DATA SHEET

Three Phase Induction Motor - Squirrel Cage



01518OT3E254JP-SG

Customer :

Product line : JP Pump NEMA Premium Product code :

Efficiency Three-Phase

Product code : 14327820

Catalog #:

Frame : 254/6JP Cooling method : IC01 - ODP Insulation class : F Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW)

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

Altitude : 1000 m.a.s.l. Approx. weight³ : 205 lb

Design : B | Moment of inertia (J) : 1.82 sq.ft.lb

3			(-)	1	
Output [HP]		15	15	15	
Poles		4	4	4	
Frequency [Hz]		60	50	50	
Rated voltage [V]		230/460	190/380	220/415	
Rated current [A]		37.2/18.6	43.8/21.9	40.0/21.2	
L. R. Amperes [A]		249/125	237/118	236/125	
LRC [A]		6.7x(Code H)	5.4x(Code F)	5.9x(Code G)	
No load current [A	.]	19.0/9.50	17.3/8.67	18.3/9.68	
Rated speed [RPI	Л]	1775	1465	1470	
Slip [%]		1.39	2.33	2.00	
Rated torque [ft.lb]	44.4	53.8	53.6	
Locked rotor torqu	ie [%]	240	170	200	
Breakdown torque	: [%]	300	220	250	
Service factor		1.15	1.15	1.15	
Temperature rise		80 K	80 K	80 K	
Locked rotor time		30s (cold) 17s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²		64.0 dB(A)	62.0 dB(A)	62.0 dB(A)	
	25%	91.0	92.3	91.4	
Efficiency (%)	50%	91.7	91.3	90.8	
Elliciency (70)	75%	92.4	91.0	91.1	
	100%	93.0	89.7	90.2	
	25%	0.36	0.45	0.40	
Power Factor	50%	0.62	0.71	0.66	
I OWELL ACIO	75%	0.73	0.81	0.78	
	100%	0.80	0.85	0.83	

<u>Drive end</u> <u>Non drive end</u> Foundation loads

Bearing type : 6309 Z C3 6208 Z C3 Max. traction : 540 lb Sealing : Without Without Max. compression : 745 lb

Sealing : Without Without Max.

Bearing Seal Bearing Seal

Lubrication interval : 20000 h 20000 h Lubricant amount : 13 g 8 g

Lubricant amount : 13 g 8 g
Lubricant type : Mobil Polyrex EM

Notes

USABLE @208V 41.1A SF 1.00 SFA 41.1A

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.

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



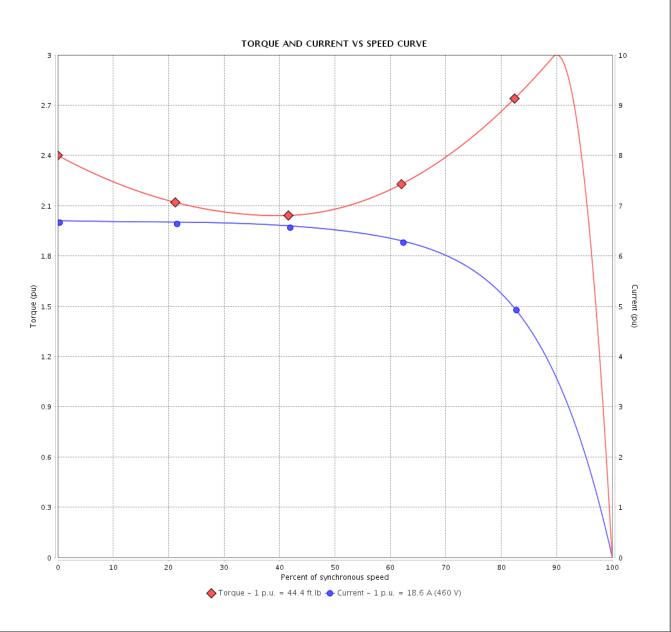
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327820

Catalog #: 01518OT3E254JP-SG



Performance : 230/460 V 60 Hz 4P Rated current : 37.2/18.6 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : 44.4 ft.lb Insulation class Rated torque : F Locked rotor torque : 240 % Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1775 rpm Design : B

Locked rotor time : 30s (cold) 17s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



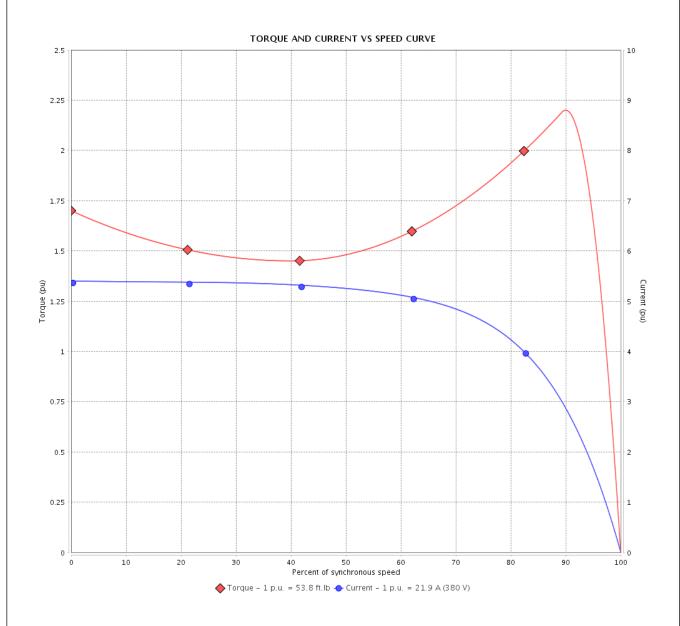
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327820

Catalog #: 01518OT3E254JP-SG



Performance : 190/380 V 50 Hz 4P Rated current : 43.8/21.9 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 5.4 Duty cycle : Cont.(S1) : 53.8 ft.lb Insulation class Rated torque : F Locked rotor torque : 170 % Service factor : 1.15 Breakdown torque : 220 % Temperature rise : 80 K : B Rated speed : 1465 rpm Design

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



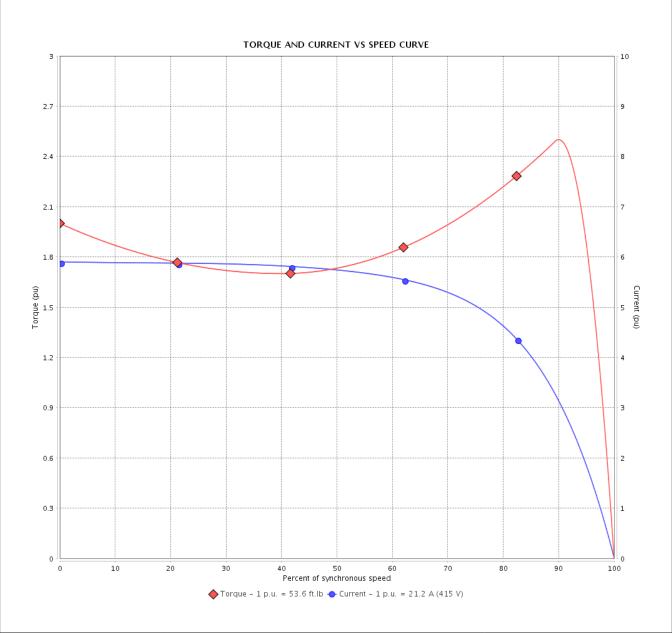
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327820

Catalog #: 01518OT3E254JP-SG



Performance : 220/415 V 50 Hz 4P Rated current : 40.0/21.2 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 5.9 Duty cycle : Cont.(S1) Insulation class Rated torque : 53.6 ft.lb : F Service factor Locked rotor torque : 200 % : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1470 rpm Design : B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



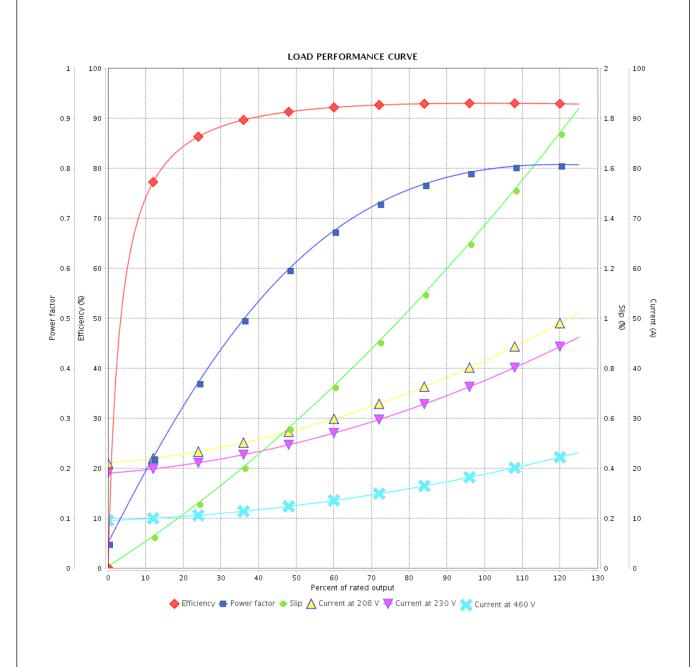
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327820

Catalog #: 01518OT3E254JP-SG



Performance	: 2	230/460 V 60 Hz 4P				
Rated current	Rated current : 37.2/18.6 A		Moment o	f inertia (J)	: 1.82 sq.ft.lb	
LRC	: 6	.7	Duty cycle)	: Cont.(S1)	
Rated torque	: 4	4.4 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 2	40 %	Service fa	ctor	: 1.15	
Breakdown torque		00 %	Temperati	Temperature rise		
Rated speed	: 1	775 rpm	Design		: B	
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Customer :

Date

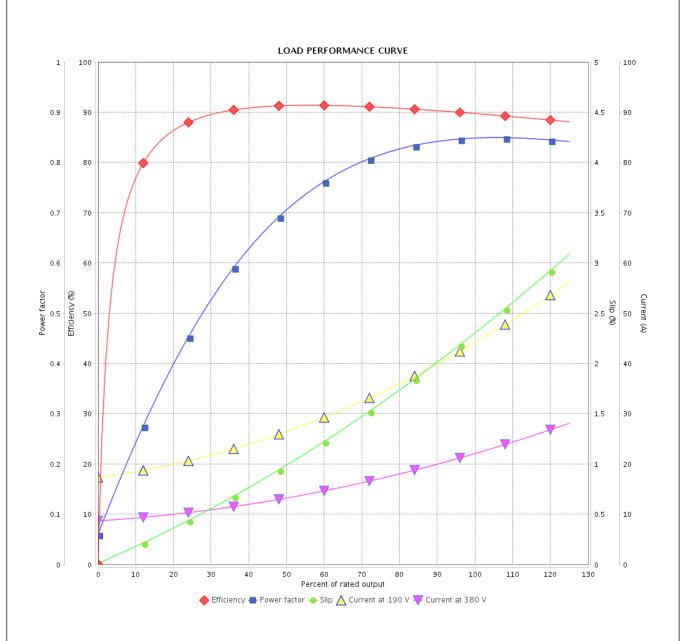
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Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327820

Catalog #: 01518OT3E254JP-SG



Performance : 190/380 V 50 Hz 4P Rated current : 43.8/21.9 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 5.4 Duty cycle : Cont.(S1) : 53.8 ft.lb Insulation class Rated torque : F Locked rotor torque : 170 % Service factor : 1.15 Breakdown torque : 220 % Temperature rise : 80 K Rated speed : 1465 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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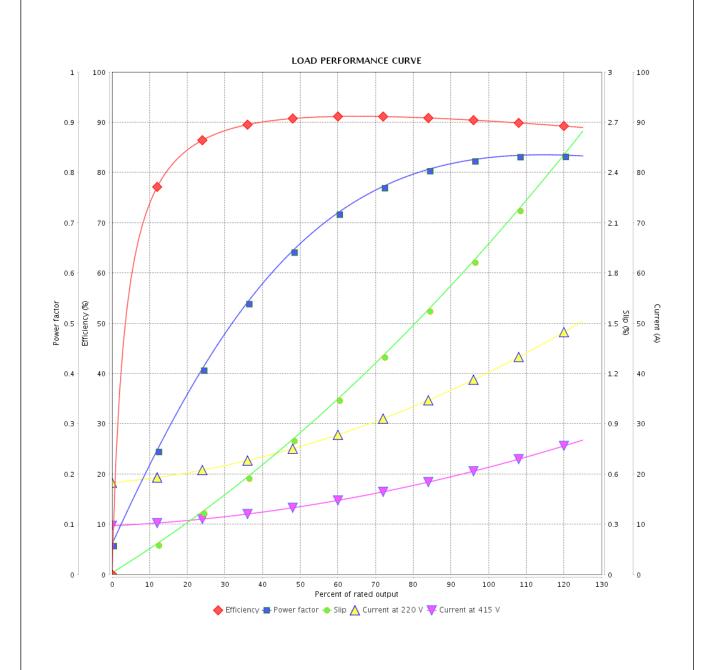
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Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327820

Catalog #: 01518OT3E254JP-SG



Performance	: 220/415 V 50 Hz 4P				
Rated current	: 40.0/21.2 A	Moment o	f inertia (J)	: 1.82 sq.ft.lb	
LRC	: 5.9	Duty cycle	}	: Cont.(S1)	
Rated torque	: 53.6 ft.lb	Insulation	class	:F	
Locked rotor torque	: 200 %	: 200 % Service factor : 250 % Temperature rise : 1470 rpm Design		: 1.15	
Breakdown torque	: 250 %			: 80 K	
Rated speed	: 1470 rpm			: B	
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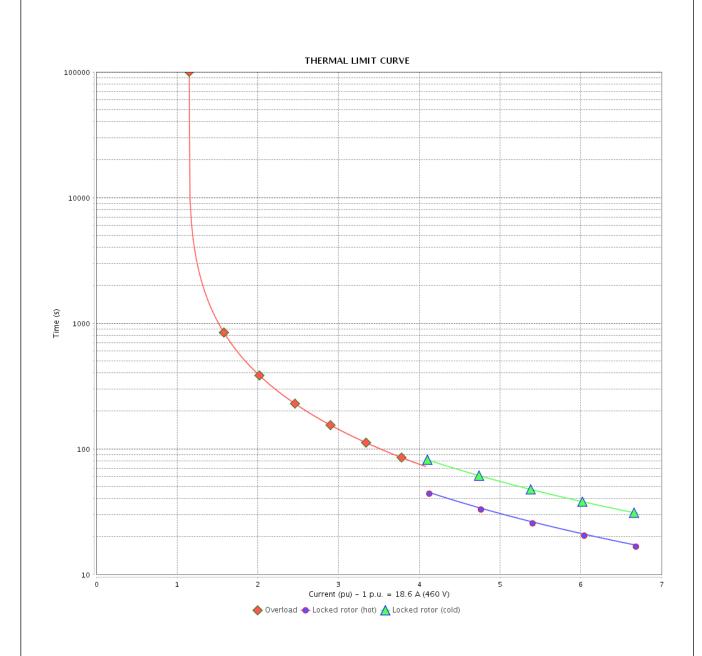


Customer		:				
Product line		: JP Pump NEMA Premium Efficiency Three-Phase		Product code :	14327820	
		Elliciency Three-Friase		Catalog # :	01518OT3E2	54JP-SG
D . (000/400 \ / 00 \ 4D				
Performance Rated current		: 230/460 V 60 Hz 4P : 37.2/18.6 A	Moment	of inertia (J)	: 1.82 sq.ft.lb	
LRC	:	: 6.7	Duty cycle	9	: Cont.(S1)	
Rated torque		: 44.4 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		: 240 % : 300 %	Service fa Temperati		: 1.15 : 80 K	
Rated speed		: 1775 rpm	Design		: B	
Heating constan	t					
Cooling constan						
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Three Phase Induction Motor - Squirrel Cage



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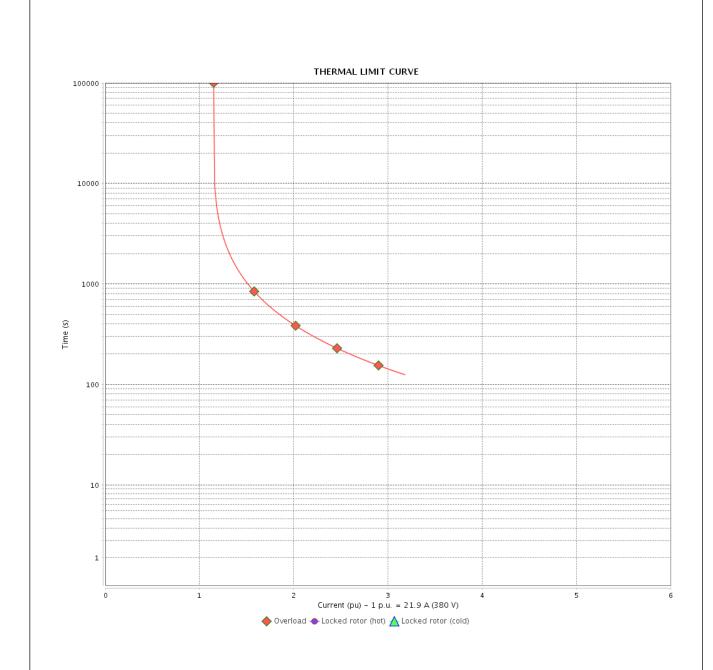


Customer	:			
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code : Catalog # :	14327820 01518OT3E2	 54JP-SG
Performance	: 190/380 V 50 Hz 4P			
Rated current	: 43.8/21.9 A	Moment of inertia (J)	: 1.82 sq.ft.lb	
LRC Rated torque	: 5.4 : 53.8 ft.lb	Duty cycle Insulation class	: Cont.(S1) : F	
Locked rotor torque	: 170 %	Service factor	: 1.15	
Breakdown torque Rated speed	: 220 % : 1465 rpm	Temperature rise Design	: 80 K : B	
Heating constant	·			
Cooling constant				
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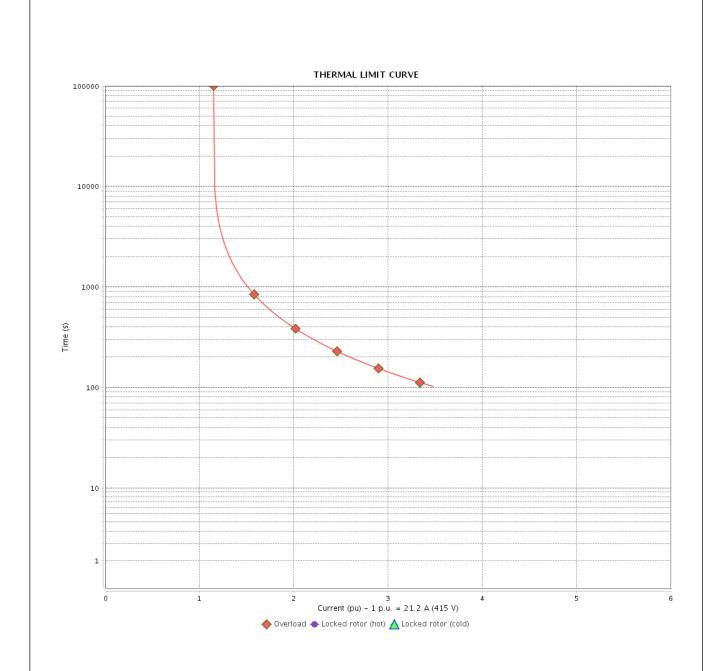


Customer	:					
Product line	: .	JP Pump NEMA Premium	Product code :		14327820	
	Ei	fficiency Three-Phase	(Catalog # :	01518OT3E2	54JP-SG
					0.0.00.00	
Performance	: 22	20/415 V 50 Hz 4P				
Rated current	: 40 : 5.	0.0/21.2 A	Moment of	f inertia (J)	: 1.82 sq.ft.lb	
LRC Rated torque		9 3.6 ft.lb	Duty cycle Insulation	class	: Cont.(S1) : F	
Locked rotor torq	ue : 20	00 %	Service fa	ctor	: 1.15	
Breakdown torqu Rated speed		50 % 470 rpm	Temperatu Design	ire rise	: 80 K : B	
		г				
Heating constant Cooling constant						
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Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

13/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

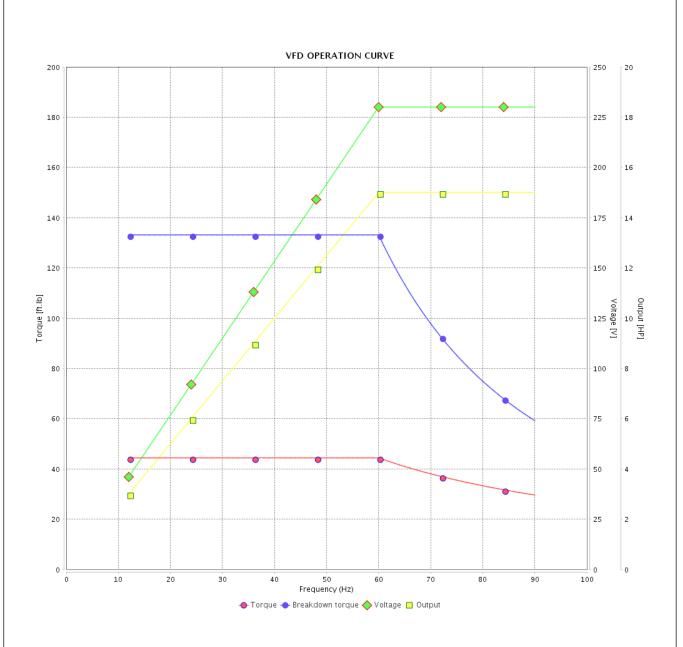
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Performance		: 230/460 V 60	Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		: 37.2/18.6 A : 6.7 : 44.4 ft.lb : 240 % : 300 % : 1775 rpm		Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 1.82 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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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

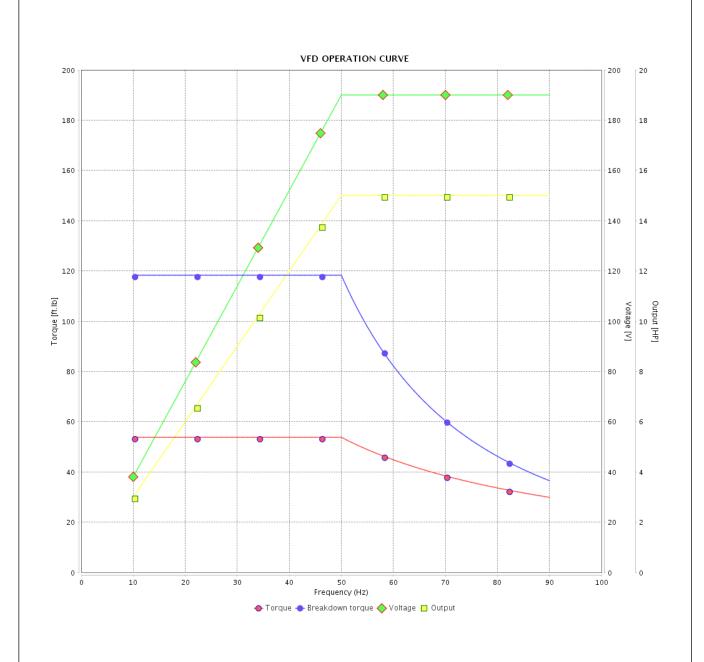
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Performance	: 19	90/380 V 50 Hz 4P					
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 5 : 5 que : 1 ue : 2	3.8/21.9 A .4 3.8 ft.lb 70 % 20 % 465 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 1.82 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	: Cont.(S1) : F : 1.15 : 80 K	
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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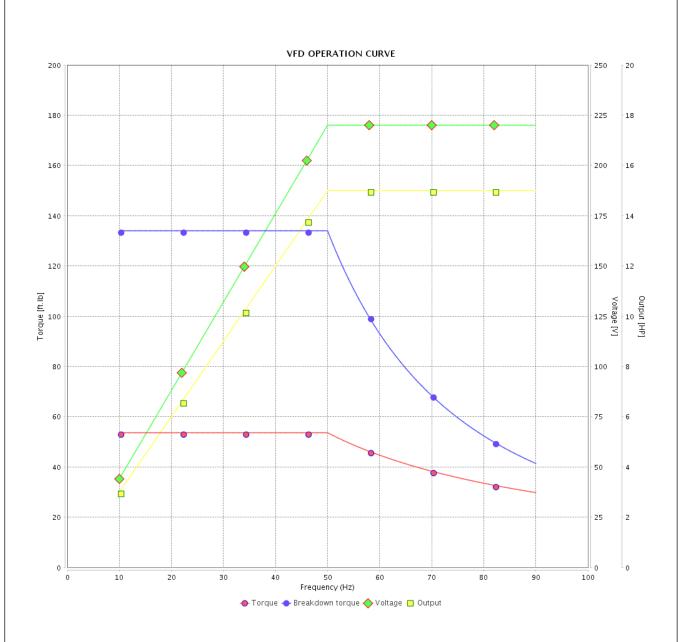
13/04/2022

Product line : JP Pump NEMA Premium

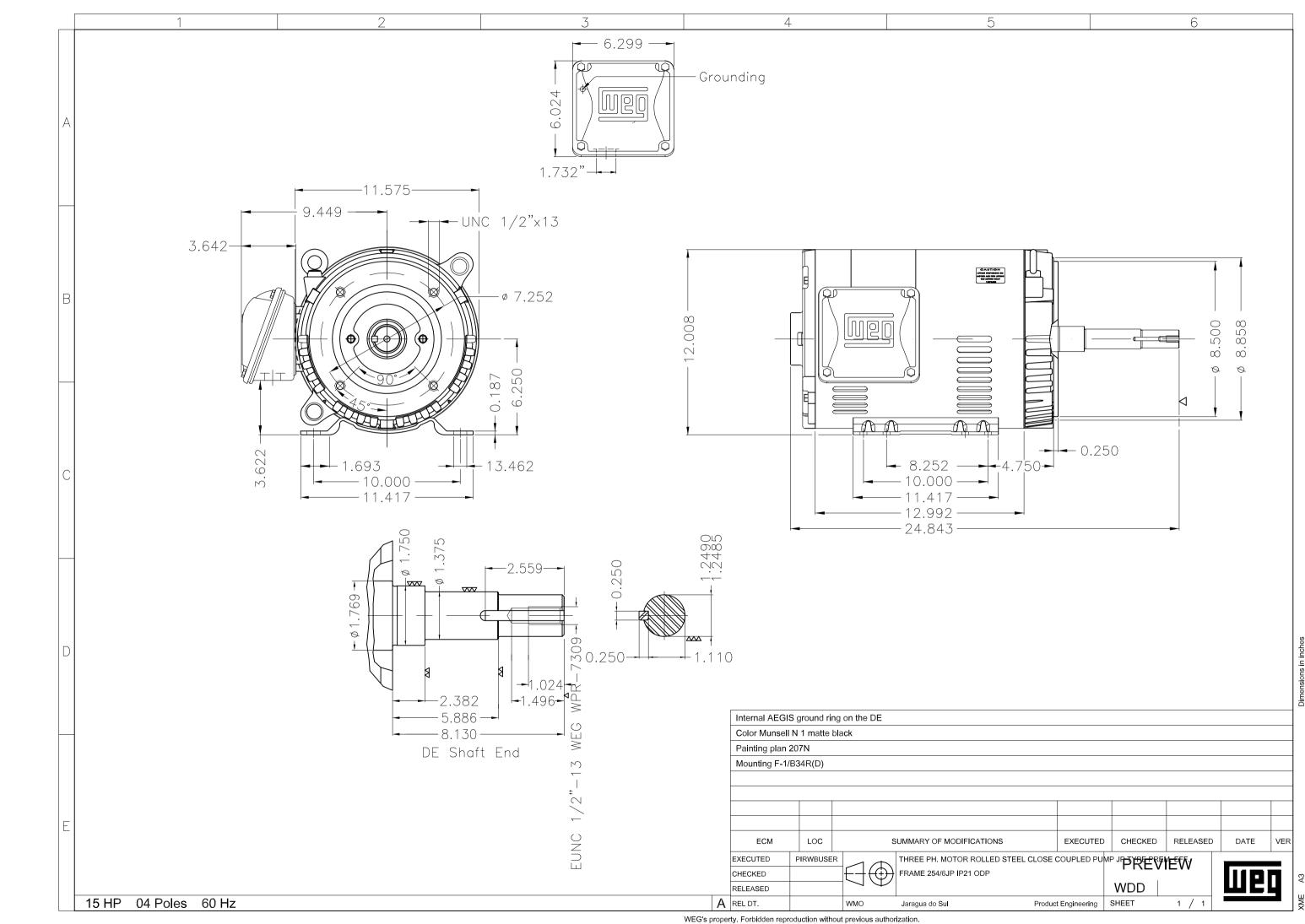
Efficiency Three-Phase

Product code: 14327820

Catalog #: 01518OT3E254JP-SG



Performance : 220/415 V 50 Hz 4P Rated current : 40.0/21.2 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 5.9 Duty cycle : Cont.(S1) : 53.6 ft.lb Insulation class : F Rated torque Locked rotor torque : 200 % Service factor : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1470 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by





US LISTED 3PT9

15(11) HP(kW)

9 ř

CC029A

MAT: 14327820

W01.TO0IC0X0N

PH 3 SFA

m.a.s.

MODEL 015180T3E254JP-SG 42.8/21 37.2/18.6 07SET2020 æ 230/460 0.80 SF 1.15

NEMA NOM.EFF. USABLE @ 208V 1465RPM 50Hz

FAT

INS CL

43.8-39.4/21.9-20.9A ALTERNATE RATING: 1000 MOT

IEC 60034-1 SF1.15

EFF 89.7% (IE1)

190-220/380-415V

15HP

SF1.00

41.1A 93.0%

T2-WHT T4-YEL

T114T12

T104

T12

T6-GRY T8-RED

73-ORG T1-BLU T5-BLK T7-PNK

9

ENCL

40°C CONT CODE

띪

PUTY 80K AMB

RPM

254/6JP

T111

HIGH

T12-VLT

79-BRK RED

T10-CURRY

Inverter

711-GRN

duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION 6208-Z-C3 ODE 6309-Z-C3

WARNING: Motor must be grounded in accordance with local and nationa

électrique grave. Déconnectez l'allmentation avant l'entretien de la machine

AVERTISSEMENT: Le moteur doit être mis à la terre conformément

source before servicing unit.

sux codes électriques locaux et nationaux afin d'éviter tout choc

MOBIL POLYREX EM electrical codes to prevent serious electrical shocks. Disconnect power

2000bh