## **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S

Frame : 213/5JM Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW)

: -20°C to +40°C Ambient temperature Starting method : Direct On Line

: 1000 m.a.s.l. Approx. weight<sup>3</sup> : 144 lb Altitude

: IP55 Protection degree Moment of inertia (J) : 0.5496 sq.ft.lb

Design : B

		. –		
Output [HP]		7.5	7.5	7.5
Poles		2	2	2
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190/380	220/415
Rated current [A]		17.3/8.67	21.2/10.6	19.1/10.1
L. R. Amperes [A]		132/65.9	134/66.8	133/70.7
LRC [A]		7.6x(Code H)	6.3x(Code G)	7.0x(Code H)
No load current [A	]	6.63/3.32	6.54/3.27	6.64/3.52
Rated speed [RPN	<b>/</b> []	3530	2905	2915
Slip [%]		1.94	3.17	2.83
Rated torque [ft.lb]		11.2	13.6	13.5
Locked rotor torque [%]		260	190	220
Breakdown torque	[%]	300	240	270
Service factor		1.15	1.00	1.00
Temperature rise		80 K	105 K	80 K
Locked rotor time		27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>		70.0 dB(A)	67.0 dB(A)	67.0 dB(A)
	25%	86.4	89.8	89.4
Efficiency (%)	50%	87.5	88.6	88.6
Elliciency (70)	75%	88.5	88.4	88.8
	100%	89.5	86.9	87.7
	25%	0.49	0.54	0.51
Power Factor	50%	0.76	0.81	0.78
I OWEI FACIOI	75%	0.85	0.88	0.87
	100%	0.89	0.91	0.90

Non drive end Foundation loads Drive end

Bearing type 6209 ZZ 6206 ZZ Max. traction : 133 lb Sealing V'Ring Without Max. compression : 277 lb

Bearing Seal

Lubrication interval Lubricant amount Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 19.2A SF 1.00 SFA 19.2A

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			1 / 16	

## TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



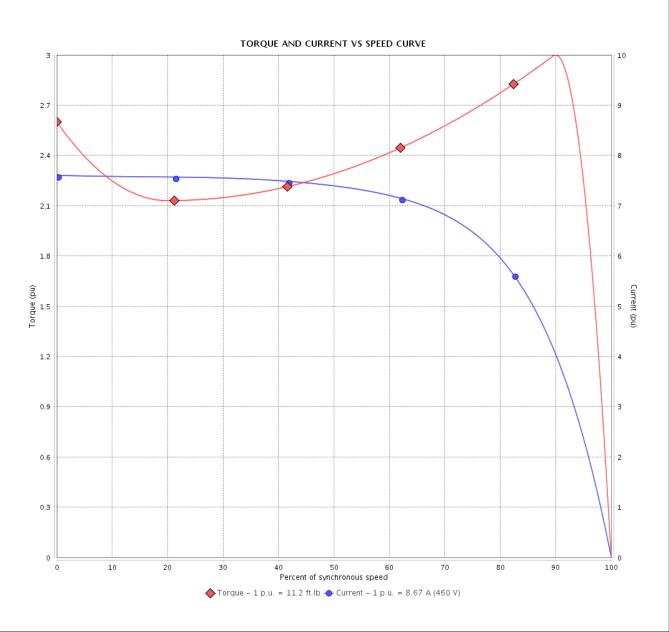
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance : 230/460 V 60 Hz 2P Rated current : 17.3/8.67 A Moment of inertia (J) : 0.5496 sq.ft.lb **LRC** : 7.6 Duty cycle : Cont.(S1) : F : 11.2 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 260 % : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 3530 rpm Design : B

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			2/16	

## TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage

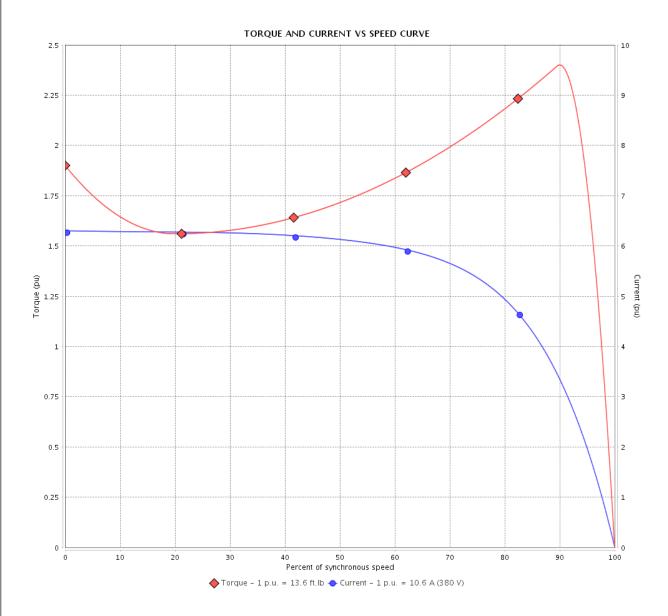


Customer :

Product line : JM Pump NEMA Premium Product code : 13420899

Efficiency Three-Phase

Catalog #: 00736ET3E213JM-S



Performance : 190/380 V 50 Hz 2P Rated current : 21.2/10.6 A Moment of inertia (J) : 0.5496 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) Insulation class Rated torque : 13.6 ft.lb : F Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 240 % Temperature rise : 105 K Rated speed : 2905 rpm Design : B

Locked rotor time : 0s (cold) 0s (hot)

		(****)			
Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			3 / 16	

## TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



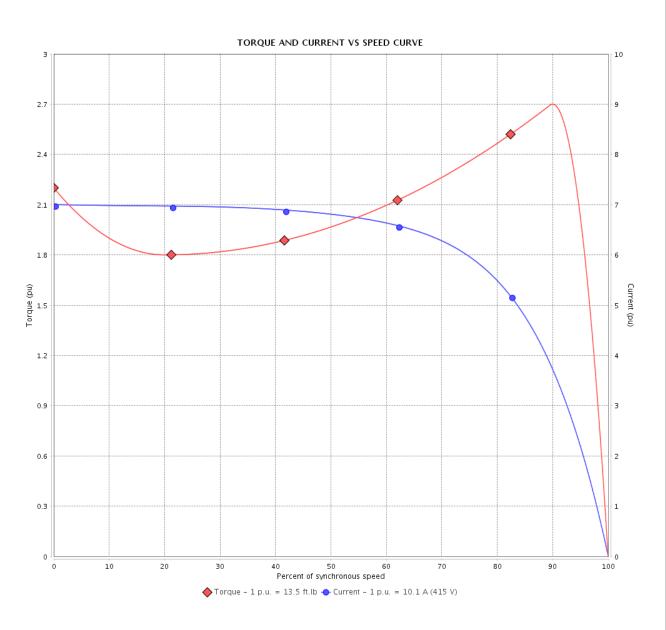
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance : 220/415 V 50 Hz 2P Rated current : 19.1/10.1 A Moment of inertia (J) : 0.5496 sq.ft.lb **LRC** : 7.0 Duty cycle : Cont.(S1) : F : 13.5 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 220 % : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 2915 rpm Design : B

Locked rotor time : 0s (cold) 0s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			4 / 16	

# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



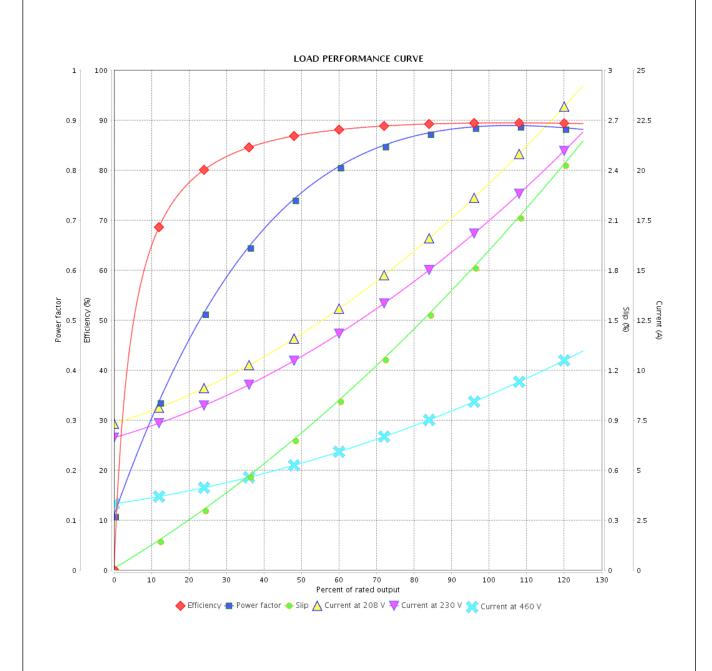
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance	formance : 230/460 V 60 Hz 2P					
Rated current	Rated current : 17.3/8.67 A		Moment of	Moment of inertia (J)		.lb
LRC	:	7.6	Duty cycle	•	: Cont.(S1)	
Rated torque	:	11.2 ft.lb	Insulation	class	: F	
•		260 %	Service fa	ctor	: 1.15	
Breakdown torqu	ue :	300 %	Temperati	Temperature rise		
Rated speed	:	3530 rpm	Design		: B	
Rev.		Changes Summary	у	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				5 / 16	

# LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Date

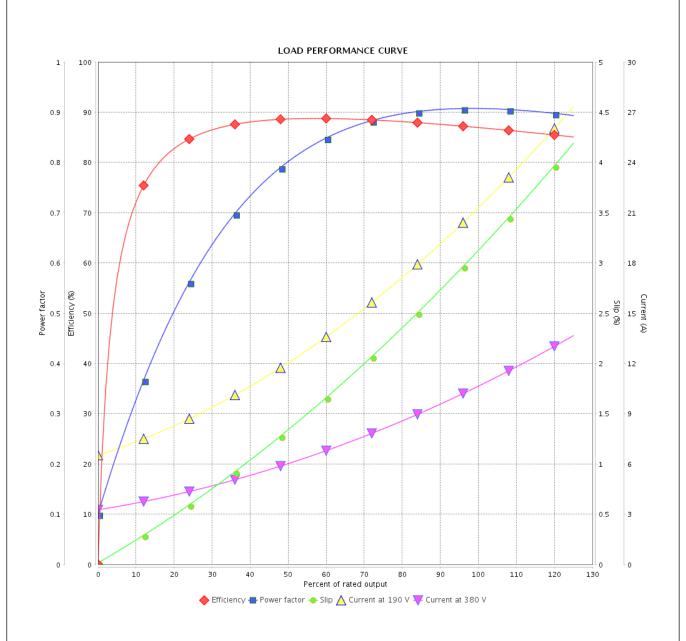
12/04/2022

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance : 190/380 V 50 Hz 2P : 21.2/10.6 A Rated current Moment of inertia (J) : 0.5496 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) : 13.6 ft.lb Insulation class Rated torque : F Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 240 % Temperature rise : 105 K Rated speed : 2905 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

6/16

# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



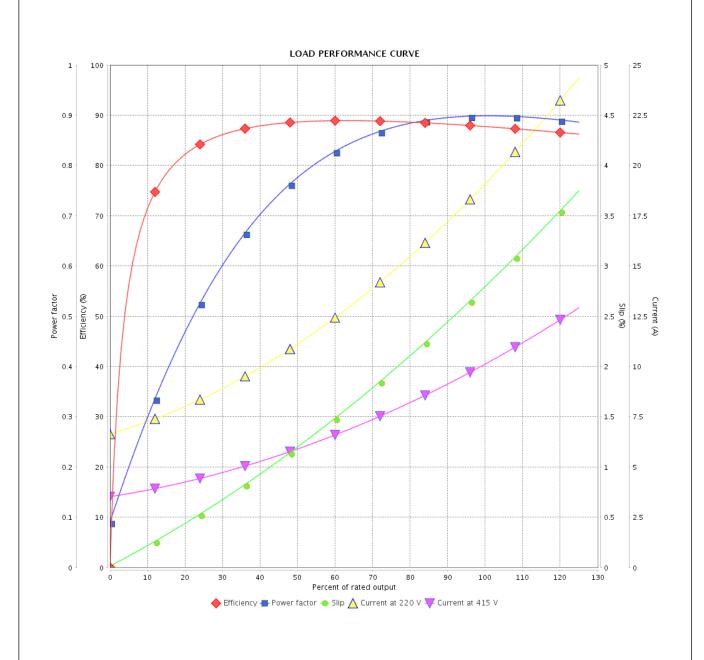
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance	Performance : 220/415 V 50 Hz 2P					
Rated current	: ′	19.1/10.1 A	Moment o	f inertia (J)	: 0.5496 sq.ft.lb	
LRC	: 7	7.0	Duty cycle	}	: Cont.(S1)	
Rated torque	: 1	13.5 ft.lb	Insulation	class	: F	
Locked rotor torq	ue : 2	220 %	Service fa	ctor	: 1.00	
Breakdown torqu	e :2	270 %	Temperature rise		: 80 K	
Rated speed	: 2	: 2915 rpm		Design		
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				7 / 16	

## Three Phase Induction Motor - Squirrel Cage

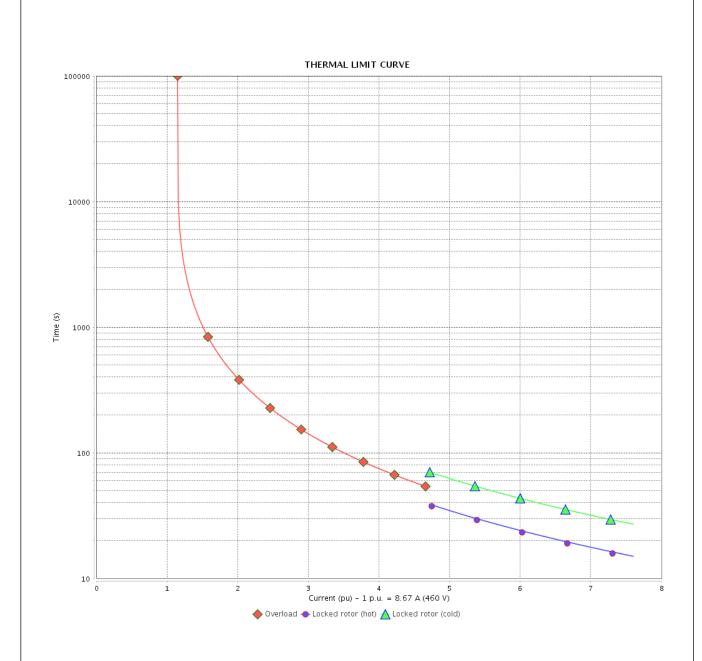


Customer	:					
Product line	:. F	JM Pump NEMA Premium fficiency Three-Phase	I	Product code :	13420899	
	_	Elliciency Tillee-i Hase		Catalog # :	00736ET3E2	13JM-S
Performance		30/460 V 60 Hz 2P				
Rated current LRC	: 17 : 7.	7.3/8.67 A .6	Moment of Duty cycle	f inertia (J)	: 0.5496 sq.ft.l : Cont.(S1)	b
Rated torque		1.2 ft.lb	Insulation	class	: F	
Locked rotor torque Breakdown torque		60 % 00 %	Service fa Temperatu		: 1.15 : 80 K	
Rated speed		530 rpm	Design		: B	
Heating constant						
Cooling constant				D ( )	01	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by		-			Page	Revision
D-/	40/04/0000	1			0 / 40	

# Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			9 / 16	

## Three Phase Induction Motor - Squirrel Cage

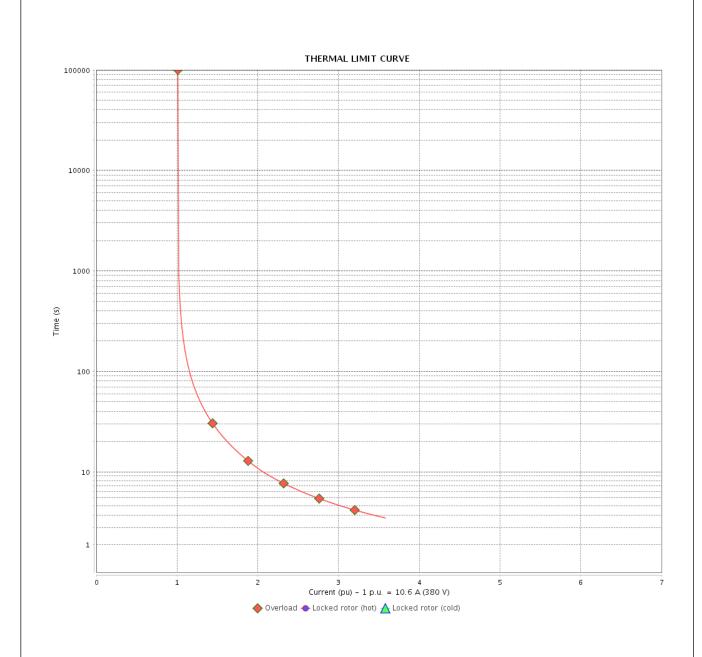


Customer	:			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code : Catalog # :	13420899 00736ET3E2 <sup>2</sup>	
Performance	: 190/380 V 50 Hz 2P			
Rated current	: 21.2/10.6 A	Moment of inertia (J)	: 0.5496 sq.ft.lb	)
LRC Rated torque	: 6.3 : 13.6 ft.lb	Duty cycle Insulation class	: Cont.(S1) : F	
Locked rotor torque	: 190 %	Service factor	: 1.00	
Breakdown torque Rated speed	: 240 % : 2905 rpm	Temperature rise Design	: 105 K : B	
Heating constant		g		
Cooling constant				
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Pogo	Povisio-
Checked by	2022		Page	Revision

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			11 / 16	

## Three Phase Induction Motor - Squirrel Cage

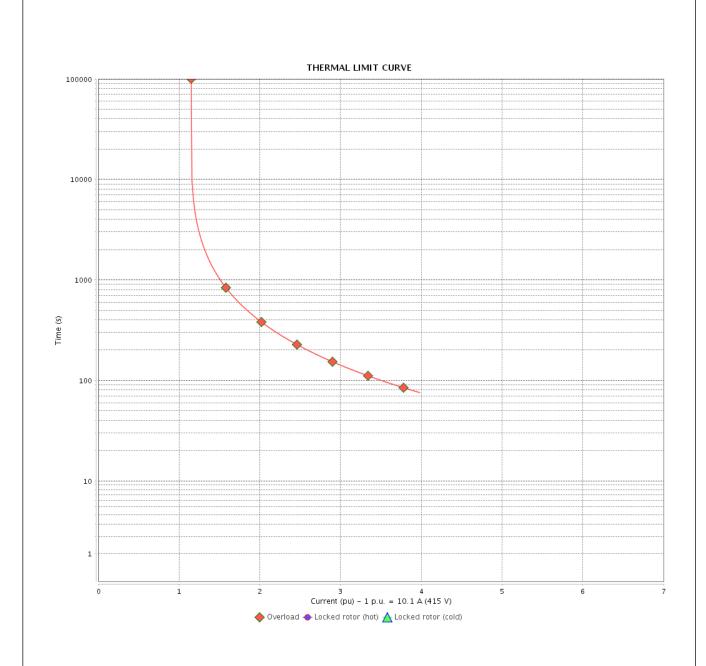


Customer		:				
Product line		: JM Pump NEMA Premium Efficiency Three-Phase	I	Product code :	13420899	
		Lindency Three-i hase		Catalog # :	00736ET3E2	13JM-S
Performance	:	220/415 V 50 Hz 2P				
Rated current LRC		19.1/10.1 A 7.0	Moment of Duty cycle	f inertia (J)	: 0.5496 sq.ft.l : Cont.(S1)	b
Rated torque		13.5 ft.lb	Insulation		: F	
Locked rotor tord		220 %	Service fa		: 1.00	
Breakdown torqu Rated speed		270 % 2915 rpm	Temperatu Design	ire rise	: 80 K : B	
Heating constant		•	<u> </u>			
Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
_						_
Performed by						
Checked by					Page	Revision
Date	12/04/2022				12 / 16	

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			13 / 16	

# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



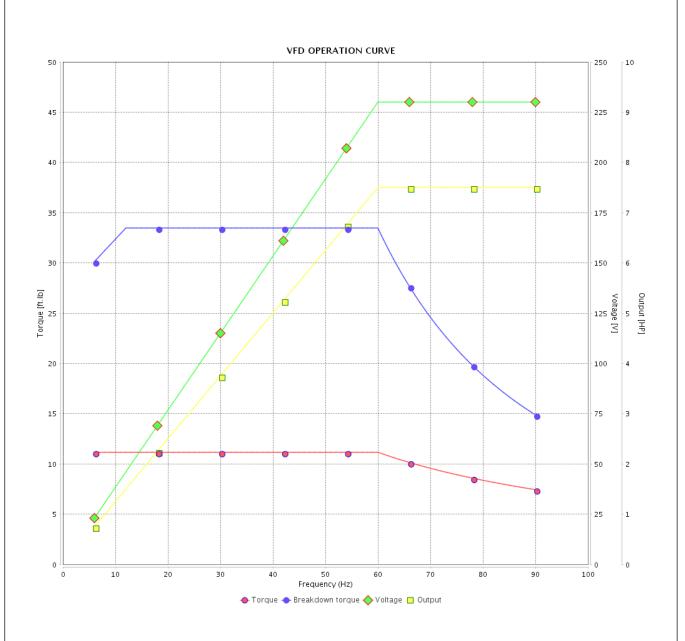
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance	: 230/460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque	: 17.3/8.67 A : 7.6 : 11.2 ft.lb : 260 % : 300 %	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise		: 0.5496 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K	
Rated speed	: 3530 rpm	Design		: B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

14/16

12/04/2022

Date

# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



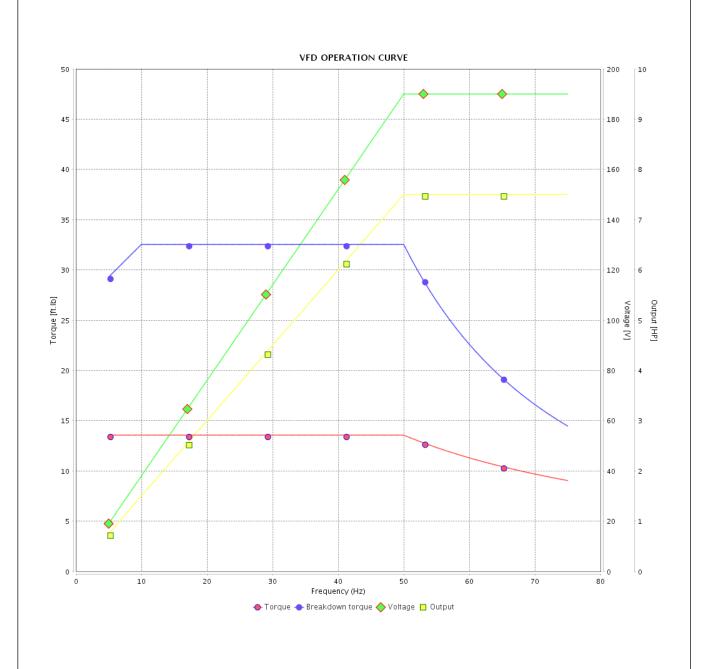
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance	: 1	90/380 V 50 Hz 2P					
Rated current		1.2/10.6 A	Moment of inertia (J)		: 0.5496 sq.ft.lb		
LRC :		.3	Duty cycle		: Cont.(S1)		
Rated torque		3.6 ft.lb	Insulation class		:F		
Locked rotor torque		90 %	Service factor		: 1.00		
Breakdown torque	: 2	40 %	Temperati	Temperature rise		: 105 K	
Rated speed	: 2	905 rpm	Design		: B		
Rev.	Changes Summary			Performed	Checked	Date	
Performed by							
, ,		-			_	<b>5</b>	
Checked by					Page	Revision	
Date	12/04/2022				15 / 16		

# VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



Revision

Page 16 / 16

Customer :

Checked by

Date

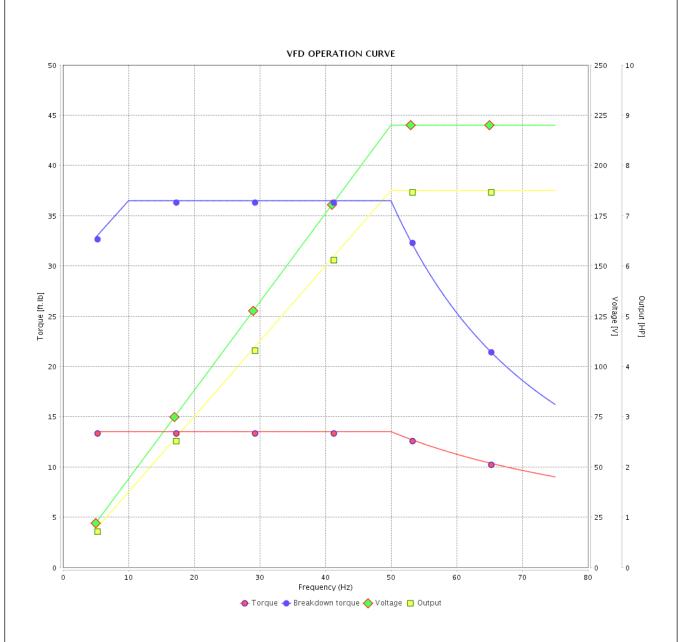
12/04/2022

Product line : JM Pump NEMA Premium

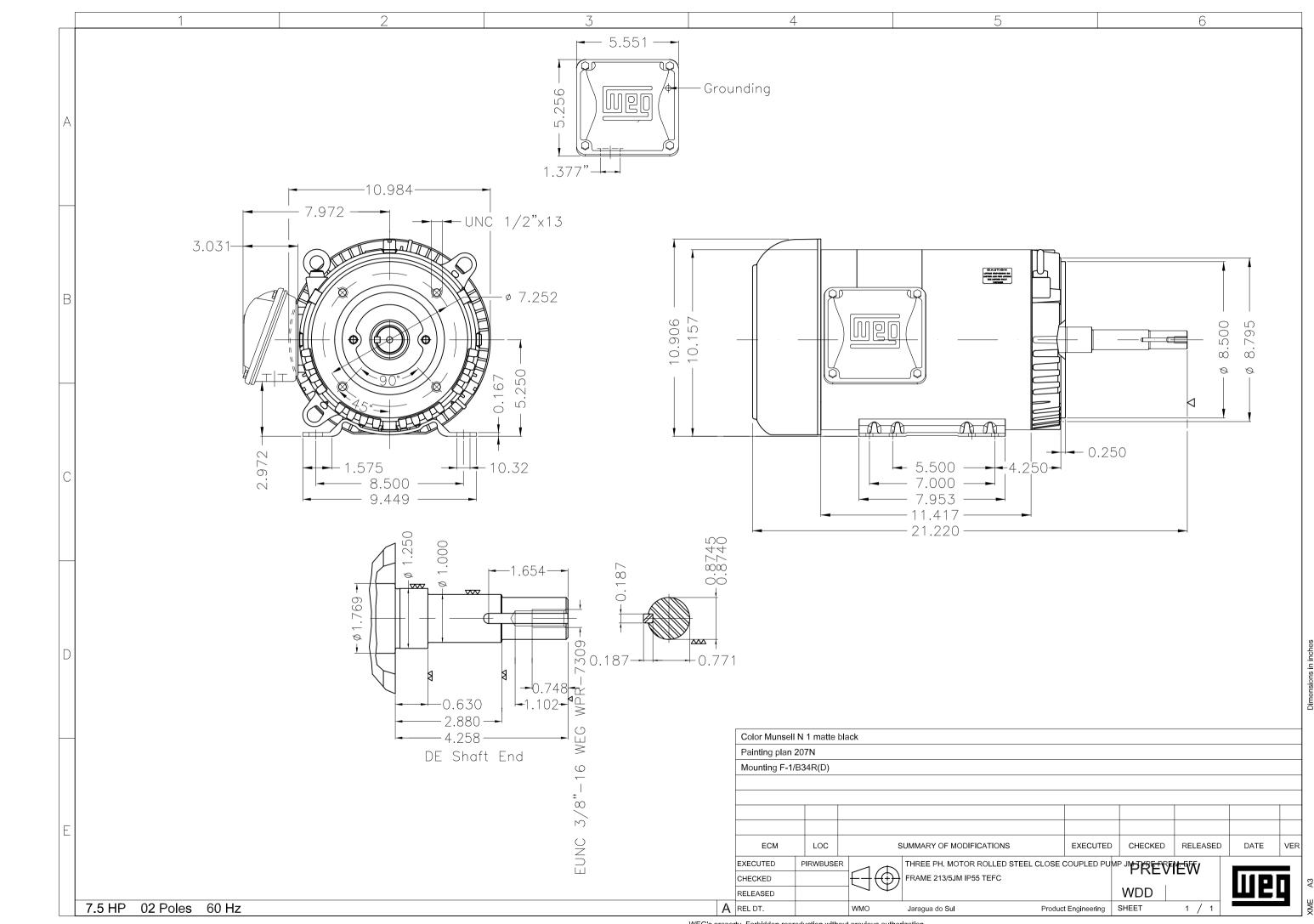
Efficiency Three-Phase

Product code: 13420899

Catalog #: 00736ET3E213JM-S



Performance : 220/415 V 50 Hz 2P : 19.1/10.1 A Rated current Moment of inertia (J) : 0.5496 sq.ft.lb **LRC** : 7.0 Duty cycle : Cont.(S1) Insulation class Rated torque : 13.5 ft.lb : F Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 2915 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by





NEX

Premiur

(**UL)**US LISTED 3PT9 FOR SAFE AREA

**&** Energy Verifi For 60Hz: Class I, Zone 2, IIC Class I, DIv.2, Gr. A,B,C,D - T3 CT 2:1/VT 1000:1

Div 2 Inverter Duty (SF1.00) MODEL 00736ET3E213JM-S

Hz 60 S/N

25MAR2022

213/5JM

CONT

N01.TE0IC0X0N 13420899

MADE IN MÉXICO

17.3/8.67 19,9/9.97 230/460 SPM 3FA 냃 쌆 P55 CODE SHO

1000 m.a.s.l

F AT 80K

SCI

89.5% 1.15 NOM EFF

E 1 190-220/380-415V **EFF 88.9%** 

IEC 60034-1

**2905RPM** 

21.2-18.4/10.6-9.75A

SABLE @ 208V 19.2A ALTERNATE RATING:

SF1.00 NCL W

TEFC <del>0</del>

ZZ-9029 300 7.5HP

8209-ZZ

JT6

50 Hz

SF1.00

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT MOBIL POLYREX EM

T2-WHT T6-GRY

T4-YEL

r3-org T7-PNK T5-BLK 1-BLU

conformément aux codes électriques locaux et nationaux afin d'éviter tout NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

AVERTISSEMENT: Le moteur doit être mis à la terre shocks. Disconnect power source before servicing unit. WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical

choc électrique grave. Déconnectez l'alimentation ayant l'entretien de la machine.

T9-BRK

T8-RED