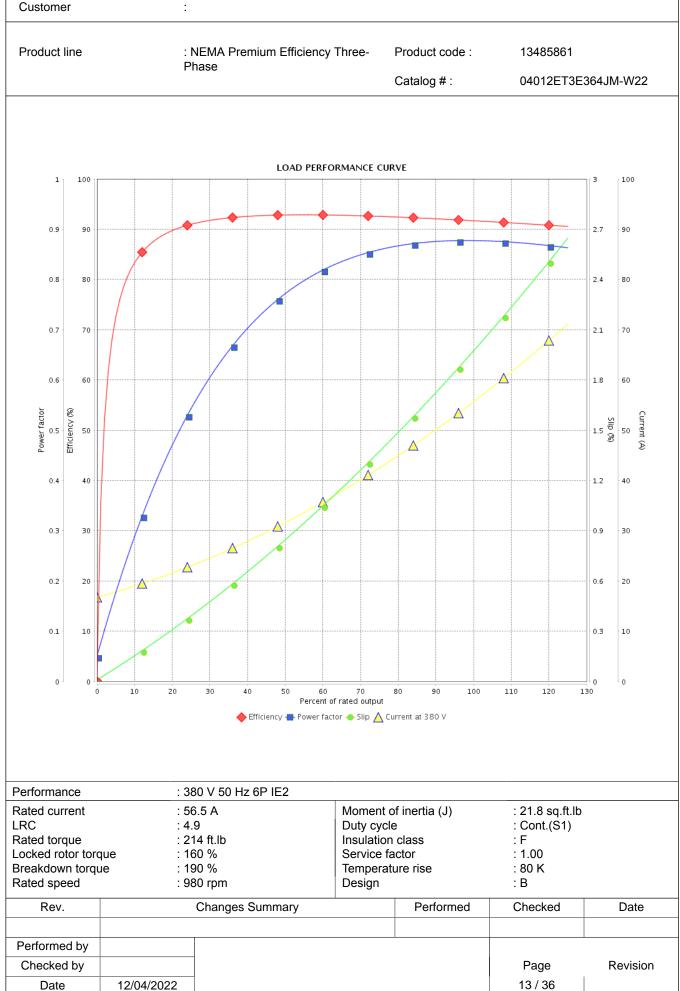


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Three Phase Induction Motor - Squirrel Cage

#### Customer



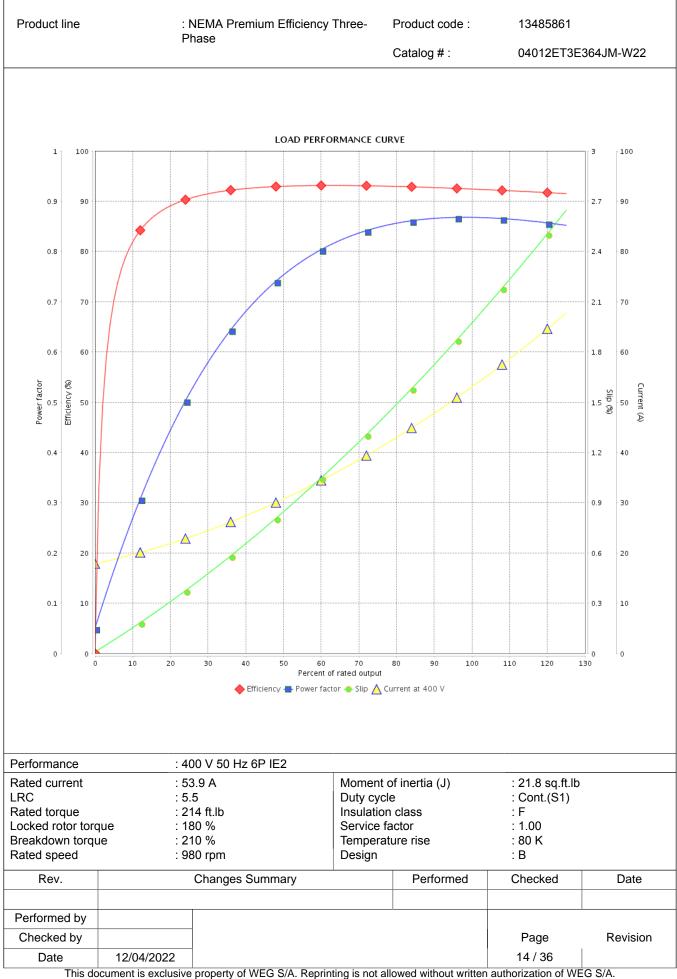
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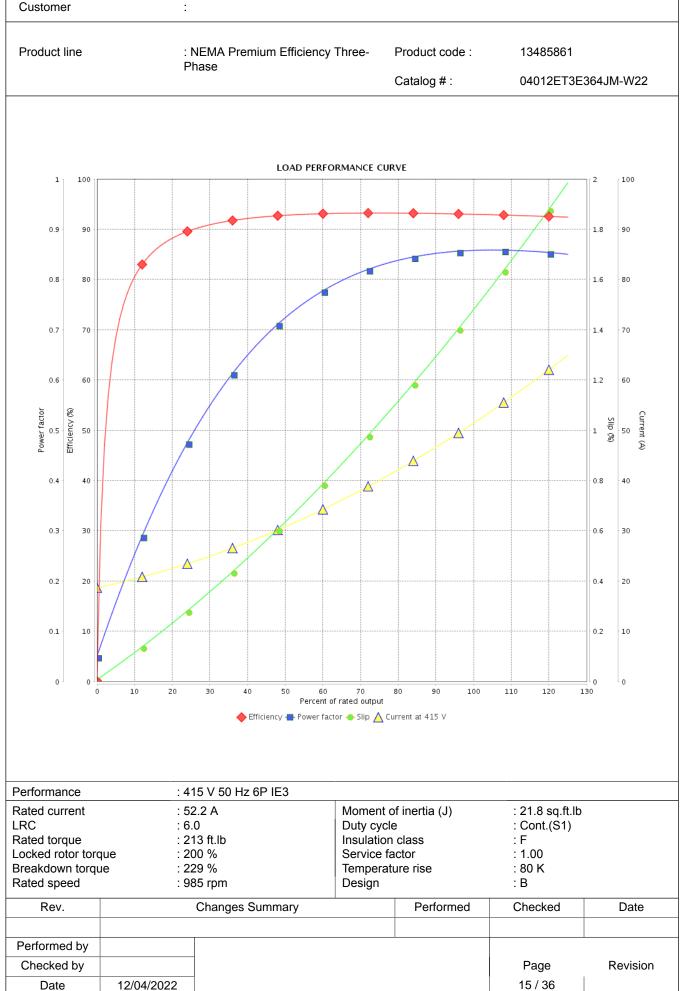


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Three Phase Induction Motor - Squirrel Cage

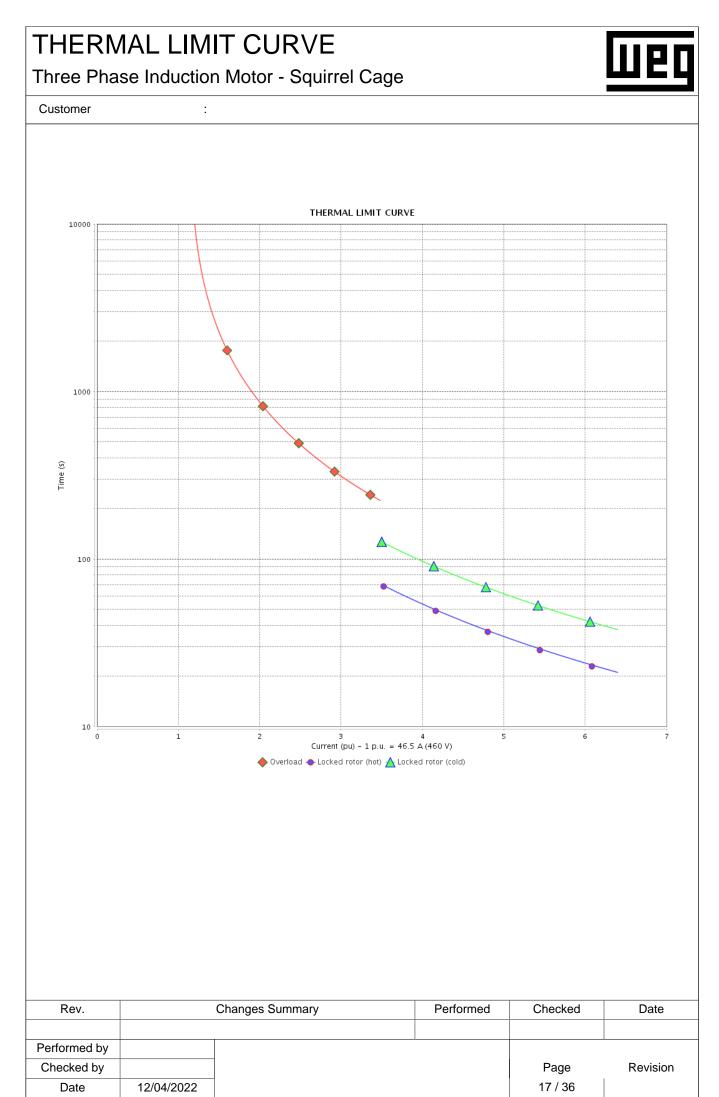
#### Customer



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THERMAL LIMIT CURVE						
Three Phase Indu	ction Motor - Squirrel Cage	)	шсч			
Customer	:					
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	13485861			
		Catalog # :	04012ET3E364JM-W22			

Performance	: 23	230/460 V 60 Hz 6P				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	: 6. : 1 ; 1 ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	3.0/46.5 A 4 77 ft.lb 00 % 40 % 185 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 21.8 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Heating constant	t					
Cooling constant	t					
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Three Phase Ind	uction Motor - Squirrel Cage	;	шеі				
Customer	:						
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	13485861				
		Catalog # :	04012ET3E364JM-W22				

Heating constant
Cooling constant

Performance

Rated current

Rated torque

Rated speed

Locked rotor torque

Breakdown torque

LRC

J					
Cooling constant	t				
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: 380 V 50 Hz 6P IE3

: 42.0 A

: 160 ft.lb

: 210 %

: 250 %

: 985 rpm

: 6.4

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Moment of inertia (J)

Duty cycle

Design

Insulation class

Temperature rise

Service factor

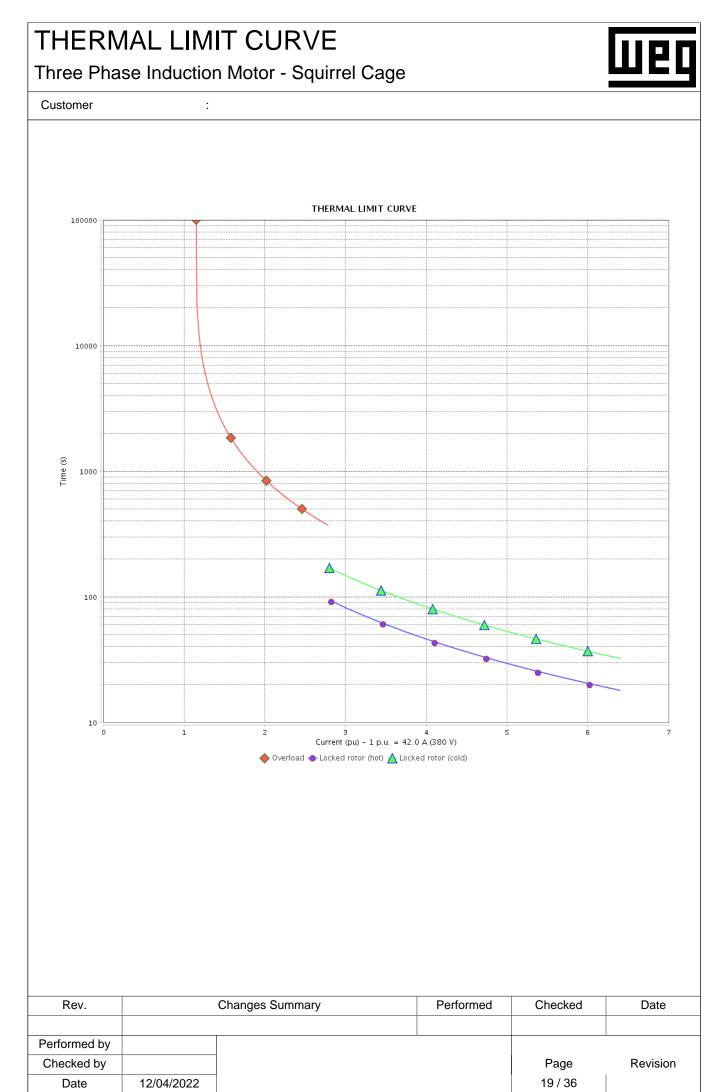
: 21.8 sq.ft.lb : Cont.(S1)

: F

: B

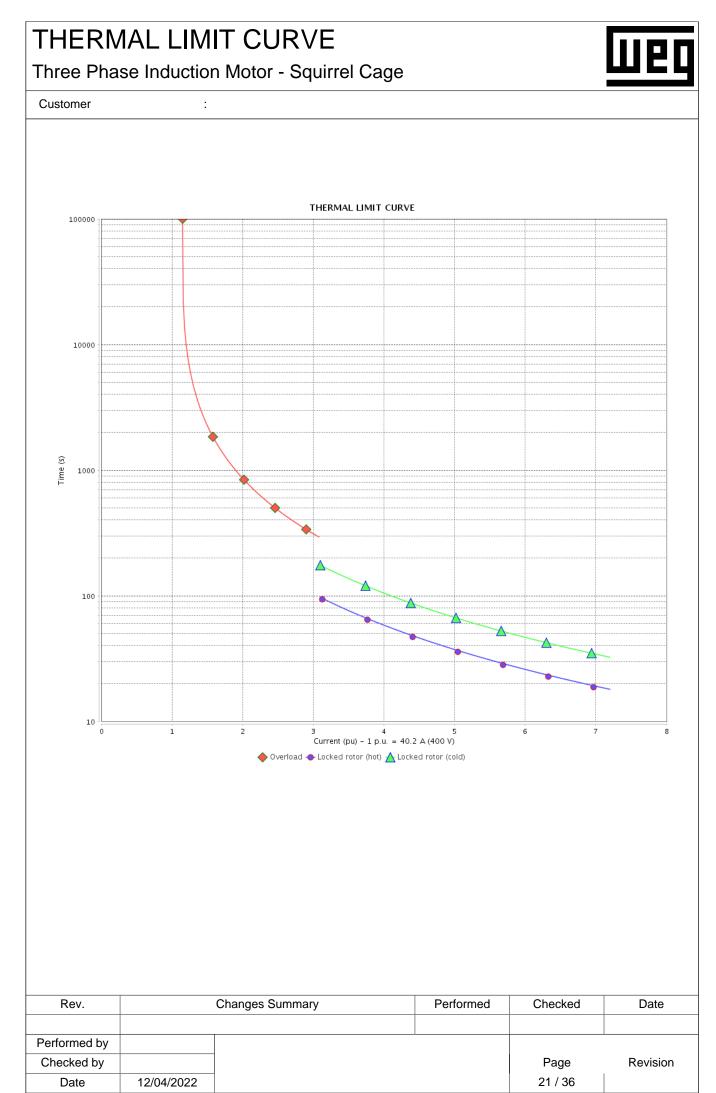
: 1.00

: 80 K



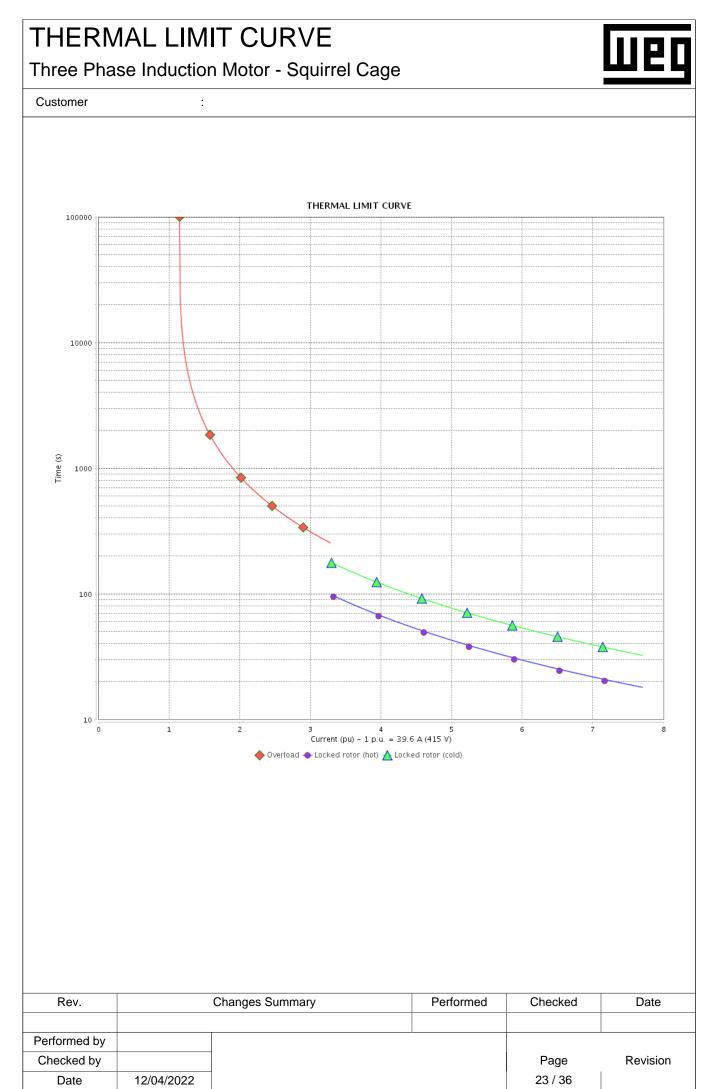
THERMAL LIMIT CURVE						
Three Phase Induc	tion Motor - Squirrel Cage	•	шсч			
Customer	:					
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	13485861			
		Catalog # :	04012ET3E364JM-W22			

Performance	:	400 V 50 Hz 6P IE3				
Rated current LRC Rated torque Locked rotor torc Breakdown torqu Rated speed	lue : ie :	40.2 A 7.2 160 ft.lb 240 % 280 % 985 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 21.8 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Heating constant	t					
Cooling constant	:					
Rev.		Changes Summary		Performed	Checked	Date
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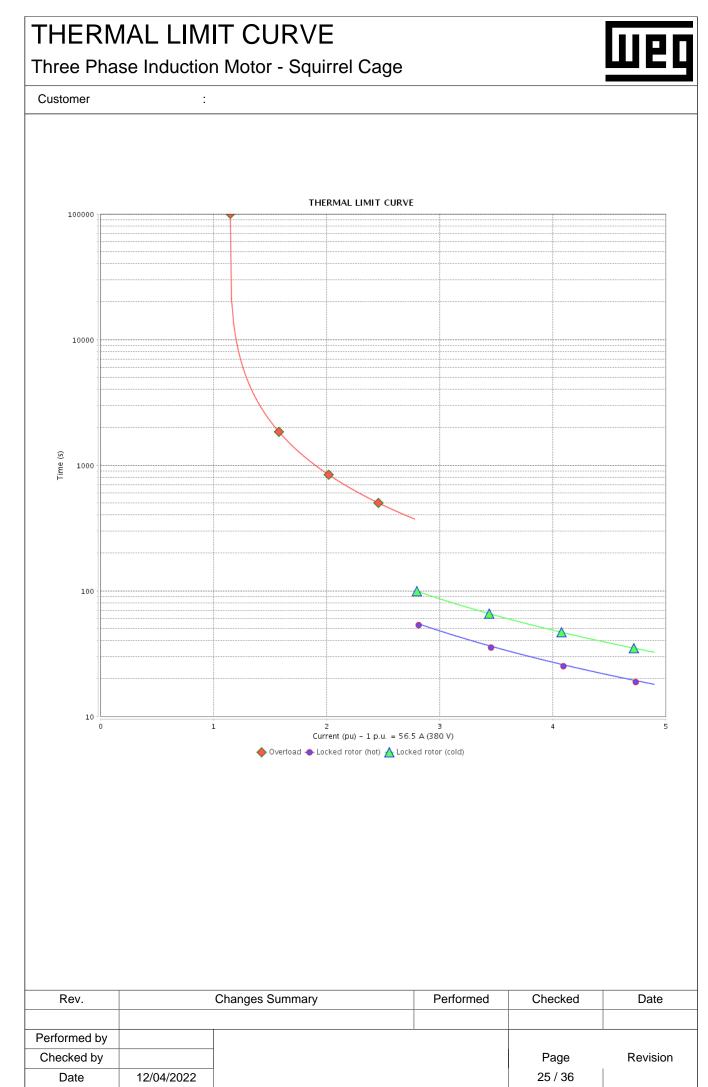
THERMAL LIMIT CURVE						
Three Phase Induction Motor - Squirrel Cage						
Customer	:					
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	13485861			
		Catalog # :	04012ET3E364JM-W22			

Performance	: 4	: 415 V 50 Hz 6P IE3				
Rated current LRC Rated torque Locked rotor toro Breakdown torqu Rated speed	2 que 2 ue 3	9.6 A .7 59 ft.lb 70 % 10 % 90 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 21.8 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Heating constan	t					
Cooling constant	t					
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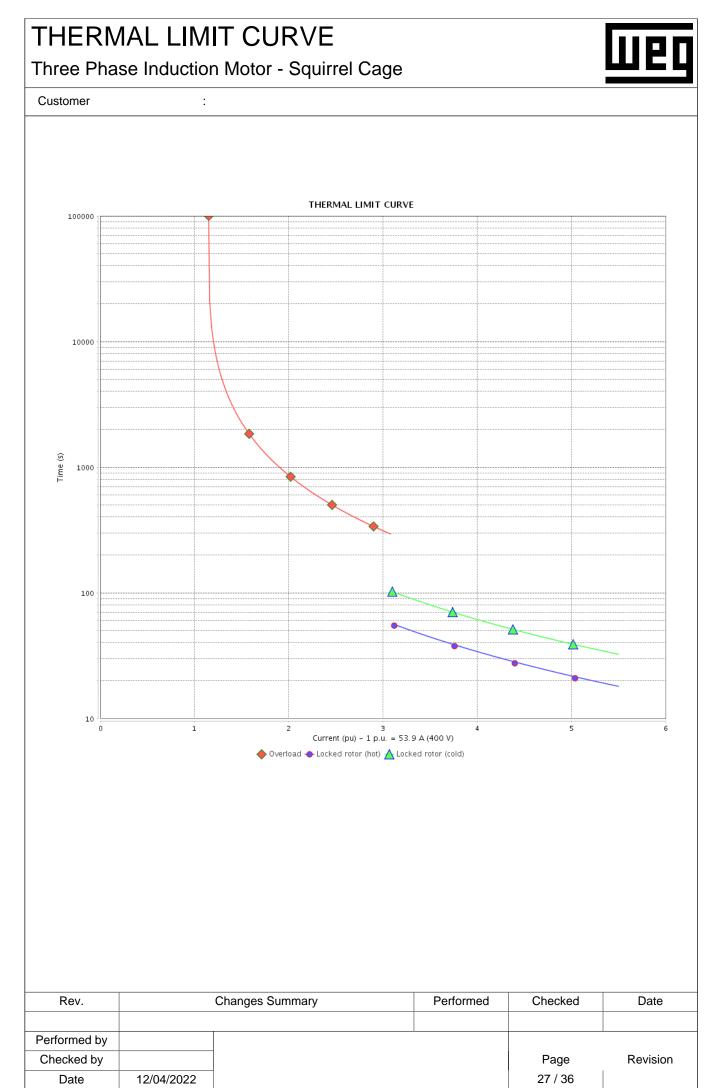
THERMAL LIMIT CURVE						
Three Phase Indu	ction Motor - Squirrel Cage	;	шед			
Customer	:					
Product line	: NEMA Premium Efficiency Three-	Product code :	13485861			
	Phase	Catalog # :	04012ET3E364JM-W22			

Performance	: 38	30 V 50 Hz 6P IE2				
Rated current	: 56	6.5 A	Moment o	f inertia (J)	: 21.8 sq.ft.lb	
LRC	: 4.	9	Duty cycle	;	: Cont.(S1)	
Rated torque	: 21	14 ft.lb	Insulation		: F `´´	
Locked rotor tore	que : 16	60 %	Service fa	ctor	: 1.00	
Breakdown torqu		90 %	Temperature rise		: 80 K	
Rated speed	: 98	30 rpm	Design		: B	
Heating constant						
Cooling constant						
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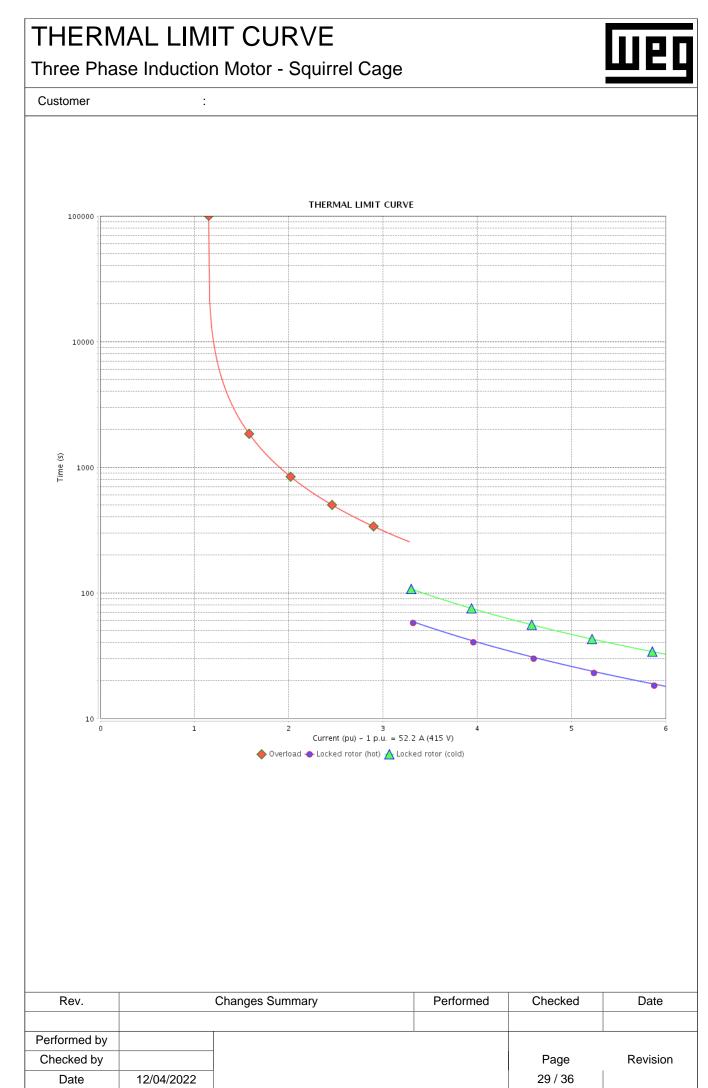
THERMAL	Induction Motor - Squirrel Cage Image: Comparison of the second seco		
Three Phase In	duction Motor - Squirrel Cage	;	шец
Customer	:		
Product line		Product code :	13485861
		Catalog # :	04012ET3E364JM-W22

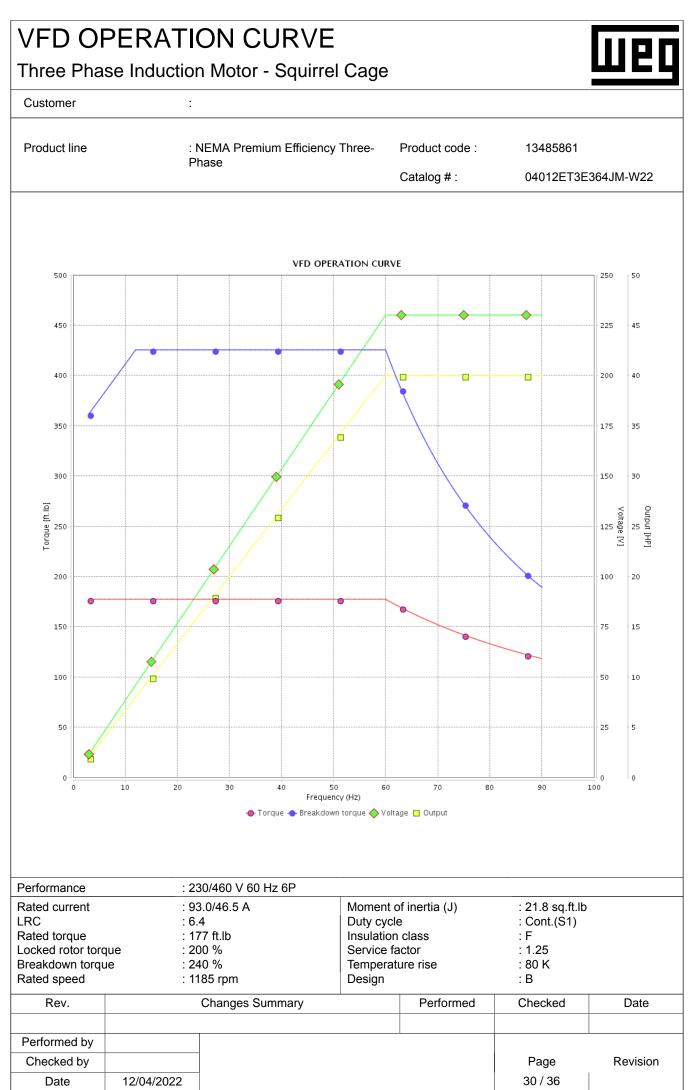
Performance	:	: 400 V 50 Hz 6P IE2				
		class ctor	: 21.8 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B			
Heating constant	t					
Cooling constant	:					
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Checked by					Page	Revision
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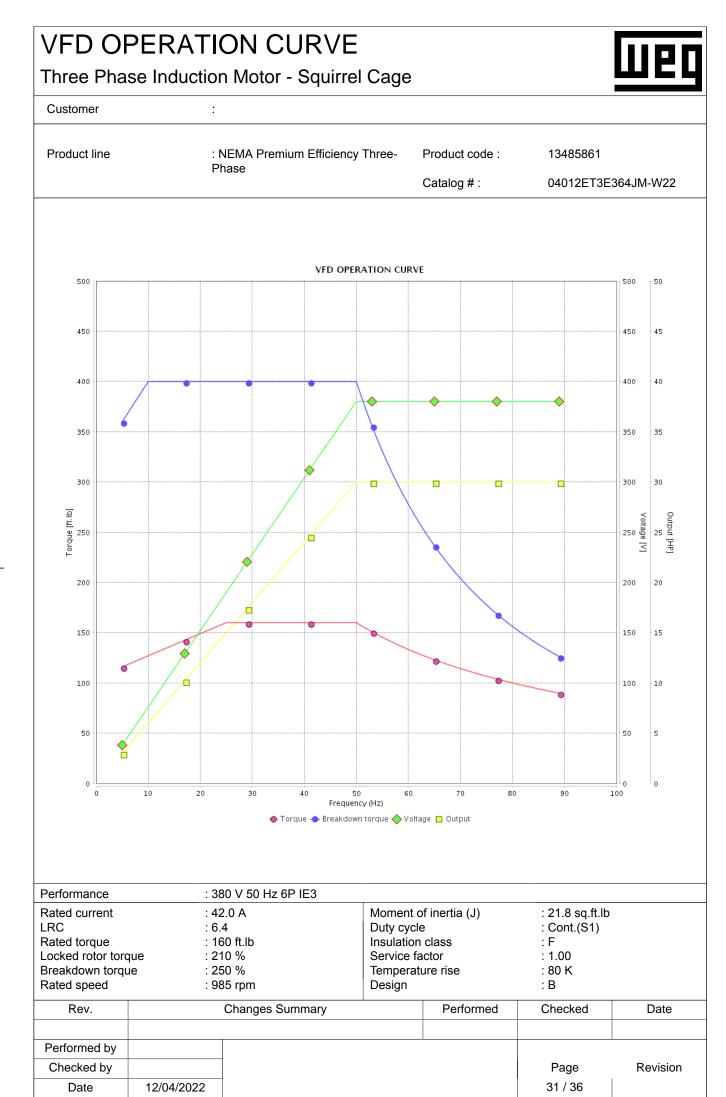


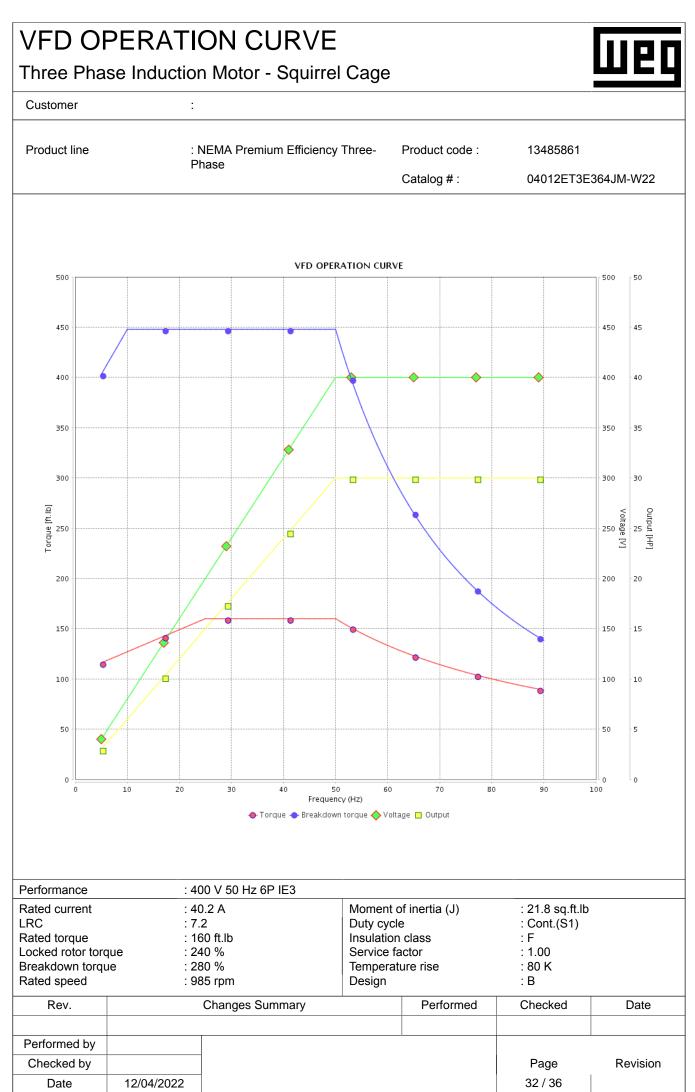
THERMAL LIMIT CURVE					
Three Phase Ind	шед				
Customer	:				
Product line	: NEMA Premium Efficiency Three- Phase	Product code :	13485861		
	Thase	Catalog # :	04012ET3E364JM-W22		

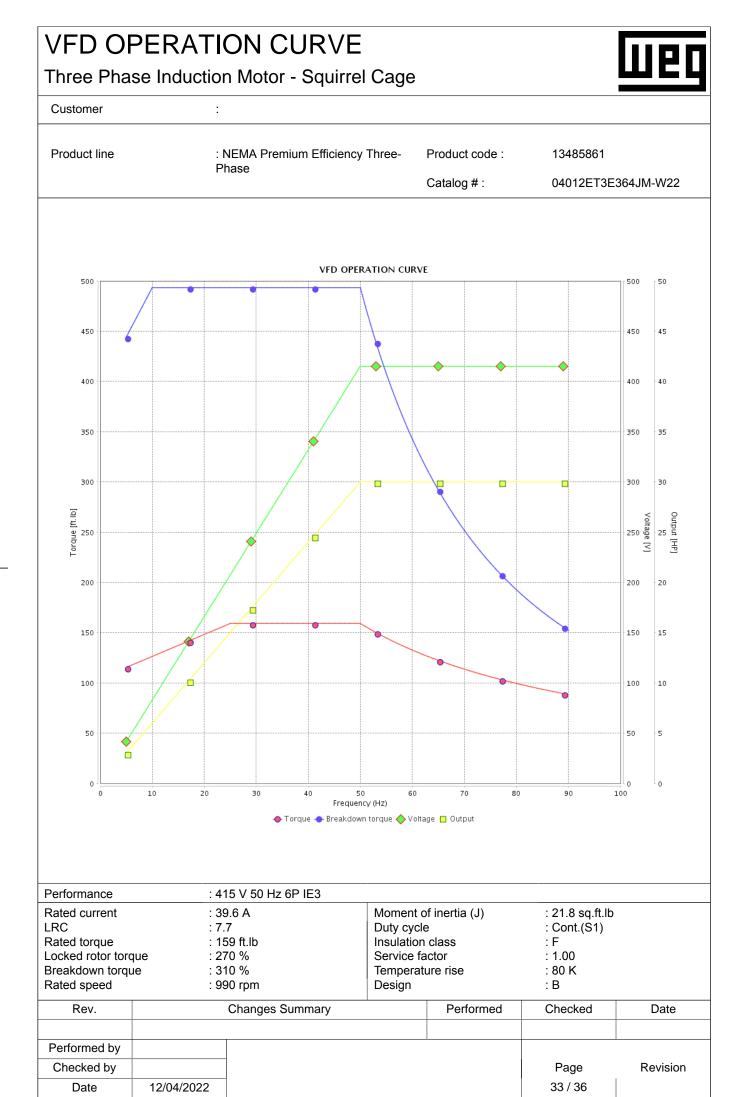
Performance	: 41	15 V 50 Hz 6P IE3				
Rated current: 52.2 AMoment of inertialLRC: 6.0Duty cycleRated torque: 213 ft.lbInsulation classLocked rotor torque: 200 %Service factorBreakdown torque: 229 %Temperature riseRated speed: 985 rpmDesign		class class	: 21.8 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B			
Heating constan	t					
Cooling constant	t					
Rev. Changes Summary			Performed	Checked	Date	
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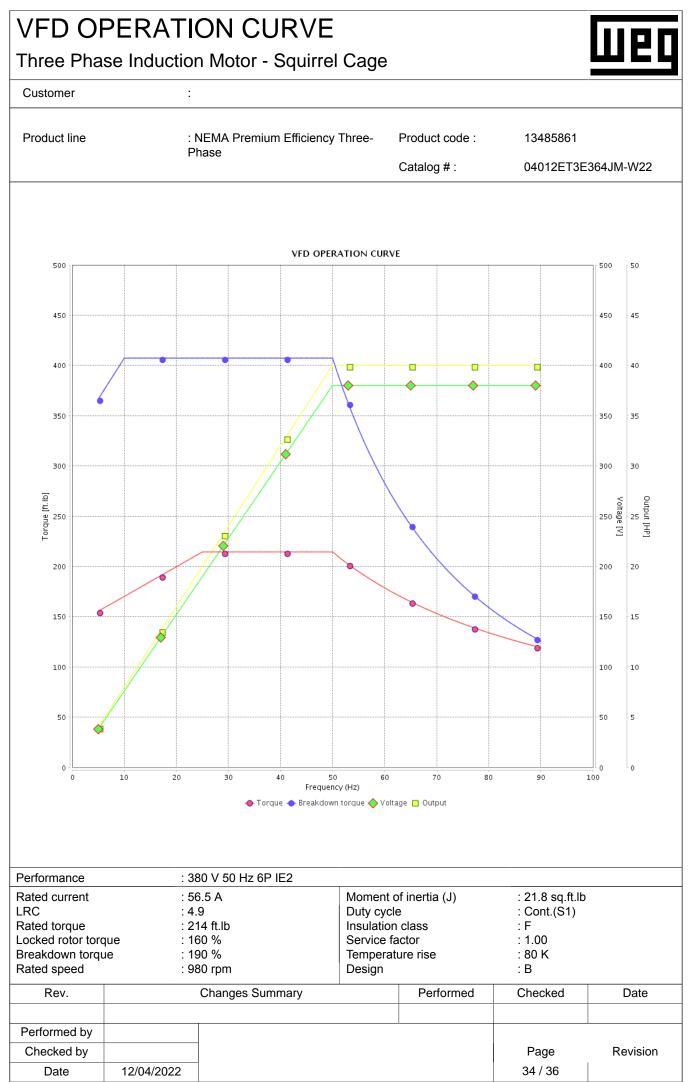


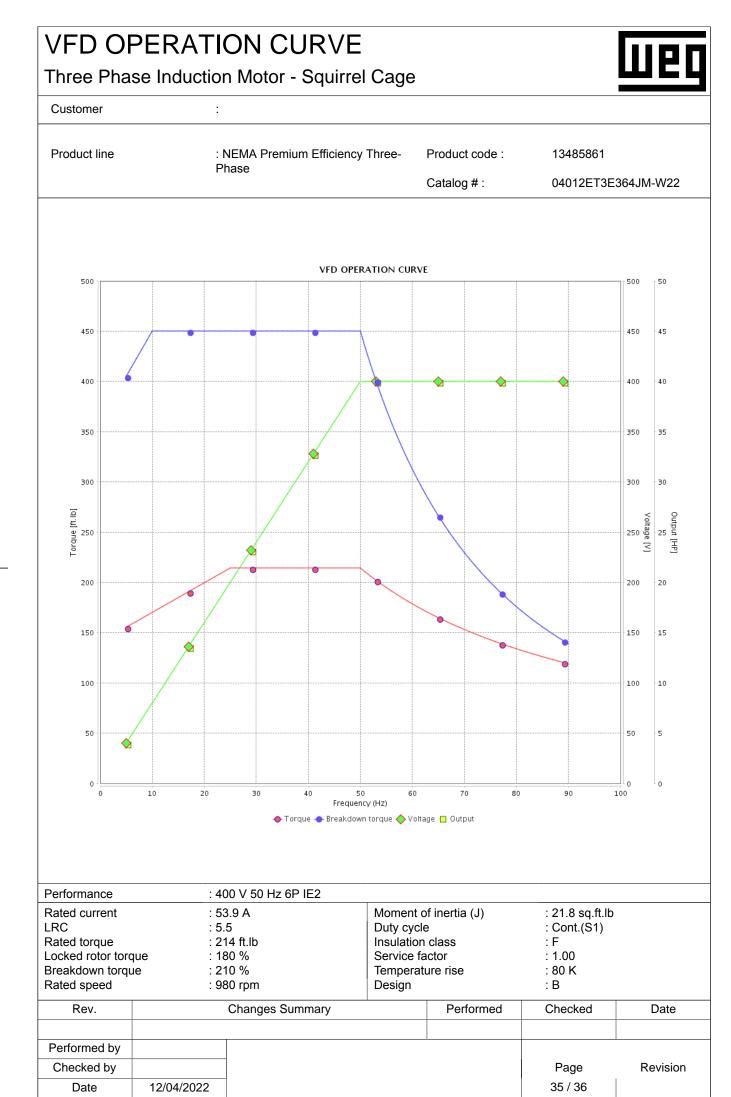


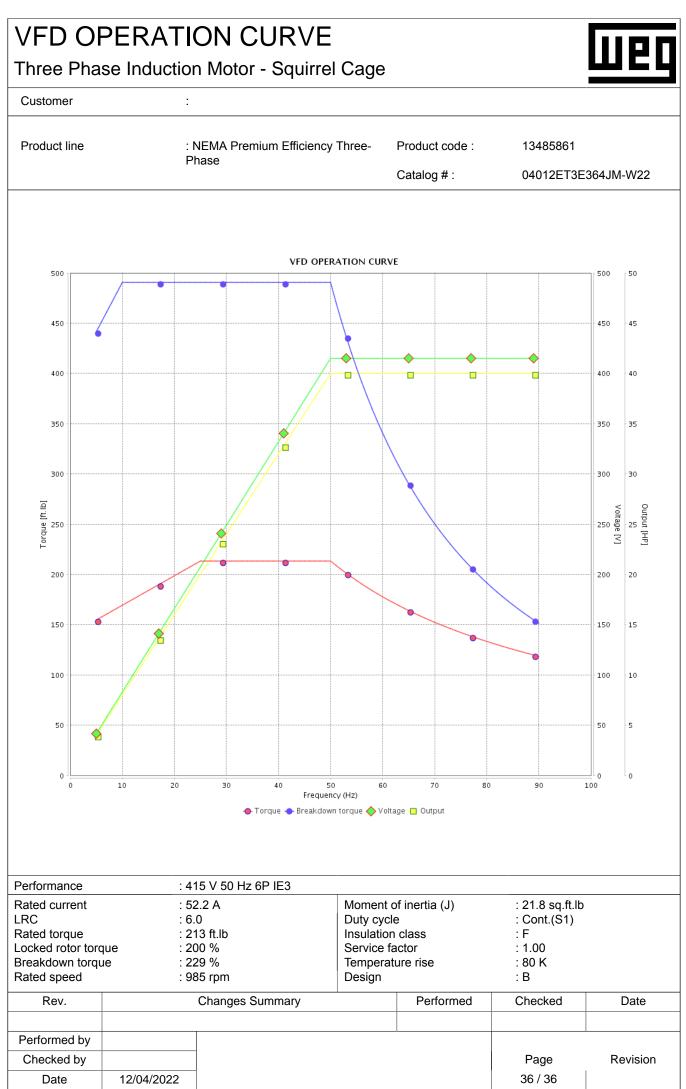


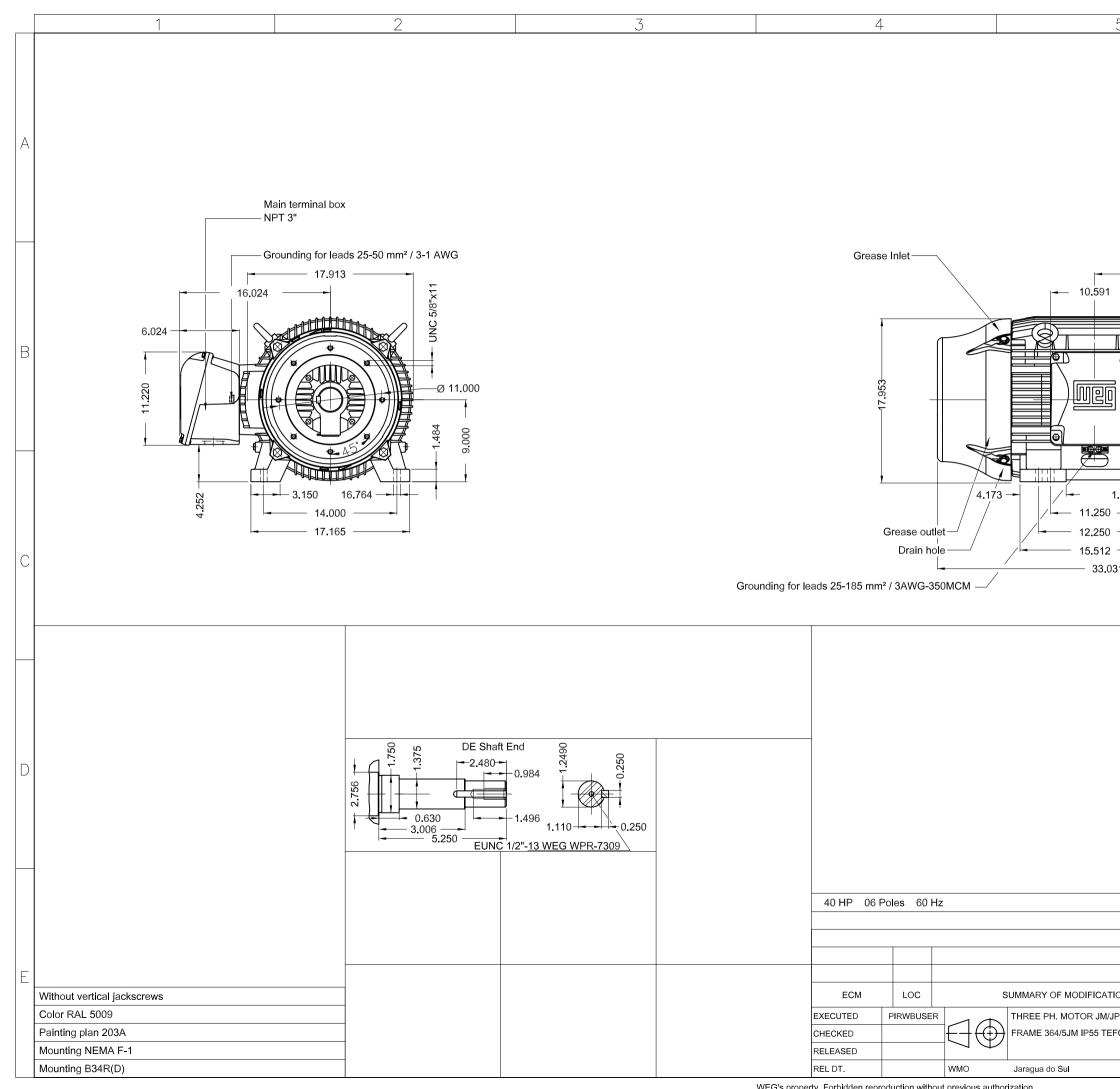












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					A	Dimensions in inches
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IP/JET PUMP W22 PF FC	REM. EFF.	PREVI	EW	ШΡ		A3
Produc	t Engineering	WDD SHEET	1 / 1			XME /
			,			×