DATA SHEET

Three Phase Induction Motor - Squirrel Cage



83.7

0.31

0.55

0.68 0.77

Customer

Product line : Rolled Steel Premium Efficiency Three-

Product code: 14786559

Catalog #: 00118ET3E56CFL-S

Frame : 56C Cooling method : IC411 - TEFC

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 : 16.7 kg Altitude

Protection degree : IP55 Moment of inertia (J)

: 0.0052 kgm² Design : B Output [HP] 1 Poles 4 4 4 Frequency [Hz] 60 50 50 Rated voltage [V] 230/460 190-220/380 415 Rated current [A] 2.94/1.47 3.40-2.94/1.70 1.62 L. R. Amperes [A] 25.3/12.6 12.2 22.1-19.1/11.0 7.5x(Code K) LRC [A] 8.6x(Code M) 6.5x(Code J) No load current [A] 1.78/0.890 1.76-1.52/0.879 0.988 Rated speed [RPM] 1765 1450 1460 Slip [%] 1.94 3.33 2.67 Rated torque [kgfm] 0.411 0.501 0.497 Locked rotor torque [%] 280 200 250 Breakdown torque [%] 300 270 330 Service factor 1.00 1.00 Temperature rise 80 K 80 K 80 K Locked rotor time 34s (cold) 19s (hot) 32s (cold) 18s (hot) 28s (cold) 16s (hot) Noise level² 52.0 dB(A) 49.0 dB(A) 49.0 dB(A) 25% 81.0 82.5 80.4 50% 82.5 82.2 80.9 Efficiency (%) 75% 84.0 83.7 83.5

82.9

0.36

0.62

0.74

0.81

Drive end Non drive end Foundation loads

85.5

0.30

0.52

0.66

0.75

Bearing type 6204 ZZ 6202 ZZ Max. traction : 44 kgf V'Ring Sealing Without Max. compression : 61 kgf

Bearing Seal Lubrication interval

Lubricant amount Mobil Polyrex EM Lubricant type

Notes

Power Factor

USABLE @208V 3.25A SF 1.00 SFA 3.25A

100%

25%

50%

75%

100%

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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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



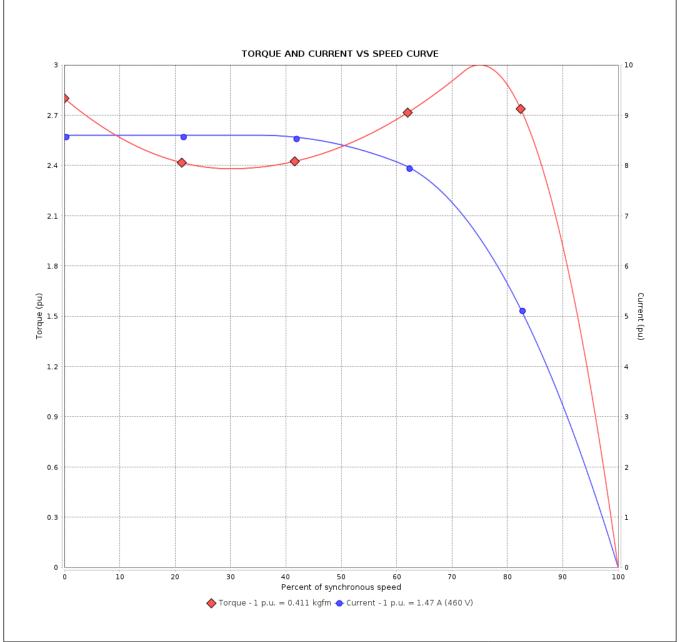
Customer :

Product line : Rolled Steel Premium Efficiency Three-

Phase

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



Performance : 230/460 V 60 Hz 4P Rated current : 2.94/1.47 A Moment of inertia (J) : 0.0052 kgm² **LRC** Duty cycle : Cont.(S1) Insulation class : F Rated torque : 0.411 kgfm Locked rotor torque : 280 % Service factor Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B

Locked rotor time : 34s (cold) 19s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel Premium Efficiency Three-

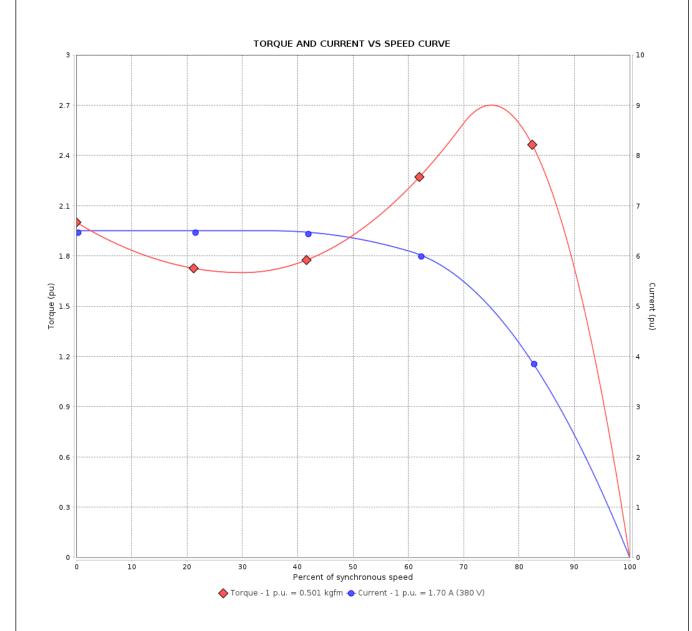
Phase

Product code:

14786559

Catalog #:

00118ET3E56CFL-S



Performance	: 190-220/380 V 50 Hz 4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 3.40-2.94/1.70 A : 6.5 : 0.501 kgfm : 200 % : 270 % : 1450 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.0052 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
Locked rotor time	: 32s (cold) 18s (hot)			

LOCKED TOLOT LITTLE		23 (Cold) 103 (1101)			
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

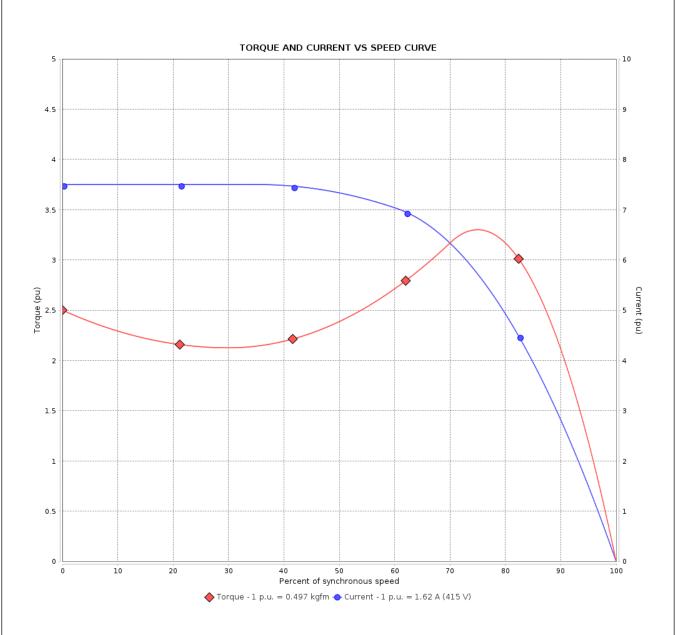


Customer

Product line : Rolled Steel Premium Efficiency Three-

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



Performance : 415 V 50 Hz 4P Rated current : 1.62 A Moment of inertia (J) : 0.0052 kgm² **LRC** : 7.5 Duty cycle : Cont.(S1) : F : 0.497 kgfm Insulation class Rated torque Service factor Locked rotor torque : 250 % : 1.00 Breakdown torque : 330 % Temperature rise : 80 K Rated speed : 1460 rpm Design : B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



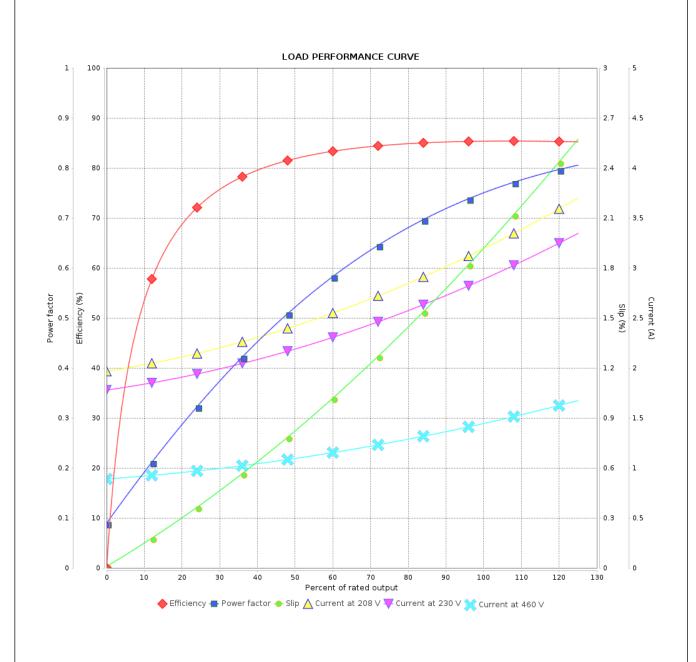
Customer

Product line : Rolled Steel Premium Efficiency Three-

Phase

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



Performance	: 2	230/460 V 60 Hz 4P				
Rated current	: 2	2.94/1.47 A	Moment o	f inertia (J)	: 0.0052 kgm²	2
LRC	: 8	3.6	Duty cycle	;	: Cont.(S1)	
Rated torque	: 0).411 kgfm	Insulation	class	: F	
Locked rotor torqu	ie : 2	280 %	Service fa	ctor	:	
Breakdown torque	: :3	300 %	Temperati	ıre rise	: 80 K	
Rated speed	: 1	1765 rpm	Design		: B	
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LOAD PERFORMANCE CURVE

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Customer

Product line : Rolled Steel Premium Efficiency Three-

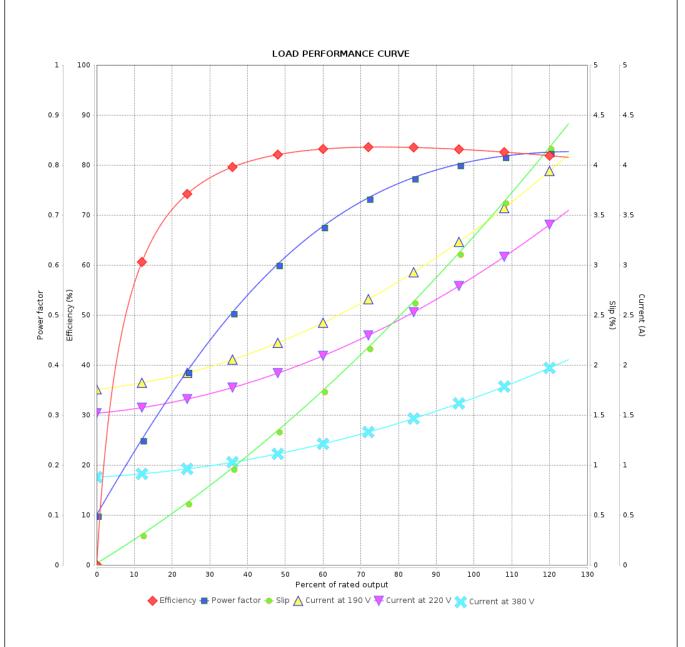
Phase

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Date

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



: 190-220/380 V 50 Hz 4P				
: 3.40-2.94/1.70 A : 6.5 : 0.501 kgfm : 200 % : 270 % : 1450 rpm	Moment of ine Duty cycle Insulation clas Service factor	SS	: 0.0052 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
Changes Summary		Performed	Checked	Date
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	: 6.5 : 0.501 kgfm : 200 % : 270 % : 1450 rpm	: 6.5 Duty cycle : 0.501 kgfm Insulation clas : 200 % Service factor Temperature r Design	: 6.5 : 0.501 kgfm : 200 % : 270 % : 1450 rpm Duty cycle Insulation class Service factor Temperature rise Design	: 6.5 Duty cycle : Cont.(S1) : 0.501 kgfm Insulation class : F : 200 % Service factor : 1.00 : 270 % Temperature rise : 80 K : 1450 rpm Design : B

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Three Phase Induction Motor - Squirrel Cage



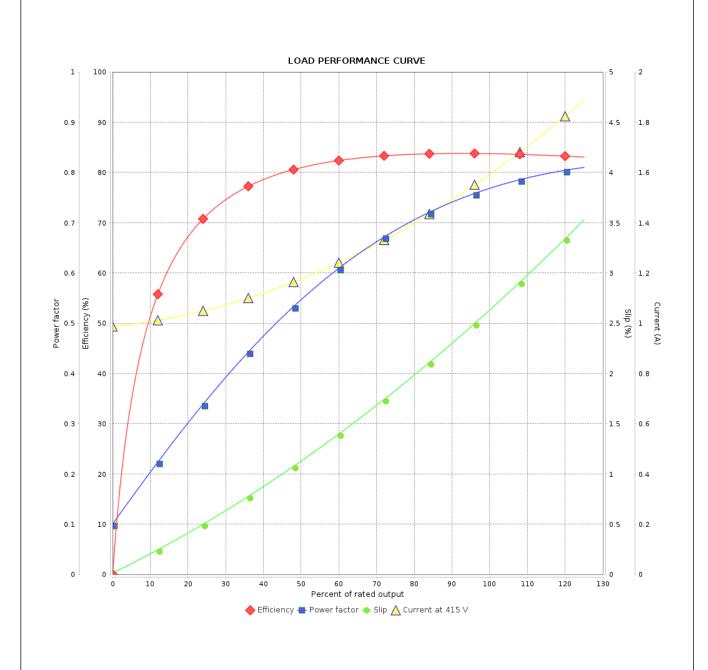
Customer :

Product line : Rolled Steel Premium Efficiency Three-

Phase

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



Performance	: 4	15 V 50 Hz 4P				
Rated current	: 1	.62 A	Moment o	f inertia (J)	: 0.0052 kgm²	
LRC	: 7	7.5	Duty cycle	:	: Cont.(S1)	
Rated torque	: 0).497 kgfm	Insulation	class	:F	
Locked rotor torque	: : 2	250 %	Service fa	ctor	: 1.00	
Breakdown torque	: 3	30 %	Temperatu	ıre rise	: 80 K	
Rated speed	: 1	460 rpm	Design		: B	
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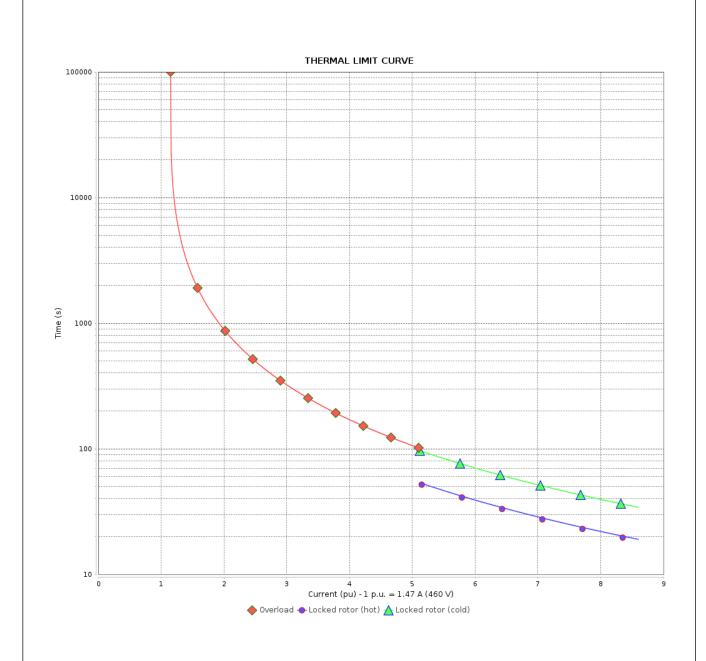


Customer	:				
Product line	: Rolled Steel Premium Efficiency Thr Phase	ee-	Product code :	14786559	
	i ilase	1	Catalog # :	00118ET3E5	6CFL-S
Performance	: 230/460 V 60 Hz 4P		5 : (1) (1)	0.00501	
Rated current LRC	: 2.94/1.47 A : 8.6	Duty cycle	f inertia (J)	: 0.0052 kgm² : Cont.(S1)	
Rated torque Locked rotor torque	: 0.411 kgfm : 280 %	Insulation Service fa	class	: F	
Breakdown torque	: 300 %	Temperatu		: 80 K	
Rated speed	: 1765 rpm	Design		: B	
Heating constant					
Cooling constant Rev.	Changes Summary		Performed	Checked	Date
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Three Phase Induction Motor - Squirrel Cage



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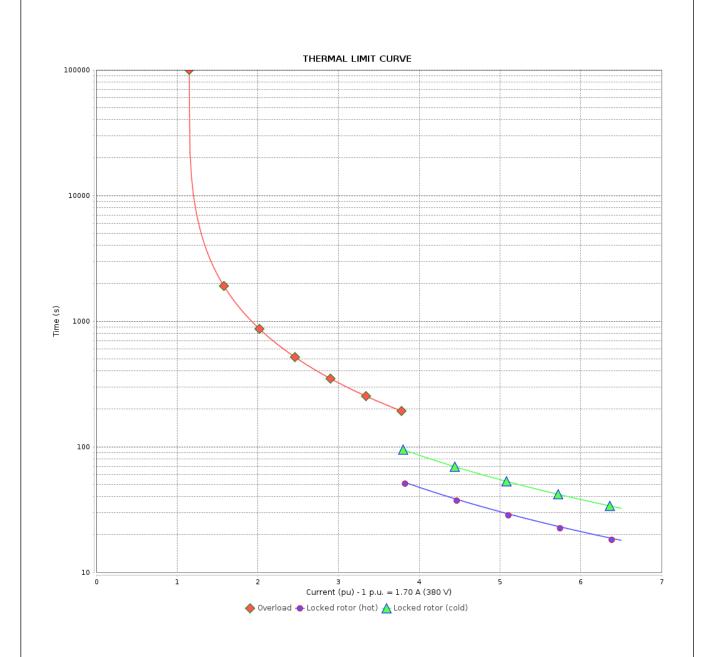


Rated current : 3.40-2.94/1.70 A				SCFL-S
Performance				SCFL-S
Performance		Catalog # :	00118ET3E56	SCFL-S
Rated current : 3.40-2.94/1.70 A				
Rated current : 3.40-2.94/1.70 A				
Rated current : 3.40-2.94/1.70 A				
Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
Rated current : 3.40-2.94/1.70 A				
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Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
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Rated current : 3.40-2.94/1.70 A				
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Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
Rated current : 3.40-2.94/1.70 A				
Rated current : 3.40-2.94/1.70 A				
Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
Rated current : 3.40-2.94/1.70 A				
Rated current : 3.40-2.94/1.70 A Moment of inertia (J) : 0.0052 kgm² LRC : 6.5 Duty cycle : Cont.(S1) Rated torque : 0.501 kgfm Insulation class : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
LRC: 6.5Duty cycle: Cont.(S1)Rated torque: 0.501 kgfmInsulation class: FLocked rotor torque: 200 %Service factor: 1.00Breakdown torque: 270 %Temperature rise: 80 KRated speed: 1450 rpmDesign: B		of inartia (I)	· 0 0052 kam²	
Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B	LRC : 6.5 Duty cycl	e	: Cont.(S1)	
Breakdown torque : 270 % Temperature rise : 80 K Rated speed : 1450 rpm Design : B				
	Breakdown torque : 270 % Temperat		: 80 K	
			: B	
	Heating constant			
Cooling constant Rev. Changes Summary Performed Checked Date		Performed	Checked	 Date
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Three Phase Induction Motor - Squirrel Cage



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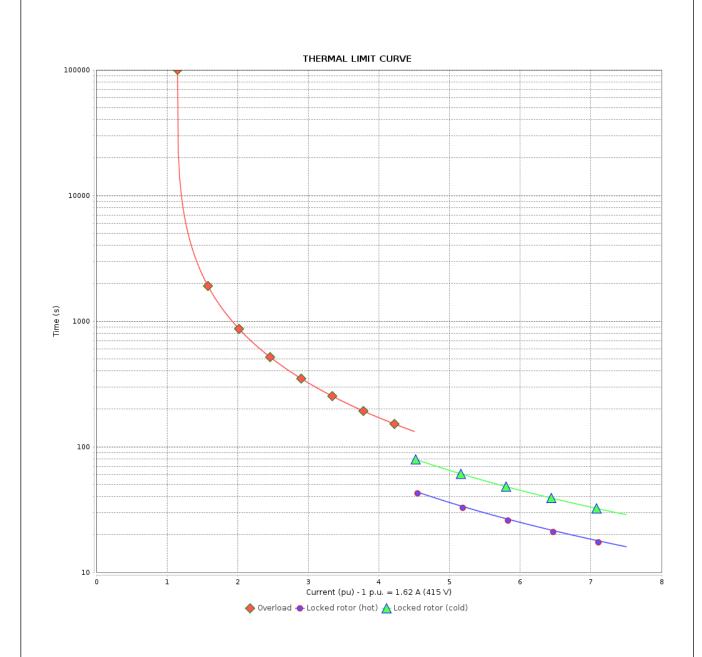


Customer	:			
Product line	: Rolled Steel Premium Efficiency Thre	ee- Product code :	14786559	
	Phase	Catalog # :	00118ET3E560	CFL-S
Performance	: 415 V 50 Hz 4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.62 A : 7.5 : 0.497 kgfm : 250 % : 330 % : 1460 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.0052 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
Heating constant		-		
Cooling constant				
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Three Phase Induction Motor - Squirrel Cage



Customer



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : Rolled Steel Premium Efficiency Three-

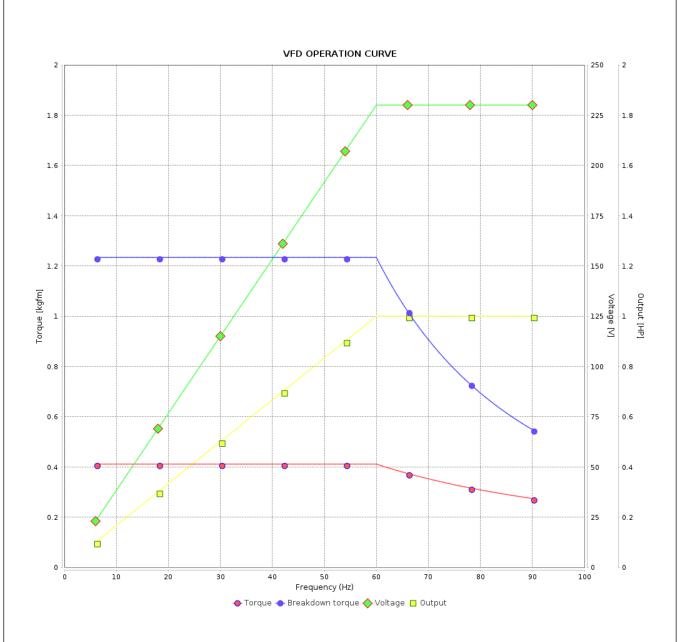
Phase

09/05/2023

Date

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



Performance	: 230/460 V 60 Hz 4P				
Rated current	: 2.94/1.47 A	Moment of inertia (J)		: 0.0052 kgm²	
LRC	: 8.6	Duty cycle		: Cont.(S1)	
Rated torque	: 0.411 kgfm	<u> </u>		: F :	
Locked rotor torque	: 280 %				
Breakdown torque	: 300 % Temperatur	ure rise	: 80 K		
Rated speed	: 1765 rpm Design			: B	
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



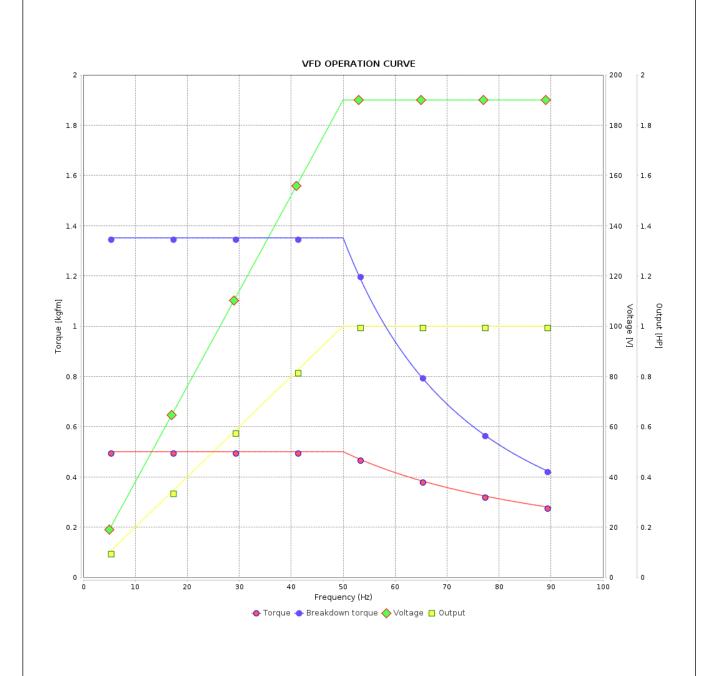
Customer :

Product line : Rolled Steel Premium Efficiency Three-

Phase

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



D (400 000/000 \ / 50 \ / .	-			
Performance	:	: 190-220/380 V 50 Hz 4P				
Rated current : 3.40-2.94/1.70 A		3.40-2.94/1.70 A	Moment of inertia (J)		: 0.0052 kgm²	
LRC	:	6.5	Duty cycle		: Cont.(S1)	
Rated torque : 0.501 kgfr		0.501 kgfm	Insulation class		: F	
Locked rotor torque : 2		200 %	Service factor		: 1.00	
Breakdown torque		270 %	Temperature rise		: 80 K	
Rated speed		1450 rpm	Design		: B	
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VFD OPERATION CURVE

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Date

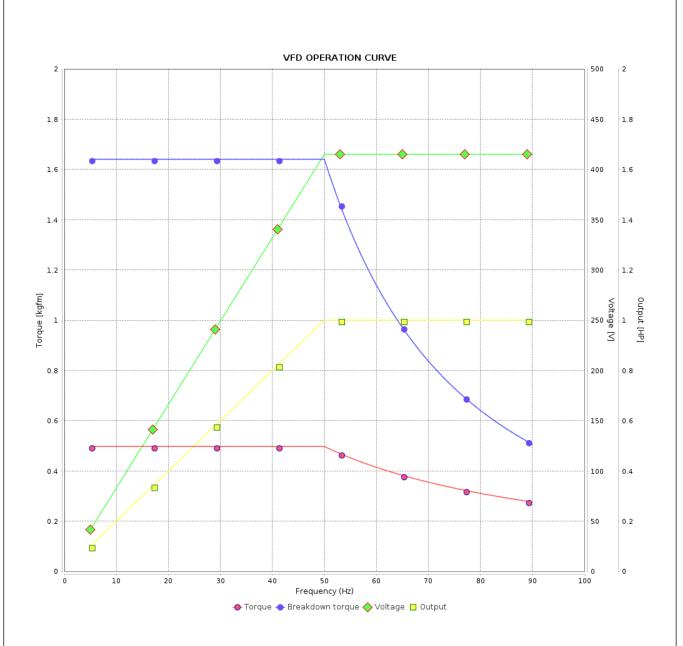
09/05/2023

Product line : Rolled Steel Premium Efficiency Three-

Phase

Product code: 14786559

Catalog #: 00118ET3E56CFL-S



Performance	: 415 V 50 Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.62 A : 7.5 : 0.497 kgfm : 250 % : 330 % : 1460 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.0052 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
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