DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W40 NEMA Premium Efficiency Product code:

Three-Phase

Catalog #: 02536OT3E256TC-W40

14495157

Frame : 254/6TC Cooling method : IC01 - ODP

Insulation class Mounting : F-1

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

: 1000 m.a.s.l. Approx. weight³ Altitude : 243 lb

Protection degree : IP23 Moment of inertia (J) : 1.13 sq.ft.lb				sq.ft.lb	
Design		: B			
Output [HP]		25	20	20	20
Poles		2	2	2	2
Frequency [Hz]		60	50	50	50
Rated voltage [V]		230/460	380	400	415
Rated current [A]		57.6/28.8	28.2	27.4	27.0
L. R. Amperes [A]		374/187	192	186	200
LRC [A]		6.5x(Code G)	6.8x(Code H)	6.8x(Code H)	7.4x(Code J)
No load current [A		17.0/8.50	8.20	9.10	10.0
Rated speed [RPN	/ 1]	3535	2935	2945	2950
Slip [%]		1.81	2.17	1.83	1.67
Rated torque [ft.lb]		37.1	35.8	35.7	35.6
Locked rotor torqu	Locked rotor torque [%]		200	220	229
Breakdown torque	[%]	280	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		19s (cold) 11s (hot)	14s (cold) 8s (hot)	18s (cold) 10s (hot)	14s (cold) 8s (hot)
Noise level ²					
	25%	90.8	87.6	87.9	87.9
Efficiency (%)	50%	91.0	89.5	89.6	89.6
Linciency (70)	75%	91.7	89.9	90.1	90.1
100%		91.7	91.9	91.9	91.9
	25%	0.53	0.54	0.49	0.45
Power Factor	50%	0.77	0.77	0.73	0.69
1 OWELL ACTOR	75%	0.85	0.85	0.82	0.79
	100%	0.88	0.88	0.86	0.84

Max. compression

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

Sealing Without Without

Bearing Seal Bearing Seal 20000 h

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

Notes

Bearing type

USABLE @208V 63.7A SF 1.15 SFA 73.2A

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	11/04/2020			1 / 21	

Three Phase Induction Motor - Squirrel Cage



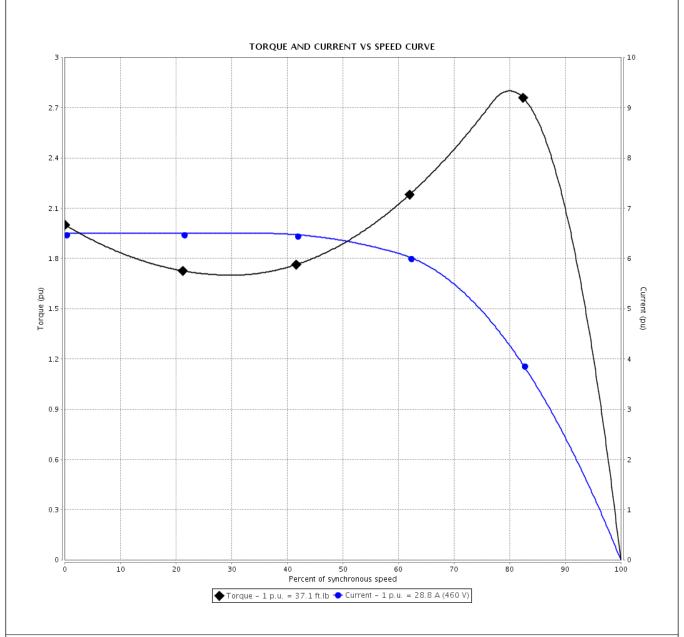
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14495157

Catalog #: 02536OT3E256TC-W40



: 230/460 V 60 Hz 2P Performance Rated current : 57.6/28.8 A Moment of inertia (J) : 1.13 sq.ft.lb **LRC** : 6.5 Duty cycle : Cont.(S1) : 37.1 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 200 % : 1.25 Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 3535 rpm Design : B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2020			2 / 21	

Three Phase Induction Motor - Squirrel Cage



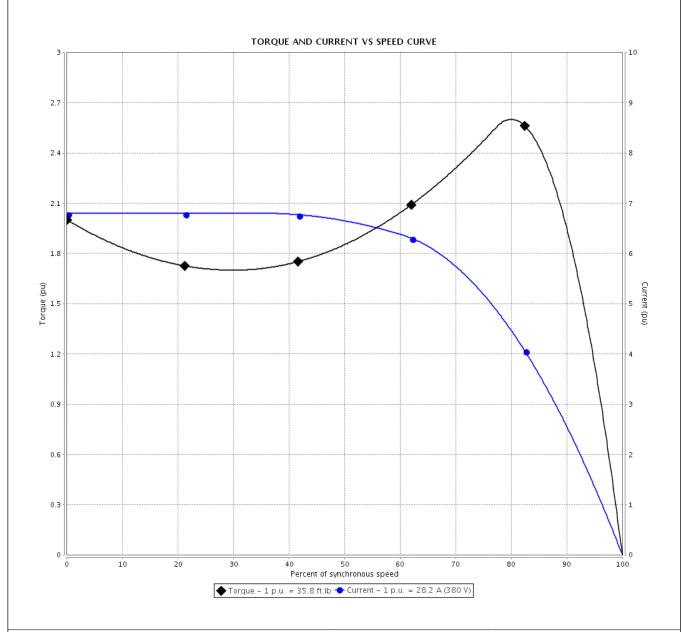
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14495157

Catalog #: 02536OT3E256TC-W40



Performance : 380 V 50 Hz 2P IE3 Rated current : 28.2 A Moment of inertia (J) : 1.13 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) : 35.8 ft.lb Insulation class Rated torque : F : 200 % Locked rotor torque Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 80 K : B Rated speed : 2935 rpm Design

Locked rotor time : 14s (cold) 8s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2020			3 / 21	

Three Phase Induction Motor - Squirrel Cage



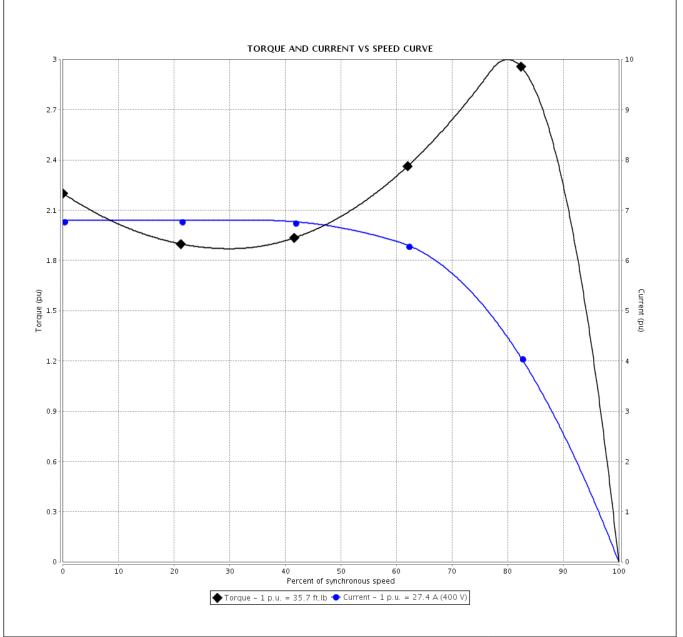
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Three-Phase

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Catalog #: 02536OT3E256TC-W40



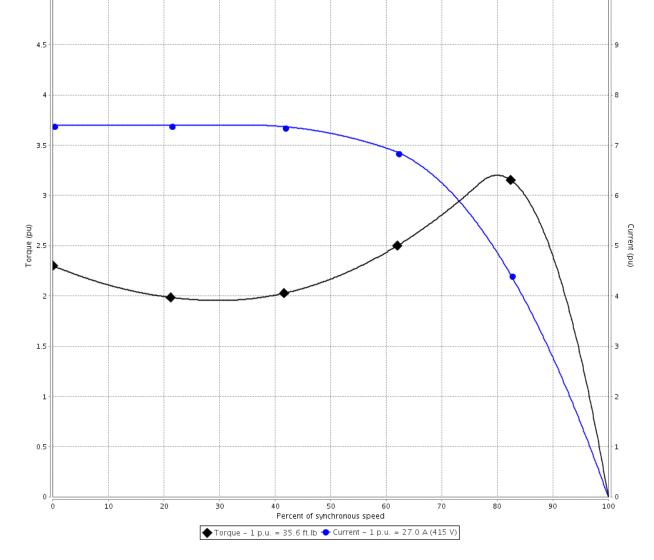
: 400 V 50 Hz 2P IE3 Performance Rated current : 27.4 A Moment of inertia (J) : 1.13 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) : 35.7 ft.lb Insulation class Rated torque : F Service factor Locked rotor torque : 220 % : 1.00 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 2945 rpm Design : B

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

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2020			4 / 21	



Three Phase Induction Motor - Squirrel Cage Customer Product line : W40 NEMA Premium Efficiency Product code: 14495157 Three-Phase Catalog #: 02536OT3E256TC-W40 TORQUE AND CURRENT VS SPEED CURVE 4.5



Performance : 415 V 50 Hz 2P IE3 Rated current : 27.0 A Moment of inertia (J) : 1.13 sq.ft.lb **LRC** : 7.4 Duty cycle : Cont.(S1) : 35.6 ft.lb Insulation class Rated torque : F Locked rotor torque : 229 % Service factor : 1.00 Breakdown torque : 320 % Temperature rise : 80 K : B Rated speed : 2950 rpm Design Locked rotor time : 14s (cold) 8s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2020			5 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer :

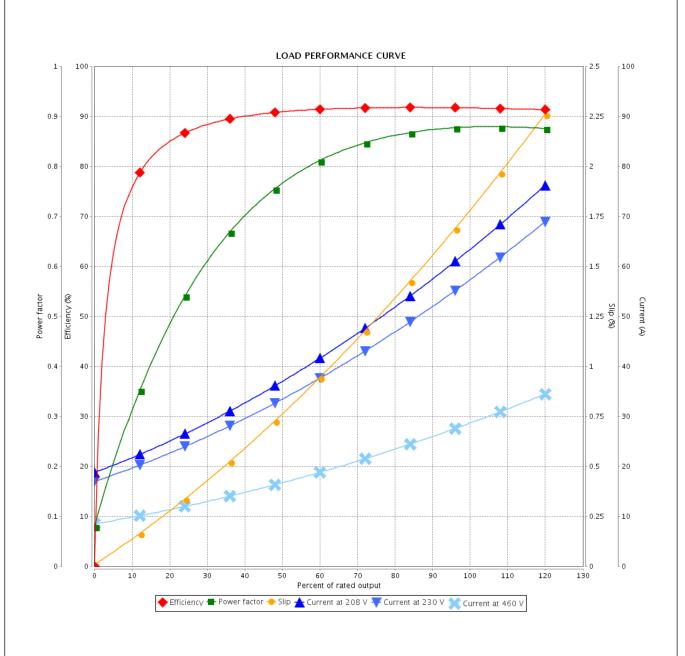
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14495157

Catalog #: 02536OT3E256TC-W40

6/21



Performance	: 230/460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 57.6/28.8 A : 6.5 : 37.1 ft.lb : 200 % : 280 % : 3535 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 1.13 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

11/04/2020

Date

Three Phase Induction Motor - Squirrel Cage

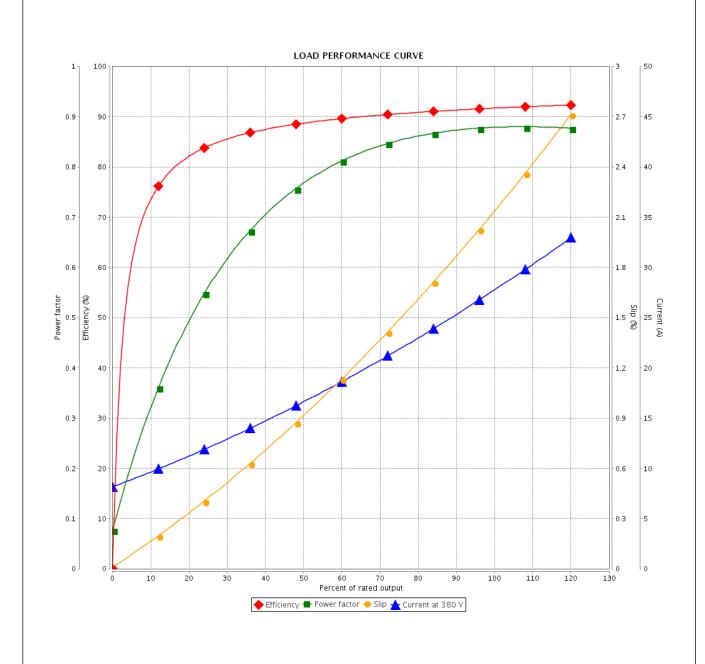


Customer

Product line : W40 NEMA Premium Efficiency

Product code: 14495157

Catalog #: 02536OT3E256TC-W40



Performance	: 3	80 V 50 Hz 2P IE3				
Rated current		8.2 A	.2 A Moment of inc		: 1.13 sq.ft.lb	
LRC	: 6	.8	Duty cycle	9	: Cont.(S1)	
Rated torque	: 3	5.8 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 20	00 %	Service fa	ictor	: 1.00	
Breakdown torque	e : 20	60 %	Temperati	Temperature rise		
Rated speed	: 29	935 rpm	Design		: B	
Rev.		Changes Summa	ry	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2020	1			7 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

11/04/2020

Product line : W40 NEMA Premium Efficiency

Three-Phase

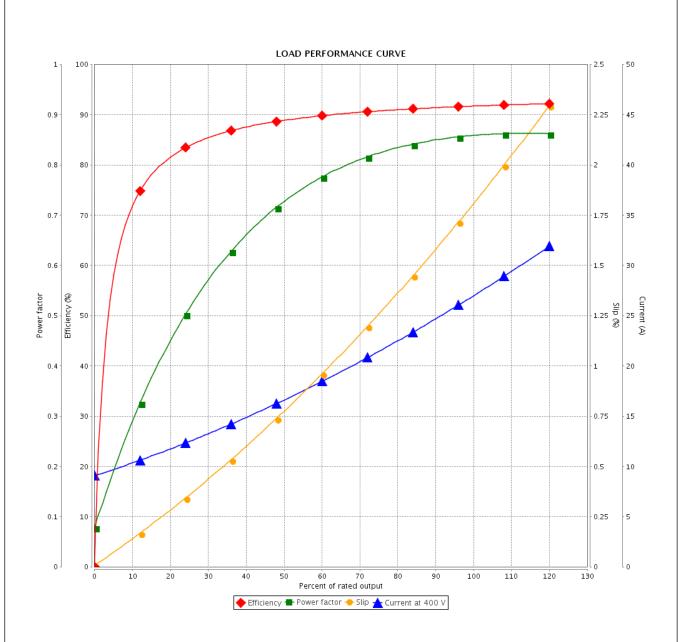
Product code: 14495157

Catalog #: 02536OT3E256TC-W40

Page

8 / 21

Revision



Performance	: 400 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 27.4 A : 6.8 : 35.7 ft.lb : 220 % : 300 % : 2945 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ector	: 1.13 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

Three Phase Induction Motor - Squirrel Cage



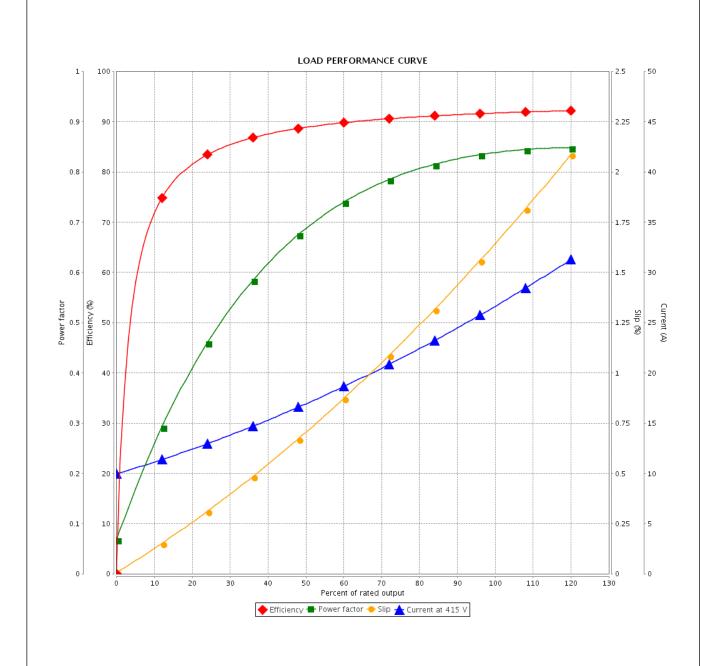
Customer

Product line : W40 NEMA Premium Efficiency Product

Three-Phase

Product code: 14495157

Catalog #: 02536OT3E256TC-W40



Performance	:	415 V 50 Hz 2P IE3				
Rated current : 27.0 A		27.0 A	Moment of	f inertia (J)	: 1.13 sq.ft.lb	
LRC	:	7.4	Duty cycle	•	: Cont.(S1)	
Rated torque	:	35.6 ft.lb	Insulation	class	: F	
Locked rotor tord	que :	229 %	Service fa	ctor	: 1.00	
Breakdown torque		320 %	Temperat	Temperature rise		
Rated speed	:	2950 rpm	Design		: B	
Rev.		Changes Summar	у	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2020				9 / 21	

Three Phase Induction Motor - Squirrel Cage

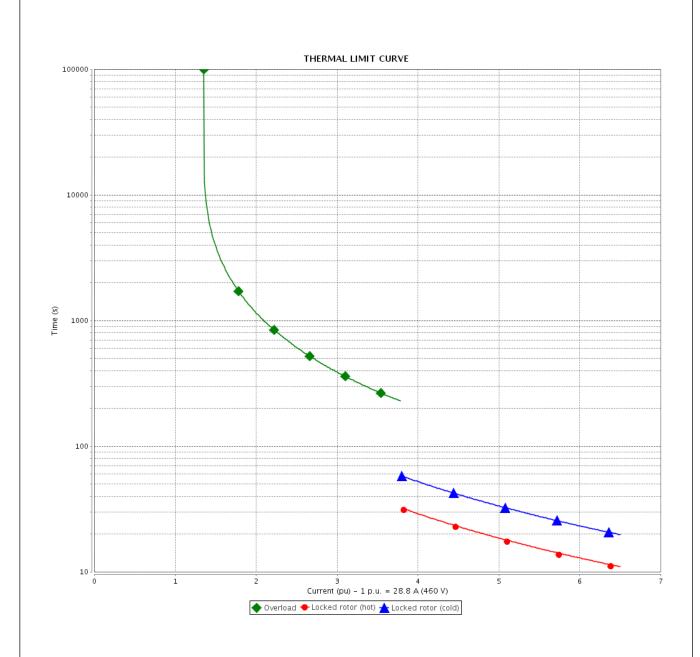


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Product line		N40 NEMA Premium Efficionree-Phase	ency I	Product code :	14495157	
	''	ircc-i riasc	(Catalog # :	02536OT3E2	56TC-W40
Performance		30/460 V 60 Hz 2P		· · · · · · · ·	4.40 6.11	
Rated current LRC	: 57 : 6.	7.6/28.8 A 5	Moment of Duty cycle	f inertia (J)	: 1.13 sq.ft.lb : Cont.(S1)	
Rated torque		7.1 ft.lb	Insulation	class	: F	
Locked rotor torq Breakdown torqu		00 % 30 %	Service far Temperatu		: 1.25 : 80 K	
Rated speed		535 rpm	Design		: B	
Heating constant						
Cooling constant		01 0				
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
D-/	44/04/0000				. 490	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2020			11 / 21	

Three Phase Induction Motor - Squirrel Cage

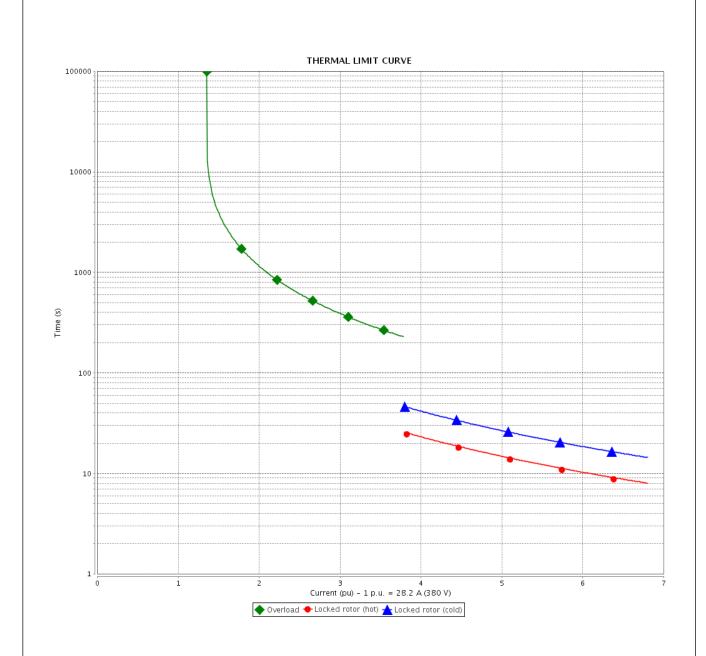


Customer		:				
Product line		: W40 NEMA Premium Effici Three-Phase		Product code : Catalog # :	14495157 02536OT3E2	56TC-W40
Performance		: 380 V 50 Hz 2P IE3				
Rated current LRC Rated torque		: 28.2 A : 6.8 : 35.8 ft.lb	Duty cycle Insulation	class	: 1.13 sq.ft.lb : Cont.(S1) : F	
Locked rotor tord Breakdown torqu	ue	: 200 % : 260 %	Service fa Temperati		: 1.00 : 80 K	
Rated speed		: 2935 rpm	Design		: B	
Heating constant Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
Dawfarrer						
Performed by Checked by					Page	Revision
Date Date	11/04/2020				12 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Pei	rformed	Checked	Date
Performed by			•			
Checked by					Page	Revision
Date	11/04/2020				13 / 21	

Three Phase Induction Motor - Squirrel Cage

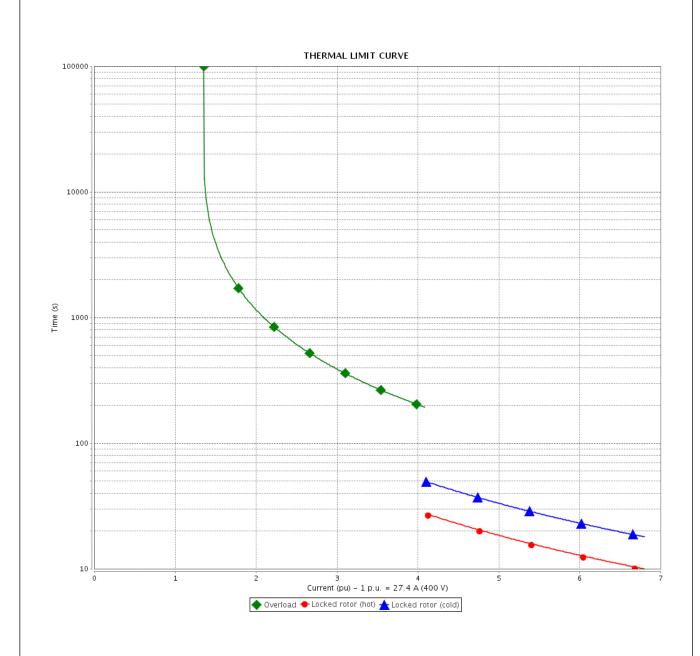


Customer		:				
Product line		: W40 NEMA Premium Effici Three-Phase		Product code : Catalog # :	14495157 02536OT3E2	56TC-W40
Performance		: 400 V 50 Hz 2P IE3				
Rated current LRC Rated torque		: 27.4 A : 6.8 : 35.7 ft.lb	Duty cycle Insulation	class	: 1.13 sq.ft.lb : Cont.(S1) : F	
Locked rotor tord Breakdown torqu		: 220 % : 300 %	Service fa Temperati		: 1.00 : 80 K	
Rated speed		: 2945 rpm	Design		: B	
Heating constant						
Cooling constant		Changes Summary		Performed	Checked	Date
Performed by Checked by					Page	Revision
Date	11/04/2020				14 / 21	VEAISIO[]

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2020			15 / 21	

Three Phase Induction Motor - Squirrel Cage

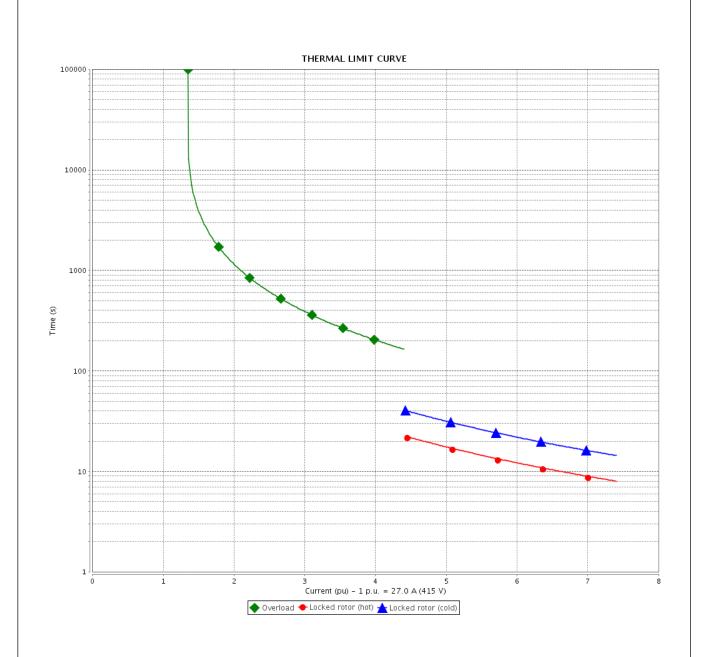


Customer		:				
Product line		: W40 NEMA Premium Effici Three-Phase		Product code : Catalog # :	14495157 02536OT3E2	56TC-W40
Performance		. AAE V 50 H- 0D I50				
Rated current		: 415 V 50 Hz 2P IE3 : 27.0 A	Moment o	of inertia (J)	: 1.13 sq.ft.lb	
LRC	:	: 7.4	Duty cycle	9	: Cont.(S1)	
Rated torque Locked rotor tord		: 35.6 ft.lb : 229 %	Insulation Service fa		: F : 1.00	
Breakdown torqu	ie :	: 320 %	Temperati		: 80 K	
Rated speed		: 2950 rpm	Design		: B	
Heating constan						
Cooling constant	T .	Changes Cummers		Dorform	Chaglead	Data
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	11/04/2020				16 / 21	

Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	11/04/2020			17 / 21	

Three Phase Induction Motor - Squirrel Cage



Revision

Page

18 / 21

Customer :

Checked by

Date

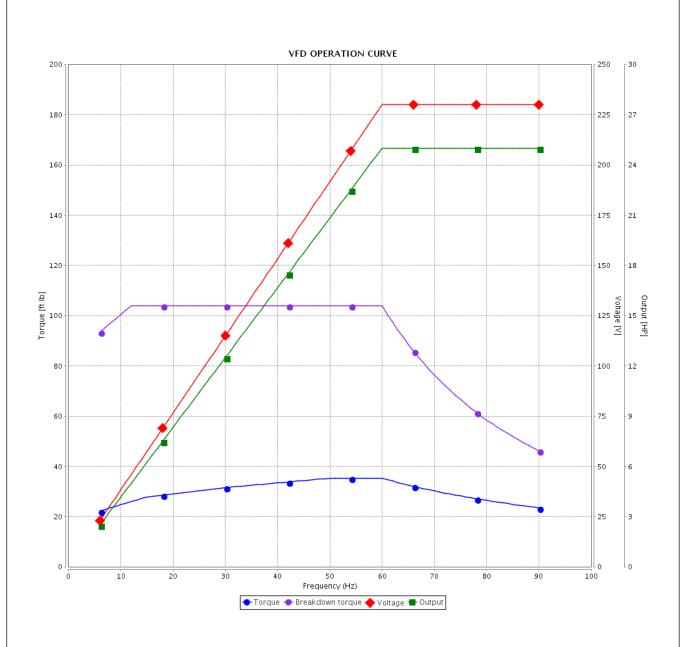
11/04/2020

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14495157

Catalog #: 02536OT3E256TC-W40



Performance : 230/460 V 60 Hz 2P Rated current : 57.6/28.8 A Moment of inertia (J) : 1.13 sq.ft.lb **LRC** Duty cycle : Cont.(S1) : 6.5 : 37.1 ft.lb Insulation class : 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 **Changes Summary** Date Performed by

Three Phase Induction Motor - Squirrel Cage



Customer

Checked by

Date

11/04/2020

Product line : W40 NEMA Premium Efficiency Product code :

Three-Phase

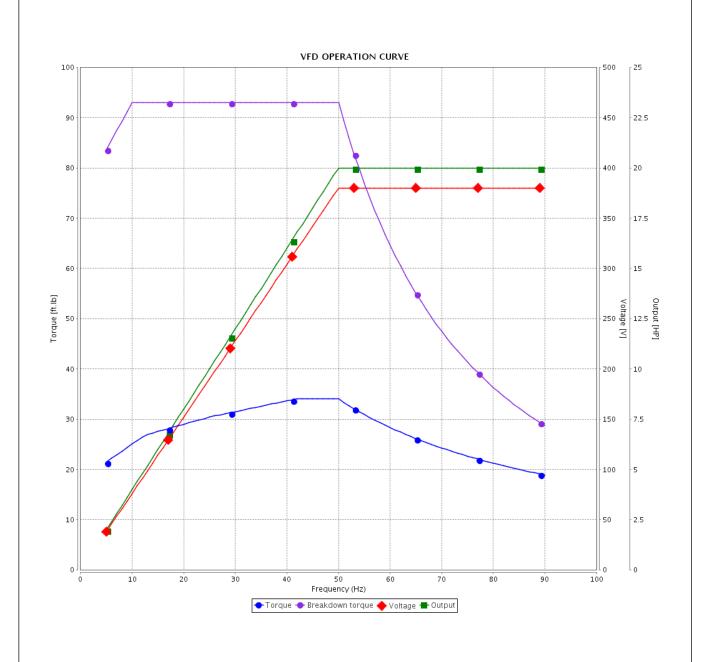
roduct code: 14495157

Catalog #: 02536OT3E256TC-W40

Page

19/21

Revision



Performance	: 380 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 28.2 A : 6.8 : 35.8 ft.lb : 200 % : 260 % : 2935 rpm	Moment of Duty cycle Insulation Service fa Temperati Design	class ctor	: 1.13 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					

Three Phase Induction Motor - Squirrel Cage



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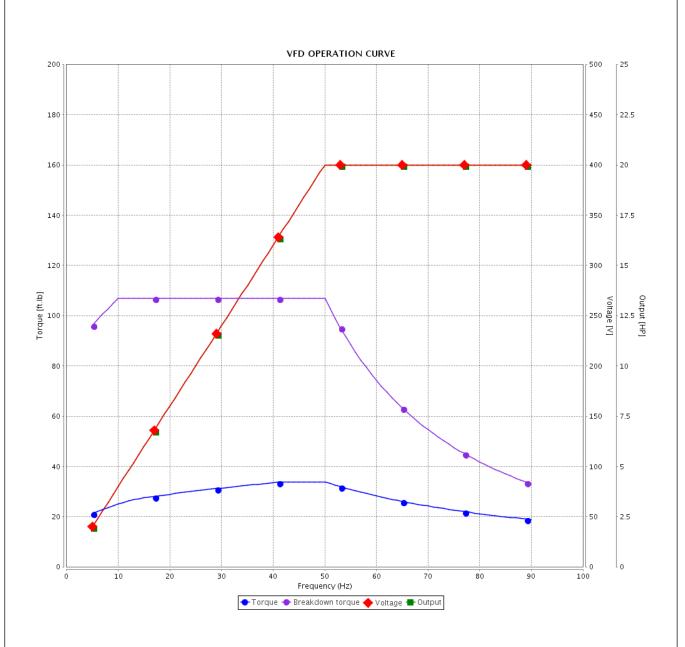
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14495157

Catalog #: 02536OT3E256TC-W40

20 / 21



Performance	: 400 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 27.4 A : 6.8 : 35.7 ft.lb : 220 % : 300 % : 2945 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		(J) : 1.13 sq.ft.lb : Cont.(S1) : F : 1.00 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

11/04/2020

Date

Three Phase Induction Motor - Squirrel Cage



Customer

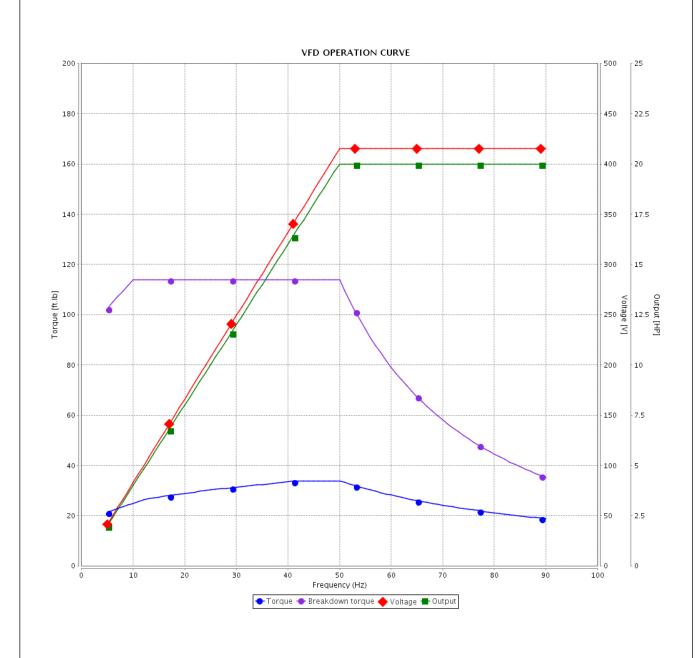
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roduct code: 14495157

Catalog #: 02536OT3E256TC-W40

21 / 21



Performance	: 415 V 50 Hz 2P IE3						
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 27.0 A : 7.4 : 35.6 ft.lb : 229 % : 320 % : 2950 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise		: 7.4 Duty cycle : Cont.(S1 : 35.6 ft.lb Insulation class : F : 229 % Service factor : 1.00 : 320 % Temperature rise : 80 K		: 1.00	
Rev.	Changes Summary	P	erformed	Checked	Date		
Performed by							
Checked by				Page	Revision		

11/04/2020

Date