DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40

Frame : 404/5JP

Insulation class Duty cycle

: Cont.(S1) : -20°C to +40°C Ambient temperature : 1000 m.a.s.l. Altitude

: IP23 Protection degree

Cooling method : IC01 - ODP

Mounting : F-1

Rotation¹ : Both (CW and CCW)

Starting method : Direct On Line Approx. weight³ : 1072 lb

Moment of inertia (J) : 25.5 sq.ft.lb

Design		: B			·
Output [HP]		125	100	100	100
Poles		4	4	4	4
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		138	138	133	129
L. R. Amperes [A]		952	994	1024	1032
LRC [A]		6.9x(Code G)	7.2x(Code H)	7.7x(Code H)	8.0x(Code J)
No load current [A		47.0	46.3	50.2	53.7
Rated speed [RPM]		1780	1480	1480	1480
Slip [%]		1.11	1.33	1.33	1.33
Rated torque [ft.lb]		369	355	355 355	
Locked rotor torqu	Locked rotor torque [%]		240	270	290
Breakdown torque	[%]	260	260	300	320
Service factor		1.25	1.00	1.00 1.00	
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		18s (cold) 10s (hot)	16s (cold) 9s (hot)	16s (cold) 9s (hot)	14s (cold) 8s (hot)
Noise level ²		69.0 dB(A)			
	25%	94.9	94.5	94.5	94.8
Efficiency (%)	50%	95.0	94.6	94.6	94.9
Lincicity (70)	75%	95.4	95.0	95.0	95.0
	100%	95.4	95.0	95.0	95.0
	25%	0.50	0.50	0.46	0.43
Power Factor	50%	0.75	0.76	0.72	0.69
1 OWEL 1 actor	75%	0.83	0.84	0.82	0.80
	100%	0.86	0.87	0.86	0.85

Drive end Non drive end

Without

Bearing Seal

6314 C3 6212 Z C3

Without

Bearing Seal

20000 h 20000 h Lubrication interval Lubricant amount 13 g 27 g Lubricant type Mobil Polyrex EM

Foundation loads

Max. traction : 2869 lb Max. compression : 3941 lb

Notes

Bearing type

Sealing

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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Three Phase Induction Motor - Squirrel Cage



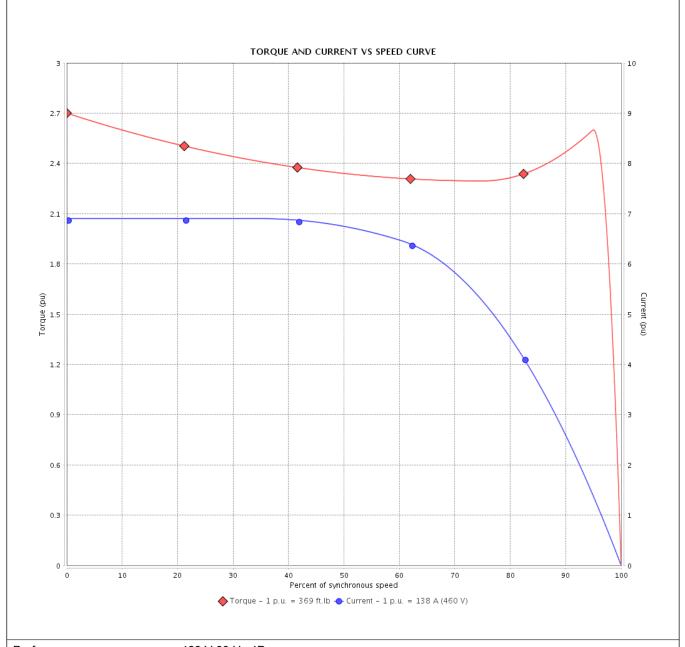
Customer :

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40



Locked rotor torque: 270 %Service factor: 1.25Breakdown torque: 260 %Temperature rise: 80 KRated speed: 1780 rpmDesign: B

Locked rotor time : 18s (cold) 10s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : W40 JP Pump NEMA Premium Product code: 14270552 Efficiency Three-Phase Catalog #: 12518OT3G405JP-W40 TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Torque (pu) 1.2 0.6 0.3 40 50 -Percent of synchronous speed 🔷 Torque – 1 p.u. = 355 ft.lb 🔷 Current – 1 p.u. = 138 A (380 V)

Performance	: 380 V 50 Hz 4P IE3			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 138 A : 7.2 : 355 ft.lb : 240 % : 260 % : 1480 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 25.5 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Locked rotor time	: 16s (cold) 9s (hot)			
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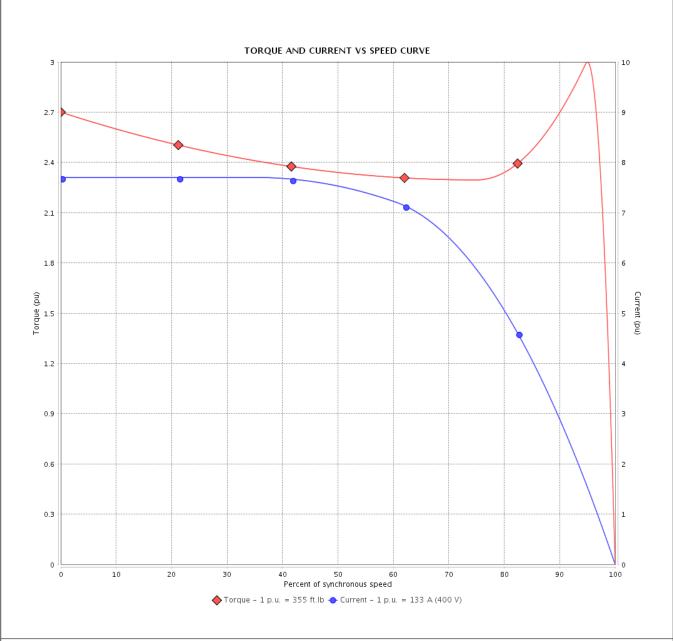
Customer :

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40



Performance : 400 V 50 Hz 4P IE3 Rated current : 133 A Moment of inertia (J) : 25.5 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) Insulation class Rated torque : 355 ft.lb : F Service factor Locked rotor torque : 270 % : 1.00 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1480 rpm Design : B

Locked rotor time : 16s (cold) 9s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : W40 JP Pump NEMA Premium Product code: 14270552 Efficiency Three-Phase Catalog #: 12518OT3G405JP-W40 TORQUE AND CURRENT VS SPEED CURVE 4.5 3.5 Torque (pu) Current 0.5 Percent of synchronous speed ◆ Torque - 1 p.u. = 355 ft.lb ◆ Current - 1 p.u. = 129 A (415 V) Performance : 415 V 50 Hz 4P IE3 Rated current : 129 A Moment of inertia (J) : 25.5 sq.ft.lb **LRC** : 8.0 Duty cycle : Cont.(S1) : 355 ft.lb Insulation class Rated torque : F : 290 % Locked rotor torque Service factor : 1.00 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 1480 rpm Design : B Locked rotor time : 14s (cold) 8s (hot) Date Rev. **Changes Summary** Performed Checked

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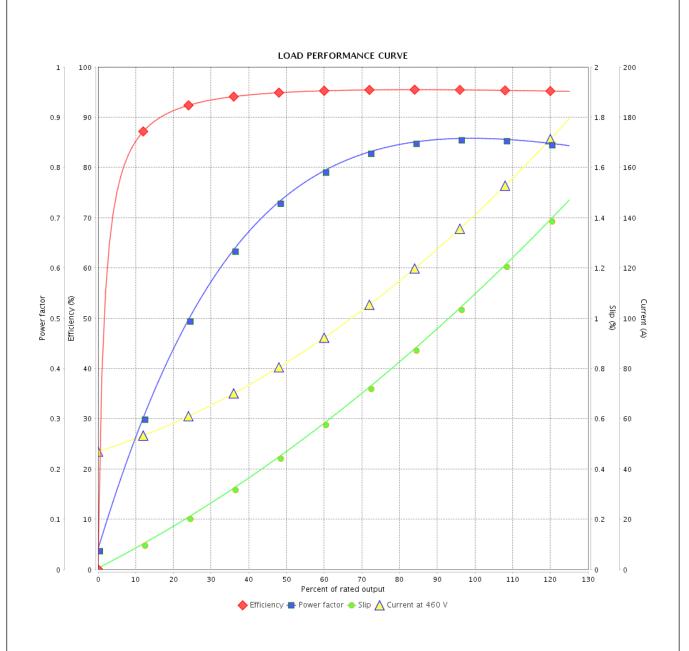
Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40

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Performance	: 4	60 V 60 Hz 4P				
Rated current : 138				Moment of inertia (J)		
LRC	: 6	.9	Duty cycle	}	: Cont.(S1)	
Rated torque	: 3	69 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 2	70 %	Service fa	ctor	: 1.25	
Breakdown torque	e : 2	60 %	Temperati	Temperature rise		
Rated speed	: 1	780 rpm	Design		: B	
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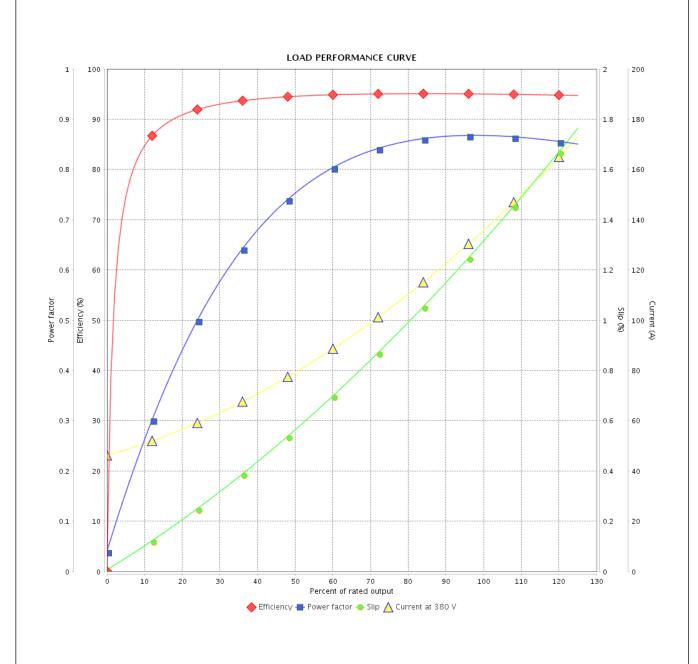
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40



Performance	: 3	80 V 50 Hz 4P IE3	}			
Rated current	: 1	38 A	Moment of	of inertia (J)	: 25.5 sq.ft.lb	
LRC		7.2	Duty cycle	е	: Cont.(S1)	
Rated torque		555 ft.lb	Insulation	class	: F	
Locked rotor torqu	ле : 2	40 %	Service fa	actor	: 1.00	
Breakdown torque	e : 2	.60 %	Temperat	Temperature rise		
Rated speed	: 1	480 rpm	Design		: B	
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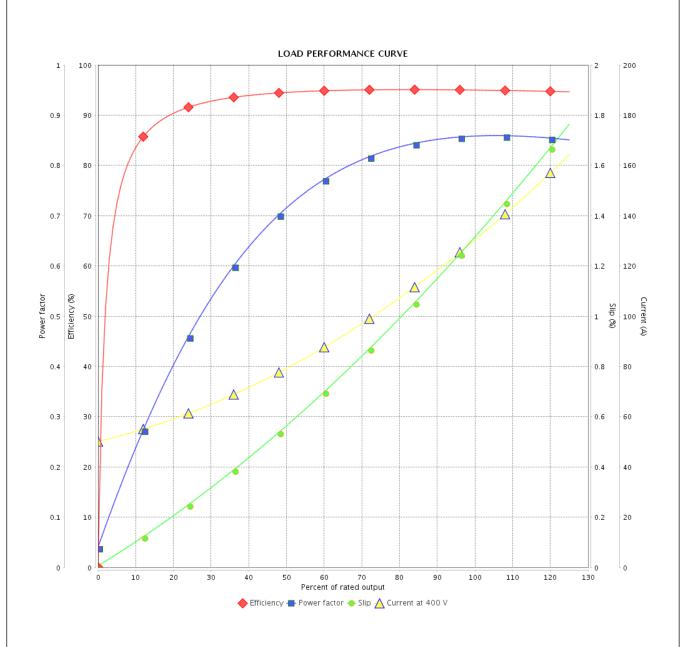
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Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40



Performance	: 4	00 V 50 Hz 4P IE3				
Rated current		33 A	Moment o	of inertia (J)	: 25.5 sq.ft.lb	
LRC : 7		.7	Duty cycle	9	: Cont.(S1)	
Rated torque : 3		55 ft.lb	Insulation	class	: F	
Locked rotor torque		70 %	Service fa	ictor	: 1.00	
Breakdown torque	: 3	00 %	Temperat	Temperature rise		
Rated speed	: 1	480 rpm	Design		: B	
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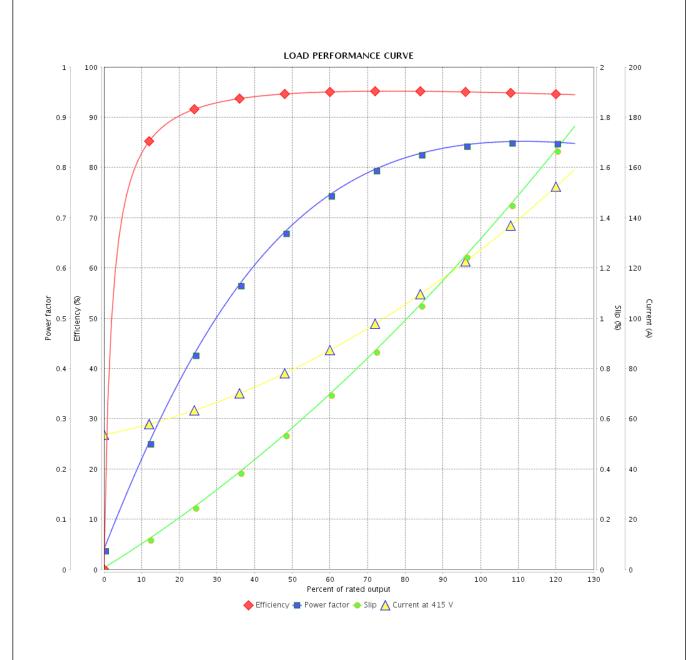
Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40

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Performance	: 415 V 50 Hz 4P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 129 A : 8.0 : 355 ft.lb : 290 % : 320 % : 1480 rpm	Moment of in Duty cycle Insulation cla Service factor Temperature Design	ass or	: 25.5 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
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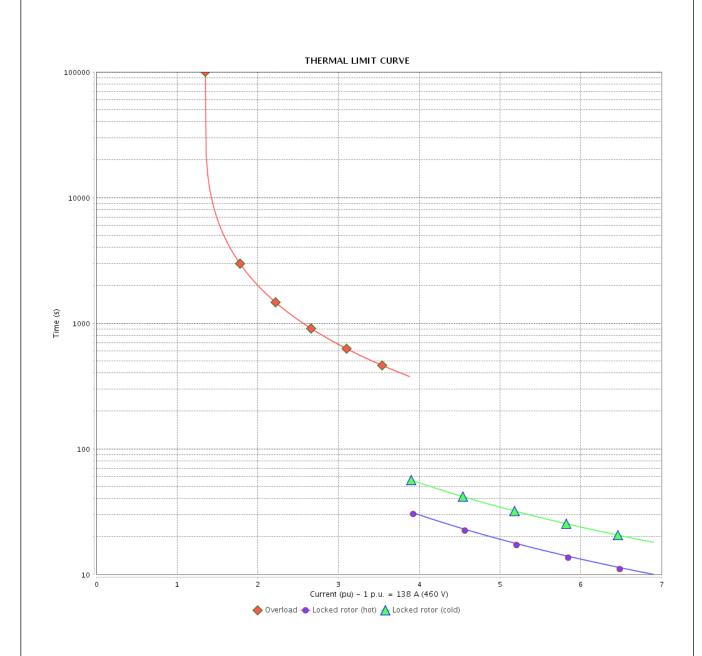


Customer	:				
Product line	: W40 JP Pump NEMA Prem Efficiency Three-Phase		Product code : Catalog # :	14270552 12518OT3G4	05JP-W40
	: 460 V 60 Hz 4P				
LRC Rated torque	: 138 A : 6.9 : 369 ft.lb : 270 %	Moment of Duty cycle Insulation Service factors	class	: 25.5 sq.ft.lb : Cont.(S1) : F : 1.25	
Breakdown torque	: 270 % : 260 % : 1780 rpm	Temperatu Design		: 80 K : B	
Heating constant					
Cooling constant Rev.	Changes Summary		Performed	Checked	Date
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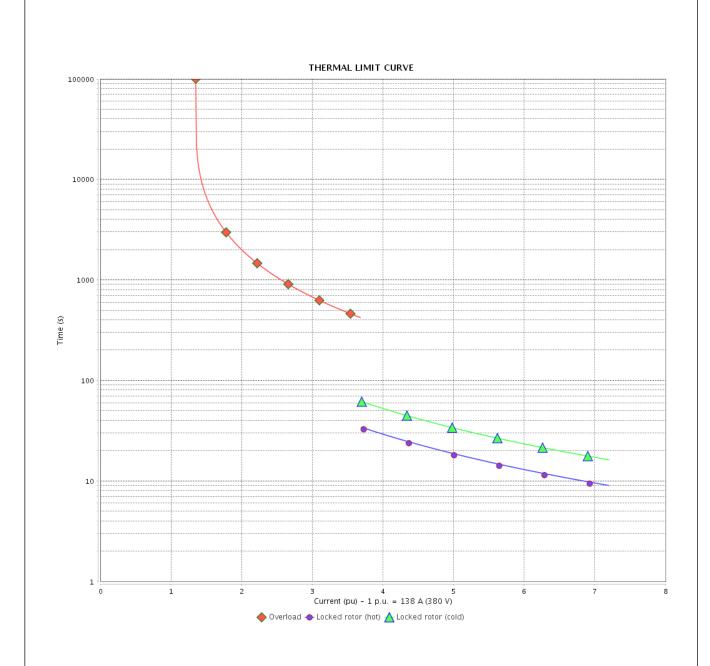


Customer		:				
Product line		: W40 JP Pump NEMA Prem	nium	Product code :	14270552	
		Efficiency Three-Phase		Catalog # :	12518OT3G4	05JP-W40
D. (000 \ / 50 \ \ . 4D \ 50				
Performance Rated current		: 380 V 50 Hz 4P IE3 : 138 A	Moment o	of inertia (J)	: 25.5 sq.ft.lb	
LRC	:	: 7.2	Duty cycle	9	: Cont.(S1)	
Rated torque Locked rotor tord		: 355 ft.lb : 240 %	Insulation Service fa		: F : 1.00	
Breakdown torqu		: 260 %	Temperati		: 80 K	
Rated speed		: 1480 rpm	Design		: B	
Heating constan	t					
Cooling constant	t					
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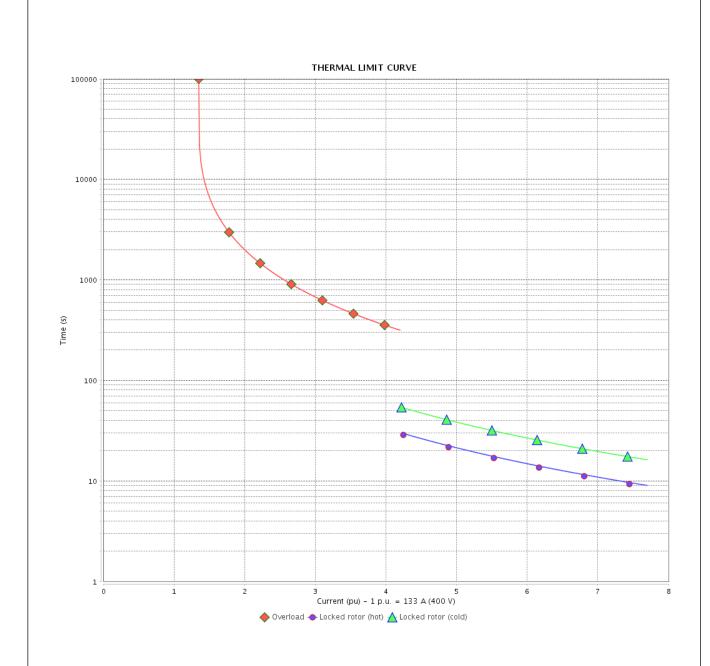


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Product line	: \	N40 JP Pump NEMA Prem fficiency Three-Phase	ium f	Product code :	14270552	
		miciency Three-Phase	(Catalog # :	12518OT3G4	05JP-W40
Performance	: 40	00 V 50 Hz 4P IE3				
Rated current LRC	: 13 : 7.	33 A 7	Moment of Duty cycle	inertia (J)	: 25.5 sq.ft.lb : Cont.(S1)	
Rated torque		7 55 ft.lb	Insulation	class	: F	
Locked rotor torqu	ıe : 27	70 %	Service fac	ctor	: 1.00	
Breakdown torque Rated speed		00 % 480 rpm	Temperatu Design	re rise	: 80 K : B	
Heating constant						
Cooling constant						
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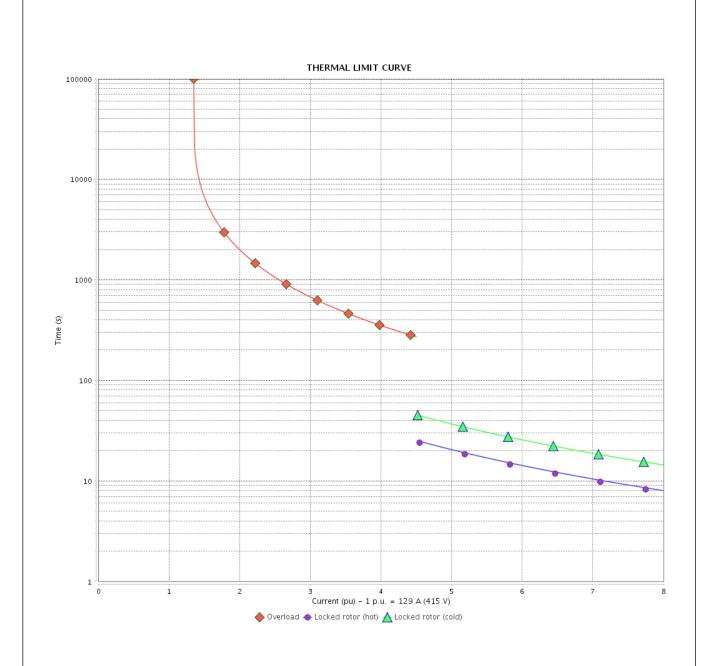


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Product line	: \ E	W40 JP Pump NEMA Prem fficiency Three-Phase	ium l	Product code :	14270552	
	_		(Catalog # :	12518OT3G4	05JP-W40
Performance		15 V 50 Hz 4P IE3	Momant	finartic (I)	. OF F 5 # !!-	
Rated current LRC	: 8.		Duty cycle	f inertia (J)	: 25.5 sq.ft.lb : Cont.(S1)	
Rated torque	: 38	55 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		90 % 20 %	Service far Temperatu		: 1.00 : 80 K	
Rated speed		480 rpm	Design		: B	
Heating constan	t					
Cooling constan	t		Т			
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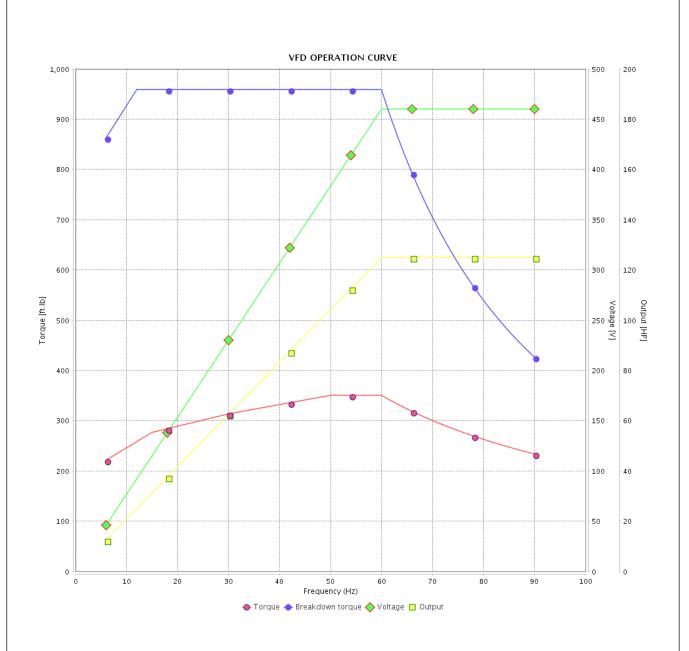
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40



Performance	: 4	60 V 60 Hz 4P				
Rated current	Rated current : 138 A		Moment o	Moment of inertia (J)		
LRC	: 6	.9	Duty cycle	9	: Cont.(S1)	
Rated torque	: 30	69 ft.lb	Insulation	class	: F	
Locked rotor tord	que : 2'	70 %	Service fa	ctor	: 1.25	
Breakdown torqu	ue : 20	60 %	Temperati	Temperature rise		
Rated speed	eed : 1780 rpm Design			: B		
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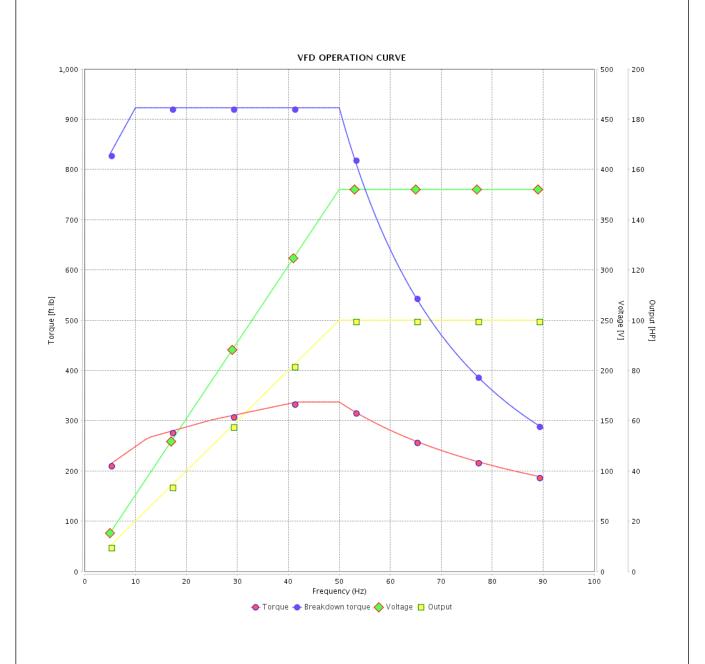
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40



Performance	:	380 V 50 Hz 4P IE3				
Rated current : 138 A		138 A	Moment o	f inertia (J)	: 25.5 sq.ft.lb	
LRC	:	7.2	Duty cycle)	: Cont.(S1)	
Rated torque	:	355 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie :	240 %	Service fa	ctor	: 1.00	
Breakdown torque	e ::	260 %	Temperature rise		: 80 K	
Rated speed	:	1480 rpm	80 rpm Design		: B	
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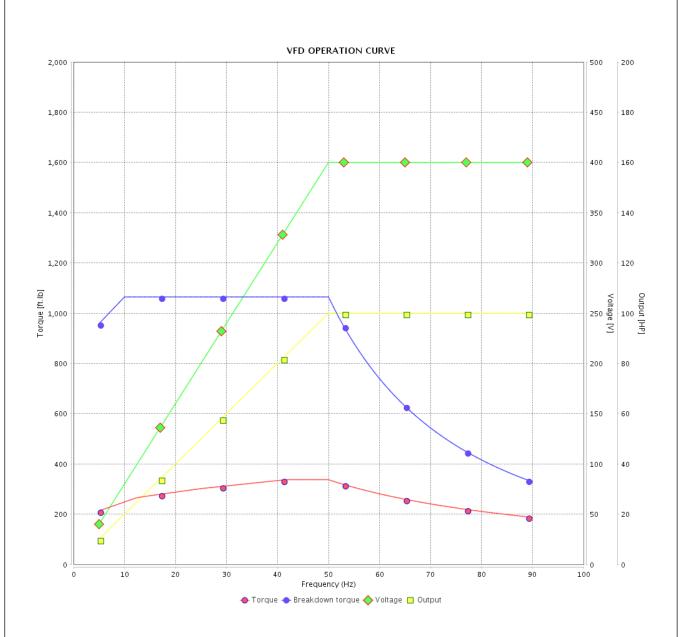
Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40

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Performance : 400 V 50 Hz 4P IE3 : 133 A Rated current Moment of inertia (J) : 25.5 sq.ft.lb **LRC** : 7.7 Duty cycle : Cont.(S1) Insulation class : 355 ft.lb : F Rated torque Locked rotor torque : 270 % Service factor : 1.00 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1480 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

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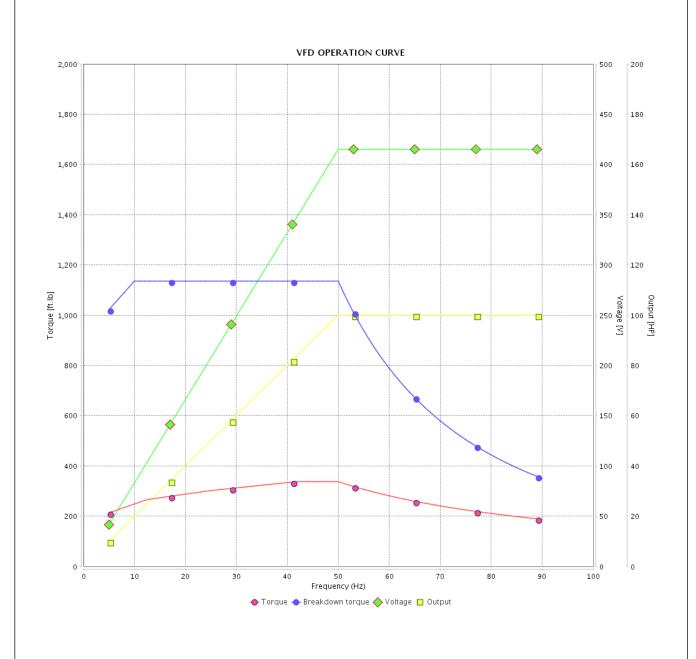
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14270552

Catalog #: 12518OT3G405JP-W40



Performance	: 4	15 V 50 Hz 4P IE3				
Rated current : 129		29 A	Moment o	Moment of inertia (J)		
LRC	: 8		Duty cycle	` '	: 25.5 sq.ft.lb : Cont.(S1)	
Rated torque	: 3	855 ft.lb	Insulation		: F	
Locked rotor torque	e : 2	290 %	Service fa	ctor	: 1.00	
Breakdown torque	: 3	320 %	Temperati	Temperature rise		
•		480 rpm	Design	Design		
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