### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : JP Pump NEMA Premium Product code: 14327799

Efficiency Three-Phase

Catalog #: 00156OT3E143JP-SG

Frame : 143/5JP Cooling method : IC01 - ODP 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> : 29.3 lb Altitude

Design : B Moment of inertia (J) : 0.0835 sa.ft.lb

Design		. Б	Moment of mertia (3)	. 0.0635 Sq.it.ib
Output [HP]		1.5	1.5	1.5
Poles		2	2	2
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190/380	220/415
Rated current [A]		3.70/1.85	4.40/2.20	4.02/2.13
L. R. Amperes [A]		31.8/15.9	29.5/14.7	29.7/15.8
LRC [A]		8.6x(Code K)	6.7x(Code H)	7.4x(Code J)
No load current [A	<b>\</b> ]	1.62/0.809	1.59/0.796	1.66/0.881
Rated speed [RPI	<b>/</b> 1]	3510	2890	2900
Slip [%]		2.50	3.67	3.33
Rated torque [ft.lb]		2.24	2.73	2.72
Locked rotor torque [%]		210	180	200
Breakdown torque	: [%]	330	250	280
Service factor			1.15	1.15
Temperature rise		80 K	80 K	80 K
Locked rotor time		34s (cold) 19s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>		62.0 dB(A)	60.0 dB(A)	60.0 dB(A)
	25%	81.1	83.2	82.1
Efficiency (%)	50%	81.5	82.7	81.9
Linderity (70)	75%	84.0	83.6	83.5
	100%	84.0	82.7	82.9
Power Factor	25%	0.45	0.51	0.47
	50%	0.73	0.79	0.75
1 OWELL ACTOL	75%	0.83	0.88	0.85
	100%	0.89	0.92	0.90

Non drive end Foundation loads Drive end

Bearing type 6206 ZZ 6203 ZZ Max. traction : 51 lb Sealing Without Without Max. compression : 81 lb

> Bearing Seal Bearing Seal

Lubrication interval Lubricant amount Mobil Polyrex EM

Lubricant type

Notes

USABLE @208V 4.09A SF 1.00 SFA 4.09A

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



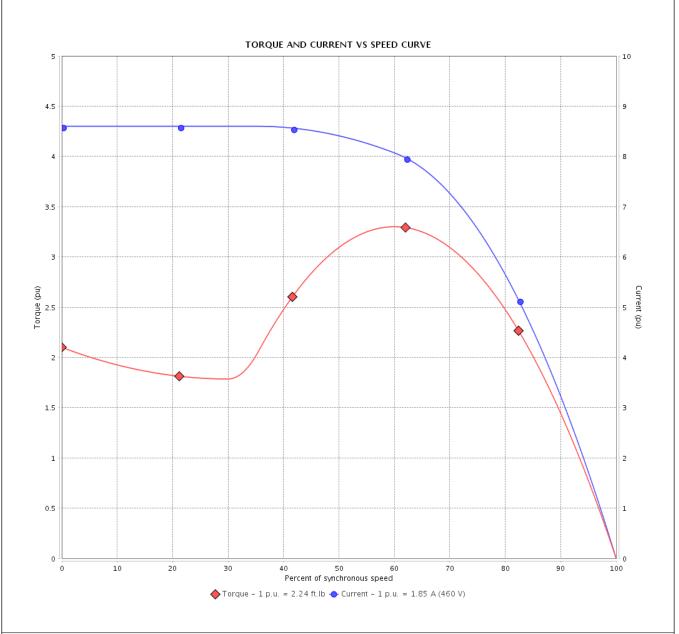
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327799

Catalog #: 00156OT3E143JP-SG



Performance	: 230/460 V 60 Hz 2P		
Rated current	: 3.70/1.85 A	Moment of inertia (J) Duty cycle Insulation class	: 0.0835 sq.ft.lb
LRC	: 8.6		: Cont.(S1)
Rated torque	: 2.24 ft.lb		: F
Locked rotor torque	: 210 %	Service factor	:
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B
Looked reter time	: 24s (sold) 10s (bot)		

Locked rotor time : 34s (cold) 19s (hot)

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#### TORQUE AND CURRENT VS SPEED CURVE



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Three Phase Induction Motor - Squirrel Cage Customer Product line : JP Pump NEMA Premium Product code: 14327799 Efficiency Three-Phase Catalog #: 00156OT3E143JP-SG TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Current Torque (pu) 1.2 0.6 0.3 Percent of synchronous speed ◆ Torque - 1 p.u. = 2.73 ft.lb ◆ Current - 1 p.u. = 2.20 A (380 V) Performance : 190/380 V 50 Hz 2P Rated current : 4.40/2.20 A Moment of inertia (J) : 0.0835 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 2.73 ft.lb Locked rotor torque : 180 % Service factor : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 2890 rpm Design : B Locked rotor time : 0s (cold) 0s (hot) Date Rev. **Changes Summary** Performed Checked

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### TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage



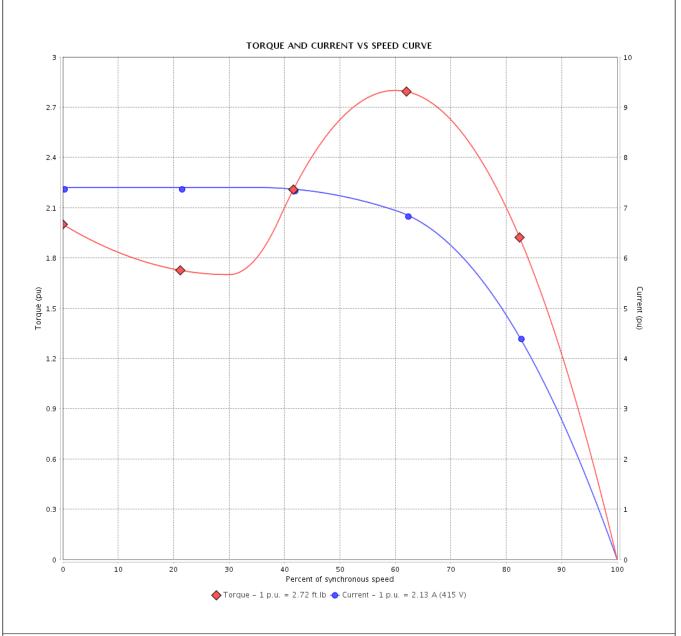
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327799

Catalog #: 00156OT3E143JP-SG



Performance	: 220/415 V 50 Hz 2P			
Rated current LRC	: 4.02/2.13 A : 7.4	Moment of inertia (J) Duty cycle	: 0.0835 sq.ft.lb : Cont.(S1)	
Rated torque	: 2.72 ft.lb	Insulation class	: F	
Locked rotor torque	: 200 %	Service factor	: 1.15	
Breakdown torque	: 280 %	Temperature rise	: 80 K	
Rated speed	: 2900 rpm	Design	: B	
Laskad ratar times	. Oo (oold) Oo (bot)			

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

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## LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



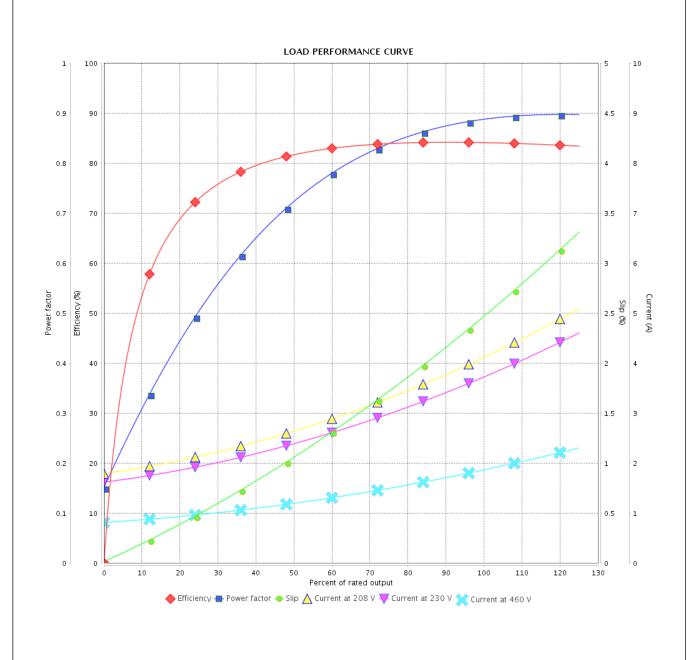
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327799

Catalog #: 00156OT3E143JP-SG



Performance	:	230/460 V 60 Hz 2P				
Rated current	rrent : 3.70/1.85 A		Moment o	Moment of inertia (J)		.lb
LRC	:	8.6	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	:	2.24 ft.lb	Insulation	class	: F	
Locked rotor torque	:	210 %	Service fa	ctor	:	
Breakdown torque	:	: 330 % Temperature Design		ture rise : 80 K : B		
Rated speed	:					
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## LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



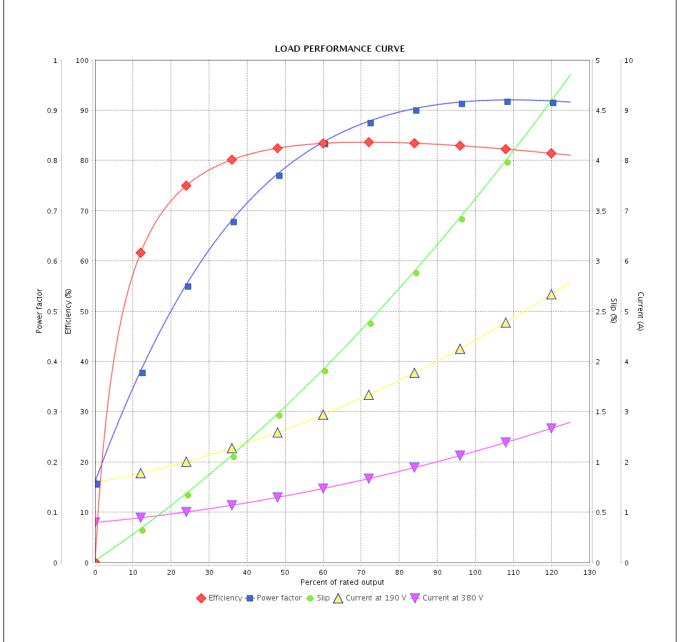
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327799

Catalog #: 00156OT3E143JP-SG



Performance	: 190/380 V 50 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 4.40/2.20 A : 6.7 : 2.73 ft.lb : 180 % : 250 % : 2890 rpm	Moment of Duty cycle Insulation Service fa Temperation Design	class ctor	: 0.0835 sq.ft. : Cont.(S1) : F : 1.15 : 80 K : B	lb
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## LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



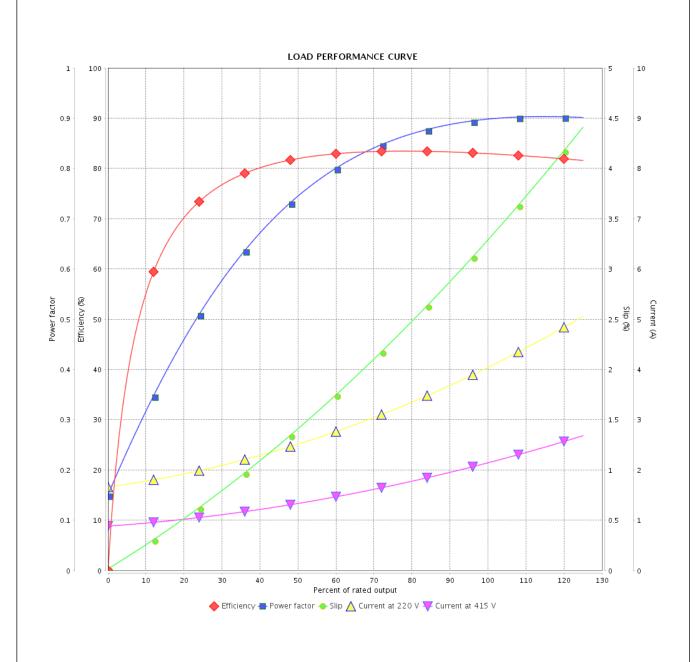
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327799

Catalog #: 00156OT3E143JP-SG



Performance	: 2	20/415 V 50 Hz 2P				
Rated current	rent : 4.02/2.13 A Moment of inertia (J) : 0.		: 0.0835 sq.ft.	.lb		
LRC	: 7	.4	Duty cycle	<b>:</b>	: Cont.(S1)	
Rated torque	: 2	.72 ft.lb	Insulation	class	: F	
Locked rotor torqu	ıe : 2	00 %	Service fa	ctor	: 1.15	
Breakdown torque	: 2	80 %	Temperatu	Temperature rise		
Rated speed	: 2	900 rpm	Design		: B	
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#### Three Phase Induction Motor - Squirrel Cage

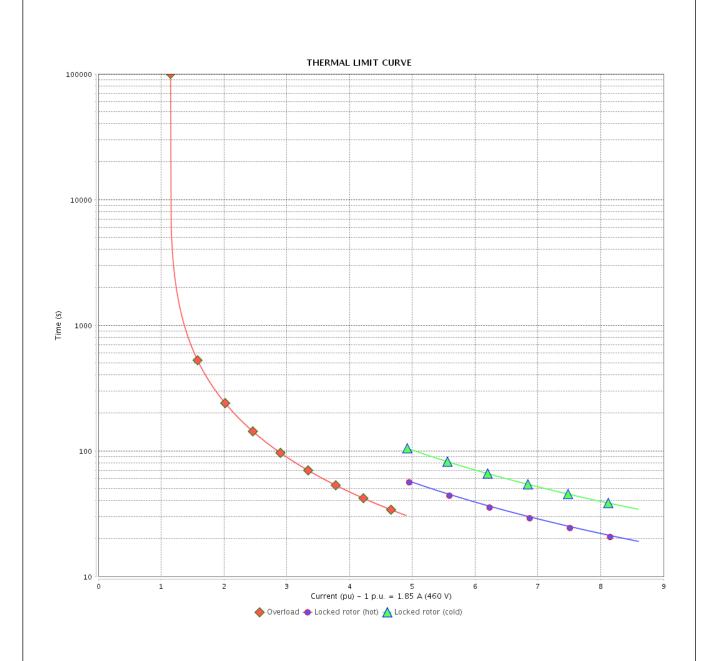


Customer		:				
Product line		: JP Pump NEMA Premium Efficiency Three-Phase		Product code :	14327799	
		Elliciency Three-Phase		Catalog # :	00156OT3E	I43JP-SG
Performance		: 230/460 V 60 Hz 2P				
Rated current	:	: 3.70/1.85 A	Moment o	of inertia (J)	: 0.0835 sq.ft.l	b
LRC Rated torque		: 8.6 : 2.24 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord	que :	: 210 %	Service fa		. г :	
Breakdown torqu	ue :	: 330 %	Temperati	ure rise	: 80 K	
Rated speed		: 3510 rpm	Design		: B	
Heating constant Cooling constant						
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### Three Phase Induction Motor - Squirrel Cage



Customer



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#### Three Phase Induction Motor - Squirrel Cage

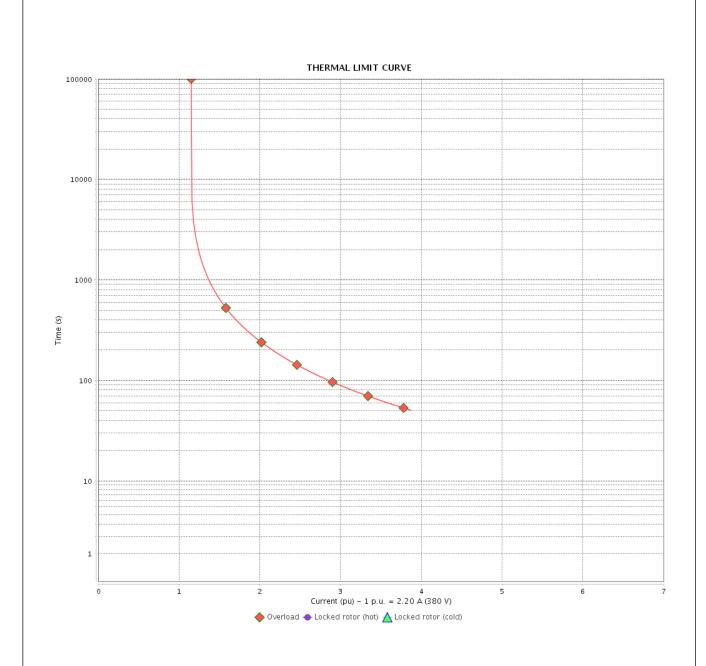


Customer	:	:				
Product line	:	: JP Pump NEMA Premium Efficiency Three-Phase		Product code :	14327799	
				Catalog # :	00156OT3E1	143JP-SG
Performance		190/380 V 50 Hz 2P				
Rated current	: 4	4.40/2.20 A	Moment o	f inertia (J)	: 0.0835 sq.ft.l	b
LRC Rated torque		6.7 2.73 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor tord	que :	180 %	Service fa		: 1.15	
Breakdown torqu Rated speed		250 % 2890 rpm	Temperati Design	ure rise	: 80 K : B	
Heating constant			200911		. <u> </u>	
Cooling constant						
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#### Three Phase Induction Motor - Squirrel Cage



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#### Three Phase Induction Motor - Squirrel Cage

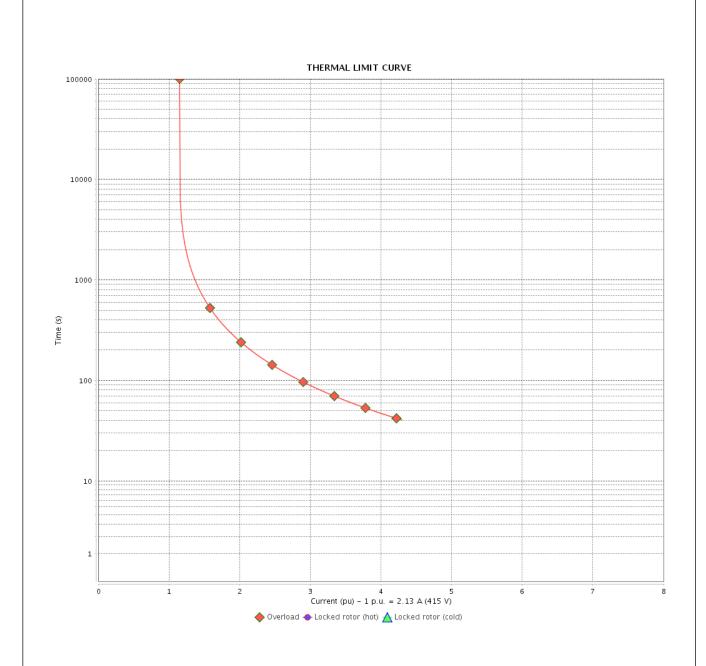


Customer	:					
Product line	:.	JP Pump NEMA Premium	I	Product code :	14327799	
	E	fficiency Three-Phase	(	Catalog # :	00156OT3E1	43JP-SG
Performance		20/415 V 50 Hz 2P	Mamonta	finartia (I)	. 0.002E og ft.l	h
Rated current LRC	: 7.		Duty cycle	f inertia (J)	: 0.0835 sq.ft.l : Cont.(S1)	U
Rated torque Locked rotor torq		72 ft.lb 00 %	Insulation Service fa	class	: F : 1.15	
Breakdown torqu	e : 28	30 %	Temperatu		: 80 K	
Rated speed		900 rpm	Design		: B	
Heating constant						
Cooling constant Rev.		Changes Summers	Т	Performed	Checked	Date
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#### Three Phase Induction Motor - Squirrel Cage



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## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



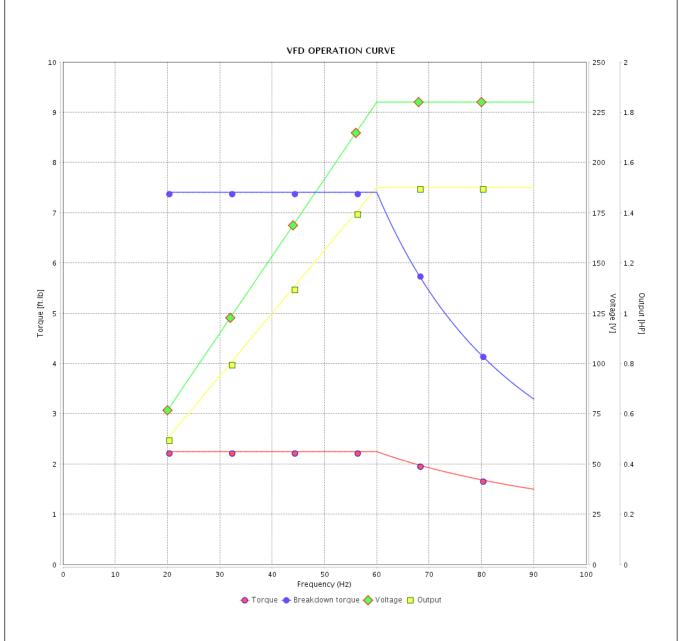
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14327799

Catalog #: 00156OT3E143JP-SG



Performance ::		230/460 V 60 Hz 2P					
Rated current : 3		.70/1.85 A	Moment of	Moment of inertia (J)		: 0.0835 sq.ft.lb	
LRC : 8.		.6	Duty cycle	Duty cycle		: Cont.(S1)	
Rated torque : 2		.24 ft.lb	Insulation	Insulation class		:F	
Locked rotor torque :		10 %	Service fa	Service factor			
Breakdown torque	: 33	30 %	Temperat	Temperature rise			
Rated speed	: 3	510 rpm Design		: B			
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