### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W40 JP Pump NEMA Premium

Product code: Efficiency Three-Phase

14486176

02036OT3E254JP-W40

Catalog #:

Frame : 254JP 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> Altitude : 215 lb

Protection degree : IP23 Moment of inertia (J) : 0.8718 sq.ft.lb

Design		: B			
Output [HP]		20	15	15	15
Poles		2	2	2	2
Frequency [Hz]		60	50	50	50
Rated voltage [V]		230/460	380	400	415
Rated current [A]		48.6/24.3	21.6	21.2	21.5
L. R. Amperes [A]		306/153	147	142	148
LRC [A]		6.3x(Code G)	6.8x(Code H)	6.7x(Code H)	6.9x(Code J)
No load current [A	]	16.8/8.40	8.00	9.30	10.3
Rated speed [RPN	<b>/</b> 1]	3535	2945	2950	2955
Slip [%]	Slip [%]		1.83	1.67	1.50
Rated torque [ft.lb]		29.7	26.7	26.7	26.7
Locked rotor torqu	Locked rotor torque [%]		200	220	229
Breakdown torque	[%]	280	290	320	350
Service factor		1.25	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		21s (cold) 12s (hot)	18s (cold) 10s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)
Noise level <sup>2</sup>					
	25%	90.0	85.6	85.8	85.9
Efficiency (%)	50%	90.2	88.0	88.1	88.2
Liliciency (70)	75%	91.0	88.5	88.6	88.7
100%		91.0	91.2	91.2	91.2
	25%	0.48	0.46	0.39	0.35
Power Factor	50%	0.72	0.69	0.62	0.57
1 OWCI I actor	75%	0.82	0.80	0.75	0.70
	100%	0.85	0.85	0.82	0.78

Drive end Non drive end Foundation loads 6309 Z C3 Bearing type 6209 Z C3 Max. traction

Sealing Without Without Max. compression Bearing Seal Bearing Seal

20000 h 20000 h Lubrication interval Lubricant amount 9 g Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 53.7A SF 1.15 SFA 61.8A

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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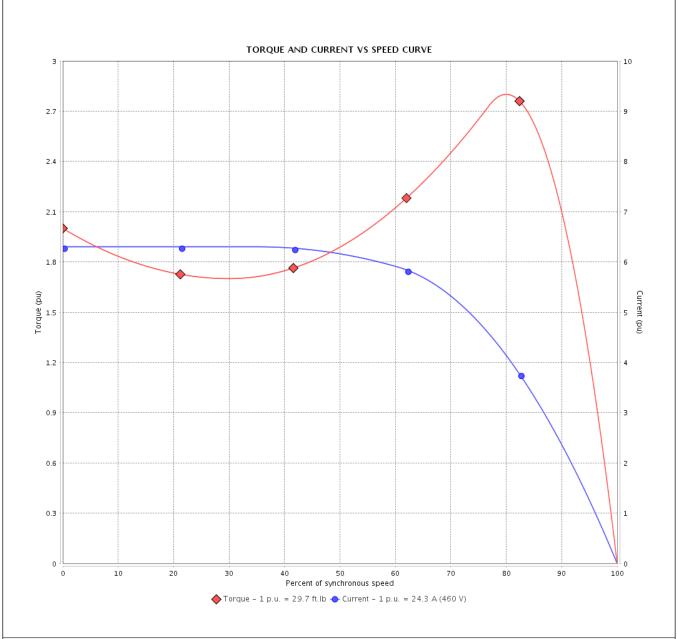
Customer :

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40



Performance : 230/460 V 60 Hz 2P Rated current : 48.6/24.3 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) : 29.7 ft.lb Insulation class Rated torque : F Locked rotor torque : 200 % Service factor : 1.25 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 3535 rpm Design : B

Locked rotor time : 21s (cold) 12s (hot)

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Three Phase Induction Motor - Squirrel Cage Customer Product line : W40 JP Pump NEMA Premium Product code: 14486176 Efficiency Three-Phase Catalog #: 02036OT3E254JP-W40 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. = 26.7 ft.lb ♦ Current – 1 p.u. = 21.6 A (380 V) : 380 V 50 Hz 2P IE3 Performance Rated current : 21.6 A Moment of inertia (J) : 0.8718 sq.ft.lb LRC : 6.8 Duty cycle : Cont.(S1) Rated torque : 26.7 ft.lb Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 : 80 K Breakdown torque : 290 % Temperature rise : 2945 rpm Rated speed : B Design

		- P	33			
Locked rotor time	e : 18	Bs (cold) 10s (hot)				
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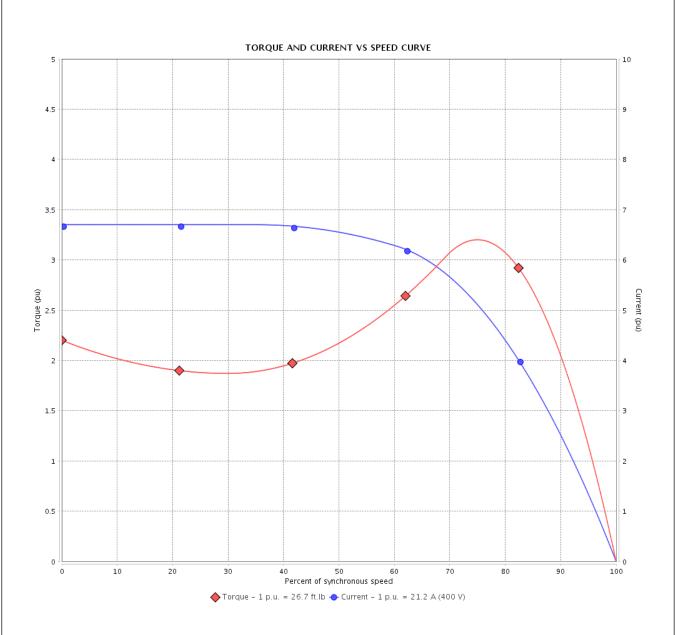
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40



Performance : 400 V 50 Hz 2P IE3 Rated current : 21.2 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : F : 26.7 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 220 % : 1.00 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : B : 2950 rpm Design

Locked rotor time : 19s (cold) 11s (hot)

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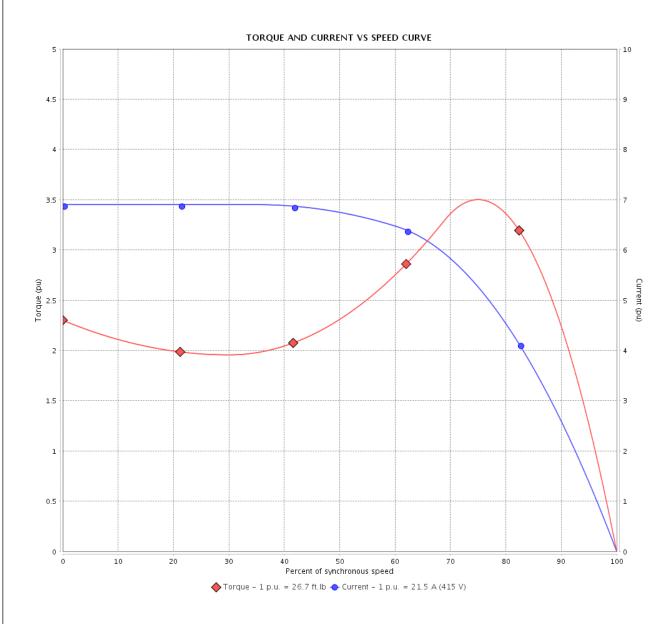


Customer :

Product line : W40 JP Pump NEMA Premium Product code : 14486176 Efficiency Three-Phase

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Catalog #: 02036OT3E254JP-W40



Performance : 415 V 50 Hz 2P IE3 Rated current : 21.5 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 6.9 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 26.7 ft.lb : 1.00 Locked rotor torque : 229 % Service factor : 80 K Breakdown torque : 350 % Temperature rise : B Rated speed : 2955 rpm Design

Locked rotor time : 19s (cold) 11s (hot)

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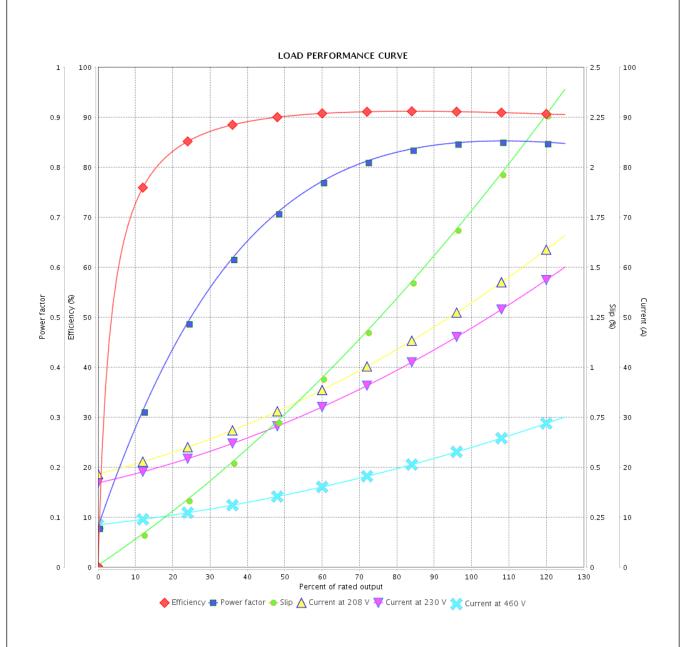
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Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40



Performance : 230/460 V 60 Hz 2P Rated current : 48.6/24.3 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.3 Insulation class : 29.7 ft.lb : F Rated torque Locked rotor torque : 200 % Service factor : 1.25 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 3535 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

#### Three Phase Induction Motor - Squirrel Cage



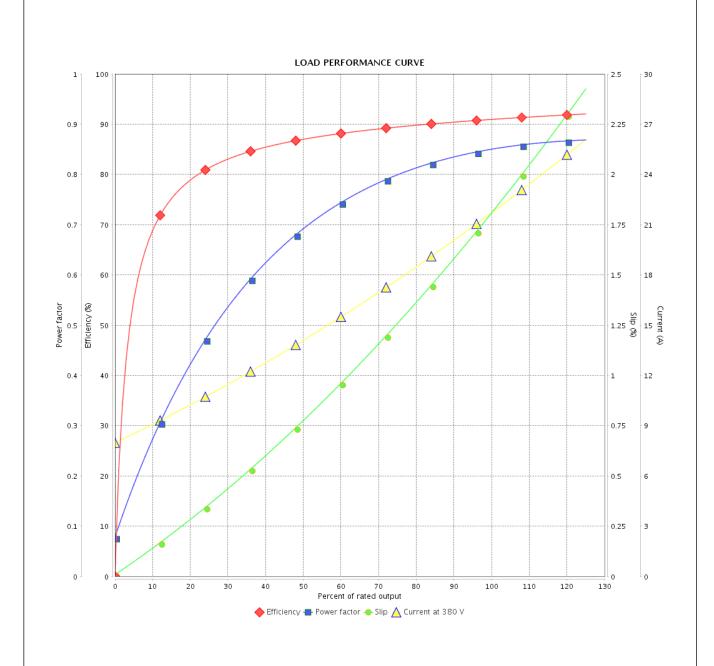
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40



Performance : 380 V 50 Hz 2P IE3							
Rated current : 21		1.6 A	Moment o	f inertia (J)	: 0.8718 sq.ft.lb		
LRC	: 6	5.8	Duty cycle	<b>;</b>	: Cont.(S1)		
Rated torque : 26		6.7 ft.lb	Insulation	class	: F		
Locked rotor torqu	ie : 2	00 %	Service fa	ctor	: 1.00		
Breakdown torque		90 %	Temperati	Temperature rise		: 80 K	
Rated speed	: 2	945 rpm	Design		: B		
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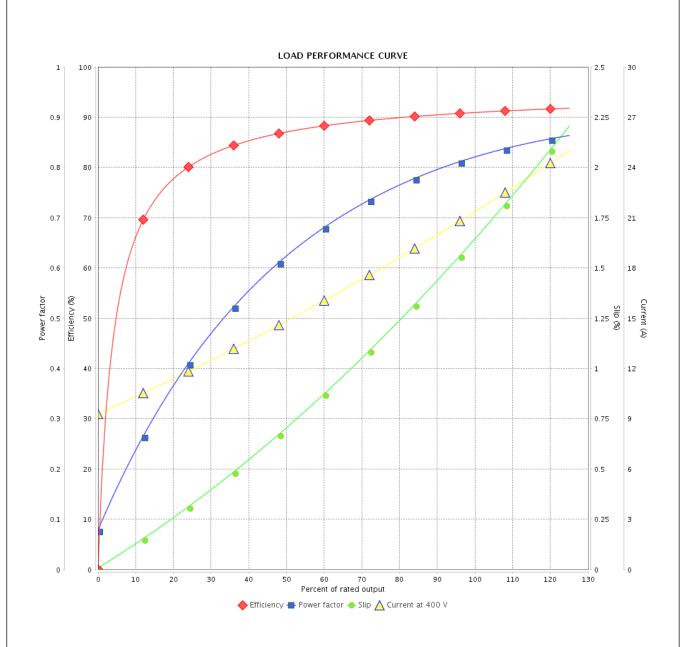
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Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40



Performance : 400 V 50 Hz 2P IE3 Rated current : 21.2 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : 26.7 ft.lb Insulation class Rated torque : F Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 2950 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

#### Three Phase Induction Motor - Squirrel Cage



Customer

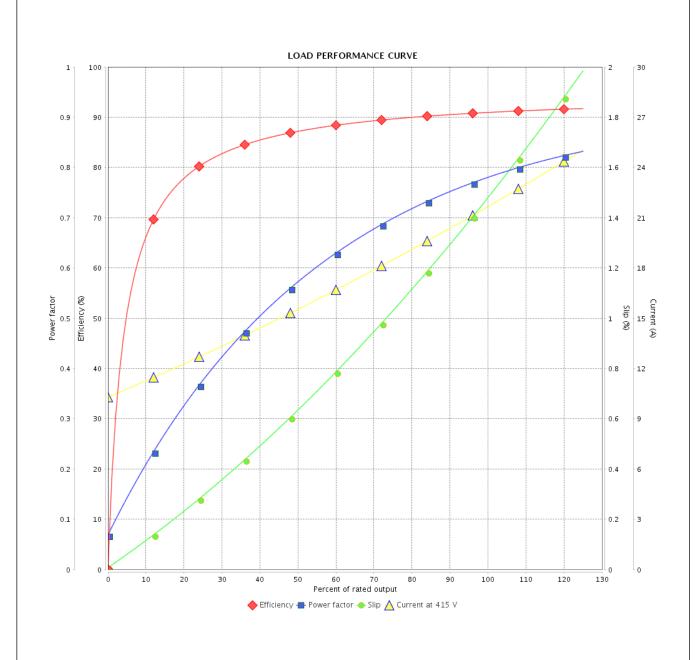
Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

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Performance	: 415 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 21.5 A : 6.9 : 26.7 ft.lb : 229 % : 350 % : 2955 rpm	Moment of inertia (J) : 0.8718 sq.ft.l  Duty cycle : Cont.(S1)  Insulation class : F  Service factor : 1.00  Temperature rise : 80 K  Design : B		lb	
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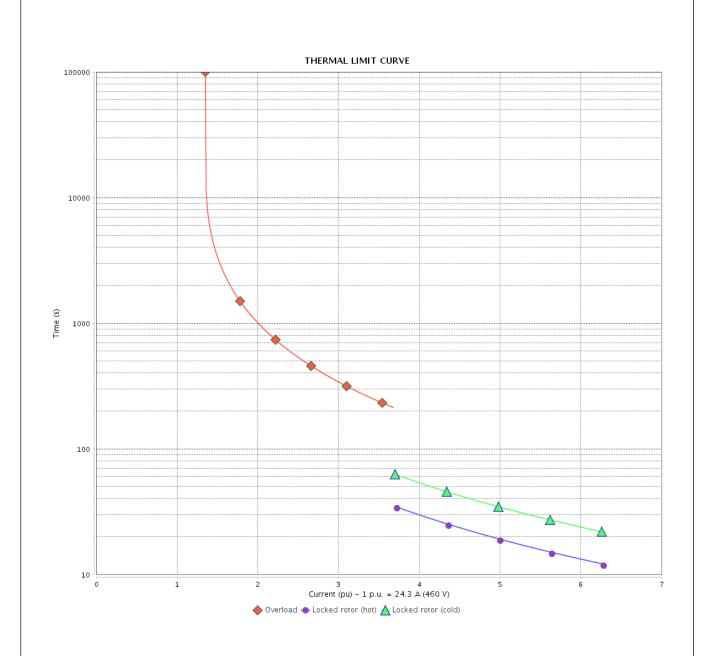


Customer	:					
Product line	:_\	W40 JP Pump NEMA Prem	ium F	Product code :	14486176	
	E.	fficiency Three-Phase	(	Catalog # :	02036OT3E2	254JP-W40
Performance		30/460 V 60 Hz 2P				
Rated current LRC	: 48 : 6.	3.6/24.3 A 3	Moment of Duty cycle	finertia (J)	: 0.8718 sq.ft.l : Cont.(S1)	b
Rated torque	: 29	9.7 ft.lb	Insulation	class	: F	
Locked rotor torqu		00 %	Service fac		: 1.25	
Breakdown torque Rated speed		30 % 535 rpm	Temperatu Design	re rise	: 80 K : B	
Heating constant						
Cooling constant					1	
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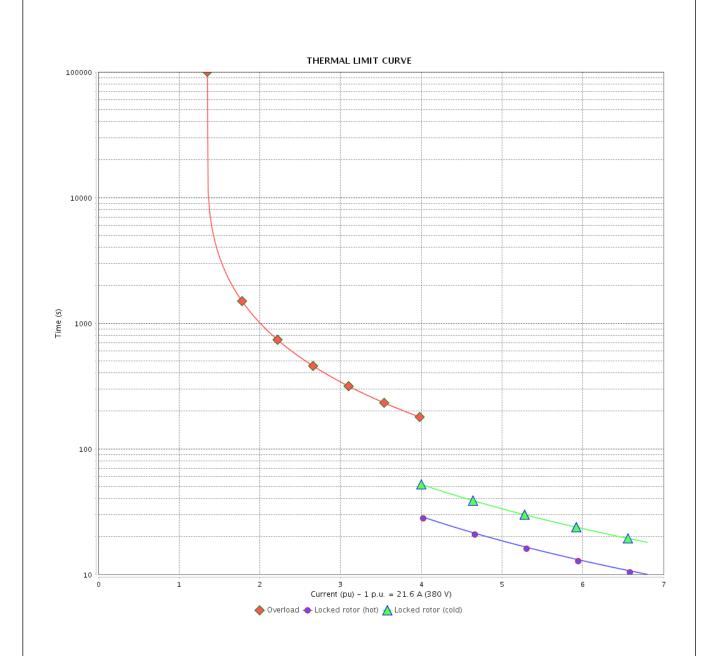


Customer	:					
Product line	: \	N40 JP Pump NEMA Prem	ium I	Product code :	14486176	
	Ef	fficiency Three-Phase	(	Catalog # :	02036OT3E2	54JP-W40
Performance	: 38	30 V 50 Hz 2P IE3				
Rated current	: 21	1.6 A	Moment of	f inertia (J)	: 0.8718 sq.ft.l	b
LRC	: 6.	8	Duty cycle	!	: Cont.(S1)	
Rated torque Locked rotor torc		6.7 ft.lb 00 %	Insulation Service fa		: F : 1.00	
Breakdown torqu	ie : 29	90 %	Temperatu		: 80 K	
Rated speed		945 rpm	Design		: B	
Heating constant						
Cooling constant Rev.		Changes Summary		Performed	Checked	Date
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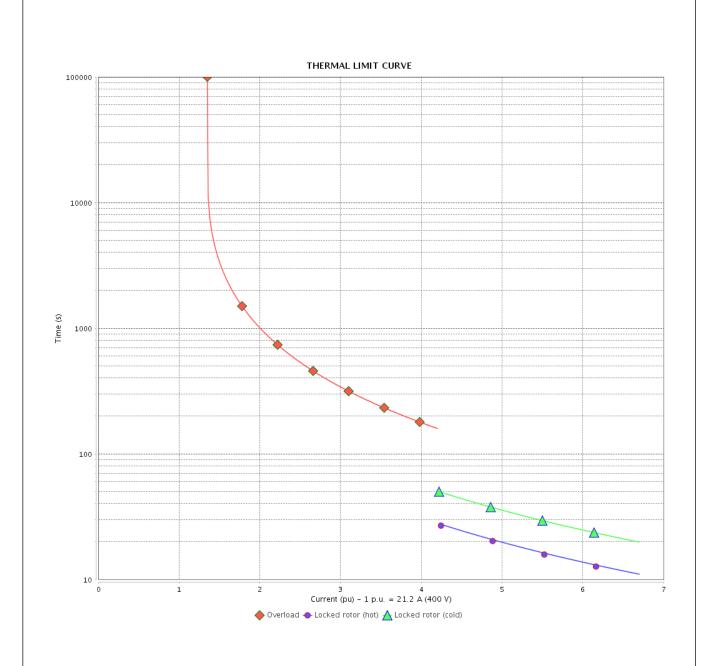


Customer		:				
Product line		: W40 JP Pump NEMA Prem Efficiency Three-Phase		Product code : Catalog # :	14486176 02036OT3E2	54JP-W40
Domformon		400 \ 70 \ 1- 20 \ 152				
Performance Rated current		400 V 50 Hz 2P IE3 21.2 A	Moment o	f inertia (J)	: 0.8718 sq.ft.ll	h
LRC	:	6.7	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	:	26.7 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		220 % 320 %	Service fa Temperatu		: 1.00 : 80 K	
Rated speed		2950 rpm	Design	110 110 <del>0</del>	: B	
Heating constant						
Cooling constant Rev.	L .	Changes Summers		Performed	Checked	Date
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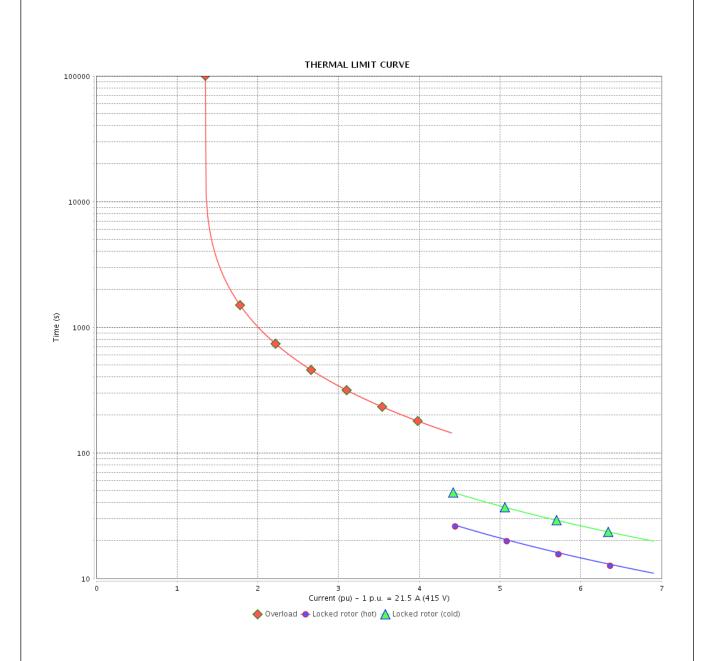


Customer	:					
Product line	: \ E	W40 JP Pump NEMA Prem fficiency Three-Phase		Product code : Catalog # :	14486176 02036OT3E2	254JP-W40
Performance		15 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torq	: 6. : 20	1.5 A .9 6.7 ft.lb 29 %	Moment of Duty cycle Insulation Service factors	class	: 0.8718 sq.ft.I : Cont.(S1) : F : 1.00	b
Breakdown torqu Rated speed	ie : 3	50 % 955 rpm	Temperatu Design		: 80 K : B	
Heating constant						
Cooling constant Rev.		Changes Summary		Performed	Checked	Date
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Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

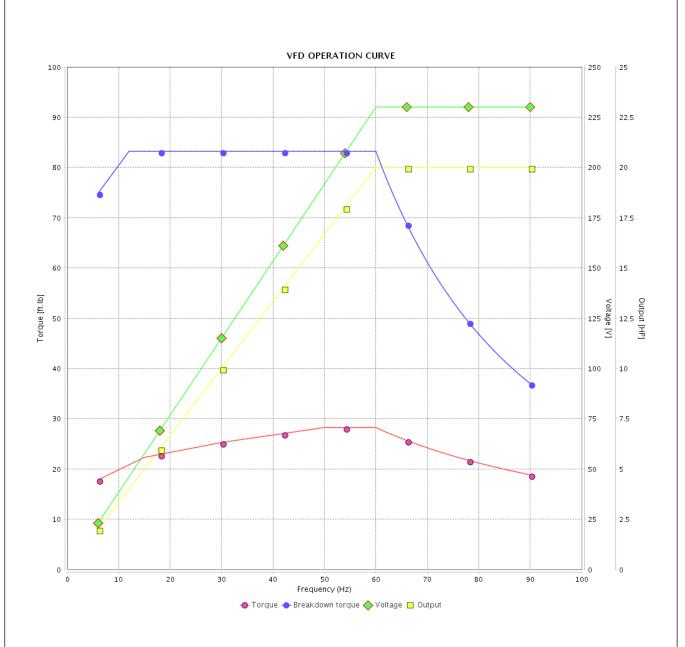
Product code: 14486176

Catalog #: 02036OT3E254JP-W40

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Performance		: 230/460 V	60 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		: 48.6/24.3 A : 6.3 : 29.7 ft.lb : 200 % : 280 % : 3535 rpm		Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.8718 sq.ft. : Cont.(S1) : F : 1.25 : 80 K : B	lb
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#### Three Phase Induction Motor - Squirrel Cage



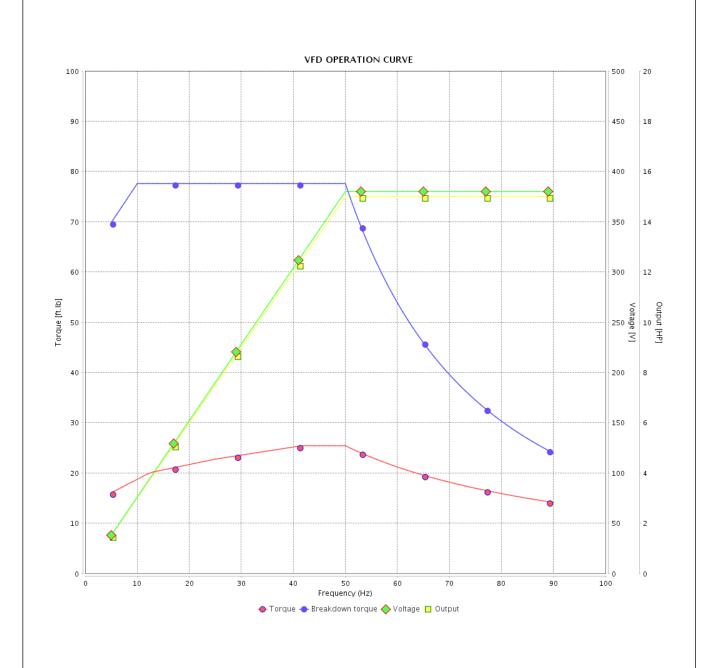
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40



Performance	: 3	80 V 50 Hz 2P IE3					
Rated current		1.6 A	Moment o	Moment of inertia (J)		lb	
LRC : 6		.8	Duty cycle	Duty cycle			
Rated torque :		6.7 ft.lb	Insulation	Insulation class			
Locked rotor torque : 2		00 %	Service fa	Service factor			
Breakdown torque	: 2	90 %	Temperati	Temperature rise		: 80 K	
Rated speed	: 2	45 rpm Design		: B			
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#### Three Phase Induction Motor - Squirrel Cage



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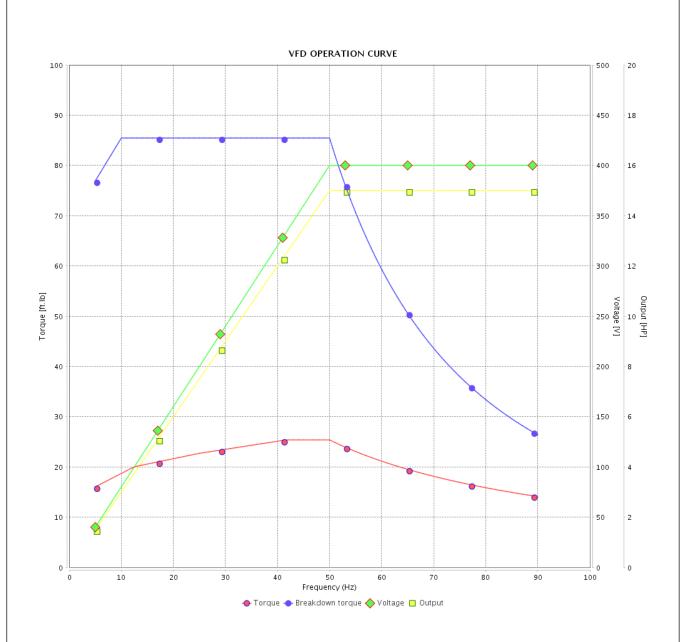
Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40

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Performance : 400 V 50 Hz 2P IE3 Rated current : 21.2 A Moment of inertia (J) : 0.8718 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : 26.7 ft.lb Insulation class : F Rated torque Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 2950 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

#### Three Phase Induction Motor - Squirrel Cage



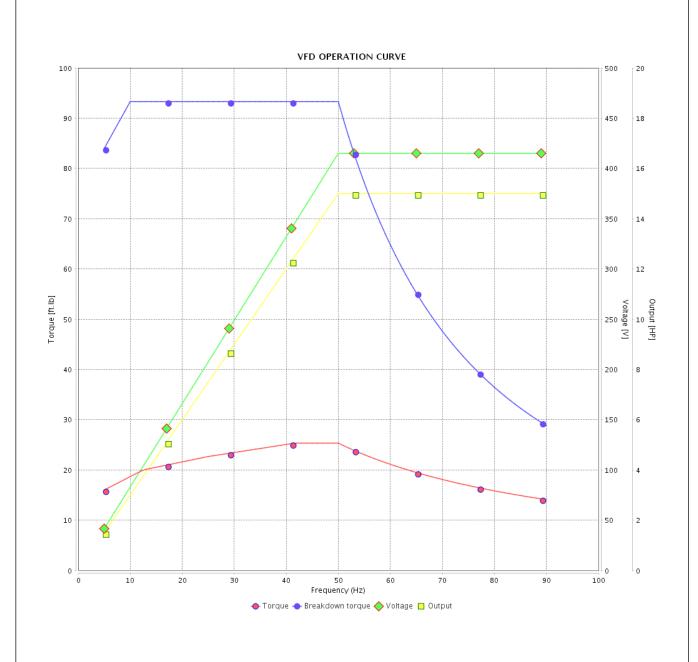
Customer

Product line : W40 JP Pump NEMA Premium

Efficiency Three-Phase

Product code: 14486176

Catalog #: 02036OT3E254JP-W40



Performance	: 4	15 V 50 Hz 2P IE3					
Rated current :		1.5 A	l l	Moment of inertia (J)		: 0.8718 sq.ft.lb	
LRC : 6.		.9	Duty cycle	9	: Cont.(S1)		
Rated torque	: 20	6.7 ft.lb	Insulation	class	: F		
Locked rotor tord	que : 22	29 %	Service fa	ictor	: 1.00		
Breakdown torque		50 %	Temperati	Temperature rise		: 80 K	
Rated speed		955 rpm	Design		: B		
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