### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Product code :

Three-Phase

Catalog #: 12536OT3G404TS-W40

14272435

Frame : 404/5TS Cooling method : IC01 - ODP

Insulation class : F Mounting : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW)

Ambient temperature : -20°C to +40°C Starting method : Direct On Line

Altitude : 1000 m.a.s.l. Approx. weight<sup>3</sup> : 1837 lb

Protection degre	е	: IP23	Moment of ine	ertia (J) : 8.23	sq.ft.lb
Design		: B			
Output [HP]		125	100	100	100
Poles		2	2	2	2
Frequency [Hz]		60	50	50	50
Rated voltage [V]		460	380	400	415
Rated current [A]		136	137	133	131
L. R. Amperes [A]		925	986	931	1022
LRC [A]		6.8x(Code G)	7.2x(Code H)	7.0x(Code H)	7.8x(Code J)
No load current [A	]	36.0	33.0	36.5	40.0
Rated speed [RPN	<b>/</b> 1]	3557	2955	2960	2965
Slip [%]		1.19	1.50	1.33	1.17
Rated torque [ft.lb]		185	178	177	177
Locked rotor torqu	Locked rotor torque [%]		170	190	200
Breakdown torque	[%]	260	250	280	290
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)	16s (cold) 9s (hot)	19s (cold) 11s (hot)	16s (cold) 9s (hot)
Noise level <sup>2</sup>		84.0 dB(A)			
	25%	92.8	90.2	90.3	90.3
Efficiency (%)	50%	93.0	91.9	92.0	92.0
Linciency (70)	75%	94.1	92.9	92.9	92.9
	100%	94.1	94.7	94.7	94.7
	25%	0.57	0.59	0.55	0.48
Power Factor	50%	0.79	0.80	0.77	0.70
I OWELL ACIOI	75%	0.86	0.86	0.84	0.80
	100%	0.88	0.88	0.86	0.84

<u>Drive end</u> <u>Non drive end</u> Foundation loads

Bearing type : 6314 C3 6212 Z C3 Max. traction : 622 lb Sealing : Without Without Max. compression : 2458 lb

Bearing Seal Bearing Seal
Lubrication interval : 14418 h 20000 h

Lubricant amount : 27 g 13 g
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.

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			1 / 21	

#### Three Phase Induction Motor - Squirrel Cage



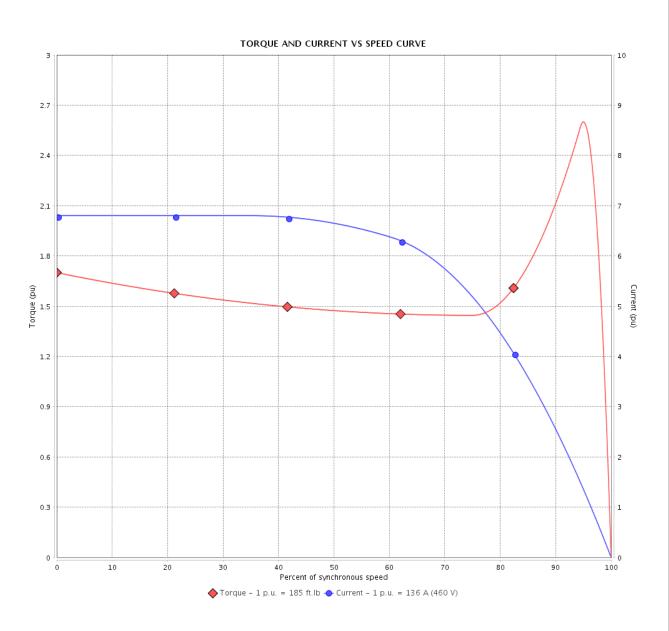
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40



Performance : 460 V 60 Hz 2P Rated current : 136 A Moment of inertia (J) : 8.23 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) Insulation class Rated torque : 185 ft.lb : F Service factor Locked rotor torque : 170 % : 1.25 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 3557 rpm Design : B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			2 / 21	

#### Three Phase Induction Motor - Squirrel Cage

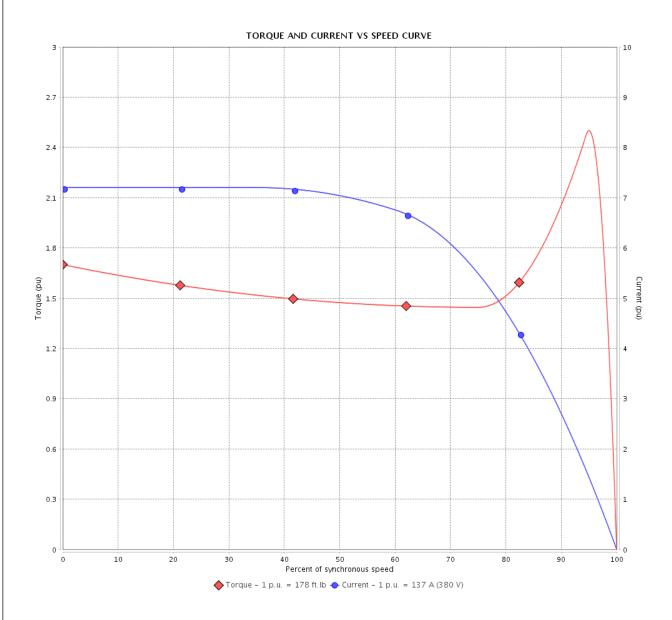


Customer :

Product line : W40 NEMA Premium Efficiency Product code : 14272435

Three-Phase

Catalog #: 12536OT3G404TS-W40



: 380 V 50 Hz 2P IE3		
: 137 A	Moment of inertia (J)	: 8.23 sq.ft.lb
: 7.2	Duty cycle	: Cont.(S1)
: 178 ft.lb	Insulation class	:F
: 170 %	Service factor	: 1.00
: 250 %	Temperature rise	: 80 K
: 2955 rpm	Design	: B
	: 7.2 : 178 ft.lb : 170 % : 250 %	: 7.2 : 178 ft.lb : 170 % : 250 %  Duty cycle Insulation class Service factor Temperature rise

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

LOCKCO TOTOL UITI	. 1	03 (0014) 03 (1101)			
Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022	1		3 / 21	

#### Three Phase Induction Motor - Squirrel Cage



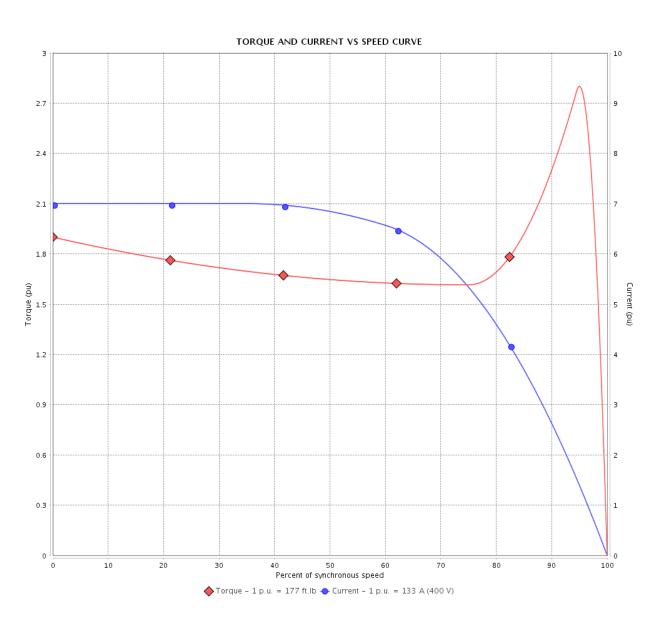
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40



Performance : 400 V 50 Hz 2P IE3 Rated current : 133 A Moment of inertia (J) : 8.23 sq.ft.lb **LRC** : 7.0 Duty cycle : Cont.(S1) Insulation class Rated torque : 177 ft.lb : F Service factor Locked rotor torque : 190 % : 1.00 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 2960 rpm Design : B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			4 / 21	

#### Three Phase Induction Motor - Squirrel Cage



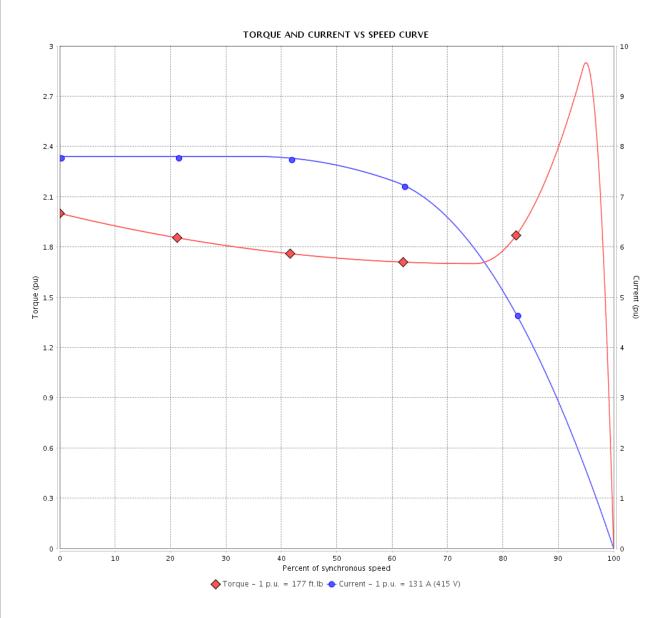
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40



Performance	: 415 V 50 Hz 2P IE3			
Rated current	: 131 A	Moment of inertia (J)	: 8.23 sq.ft.lb	
LRC	: 7.8	Duty cycle	: Cont.(S1)	
Rated torque	: 177 ft.lb	Insulation class	: F	
Locked rotor torque	: 200 %	Service factor	: 1.00	
Breakdown torque	: 290 %	Temperature rise	: 80 K	
Rated speed	: 2965 rpm	Design	: B	

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

		, , , ,			
Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			5 / 21	

#### Three Phase Induction Motor - Squirrel Cage



Customer :

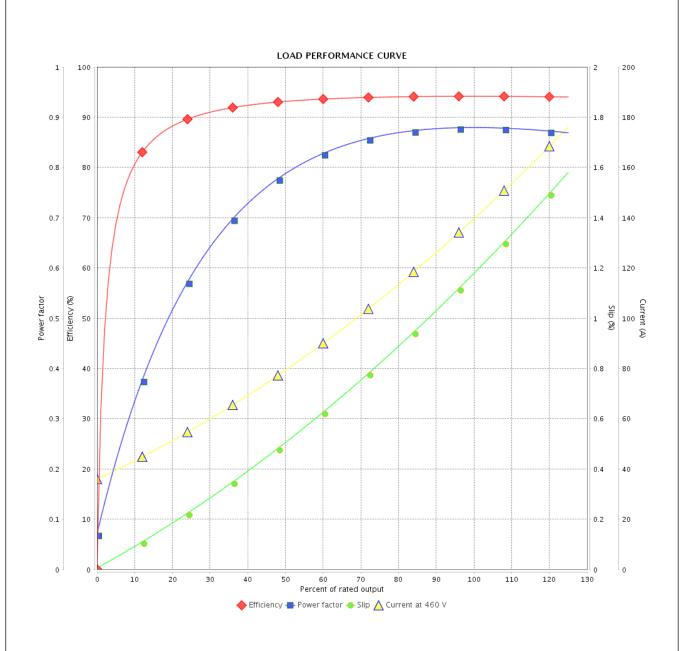
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40

6/21



Performance	: 460 V 60 Hz 2P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 136 A : 6.8 : 185 ft.lb : 170 % : 260 % : 3557 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 8.23 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Rev.	Changes Summary	Performe	d Checked	Date
Performed by Checked by			Page	Revision

13/04/2022

Date

#### Three Phase Induction Motor - Squirrel Cage

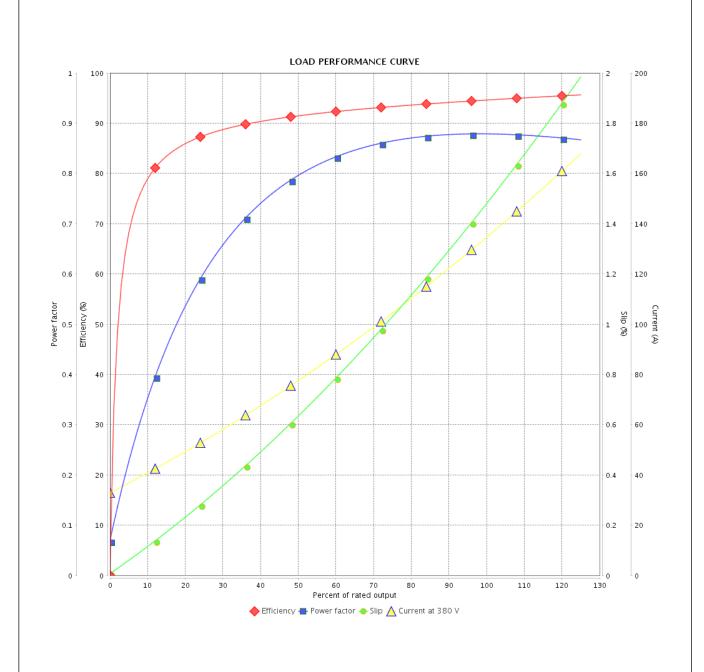


Customer

Product line : W40 NEMA Premium Efficiency Product code : 14272435

Three-Phase

Catalog #: 12536OT3G404TS-W40



Performance	: 3	80 V 50 Hz 2P IE3				
Rated current	: 1	37 A	Moment o	f inertia (J)	: 8.23 sq.ft.lb	
LRC	: 7	.2	Duty cycle	;	: Cont.(S1)	
Rated torque	: 1	78 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 1°	70 %	Service fa	ctor	: 1.00	
Breakdown torque : 250 %		50 %	Temperature rise		: 80 K	
Rated speed	: 2	955 rpm	Design		: B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by		-			Page	Revision
Date	13/04/2022	1			7 / 21	

#### Three Phase Induction Motor - Squirrel Cage



Customer :

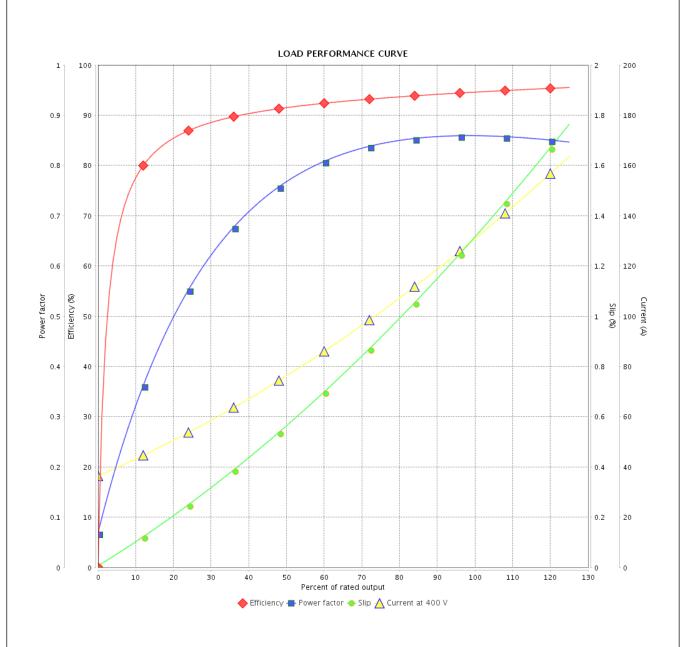
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40

8 / 21



Performance	: 400 V 50 Hz 2P IE3			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 133 A : 7.0 : 177 ft.lb : 190 % : 280 % : 2960 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 8.23 sq.ft. : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary	Perform	ned Checked	Date
Performed by				
Checked by			Page	Revision

13/04/2022

Date

#### Three Phase Induction Motor - Squirrel Cage

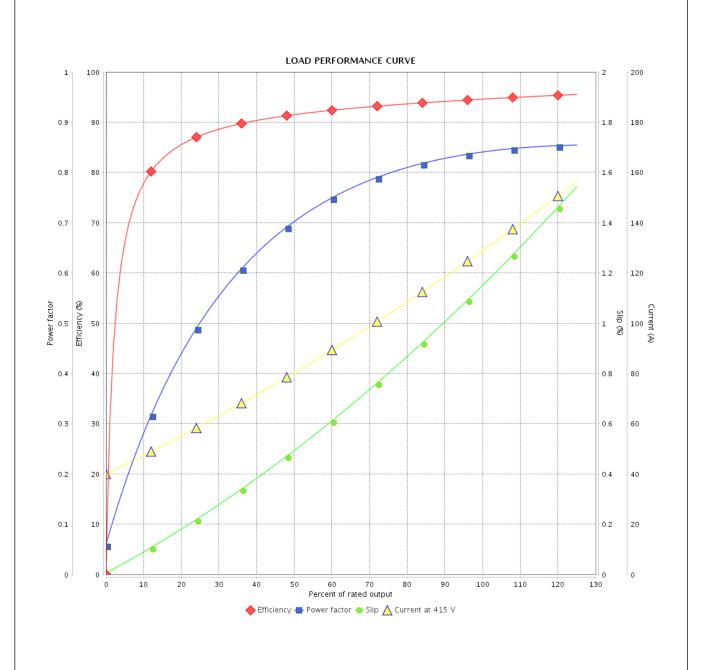


Customer

Product line : W40 NEMA Premium Efficiency Product code : 14272435

Three-Phase

Catalog #: 12536OT3G404TS-W40



Performance	: 4	415 V 50 Hz 2P IE3				
Rated current	: -	131 A	Moment of	of inertia (J)	: 8.23 sq.ft.lb	
LRC	: 7	7.8	Duty cycle	Э	: Cont.(S1)	
Rated torque	: '	177 ft.lb	Insulation	class	: F	
Locked rotor torque	e : 2	200 %	Service fa	actor	: 1.00	
Breakdown torque		290 %	Temperat	Temperature rise		
Rated speed	: 2	2965 rpm	Design		: B	
Rev.		Changes Summary	у	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				9 / 21	

### Three Phase Induction Motor - Squirrel Cage

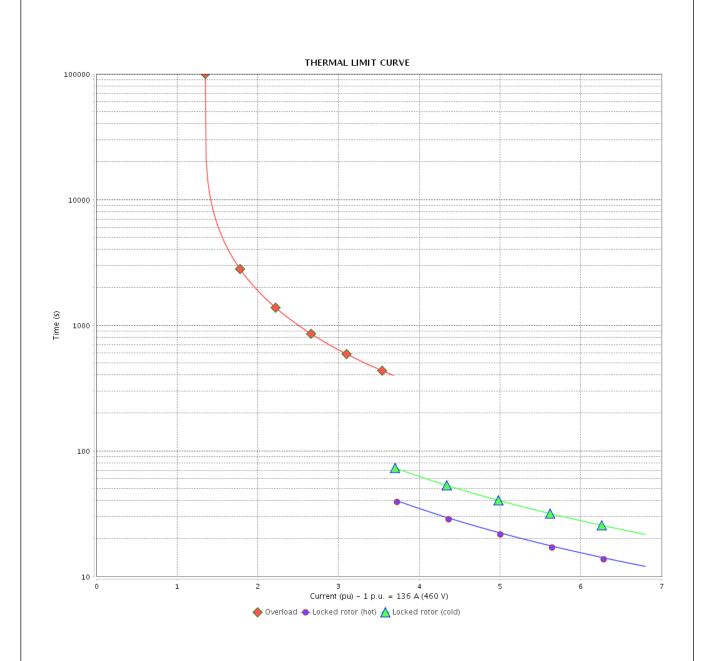


Customer	:					
Product line	: \ TI	N40 NEMA Premium Efficionree-Phase		Product code :	14272435	
			(	Catalog # :	12536OT3G4	04TS-W40
Performance		60 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 6. : 18 : 17 : 20	36 A 8 35 ft.lb 70 % 60 % 557 rpm	Moment of Duty cycle Insulation Service far Temperatu Design	class ctor	: 8.23 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
		-				
Heating constant Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
INGV.		Changes Summary		i enomieu	Onecked	Date
Performed by Checked by					Page	Revision
Data	13/04/2022	]			10 / 21	

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			11 / 21	

### Three Phase Induction Motor - Squirrel Cage

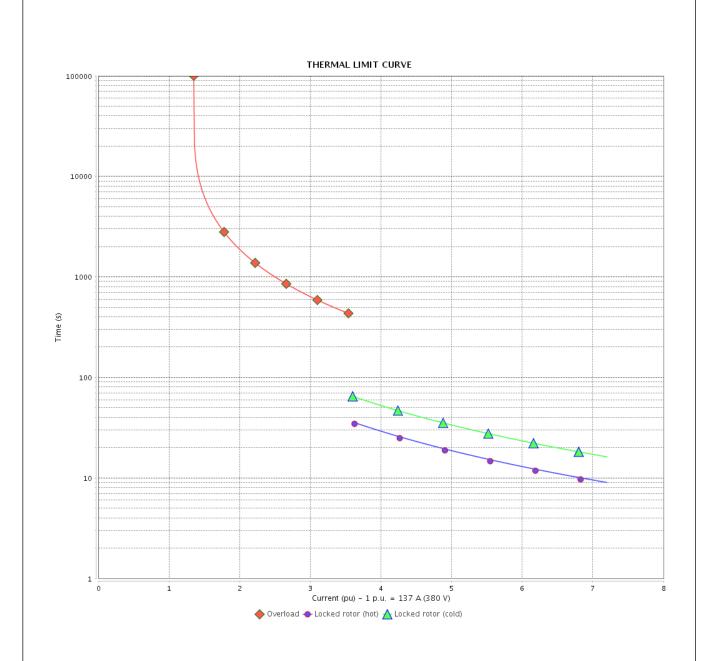


Customer	:					
Product line	: \ TI	W40 NEMA Premium Efficion Nree-Phase	ency l	Product code :	14272435	
			(	Catalog # :	12536OT3G4	04TS-W40
Performance		30 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 7. : 17 : 29 : 29	37 A 2 78 ft.lb 70 % 50 % 955 rpm	Moment of Duty cycle Insulation Service far Temperatu Design	class ctor	: 8.23 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
	. 2	· <del> -</del> · · ·			- <del>-</del>	
Heating constant						
Cooling constant  Rev.		Changes Summary	I	Performed	Checked	Date
Nev.		Changes Summary		renomilea	CHECKEG	Dale
Performed by Checked by					Page	Revision
Date	13/04/2022				12 / 21	

#### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			13 / 21	

### Three Phase Induction Motor - Squirrel Cage

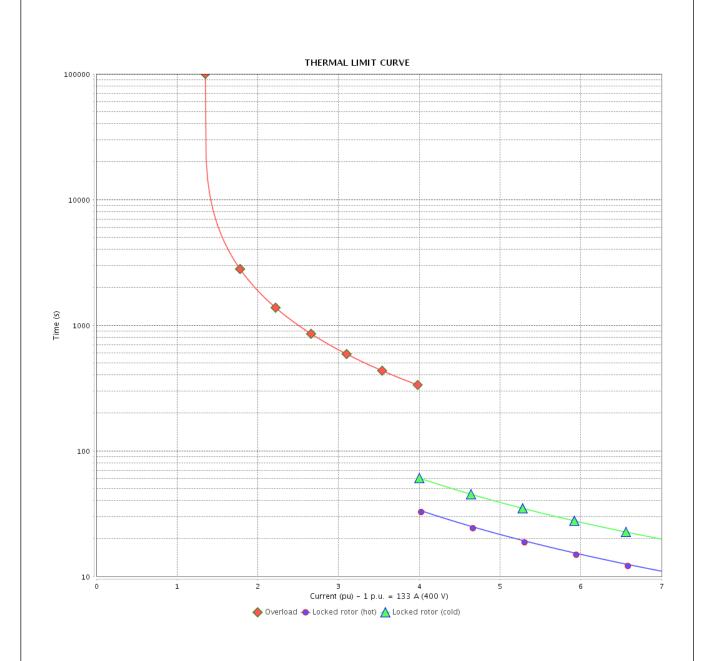


Customer		:				
Product line		: W40 NEMA Premium Efficie Three-Phase		Product code : Catalog # :	14272435 12536OT3G4	04TS-W40
Performance	:	400 V 50 Hz 2P IE3				
Rated current LRC Rated torque	:	133 A 7.0 177 ft.lb 190 %	Moment o Duty cycle Insulation Service fa	class	: 8.23 sq.ft.lb : Cont.(S1) : F : 1.00	
Locked rotor tord Breakdown torqu Rated speed	ue :	280 % 2960 rpm	Temperati Design		: 80 K : B	
Heating constant						
Cooling constant	τ	Changes Summary		Performed	Checked	Date
		<u> </u>			-	
Performed by						
Checked by	13/04/2022				Page 14 / 21	Revision

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	13/04/2022			15 / 21	

### Three Phase Induction Motor - Squirrel Cage

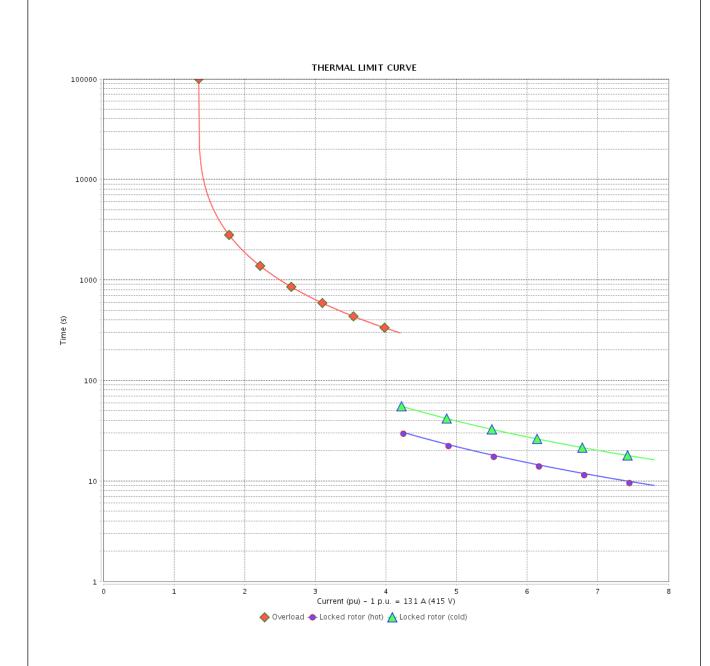


Customer		:				
Product line		: W40 NEMA Premium Effici Three-Phase		Product code : Catalog # :	14272435 12536OT3G4	04TS-W40
					1200001001	
Performance		: 415 V 50 Hz 2P IE3				
Rated current LRC		: 131 A : 7.8	Moment o	of inertia (J)	: 8.23 sq.ft.lb	
Rated torque		: 177 ft.lb	Duty cycle Insulation	class	: Cont.(S1) : F	
Locked rotor tord Breakdown torqu		: 200 % : 290 %	Service fa Temperati		: 1.00 : 80 K	
Rated speed		: 2965 rpm	Design	uic iisc	: 80 K : B	
Heating constan	t					
Cooling constant	t				1	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				16 / 21	

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by			·		
Checked by				Page	Revision
Date	13/04/2022			17 / 21	

#### Three Phase Induction Motor - Squirrel Cage



Customer :

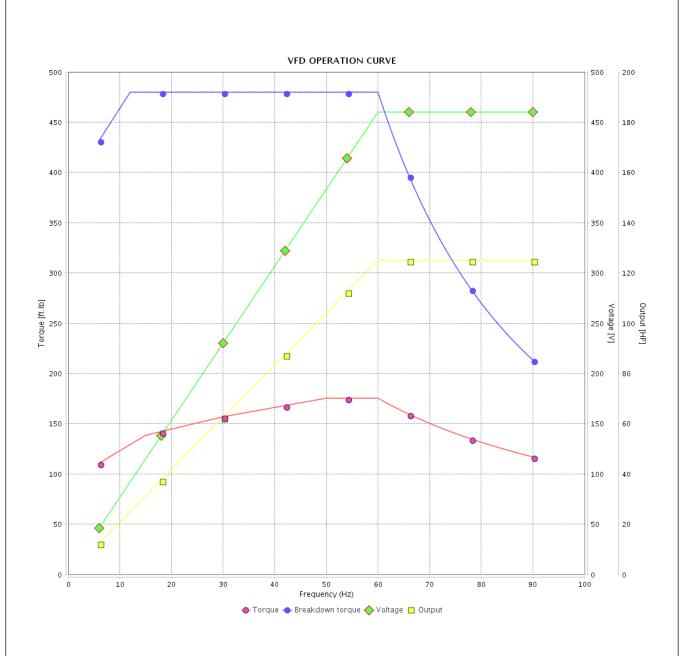
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40

18/21



Performance	: 46	60 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 6. : 18 que : 17 ue : 26	86 A 8 85 ft.lb 70 % 60 % 557 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		
Rev.		Changes Summary	·	Performed	Checked	Date
Performed by						
Checked by					Page	Revision

13/04/2022

Date

#### Three Phase Induction Motor - Squirrel Cage

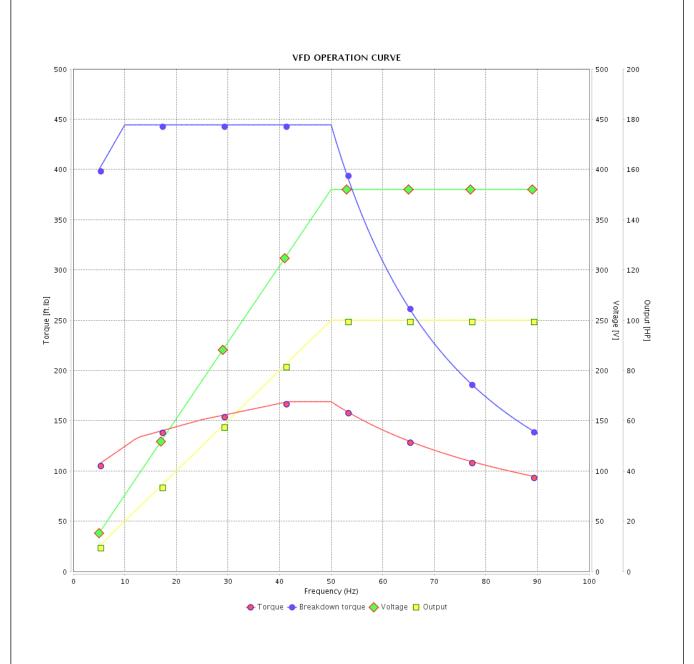


Customer

Product line : W40 NEMA Premium Efficiency Product code : 14272435

Three-Phase

Catalog #: 12536OT3G404TS-W40



Performance	: 3	380 V 50 Hz 2P IE3				
Rated current	: 1	137 A	Moment o	f inertia (J)	: 8.23 sq.ft.lb	
LRC	: 7	7.2	Duty cycle	<b>;</b>	: Cont.(S1)	
Rated torque	:1	178 ft.lb	Insulation	class	: F	
Locked rotor torque	e :1	170 %	Service fa	ctor	: 1.00	
Breakdown torque	: 2	250 %	Temperature rise		: 80 K	
Rated speed	: 2	2955 rpm	Design		: B	
Rev.		Changes Summary	у	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	13/04/2022				19 / 21	

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Date

13/04/2022

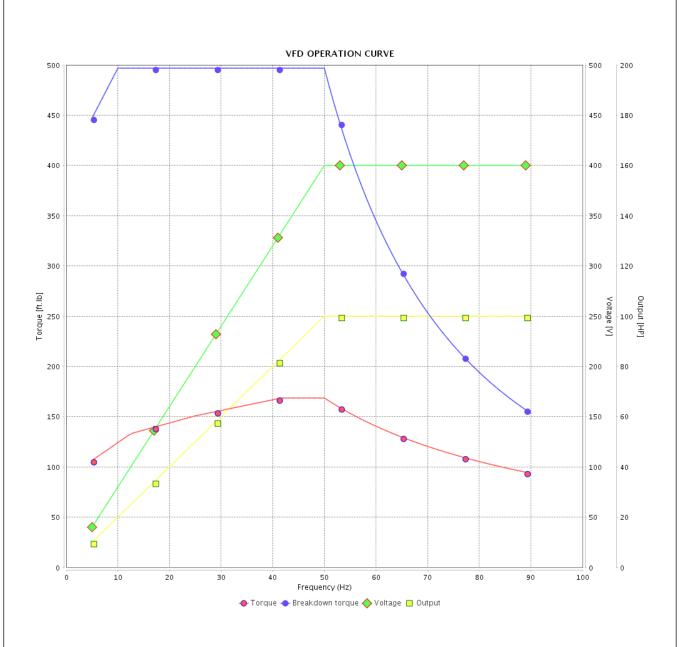
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40

20 / 21



Performance : 400 V 50 Hz 2P IE3 : 133 A Rated current Moment of inertia (J) : 8.23 sq.ft.lb **LRC** : 7.0 Duty cycle : Cont.(S1) Insulation class : 177 ft.lb : F Rated torque Locked rotor torque : 190 % Service factor : 1.00 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 2960 rpm Design : B Rev. Performed Checked **Changes Summary** Date Performed by Checked by Revision Page

#### Three Phase Induction Motor - Squirrel Cage



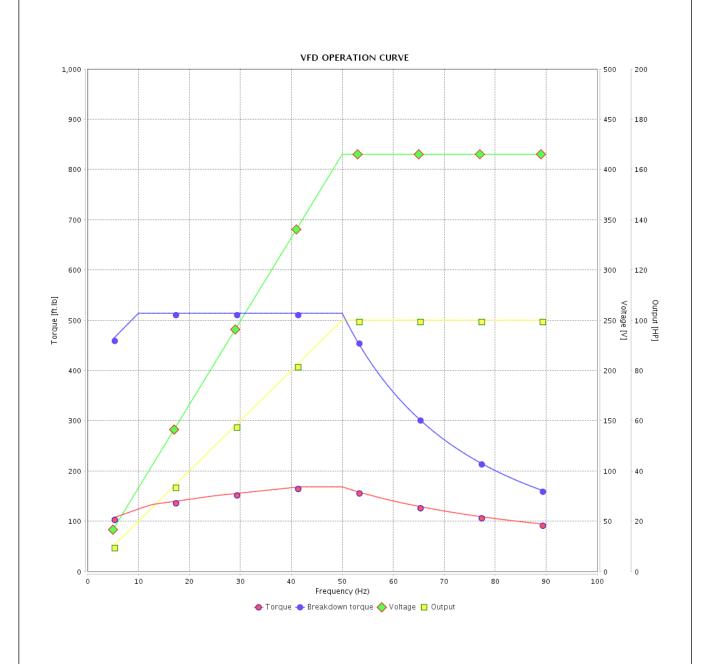
Customer

Product line : W40 NEMA Premium Efficiency Pr

Three-Phase

Product code: 14272435

Catalog #: 12536OT3G404TS-W40



Performance	: 4	15 V 50 Hz 2P IE3				
Rated current	: 10	31 A	Moment of	of inertia (J)	: 8.23 sq.ft.lb	
LRC	: 7.	.8	Duty cycle	9	: Cont.(S1)	
Rated torque	: 17	77 ft.lb	Insulation	class	: F	
Locked rotor toro	que : 20	00 %	Service fa	ictor	: 1.00	
Breakdown torqu	ie : 29	90 %	Temperati	Temperature rise		
Rated speed	: 29	965 rpm	Design		: B	
Rev.		Changes Summar	Ту	Performed	Checked	Date
Performed by						
Checked by		-			Page	Revision
Date	13/04/2022	1			21 / 21	

