DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W40 NEMA Premium Efficiency Product code:

Three-Phase

Catalog #: 25036OT3G445TS-W40

14018042

Frame : 444/5TS Cooling method : IC01 - ODP

Insulation class Mounting : F-1

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

: 1000 m.a.s.l. Approx. weight³ : 1380 lb Altitude : IP23 Protection degree Moment of inertia (J) : 26.9 sq.ft.lb

Design	gn : B				- 4
Output [HP]		250	220	220	220
Poles		2	2	2	2
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		278	289	278	271
L. R. Amperes [A]		1863	1965	2029	2114
LRC [A]		6.7x(Code G)	6.8x(Code G)	7.3x(Code H)	7.8x(Code H)
No load current [A]	72.0	71.0	80.0	90.0
Rated speed [RPN	- /1]	3570	2965	2970	2970
Slip [%]		0.83	1.17	1.00	1.00
Rated torque [ft.lb]		368	390	389	389
Locked rotor torqu	Locked rotor torque [%]		150	160	180
Breakdown torque	[%]	229	210	240	250
Service factor		1.15	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		28s (cold) 16s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²		85.0 dB(A)			
	25%	93.0	91.6	91.5	91.3
Efficiency (%)	50%	93.6	93.1	93.0	92.9
Elliciency (70)	75%	94.5	94.0	94.0	93.9
	100%	95.0	95.6	95.6	95.6
	25%	0.56	0.59	0.54	0.49
Power Factor	50%	0.79	0.80	0.76	0.73
1 OWEL FACIOI	75%	0.85	0.86	0.84	0.82
	100%	0.88	0.88	0.87	0.86

Drive end Non drive end Foundation loads

6314 C3 Bearing type 6212 Z C3 Max. traction : 1902 lb Without Sealing Without Max. compression : 3282 lb

Bearing Seal Bearing Seal

14418 h 20000 h Lubrication interval 13 g Lubricant amount

Lubricant type Mobil Polyrex EM

Notes

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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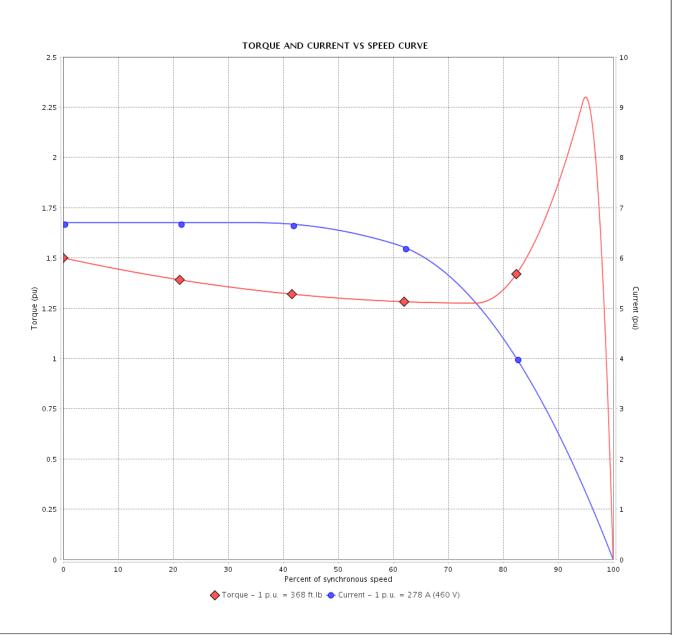
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14018042

Catalog # : 25036OT3G445TS-W40



Performance : 460 V 60 Hz 2P Rated current : 278 A Moment of inertia (J) : 26.9 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 368 ft.lb Service factor Locked rotor torque : 150 % : 1.15 : 229 % Breakdown torque Temperature rise : 80 K Rated speed : 3570 rpm Design : B

Locked rotor time : 28s (cold) 16s (hot)

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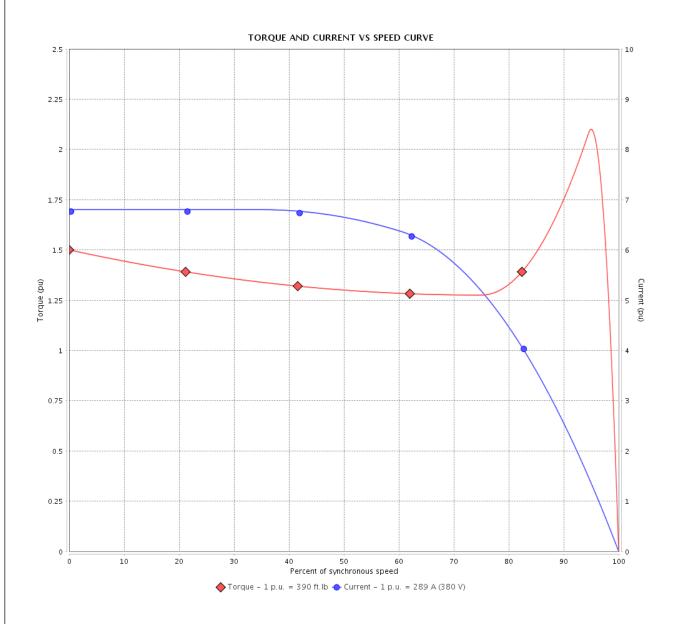


Customer :

Product line : W40 NEMA Premium Efficiency Product code : 14018042

Three-Phase

Catalog #: 25036OT3G445TS-W40



Performance	: 380 V 50 Hz 2P IE3			
Rated current	: 289 A	Moment of inertia (J)	: 26.9 sq.ft.lb	
LRC	: 6.8	Duty cycle	: Cont.(S1)	
Rated torque	: 390 ft.lb	Insulation class	:F	
Locked rotor torque	: 150 %	Service factor	: 1.00	
Breakdown torque	: 210 %	Temperature rise	: 80 K	
Rated speed	: 2965 rpm	Design	: B	

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

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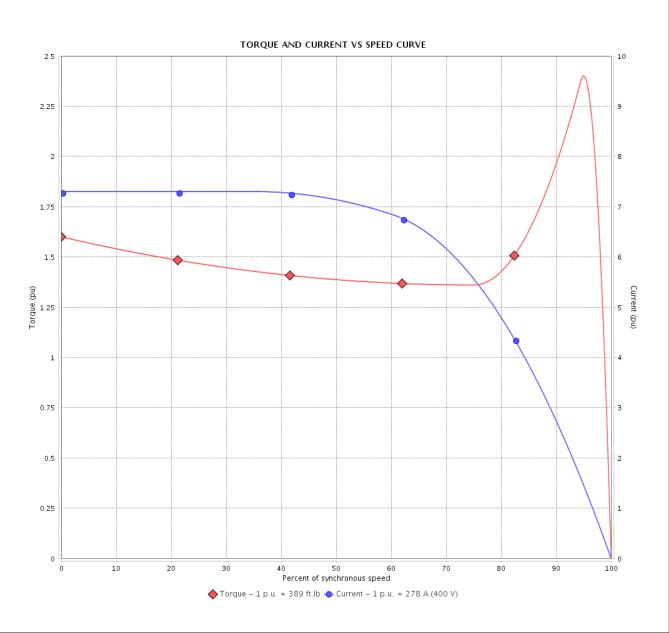
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14018042

Catalog #: 25036OT3G445TS-W40



Performance : 400 V 50 Hz 2P IE3 Rated current : 278 A Moment of inertia (J) : 26.9 sq.ft.lb **LRC** : 7.3 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 389 ft.lb Service factor Locked rotor torque : 160 % : 1.00 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 2970 rpm Design : B

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

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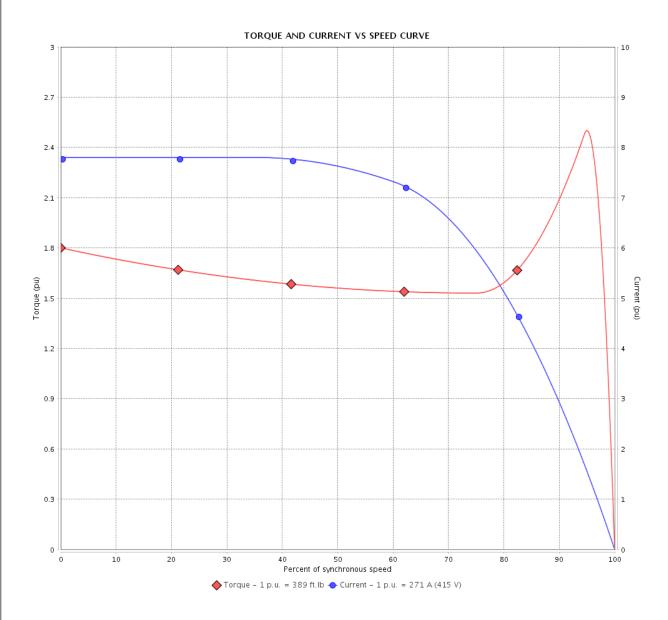


Customer :

Product line : W40 NEMA Premium Efficiency Product code : 14018042

Three-Phase

Catalog #: 25036OT3G445TS-W40



: 415 V 50 Hz 2P IE3		
: 271 A	Moment of inertia (J)	: 26.9 sq.ft.lb
: 7.8	Duty cycle	: Cont.(S1)
: 389 ft.lb	Insulation class	: F
: 180 %	Service factor	: 1.00
: 250 %	Temperature rise	: 80 K
: 2970 rpm	Design	: B
	: 7.8 : 389 ft.lb : 180 % : 250 %	 : 7.8 : 389 ft.lb : 180 % : 250 % Duty cycle Insulation class Service factor Temperature rise

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

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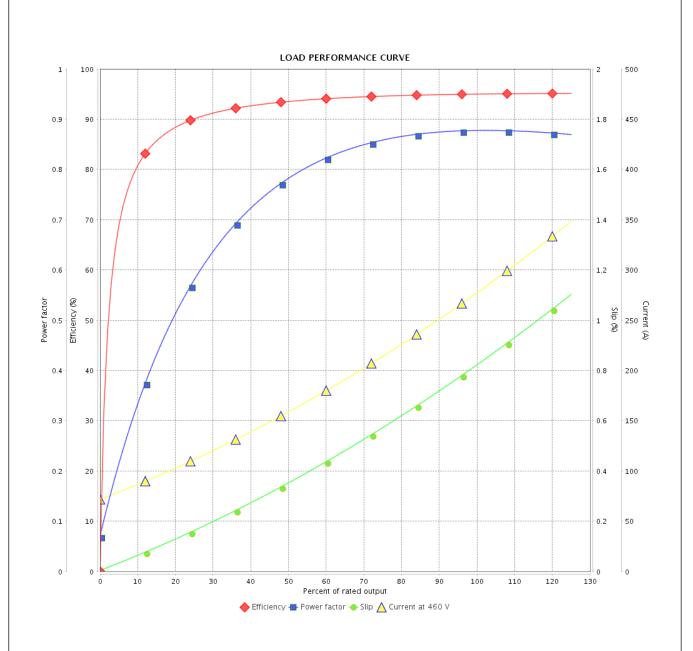
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Three-Phase

Product code: 14018042

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: 460 V 60 Hz 2P				
: 278 A : 6.7 : 368 ft.lb : 150 % : 229 % : 3570 rpm	Moment of inertia (J) : 26.9 sq.ft.lb Duty cycle : Cont.(S1) Insulation class : F Service factor : 1.15 Temperature rise : 80 K Design : B			
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	: 278 A : 6.7 : 368 ft.lb : 150 % : 229 % : 3570 rpm	: 278 A Moment o : 6.7 Duty cycle : 368 ft.lb Insulation : 150 % Service fa : 229 % Temperatu : 3570 rpm Design	: 278 A : 6.7 : 368 ft.lb : 150 % : 229 % : 3570 rpm Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 278 A Moment of inertia (J) : 26.9 sq.ft.lb : 6.7 Duty cycle : Cont.(S1) : 368 ft.lb Insulation class : F : 150 % Service factor : 1.15 : 229 % Temperature rise : 80 K : 3570 rpm Design : B

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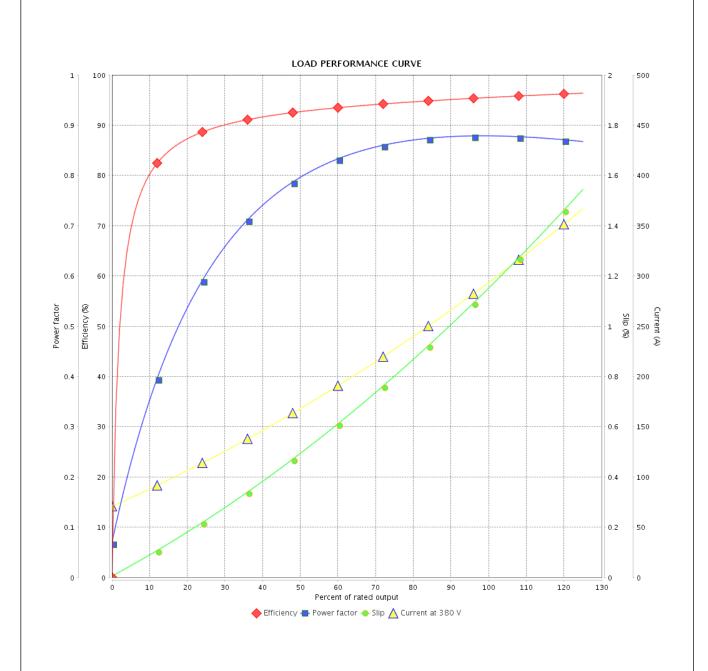
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Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14018042

Catalog #: 25036OT3G445TS-W40



Performance	: 3	880 V 50 Hz 2P IE3				
Rated current	: 2	289 A	Moment o	f inertia (J)	: 26.9 sq.ft.lb	
LRC	: 6	3.8	Duty cycle)	: Cont.(S1)	
Rated torque	: 3	390 ft.lb	Insulation	class	: F	
Locked rotor tord	que : 1	150 %	Service fa	ctor	: 1.00	
Breakdown torqu	ue : 2	210 %	Temperati	ıre rise	: 80 K	
Rated speed		2965 rpm	Design		: B	
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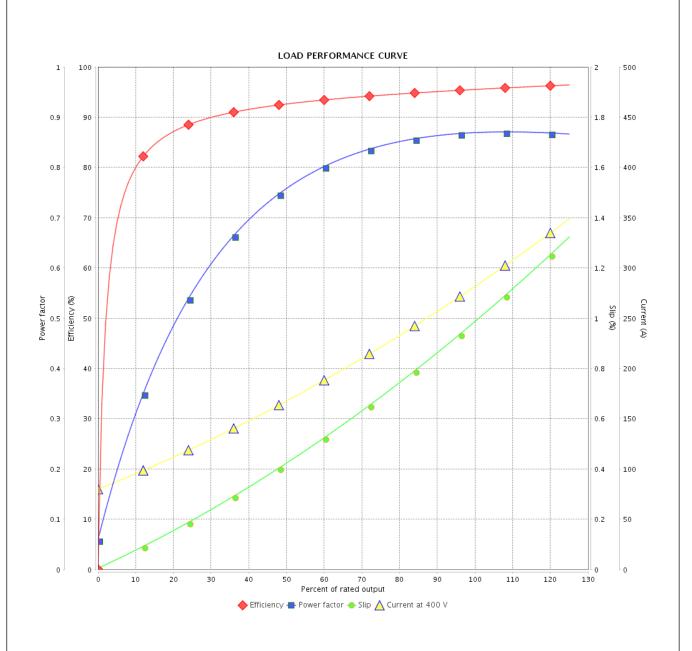
Customer

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14018042

Catalog #: 25036OT3G445TS-W40



Performance	: 40	00 V 50 Hz 2P IE3				
Rated current	Rated current : 278 A		Moment of	of inertia (J)	: 26.9 sq.ft.lb	
LRC	: 7.	.3	Duty cycle	9	: Cont.(S1)	
Rated torque	: 38	89 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 10	60 %	Service fa	actor	: 1.00	
Breakdown torque	e : 24	40 %	Temperature rise		: 80 K	
Rated speed		970 rpm	Design	Design		
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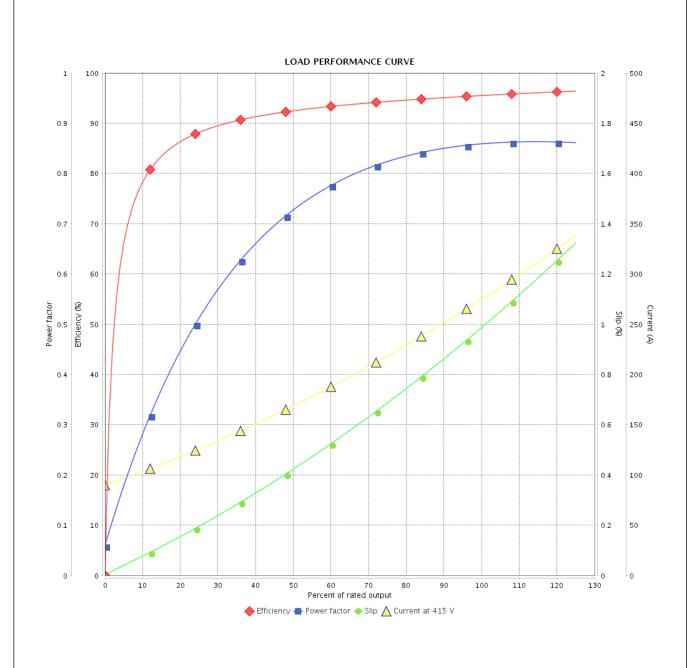


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Product line : W40 NEMA Premium Efficiency Product code : 14018042

Three-Phase

Catalog #: 25036OT3G445TS-W40



Performance	: 4	15 V 50 Hz 2P IE3				
Rated current	: 2	71 A	Moment o	f inertia (J)	: 26.9 sq.ft.lb	
LRC	: 7	.8	Duty cycle	` '	: Cont.(S1)	
Rated torque	: 3	89 ft.lb	Insulation		: F	
Locked rotor torque	e : 1	80 %	Service fa	ctor	: 1.00	
Breakdown torque	: 2	50 %	Temperature rise		: 80 K	
		Design		: B		
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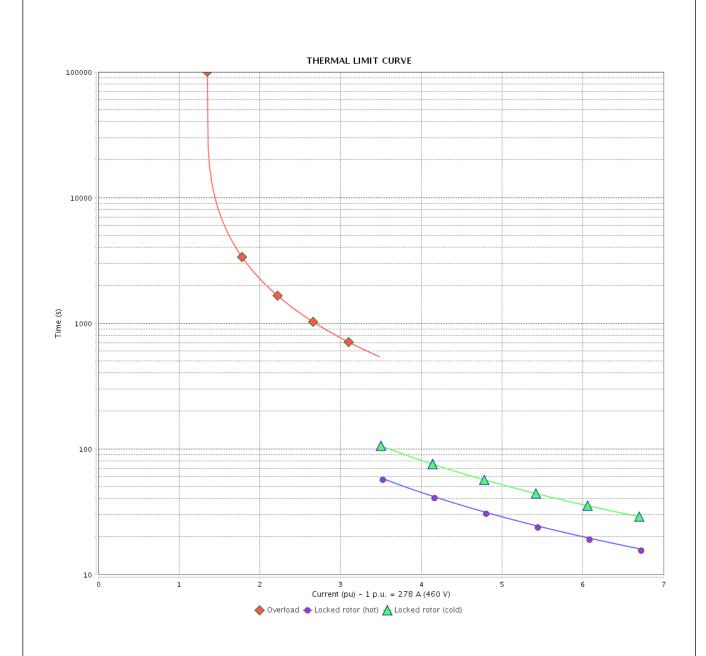


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Product line		: W40 NEMA Premium Effici Three-Phase		Product code : Catalog # :	14018042 25036OT3G4	45TS-W40
Performance		: 460 V 60 Hz 2P				
Rated current		: 278 A	Moment o	of inertia (J)	: 26.9 sq.ft.lb	
LRC		: 6.7	Duty cycle	9	: Cont.(S1)	
Rated torque Locked rotor tord		: 368 ft.lb : 150 %	Insulation Service fa		: F : 1.15	
Breakdown torqu	ue	: 229 %	Temperati		: 80 K	
Rated speed		: 3570 rpm	Design		: B	
Heating constant						
Cooling constant	Ţ.	Changes Summers		Performed	Checked	Date
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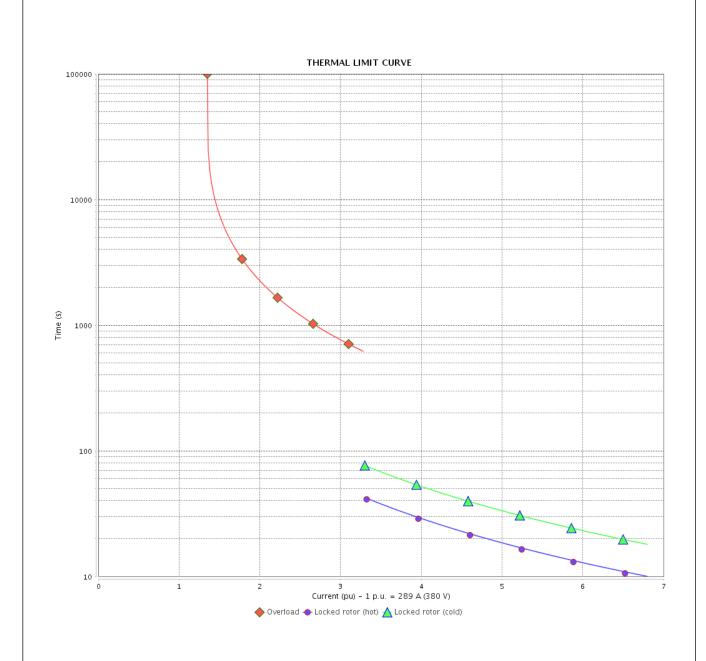


Customer	:				
Product line	: W40 NEMA Premium Effi Three-Phase		roduct code :	14018042 25036OT3G	
Performance	: 380 V 50 Hz 2P IE3				
Rated current	: 289 A	Moment of	inertia (J)	: 26.9 sq.ft.lb	
LRC	: 6.8	Duty cycle		: Cont.(S1)	
Rated torque Locked rotor torque	: 390 ft.lb : 150 %	Insulation of Service fac		: F : 1.00	
Breakdown torque	: 210 %	Temperatur		: 80 K	
Rated speed	: 2965 rpm	Design		: B	
Heating constant					
Cooling constant	01 0		· · ·	<u> </u>	
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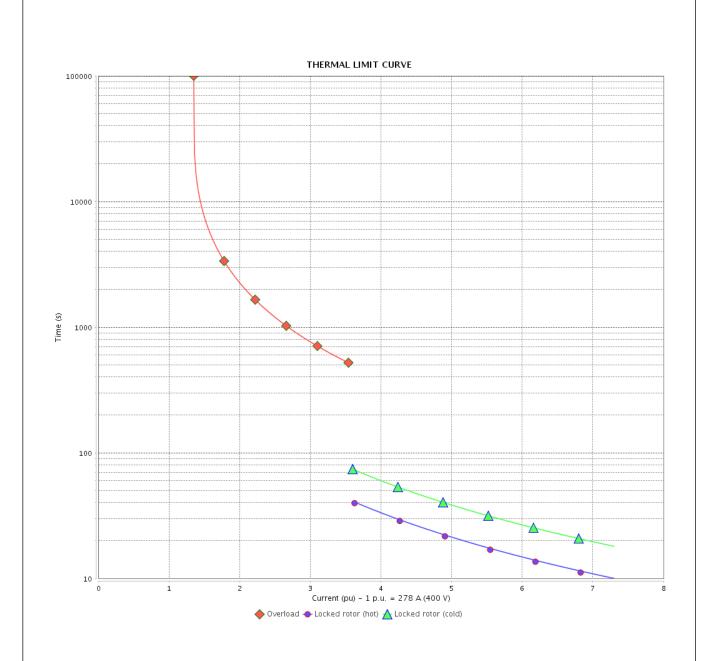


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Denfermen	. 40	20 \ / 50 - 0D 50				
Performance Rated current		00 V 50 Hz 2P IE3 78 A	Moment of	f inertia (J)	: 26.9 sq.ft.lb	
LRC	: 7.	3	Duty cycle		: Cont.(S1)	
Rated torque Locked rotor torque		39 ft.lb 60 %	Insulation Service fa		: F : 1.00	
Breakdown torque	: 24	40 %	Temperatu		: 80 K	
Rated speed	: 29	970 rpm	Design		: B	
Heating constant Cooling constant						
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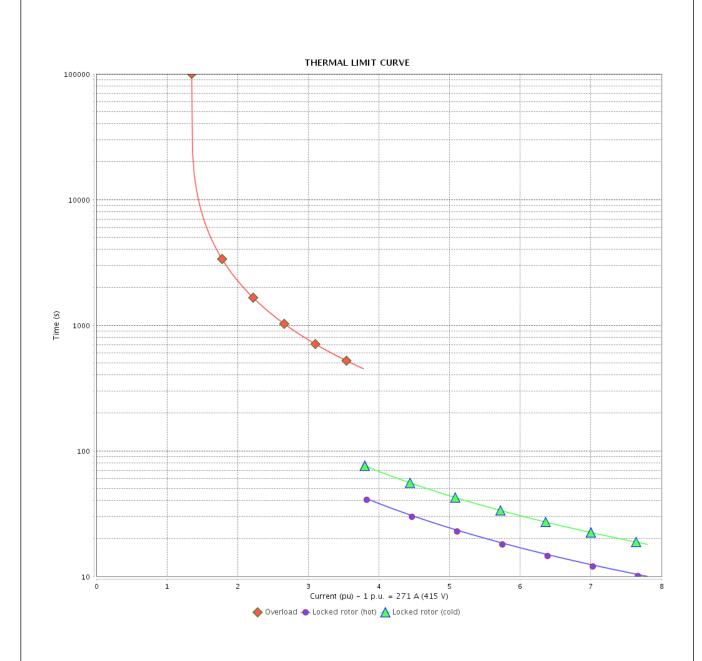


Customer		:				
Product line		: W40 NEMA Premium Effici Three-Phase		Product code : Catalog # :	14018042 25036OT3G4	45TS-W40
Performance		: 415 V 50 Hz 2P IE3				
Rated current LRC		: 271 A : 7.8	Duty cycle		: 26.9 sq.ft.lb : Cont.(S1)	
Rated torque Locked rotor tord		: 389 ft.lb : 180 %	Insulation Service fa		: F : 1.00	
Breakdown torqu		: 250 %	Temperati		: 80 K	
Rated speed		: 2970 rpm	Design		: B	
Heating constant						
Cooling constant	t	Changes Summers		Performed	Checked	Date
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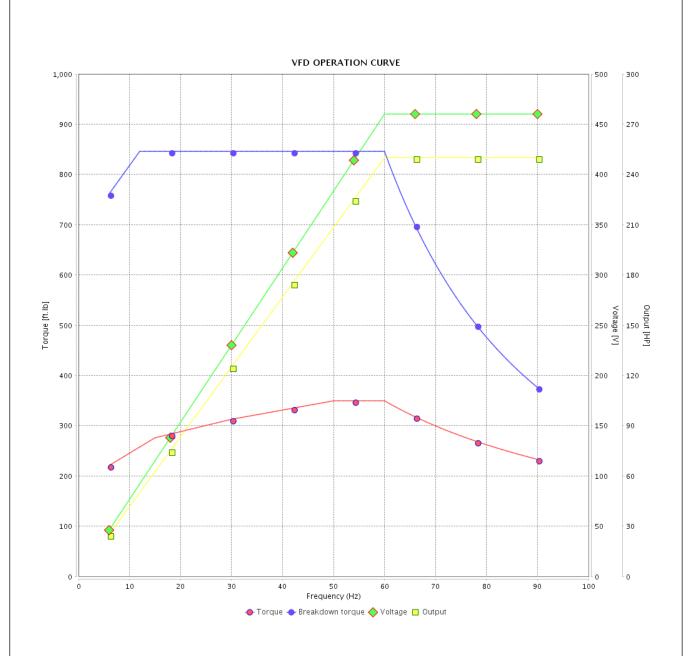
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Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14018042

Catalog #: 25036OT3G445TS-W40



Performance : 460 V 60 Hz 2P Rated current : 278 A Moment of inertia (J) : 26.9 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.7 : 368 ft.lb Insulation class Rated torque : F Locked rotor torque : 150 % Service factor : 1.15 Breakdown torque : 229 % Temperature rise : 80 K Rated speed : 3570 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

Three Phase Induction Motor - Squirrel Cage



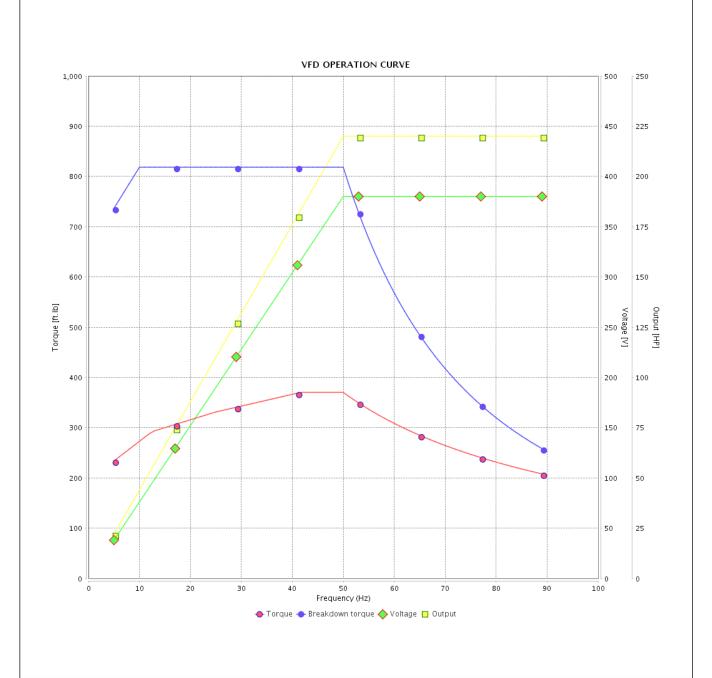
Customer

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14018042

Catalog #: 25036OT3G445TS-W40



Performance	:	380 V 50 Hz 2P IE3				
Rated current	::	: 289 A Mome		f inertia (J)	: 26.9 sq.ft.lb	
LRC	:	6.8	Duty cycle	;	: Cont.(S1)	
Rated torque	:	390 ft.lb	Insulation	class	: F	
Locked rotor torg	jue :	150 %	Service fa	ctor	: 1.00	
Breakdown torqu	ie ::	210 %	Temperati	Temperature rise		
Rated speed	:	2965 rpm	Design		: B	
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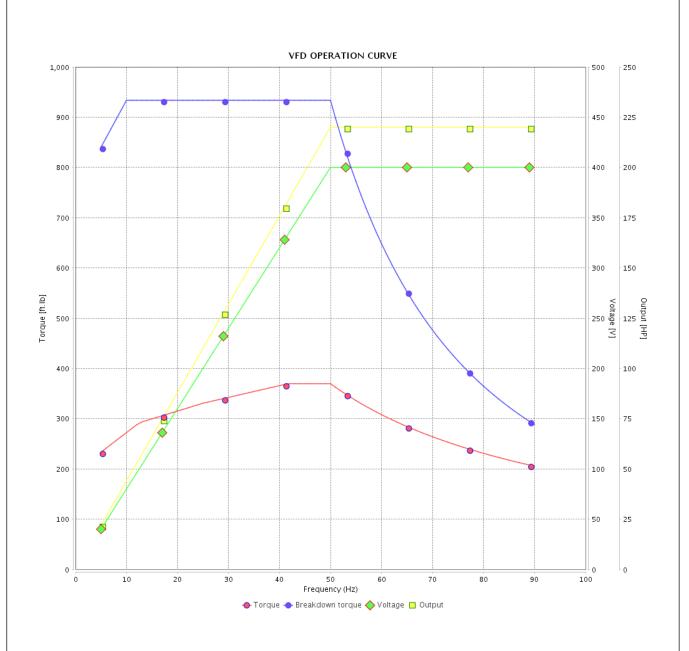
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14018042

Catalog #: 25036OT3G445TS-W40

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	·		*		·	
Performance	: 400	V 50 Hz 2P IE3	3			
Rated current	ted current : 278 A Moment of inertia (J		Moment of inertia (J)			
LRC	: 7.3		Duty cycle		: Cont.(S1)	
Rated torque	: 389	ft.lb	Insulation	class	: F	
Locked rotor torq	ue : 160	%	Service fa	ctor	: 1.00	
Breakdown torqu	e : 240	%	Temperature rise		: 80 K	
Rated speed	: 297	0 rpm	Design			
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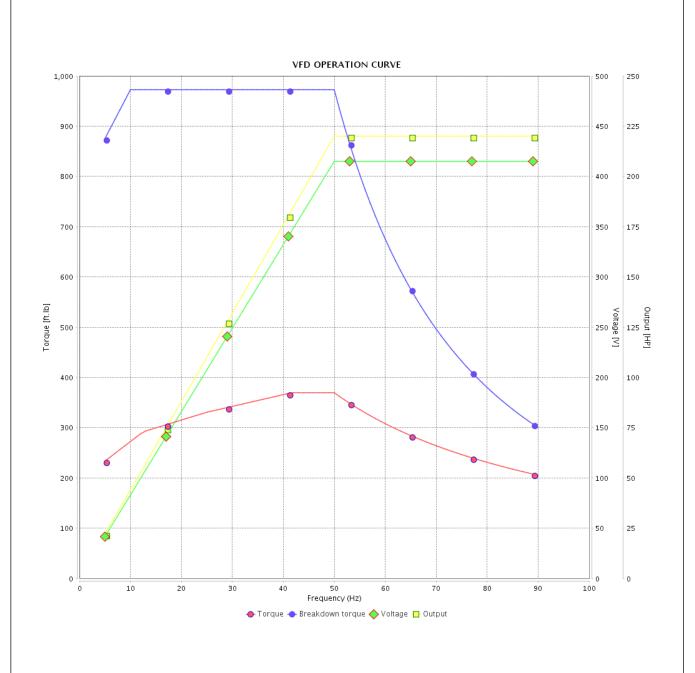
Customer

Product line : W40 NEMA Premium Efficiency Product code :

Three-Phase

Catalog #: 25036OT3G445TS-W40

14018042



Performance	:	415 V 50 Hz 2P IE3				
Rated current	:	: 271 A Moment of in		finertia (J) : 26.9 sq.ft.lb		
LRC	:	7.8	Duty cycle	;	: Cont.(S1)	
Rated torque	:	389 ft.lb	Insulation	class	:F	
Locked rotor torque	:	180 %	Service fa	ctor	: 1.00	
Breakdown torque	:	250 %	Temperature rise		: 80 K	
Rated speed	:	2970 rpm	Design		: B	
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