### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14490859

Catalog #: 04036OP3EFP286TS-W40

Frame : 284/6TS Cooling method : IC01 - ODP

Insulation class : F Mounting : F-1
Duty cycle : Cont.(S1) Rotation¹ : Both (CW

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. weight³ : 335 lb
Protection degree : IP23 Moment of inertia (J) : 1.91 sq.ft.lb

Trotection degree		. 11 20	Wichicht of the	Woment of mertia (0)			
Design		: B					
Output [HP]		40	40	40	40		
Poles		2	2	2	2		
Frequency [Hz]		60	50	50	50		
Rated voltage [V]		230/460	380	400	415		
Rated current [A]		94.4/47.2	57.1	53.8	52.2		
L. R. Amperes [A]		576/288	308	339	350		
LRC [A]		6.1x(Code G)	5.4x(Code F)	6.3x(Code G)	6.7x(Code G)		
No load current [A	]	28.0/14.0	12.0	13.0	15.0		
Rated speed [RPN	<i>/</i> I]	3535	2920	2930	2935		
Slip [%]		1.81	2.67	2.33	2.17		
Rated torque [ft.lb]		59.4	71.9	71.7	71.6		
Locked rotor torque [%]		170	130	150	160		
Breakdown torque	[%]	250	200	200	220		
Service factor		1.15	1.00	1.00	1.00		
Temperature rise		80 K	105 K	105 K	105 K		
Locked rotor time		18s (cold) 10s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)	9s (cold) 5s (hot)		
Noise level <sup>2</sup>							
	25%	90.8	89.1	89.9	90.1		
Efficiency (%)	50%	91.0	89.5	90.2	90.2		
Liliciency (70)	75%	91.7	89.5	90.2	91.0		
	100%	91.7	89.7	90.4	90.8		
	25%	0.54	0.62	0.57	0.52		
Power Factor	50%	0.78	0.83	0.79	0.76		
1 OWCI I actor	75%	0.86	0.88	0.86	0.84		
	100%	0.87	0.89	0.89	0.88		

Gealing : Without Without Max. o Bearing Seal Bearing Seal

Lubrication interval:20000 h20000 hLubricant amount:18 g11 gLubricant type:Mobil Polyrex EM

Notes

USABLE @208V 104A SF 1.00 SFA 104A

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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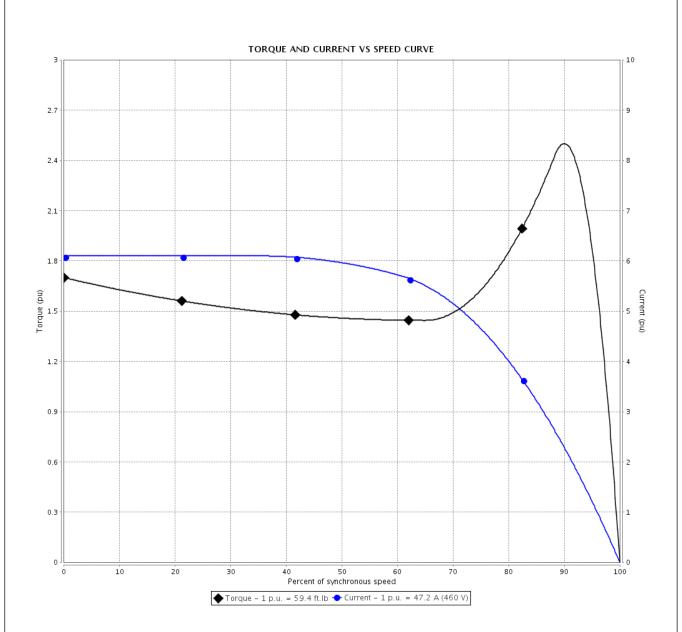
#### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14490859

Catalog #: 04036OP3EFP286TS-W40



Performance : 230/460 V 60 Hz 2P Rated current : 94.4/47.2 A Moment of inertia (J) : 1.91 sq.ft.lb **LRC** : 6.1 Duty cycle : Cont.(S1) : F : 59.4 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 170 % : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 3535 rpm Design : B

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

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Three Phase Induction Motor - Squirrel Cage Customer Product line : W40 High Efficiency Three-Phase Product code: 14490859 Catalog #: 04036OP3EFP286TS-W40 TORQUE AND CURRENT VS SPEED CURVE 2.25 Current (pu)

Performance	: 380 V 50 Hz 2P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque	: 57.1 A : 5.4 : 71.9 ft.lb : 130 % : 200 %	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise	: 1.91 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K	
Rated speed	: 2920 rpm	Design	: B	

40 50 60 Percent of synchronous speed ◆ Torque – 1 p.u. = 71.9 ft.lb ◆ Current – 1 p.u. = 57.1 A (380 V)

Locked rotor time : 9s (cold) 5s (hot)

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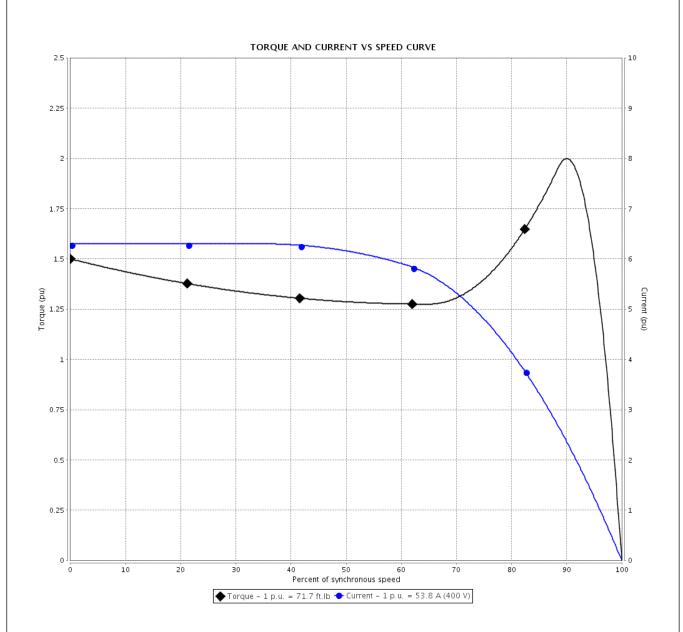
### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14490859

Catalog #: 04036OP3EFP286TS-W40



Performance	: 400 V 50 Hz 2P		
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 53.8 A : 6.3 : 71.7 ft.lb : 150 % : 200 % : 2930 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 1.91 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B

Locked rotor time : 9s (cold) 5s (hot)

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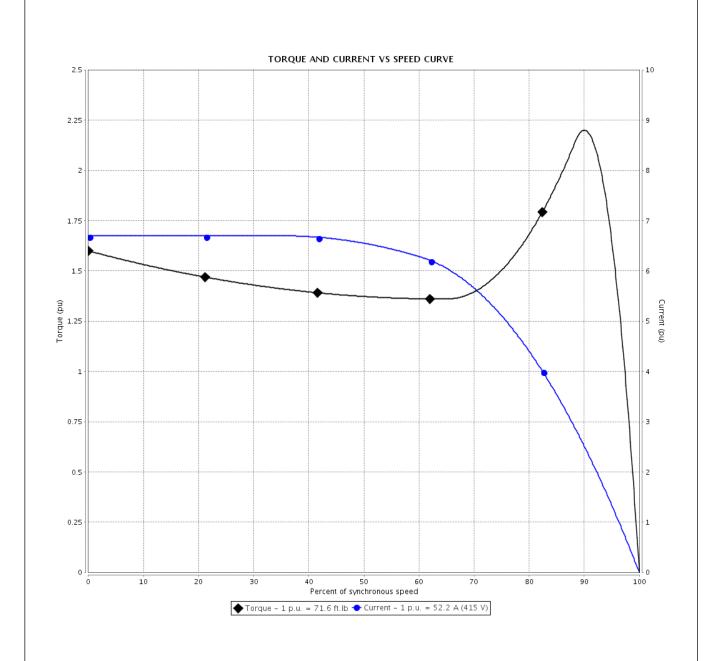
### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14490859

Catalog #: 04036OP3EFP286TS-W40



Performance	: 415 V 50 Hz 2P IE1		
Rated current	: 52.2 A	Moment of inertia (J)	: 1.91 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 71.6 ft.lb	Insulation class	:F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 2935 rpm	Design	: B
Locked rotor time	· 9s (cold) 5s (hot)		

Locked rotor time : 9s (cold) 5s (hot)

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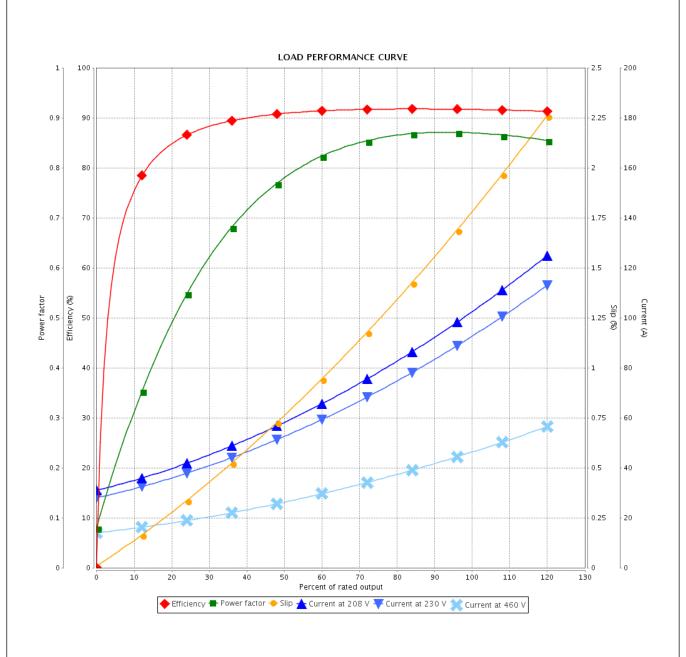
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Performance	: 230/460 V 60 Hz 2P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 94.4/47.2 A : 6.1 : 59.4 ft.lb : 170 % : 250 % : 3535 rpm	Moment of Duty cycle Insulation Service fa Temperat Design	class actor	: 1.91 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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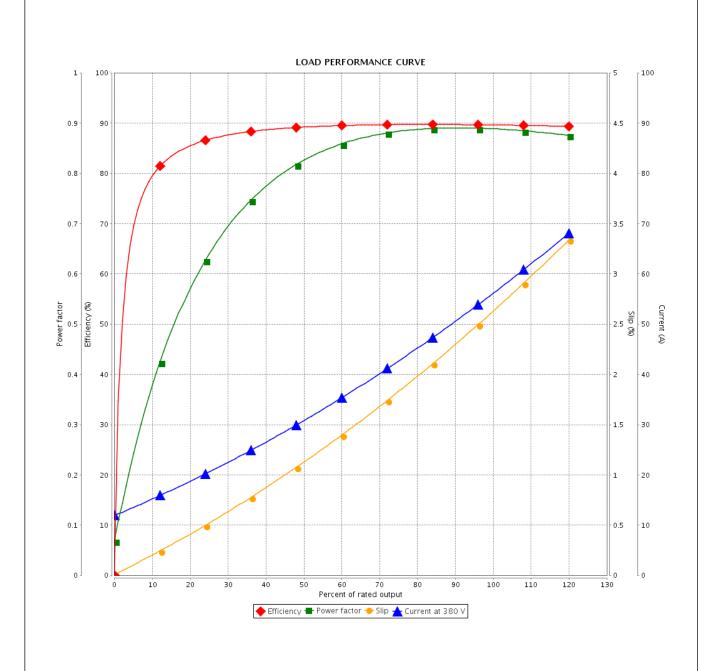
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Customer

Product line : W40 High Efficiency Three-Phase Product code : 14490859

Catalog # : 04036OP3EFP286TS-W40



Performance	: 380 V 50 Hz 2P				
Rated current	: 57.1 A	Moment of inertia (J)		: 1.91 sq.ft.lb	
LRC	: 5.4	Duty cycle		: Cont.(S1)	
Rated torque	: 71.9 ft.lb	Insulation class		: F	
Locked rotor torque	: 130 %	Service factor		: 1.00	
Breakdown torque	: 200 %	Temperatu	ıre rise	: 105 K	
Rated speed	: 2920 rpm	Design		: B	
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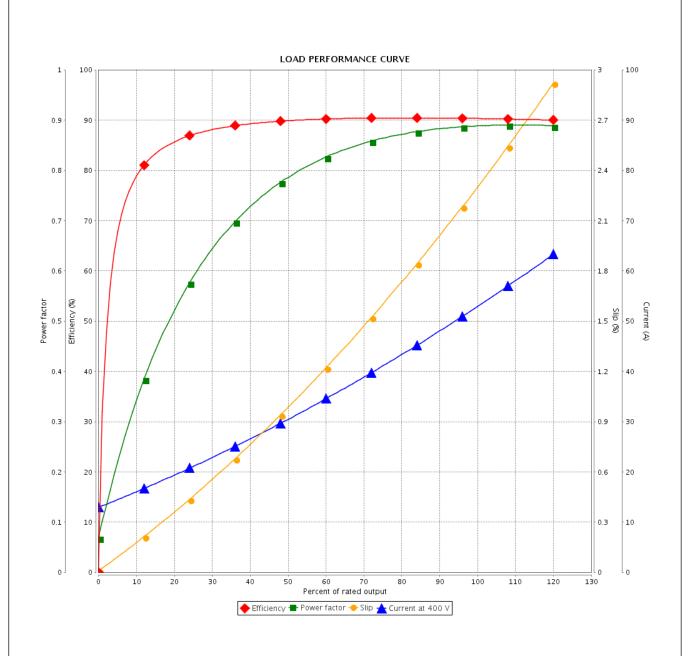
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Performance	: 400 V 50 Hz 2P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 53.8 A : 6.3 : 71.7 ft.lb : 150 % : 200 % : 2930 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ector	: 1.91 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B	
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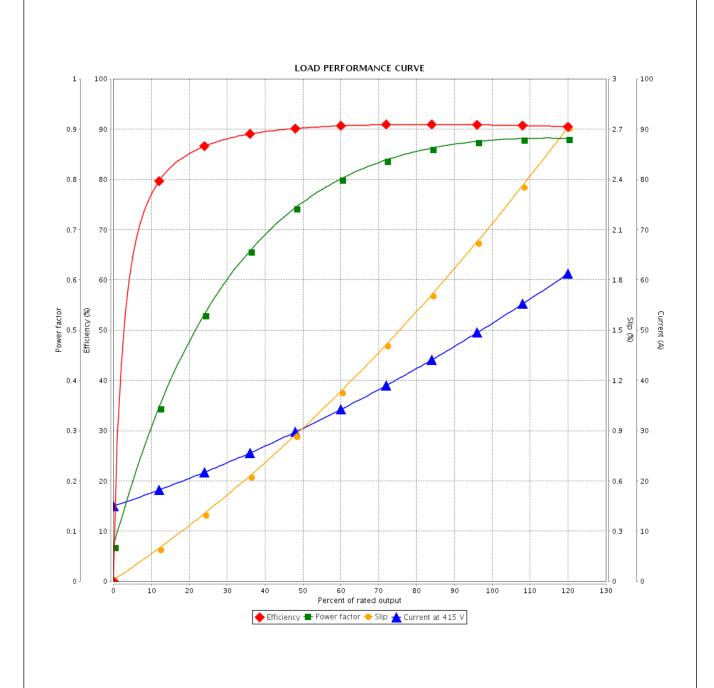


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Performance	: 415 V 50 Hz 2P IE1						
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 52.2 A : 6.7 : 71.6 ft.lb : 160 % : 220 % : 2935 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		Duty cycle         : Cont.(S1)           6 ft.lb         Insulation class         : F           %         Service factor         : 1.00           %         Temperature rise         : 105 K		: Cont.(\$1) : F : 1.00 : 105 K	
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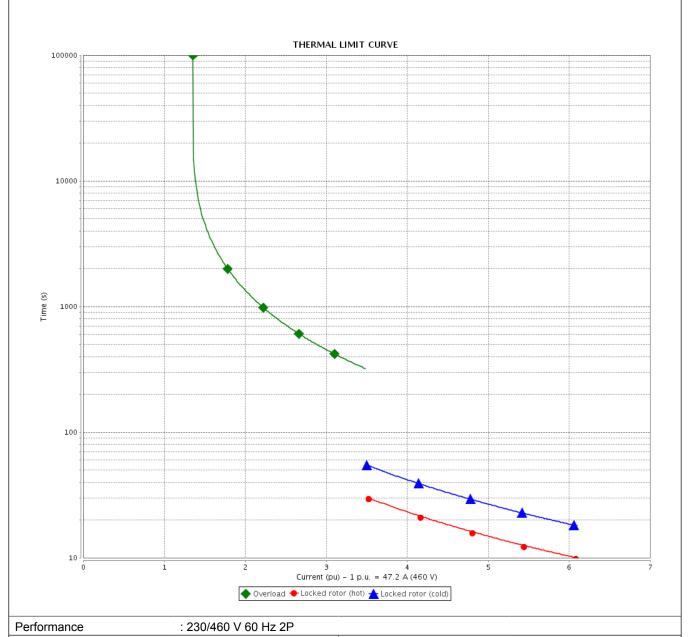
Rated current

Date

LRC

Product line : W40 High Efficiency Three-Phase Product code : 14490859

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Rated torque Locked rotor torque	: 59.4 ft.lb : 170 %	Insulation Service fa	ctor	: F : 1.15	
Breakdown torque	: 250 %	Temperat	ure rise	: 80 K	
Rated speed	: 3535 rpm	Design		: B	
Heating constant					
Cooling constant					
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Moment of inertia (J)

Duty cycle

: 1.91 sq.ft.lb

: Cont.(S1)

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: 94.4/47.2 A

: 6.1

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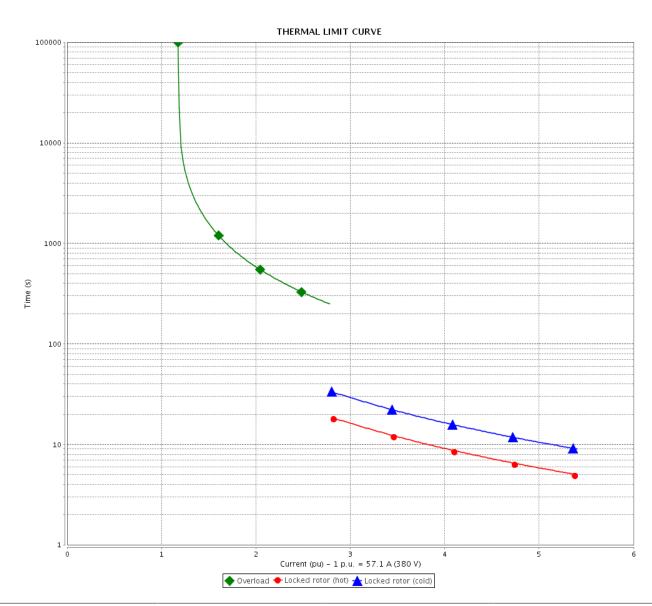
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Cooling constant	į .				
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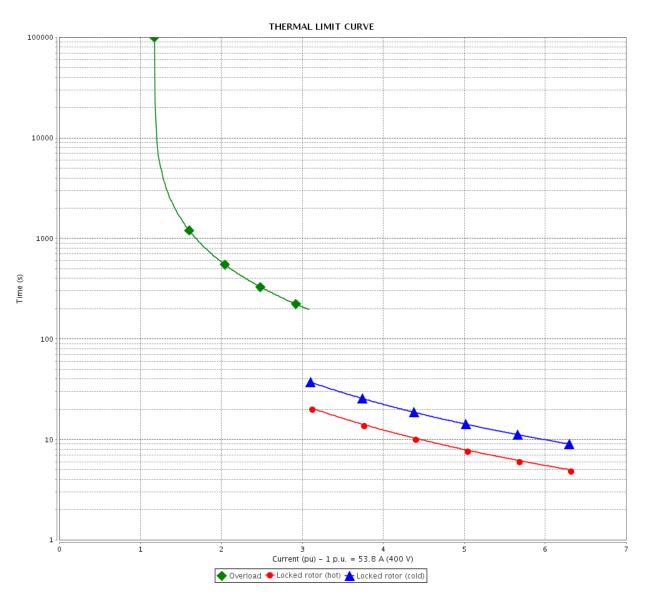
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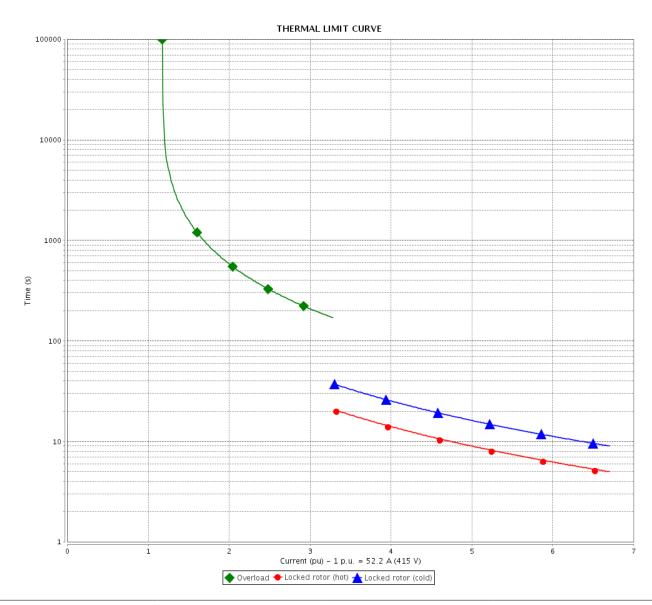
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Cooling constant

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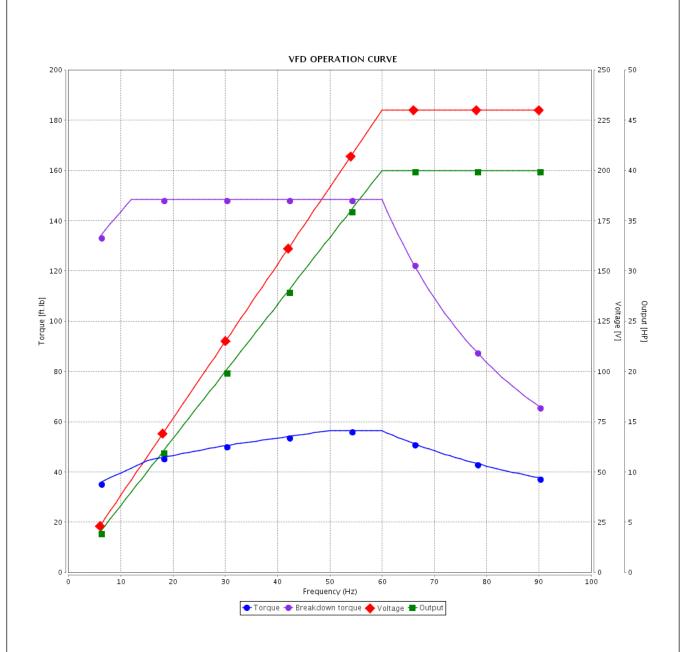
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Locked rotor tord Breakdown torqu	: 170 % : 250 %	Service f		: 1.15 : 80 K	
Rated speed	: 3535 rpm	Design		: B	
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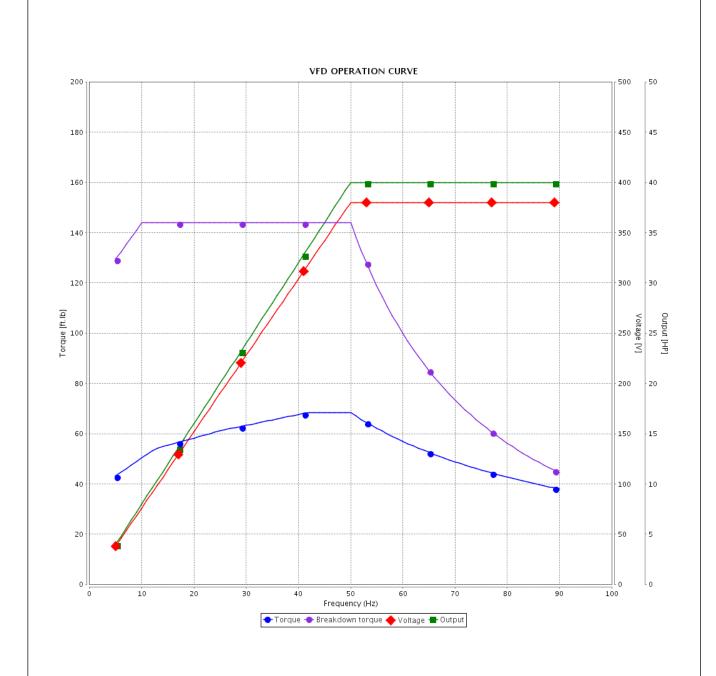
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Performance	: 380 V 50 Hz 2P				
LRC : 5.4 Duty of Rated torque : 71.9 ft.lb Insula Locked rotor torque : 130 % Service Breakdown torque : 200 % Temper		Duty cycle Insulation Service fa	Moment of inertia (J) : 1.91 sq.ft.lb  Duty cycle : Cont.(S1)  Insulation class : F  Service factor : 1.00  Temperature rise : 105 K  Design : B		
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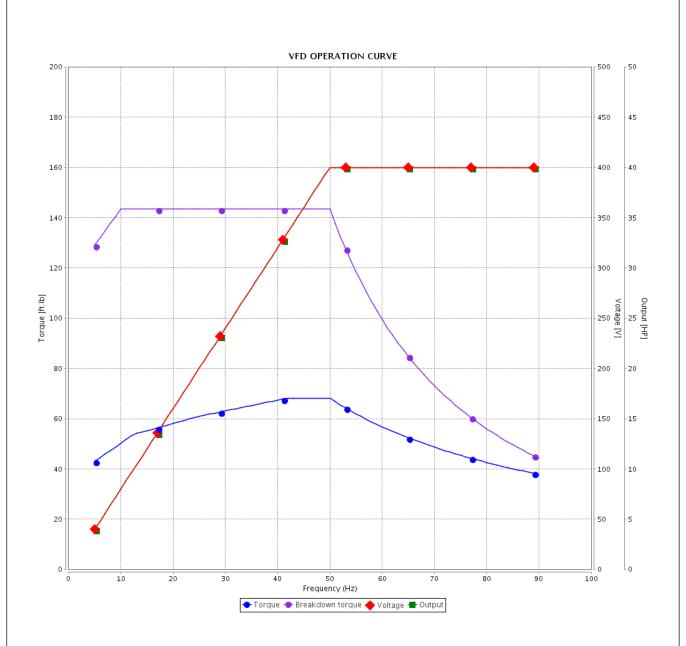
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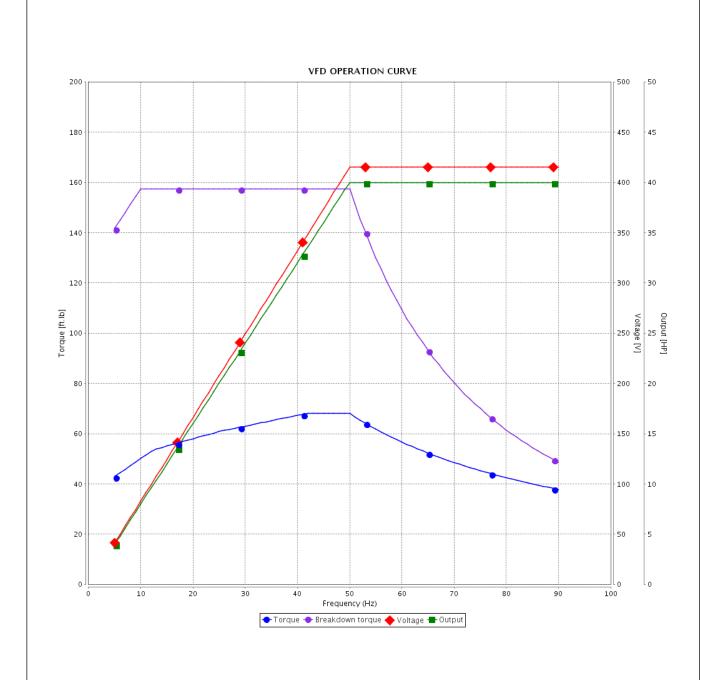
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