DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : JP Pump NEMA Premium Product code: 14808738

Efficiency Three-Phase

Catalog #: 00156ET3E143JP-SG

Frame : 143/5JP Cooling method : IC411 - TEFC

Insulation class Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line

: 1000 m.a.s.l. Approx. weight³ : 2.2 lb Altitude

Protection degree : IP55 Moment of inertia (J) : 0.1023 sq.ft.lb

: B Design

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]		3.74/1.87	4.44/2.22	4.02/2.13
L. R. Amperes [A]		34.0/17.0	32.0/16.0	32.1/17.0
LRC [A]		9.1x(Code L)	7.2x(Code H)	8.0x(Code J)
No load current [A]		1.72/0.859	1.69/0.845	1.72/0.914
Rated speed [RPN	/ []	3520	2895	2905
Slip [%]		2.22	3.50	3.17
Rated torque [ft.lb]		2.24	2.72	2.71
Locked rotor torqu	e [%]	229	190	220
Breakdown torque	[%]	300	280	310
Service factor			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		68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
	25%	78.4	83.1	82.2
Efficiency (%)	50%	80.0	82.6	82.2
Efficiency (%)	75%	82.5	83.8	84.0
100		84.0	82.9	83.6
	25%	0.44	0.49	0.46
Power Factor	50%	0.71	0.77	0.73
Fower Factor	75%	0.82	0.87	0.84
	100%	0.88	0.91	0.89

Drive end Non drive end Foundation loads

Bearing type 6206 ZZ 6203 ZZ Max. traction : 72 lb Sealing V'Ring Without Max. compression : 74 lb

Bearing Seal

Lubrication interval Lubricant amount Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 4.13A SF 1.00 SFA 4.13A

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



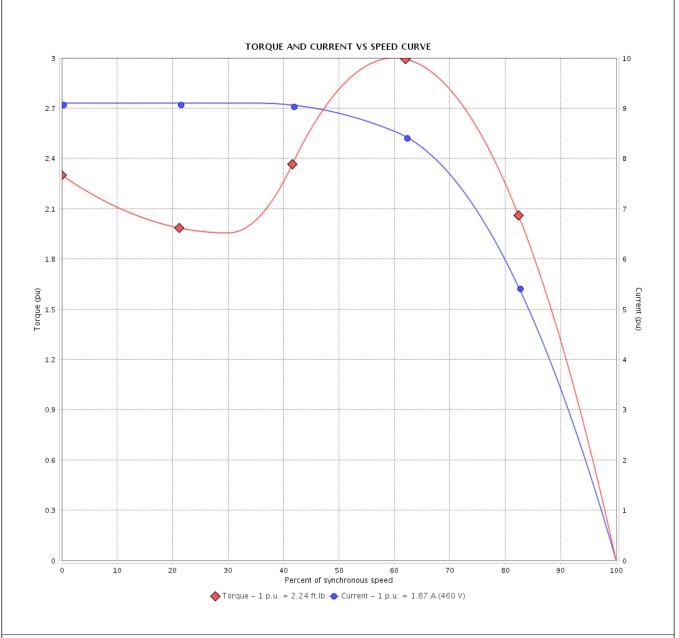
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14808738

Catalog #: 00156ET3E143JP-SG



Performance : 230/460 V 60 Hz 2P Rated current : 3.74/1.87 A Moment of inertia (J) : 0.1023 sq.ft.lb **LRC** : 9.1 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 2.24 ft.lb Service factor Locked rotor torque : 229 % : 80 K Breakdown torque : 300 % Temperature rise Rated speed : 3520 rpm Design : B

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

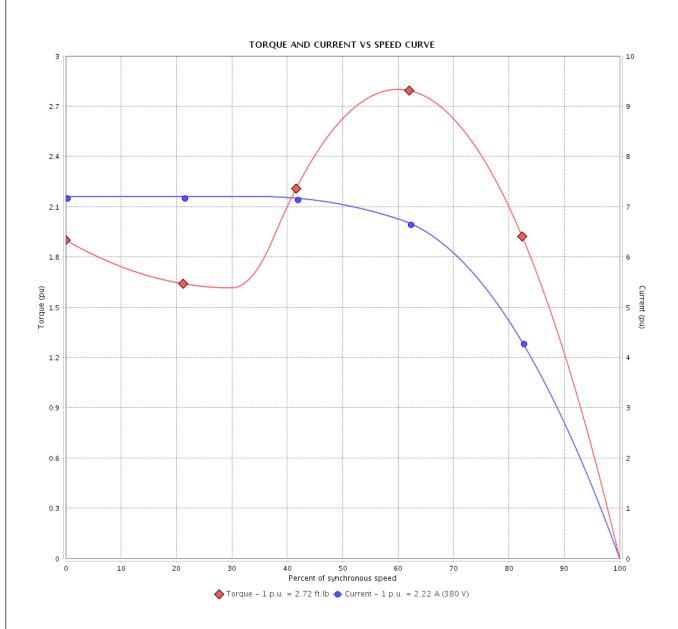


Customer :

Product line : JP Pump NEMA Premium Product code : 14808738

Efficiency Three-Phase

Catalog #: 00156ET3E143JP-SG



Performance : 190/380 V 50 Hz 2P Rated current : 4.44/2.22 A Moment of inertia (J) : 0.1023 sq.ft.lb **LRC** : 7.2 Duty cycle : Cont.(S1) : 2.72 ft.lb Insulation class : F Rated torque Locked rotor torque : 190 % Service factor : 1.15 Breakdown torque : 280 % Temperature rise : 80 K : B Rated speed : 2895 rpm Design

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



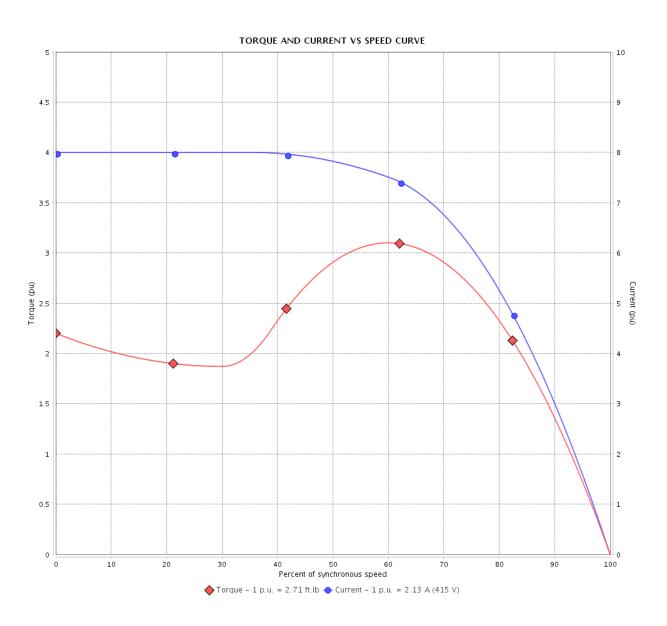
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14808738

Catalog #: 00156ET3E143JP-SG



Performance : 220/415 V 50 Hz 2P Rated current : 4.02/2.13 A Moment of inertia (J) : 0.1023 sq.ft.lb **LRC** : 8.0 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 2.71 ft.lb Service factor Locked rotor torque : 220 % : 1.15 Breakdown torque : 310 % Temperature rise : 80 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			4 / 16	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



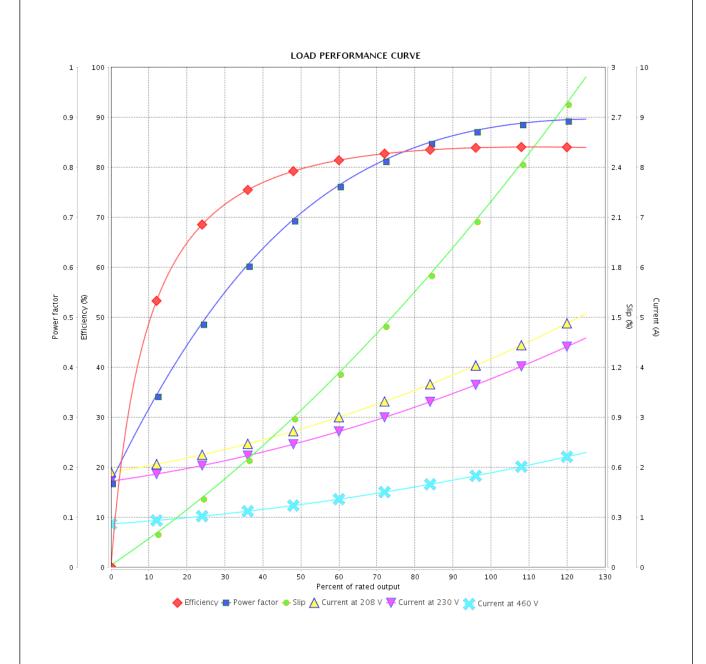
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14808738

Catalog #: 00156ET3E143JP-SG



Performance	::	230/460 V 60 Hz 2P				
Rated current	::	3.74/1.87 A	Moment o	f inertia (J)	: 0.1023 sq.ft.	lb
LRC	: 9	9.1	Duty cycle	;	: Cont.(S1)	
Rated torque	::	2.24 ft.lb	Insulation	class	: F	
Locked rotor torque	e ::	229 %	Service fa	ctor	:	
Breakdown torque	::	300 %	Temperature rise		: 80 K	
Rated speed	::	3520 rpm	Design		: B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Data	12/04/2022				5 / 16	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

12/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

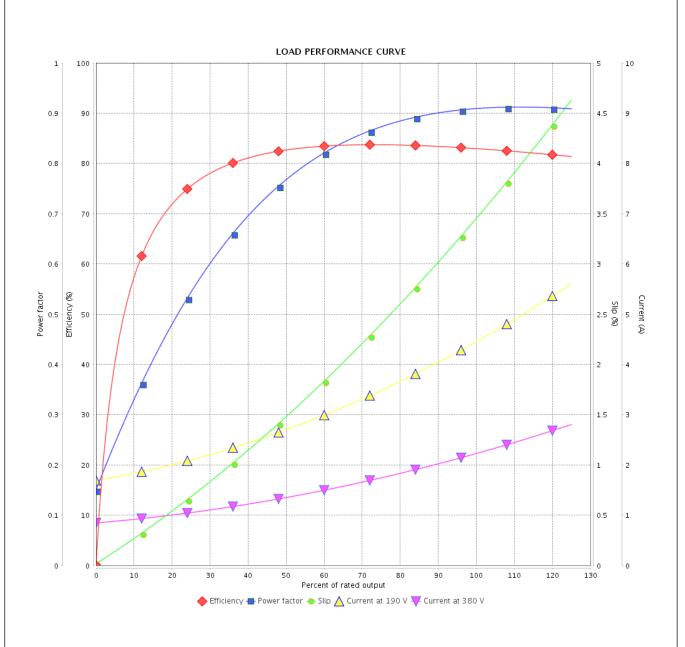
Product code: 14808738

Catalog #: 00156ET3E143JP-SG

Page

6/16

Revision



Performance	:	190/380 V 50 Hz 2F	D			
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: ue e :	4.44/2.22 A 7.2 2.72 ft.lb 190 % 280 % 2895 rpm	Moment of Duty cycle Insulation Service fa Temperatu Design	class ctor	: 0.1023 sq.ft. : Cont.(S1) : F : 1.15 : 80 K : B	lb
Rev.		Changes Summa	ary	Performed	Checked	Date
Performed by						

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



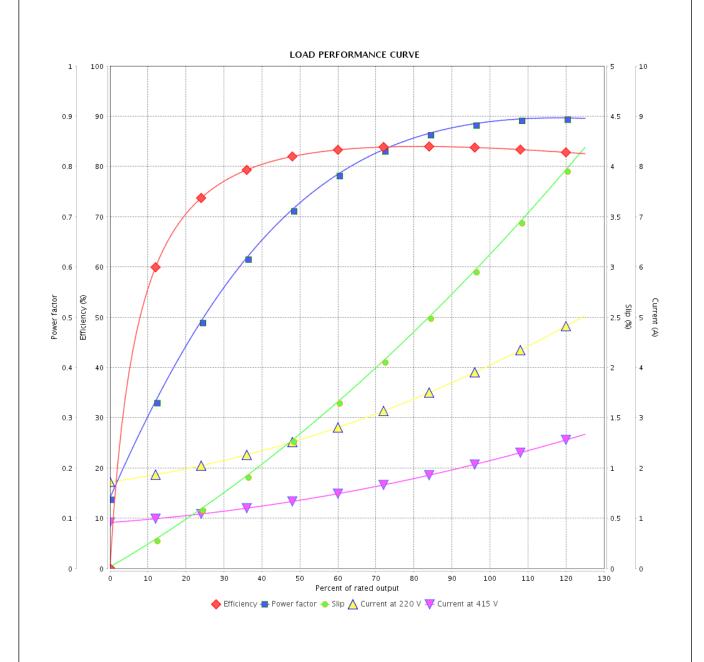
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14808738

Catalog #: 00156ET3E143JP-SG



Performance	:	220/415 V 50 Hz 2P				
Rated current		4.02/2.13 A	Moment o	f inertia (J)	: 0.1023 sq.ft.	lb
LRC	:	8.0	Duty cycle	:	: Cont.(S1)	
Rated torque	:	2.71 ft.lb	Insulation	class	: F	
		220 %	Service fa	ctor	: 1.15	
Breakdown torque		310 %	Temperature rise		: 80 K	
Rated speed	:	2905 rpm	Design		: B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				7 / 16	

Three Phase Induction Motor - Squirrel Cage

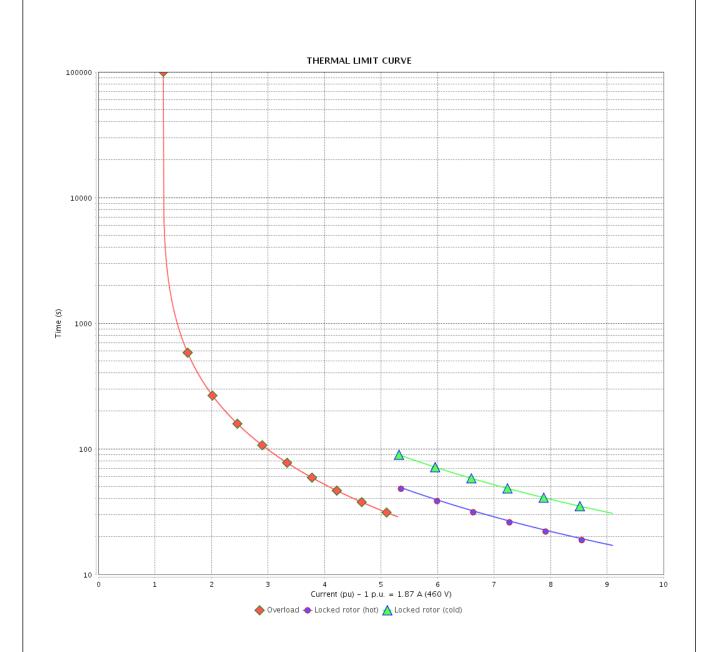


Customer	:					
Product line	:,	JP Pump NEMA Premium		Product code :	14808738	
	E	fficiency Three-Phase				40 ID 00
				Catalog # :	00156ET3E1	43JP-3G
Performance	: 2:	30/460 V 60 Hz 2P				
Rated current	: 3.	.74/1.87 A	Moment o	f inertia (J)	: 0.1023 sq.ft.l	b
LRC	: 9.	.1	Duty cycle)	: Cont.(S1)	
Rated torque Locked rotor torque		.24 ft.lb 29 %	Insulation Service fa		: F :	
Breakdown torque	: 30	00 %	Temperatu		: 80 K	
Rated speed	: 3	520 rpm	Design		: B	
Heating constant						
Cooling constant			Т			
Rev.		Changes Summary		Performed	Checked	Date
Dorformed by						
Performed by		_			Pogo	Revision
Checked by	12/04/2022	_			Page	KEVISION

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

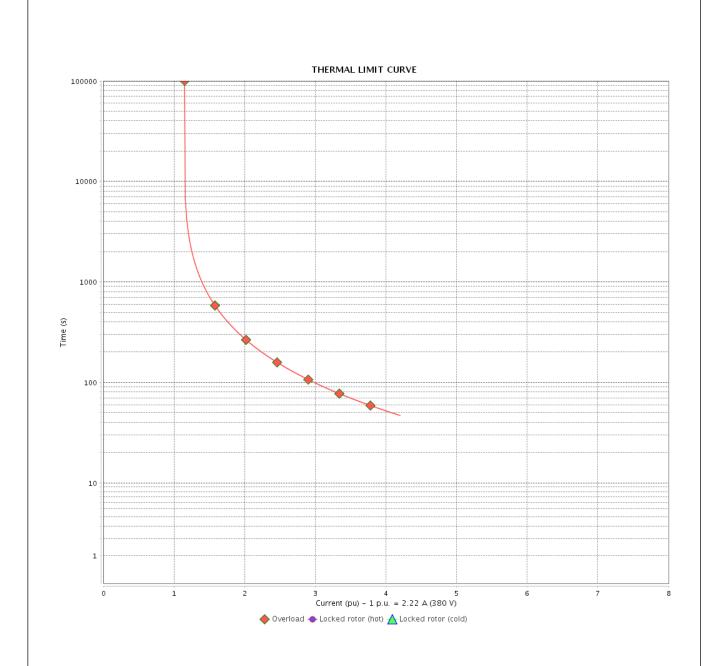


Customer		:				
Product line		: JP Pump NEMA Premium		Product code :	14808738	
		Efficiency Three-Phase		Catalog # :	00156ET3E1	43 IP-SG
Performance	:	190/380 V 50 Hz 2P				
Rated current LRC		4.44/2.22 A 7.2	Moment o	f inertia (J)	: 0.1023 sq.ft.ll : Cont.(S1))
Rated torque	:	2.72 ft.lb	Insulation	class	: F	
Locked rotor toro		190 %	Service fa		: 1.15	
Breakdown torqu Rated speed		280 % 2895 rpm	Temperatu Design	ire rise	: 80 K : B	
Heating constant						
Cooling constant	t			т		
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				10 / 16	

Three Phase Induction Motor - Squirrel Cage



Customer :



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

Three Phase Induction Motor - Squirrel Cage

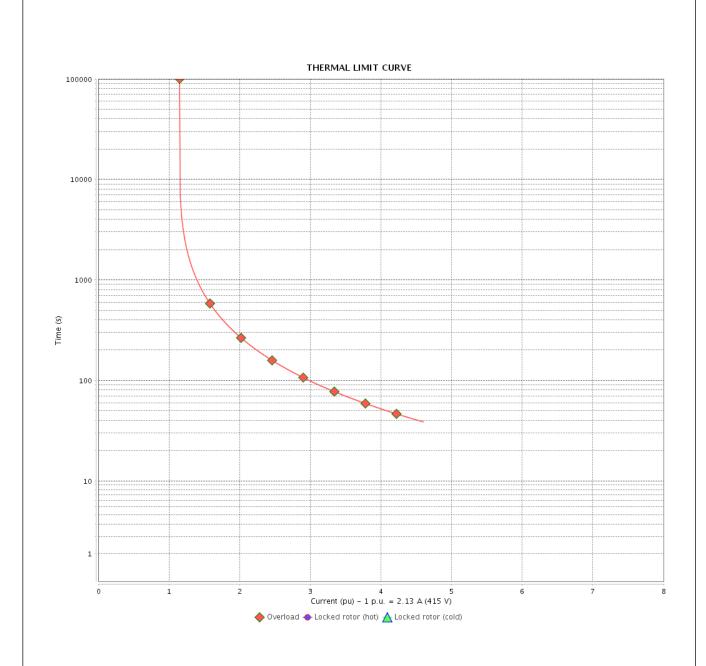


Customer	:					
Product line	: JP F Efficie	: JP Pump NEMA Premium Efficiency Three-Phase		Product code :	14808738	
	Emore	they three thate	(Catalog # :	00156ET3E1	43JP-SG
Performance		15 V 50 Hz 2P				
Rated current LRC	: 4.02/2 : 8.0	2.13 A	Moment of Duty cycle		: 0.1023 sq.ft.lt : Cont.(S1)	
Rated torque	: 2.71 1		Insulation	class	: F	
Locked rotor tord			Service fac		: 1.15 : 80 K	
Breakdown torqu Rated speed	: 2905		Temperatu Design	re rise	: B	
Heating constant			-			
Cooling constant						
Rev.		anges Summary		Performed	Checked	Date
Performed by					_	
Checked by	12/04/2022				Page 12 / 16	Revision
LISTE	1フ/ログ/フロンフ			1	1//Th	1

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



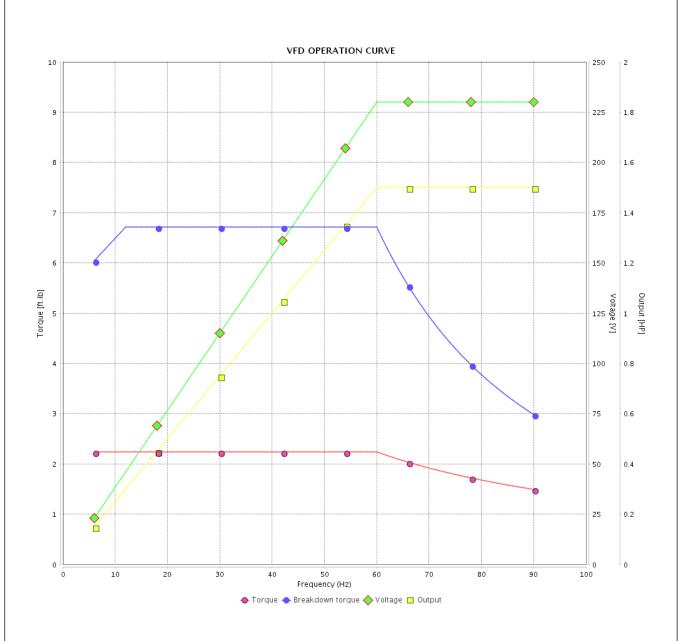
Customer :

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14808738

Catalog #: 00156ET3E143JP-SG



Performance		: 230/460 V 60 Hz 2P						
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		74/1.87 A 1 24 ft.lb 29 % 00 % 520 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1023 sq.ft.lb : Cont.(S1) : F : : 80 K : 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



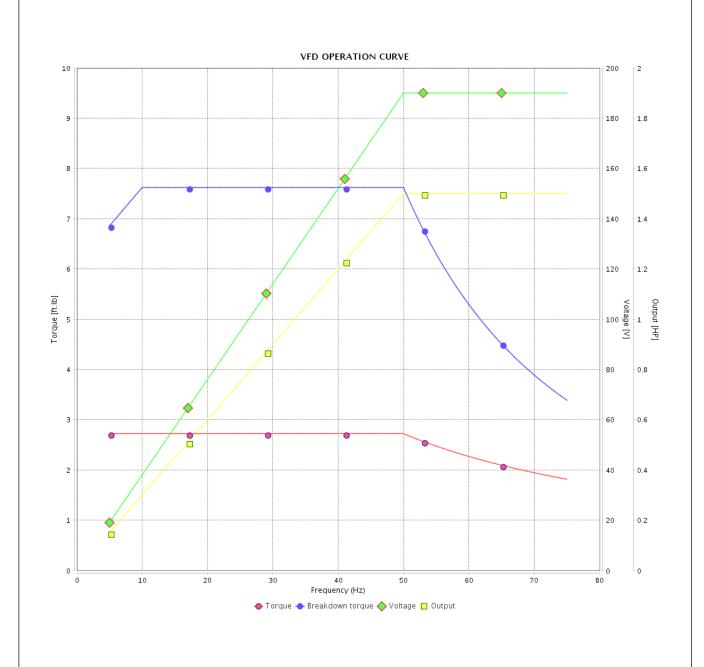
Customer

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14808738

Catalog #: 00156ET3E143JP-SG



Performance	: 1	: 190/380 V 50 Hz 2P					
Rated current	ed current : 4.44/2.22 A		Moment o	Moment of inertia (J)		.lb	
LRC	: 7.2 Duty cycle		;	: Cont.(S1)			
Rated torque	: 2	.72 ft.lb	Insulation class		: F ` ´		
Locked rotor torqu	ie : 1	90 %	Service fa	Service factor		: 1.15	
Breakdown torque		80 %	Temperati	Temperature rise		: 80 K	
Rated speed : 2895		895 rpm	Design	Design			
Rev.		Changes Summary		Performed	Checked	Date	
D ()		T					
Performed by							
Checked by					Page	Revision	
Date	12/04/2022	1			15 / 16		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

12/04/2022

Product line : JP Pump NEMA Premium

Efficiency Three-Phase

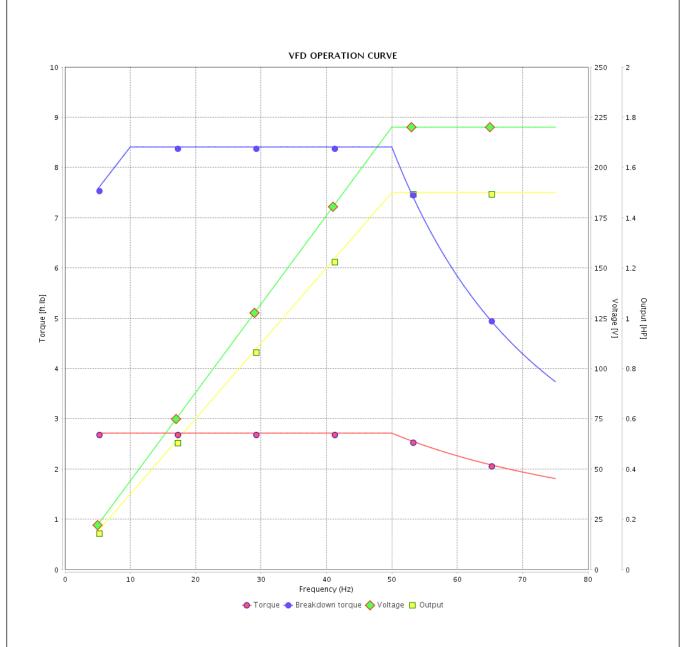
Product code: 14808738

Catalog #: 00156ET3E143JP-SG

Page

16 / 16

Revision



Performance	: 22	20/415 V 50 Hz 2P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 8. : 2. ue : 22	.02/2.13 A .0 .71 ft.lb 20 % 10 % 905 rpm	Duty cycle Insulation class Service factor Temperature rise		: 0.1023 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
Rev.	Changes Summary			Performed	Checked	Date
Performed by						

