## **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : JP Pump NEMA Premium Product code: 13506323

Efficiency Three-Phase

Catalog #: 01536ET3E254JP-S

Frame : 254/6JP 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 : Direct On Line Ambient temperature Starting method

Altitude			: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 196 lb
Protection degree		е	: IP55	Moment of inertia (J)	: 0.8718 sq.ft.lb
	Design		: B		
	Output [HP]		15	12.5	12.5
	Poles		2	2	2
	Frequency [Hz]		60	50	50
	Rated voltage [V]		230/460	190/380	220/415
	Rated current [A]		34.8/17.4	35.4/17.7	32.3/17.1
	L. R. Amperes [A]		237/118	244/122	245/130
	LRC [A]		6.8x(Code G)	6.9x(Code H)	7.6x(Code J)
	No load current [A	]	13.0/6.50	13.6/6.80	13.9/7.39
	Rated speed [RPM]		3525	2920	2930
	Slip [%]		2.08	2.67	2.33
	Rated torque [ft.lb]	]	22.3	22.5	22.4
	Locked rotor torqu	e [%]	200	190	210
	Breakdown torque	[%]	300	290	330
	Service factor		1.15	1.00	1.00
	Temperature rise		80 K	105 K	105 K
	Locked rotor time		25s (cold) 14s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
	Noise level <sup>2</sup>		75.0 dB(A)	72.0 dB(A)	72.0 dB(A)
		25%	89.2	90.7	90.1
	Efficiency (%)	50%	89.5	90.2	90.0
	Efficiency (%)	75%	91.0	90.6	90.7
		100%	91.0	89.8	90.3
		25%	0.47	0.47	0.43
	Power Factor	50%	0.73	0.74	0.70

Drive end Non drive end Foundation loads

0.84

0.88

6309 Z C3 6208 Z C3 Bearing type Max. traction : 256 lb Sealing V'Ring Without Max. compression : 452 lb

0.83

0.87

Bearing Seal

15797 h 20000 h Lubrication interval 13 g Lubricant amount 8 g Mobil Polyrex EM Lubricant type

Notes

Power Factor

USABLE @208V 38.5A SF 1.00 SFA 38.5A

75%

100%

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.

0.81

0.86

(1) / 11 100 / 10 11 10					
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022	1		1 / 16	

## TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage



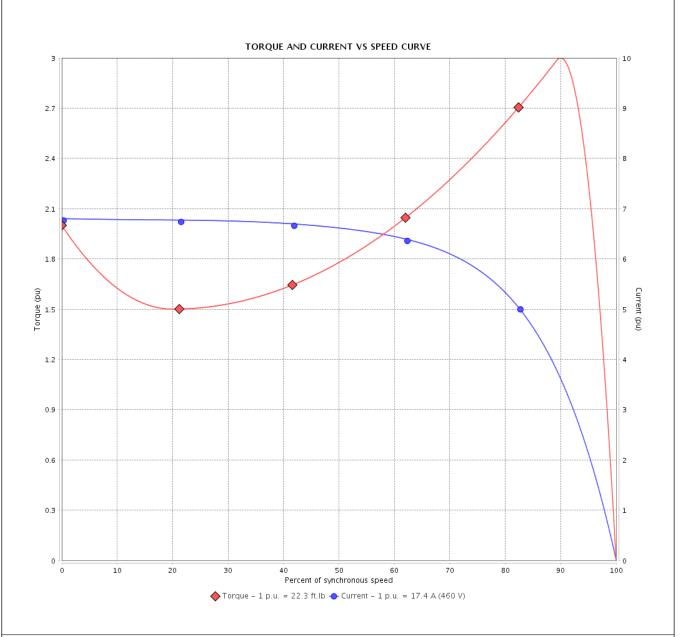
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance : 230/460 V 60 Hz 2P Rated current : 34.8/17.4 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 22.3 ft.lb Service factor : 1.15 Locked rotor torque : 200 % Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 3525 rpm Design : B Locked rotor time : 25s (cold) 14s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			2 / 16	

## TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage



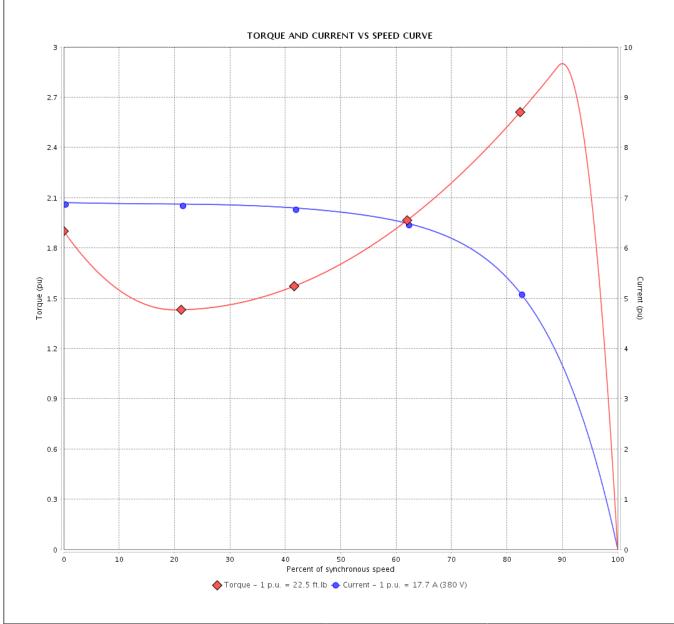
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance : 190/380 V 50 Hz 2P Rated current : 35.4/17.7 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 6.9 Duty cycle : Cont.(S1) : 22.5 ft.lb Insulation class : F Rated torque Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 290 % Temperature rise : 105 K Rated speed : 2920 rpm Design : B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			3 / 16	

## TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage



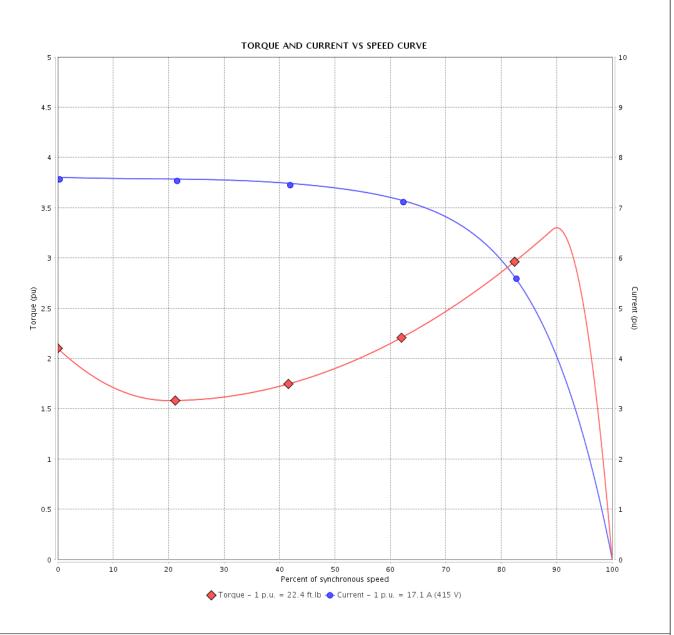
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance : 220/415 V 50 Hz 2P Rated current : 32.3/17.1 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 7.6 Duty cycle : Cont.(S1) : F : 22.4 ft.lb Insulation class Rated torque : 210 % Service factor Locked rotor torque : 1.00 Breakdown torque : 330 % Temperature rise : 105 K Rated speed : B : 2930 rpm Design

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			4 / 16	

# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



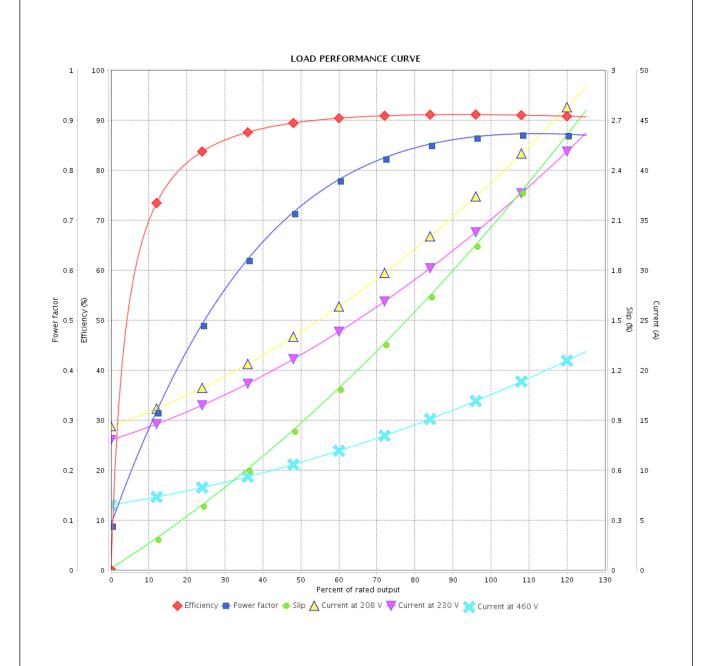
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance	: 2	230/460 V 60 Hz 2P					
Rated current	: 3	34.8/17.4 A	Moment o	f inertia (J)	: 0.8718 sq.ft.	lb	
LRC	: 6	3.8	Duty cycle	<b>;</b>	: Cont.(S1)		
Rated torque	: 2	22.3 ft.lb	Insulation class		: F ` ´		
Locked rotor torq	ue : 2	200 %	Service fa	Service factor			
Breakdown torqu	e :3	300 %	Temperature rise		: 80 K		
Rated speed	: 3525 rpm		Design	Design		: B	
Rev.		Changes Summary	'	Performed	Checked	Date	
Performed by							
Checked by					Page	Revision	
Date	13/04/2022				5 / 16		

## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

Date

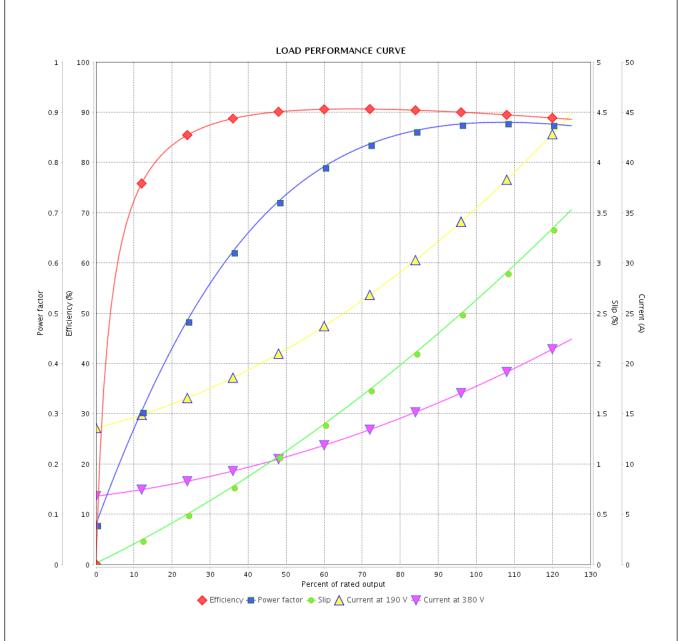
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Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance : 190/380 V 50 Hz 2P : 35.4/17.7 A Rated current Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.9 Insulation class Rated torque : 22.5 ft.lb : F Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 290 % Temperature rise : 105 K Rated speed : 2920 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



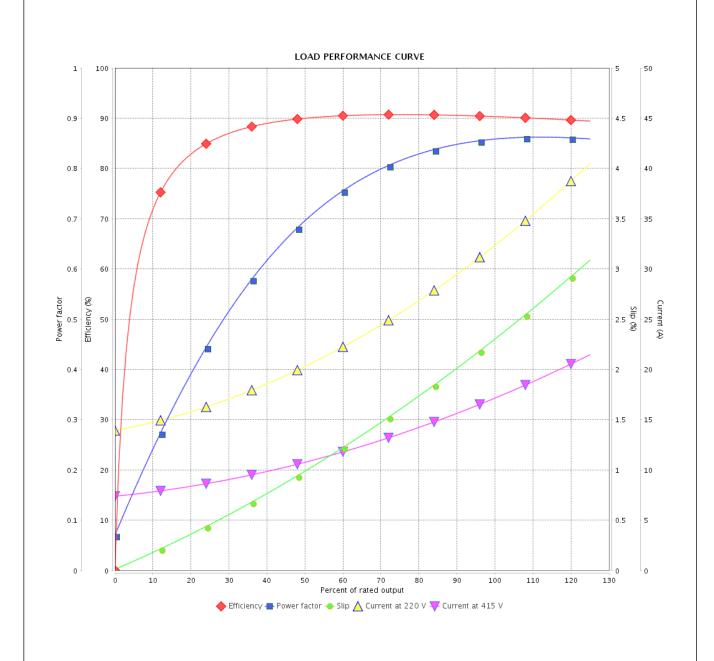
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance	: 2	220/415 V 50 Hz 2P				
Rated current		32.3/17.1 A	Moment of inertia (J)		: 0.8718 sq.ft.lb	
LRC		<b>7</b> .6	Duty cycle	•	: Cont.(S1)	
Rated torque		22.4 ft.lb	Insulation	Insulation class		
Locked rotor torque		210 %	Service fa	ctor	: 1.00	
Breakdown torqu		330 %	Temperat	Temperature rise		
Rated speed	: 2	2930 rpm	0 rpm Design		: B	
Rev.		Changes Summary	l	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				7 / 16	

## Three Phase Induction Motor - Squirrel Cage

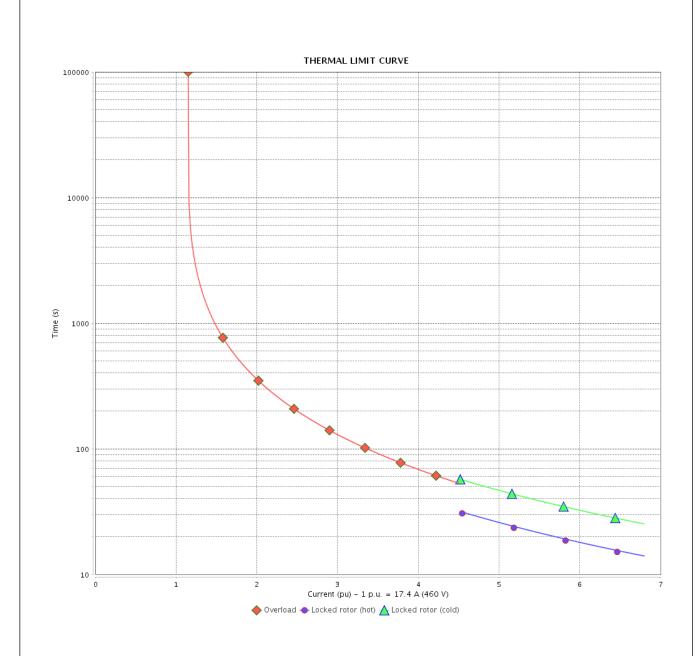


Customer		:				
Product line		: JP Pump NEMA Premium Efficiency Three-Phase		Product code :	13506323	
		Emololicy Throo Thaco		Catalog # :	01536ET3E2	54JP-S
Performance	:	230/460 V 60 Hz 2P				
Rated current		34.8/17.4 A	Moment o	f inertia (J)	: 0.8718 sq.ft.l	b
LRC Rated torque		6.8 22.3 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord	que :	200 %	Service fa		: 1.15	
Breakdown torqu	ue :	300 %	Temperati	ure rise	: 80 K	
Rated speed		3525 rpm	Design		: B	
Heating constant						
Cooling constant Rev.	t 	Changes Summary		Performed	Checked	Date
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Checked by					Page	Revision
Date	13/04/2022				8 / 16	

# Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			9 / 16	

## Three Phase Induction Motor - Squirrel Cage

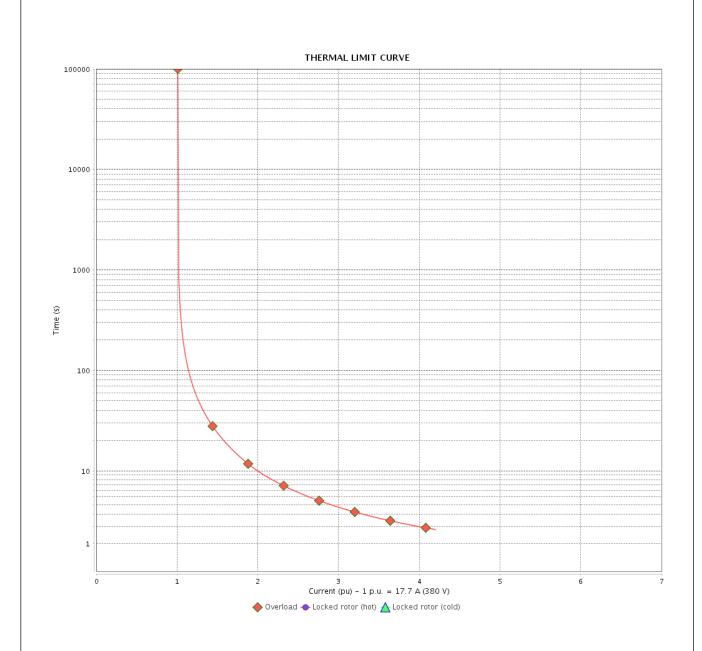


Customer		:				
Product line		: JP Pump NEMA Premium Efficiency Three-Phase		Product code :	13506323	
		,	(	Catalog # :	01536ET3E2	254JP-S
Performance	:	190/380 V 50 Hz 2P				
Rated current		35.4/17.7 A	Moment of		: 0.8718 sq.ft.l	b
LRC Rated torque		6.9 22.5 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor torq	que :	190 %	Service fa	ctor	: 1.00	
Breakdown torqu Rated speed		290 % 2920 rpm	Temperatu Design	ire rise	: 105 K : B	
			Doolgii			
Heating constant Cooling constant						
Rev.	•	Changes Summary		Performed	Checked	Date
		,				
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Checked by					Page	Revision
Date	13/04/2022				10 / 16	

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			11 / 16	

## Three Phase Induction Motor - Squirrel Cage

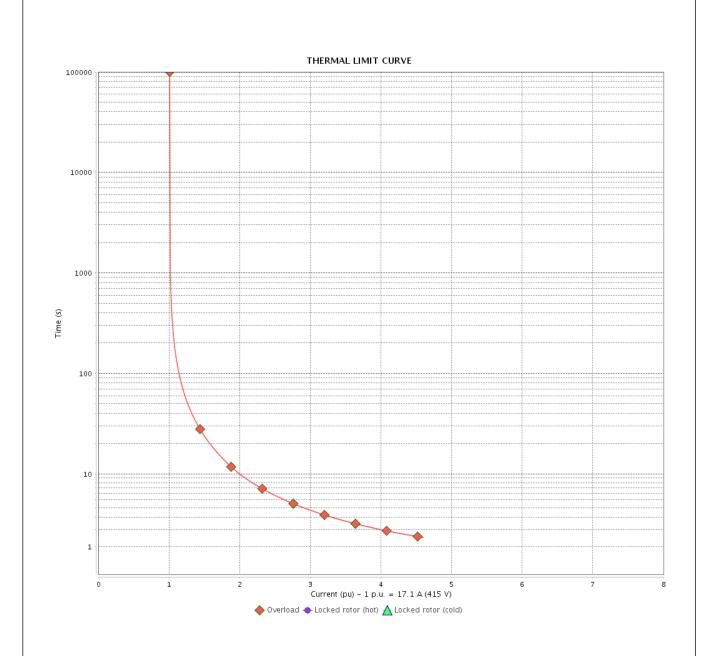


Customer	:					
Product line	: F	: JP Pump NEMA Premium Efficiency Three-Phase		Product code :	13506323	
	_	indicately three trade		Catalog # :	01536ET3E2	54JP-S
Performance	: 2	220/415 V 50 Hz 2P				
Rated current		32.3/17.1 A	Moment o	f inertia (J)	: 0.8718 sq.ft.l	b
LRC Rated torque		7.6 22.4 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord	que : 2	210 %	Service fa	ctor	: 1.00	
Breakdown torqu		330 %	Temperatu	ure rise	: 105 K : B	
Rated speed		2930 rpm	Design		. D	
Heating constant						
Cooling constant	<b>l</b>	Changes Summary		Performed	Checked	Date
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Checked by		-			Page	Revision
Date	13/04/2022	-			12 / 16	

### Three Phase Induction Motor - Squirrel Cage



Customer :



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

# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

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Date

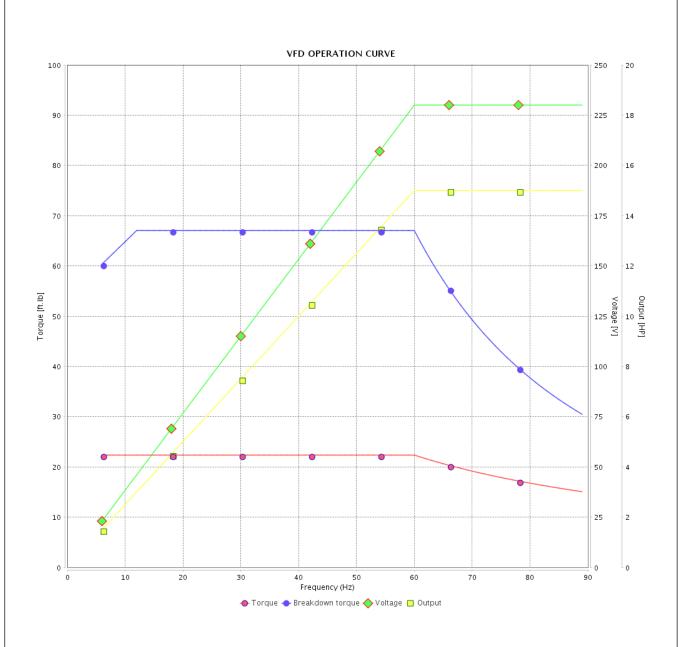
13/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance : 230/460 V 60 Hz 2P Rated current : 34.8/17.4 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.8 Insulation class Rated torque : 22.3 ft.lb : F Locked rotor torque : 200 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 3525 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

Page

14 / 16

Revision

# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



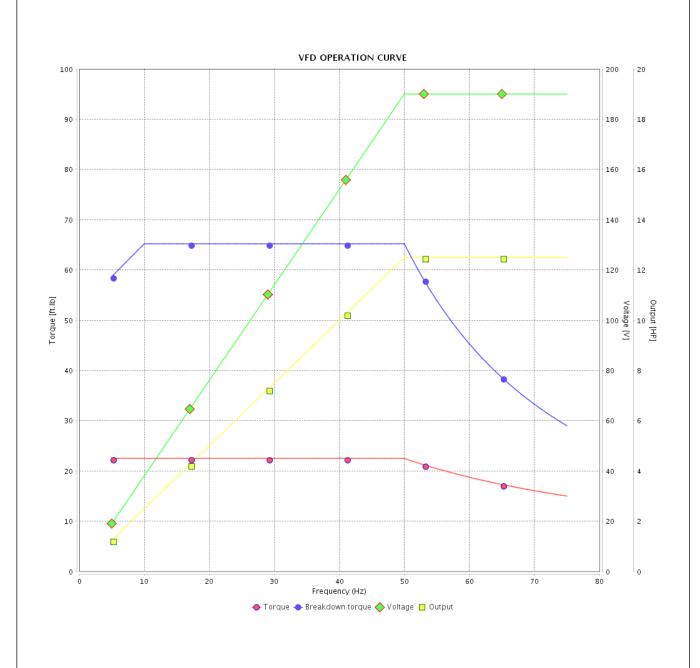
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance		: 190/380 V 50 Hz 2P							
Rated current	: 3	Moment of inertia (J)		: 0.8718 sq.ft.lb					
LRC :		.9	Duty cycle	Duty cycle					
Rated torque	: 2	2.5 ft.lb	Insulation class		:F				
Locked rotor torque		90 %	Service fa	Service factor		: 1.00			
Breakdown torque	e : 2	90 %	Temperat	Temperature rise		: 105 K			
Rated speed	: 2	920 rpm Design		: B					
Rev.	Changes Summary			Performed	Checked	Date			
Performed by									
Checked by					Page	Revision			
Date	13/04/2022				15 / 16				

# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Revision

Page

Customer :

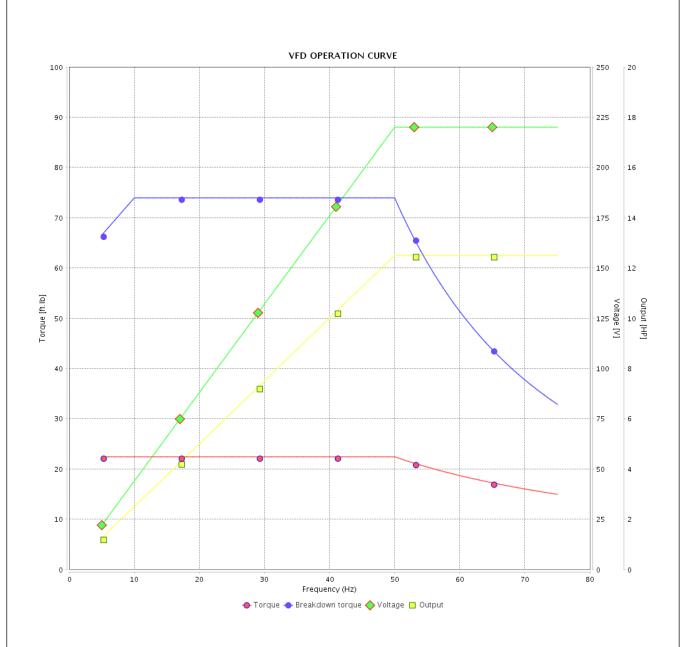
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Product line : JP Pump NEMA Premium

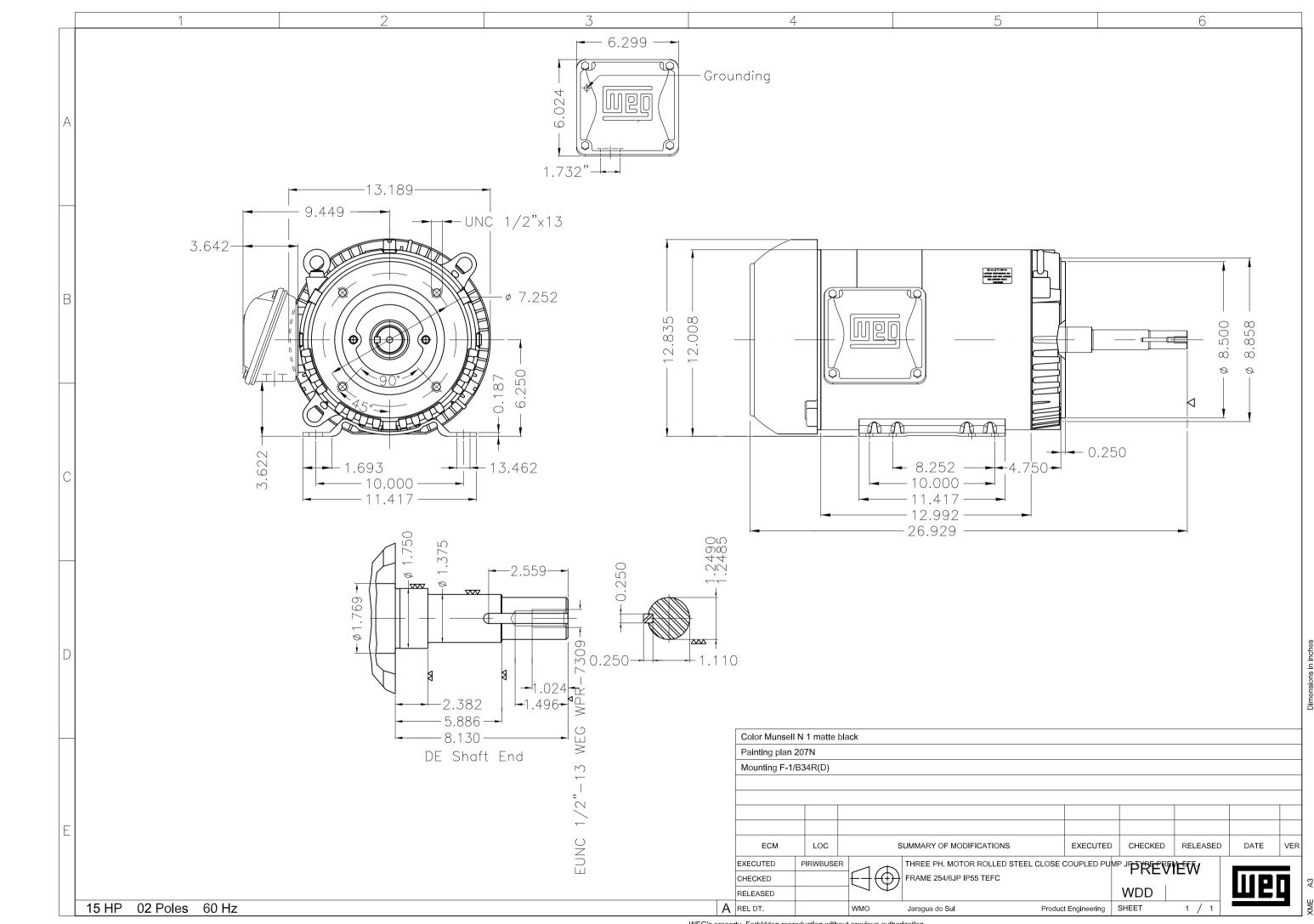
Efficiency Three-Phase

Product code: 13506323

Catalog #: 01536ET3E254JP-S



Performance : 220/415 V 50 Hz 2P Rated current : 32.3/17.1 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 7.6 Insulation class Rated torque : 22.4 ft.lb : F Locked rotor torque : 210 % Service factor : 1.00 Breakdown torque : 330 % Temperature rise : 105 K Rated speed : 2930 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by





**Energy Verified** 

Div 2 Inverter Duty (SF1.00) CT 2:1/VT 1000:1 9 ř

DES CONT 3525

0°04 CODE M 80K AMB RPM

B ENCL

15(11)

HP(kW)

254/6JP

PH 3

S

01JUL2019 쏦 230/460

MODEL 01536ET3E254JP-S

W01.TE0IC0X0N

MAT: 13506323

Class I, Dlv.2, Gr. A.B.C.D - T3 255 For 60Hz: Class I, Zone 2,

T114T12 HIGH T12

ij

IEC 60034-1

EFF 89.8% (IE2)

35.4-31.3/17.7-16.6A

ALTERNATE RATING:

m.a.s.l.

1000

0.87 SF 1.15

T2-WHT

SF1.00

190-220/380-415V

SF1.00

38.5A

USABLE @ 208V 3: 12.5HP 50Hz 2920RPM

NEMA NOM.EFF. 91.0%

INS CL F AT

SFA 40.0/20.0

34 8/17 4

T1-BLU

MOT

13-ORG T5-BLK T7-PNK

T4-YEL T6-GRY T8-RED T9-BRK RED T10-CURRY

safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT T12-VLT MOBIL POLYREX EM OLINE WIRES TO REVERSE THE ROTATION T11-GRN

NERCHANGE ANY TW

WARNING: Motor must be grounded in accordance with local and nationa electrical codes to prevent serious electrical shocks. Disconnect power AVERTISSEMENT: Le moteur doit être mis à la terre conformément 6208-Z-C3 ODE source before servicing unit. 6309-Z-C3

15797h électrique grave. Déconnectez l'allmentation avant l'entretien de la machine aux codes électriques locaux et nationaux afin d'éviter tout choc