

# PRODUCT INFORMATION PACKET

Model No: 160LTFC6588

Catalog No: R335A

15 HP General Purpose, 3 phase, 1200 RPM, 230/460 V, 160L Frame, TEFC  
Cast Iron TEFC Motors





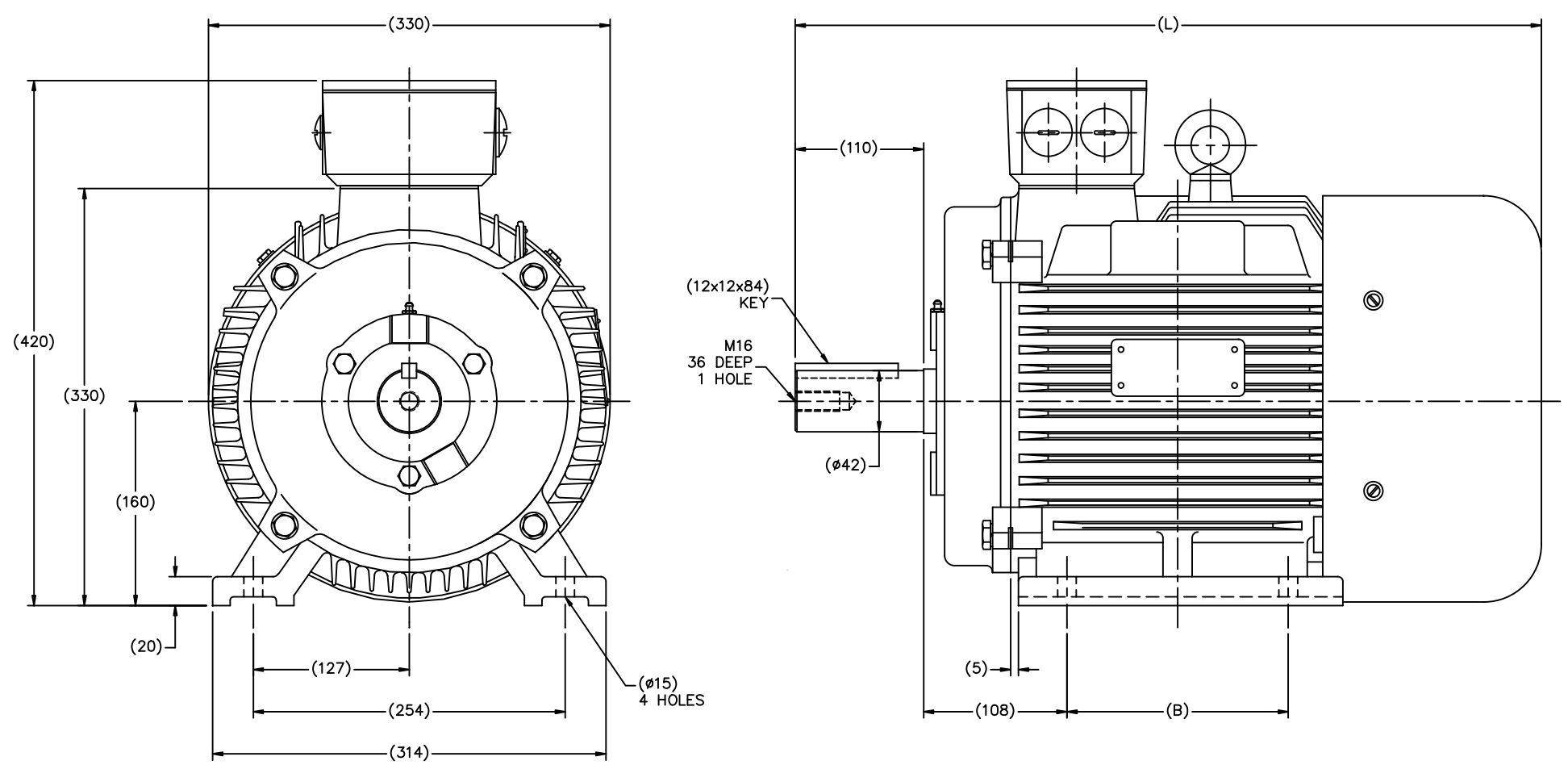
### Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	40.0/20.0 A	Speed	1180 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	77
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	160L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6209
UL	No	CSA	Y
CE	Y	IP Code	55

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start & Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	0 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	26.57 in
Shaft Diameter	1.666 in	Shaft Extension	4.33 in
Assembly/Box Mounting	F3		
Outline Drawing	SS622238	Connection Drawing	004172.01

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:19/10/2020



(MAY NOT BE DRAWN TO SCALE)

(DIMENSIONS ARE IN MILLIMETERS)

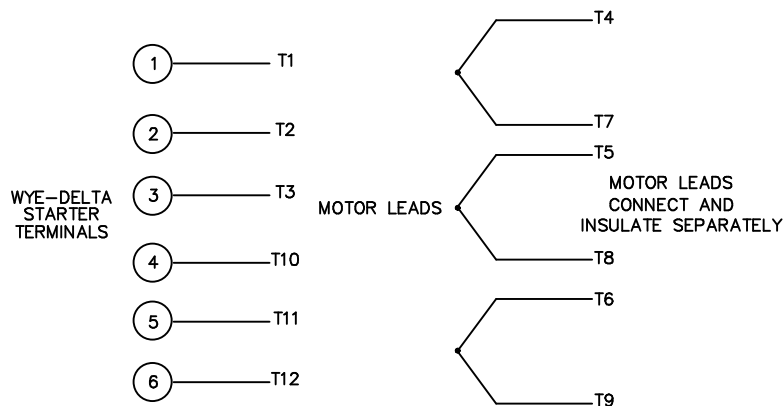
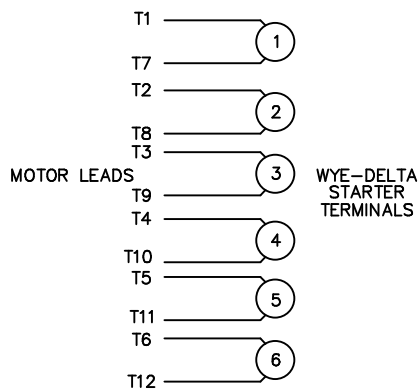
DF160L-6R	193317.60	675	254
FRAME	PART #	L	B

		TOLERANCES UNLESS SPECIFIED				DRAWN MSG 11-17-2010	
		DEC.	METRIC			CHK MJS 11-18-2010	
		.X	±2.5	TITLE OUTLINE - IEC PREMIUM		APPD SB 11-18-2010	
		.XX	±.76	DF160L-6R (II)		SCALE 5=16	
		.XXX	±.127	MAT'L		REF	
		.XXXX	±.0127			FMF HEBEI	
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	PREV
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	11-18-2010	CAD FILE	ss622238
						SIZE	DRAWING NO. PAGE OF REV.
						B	SS622238

WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

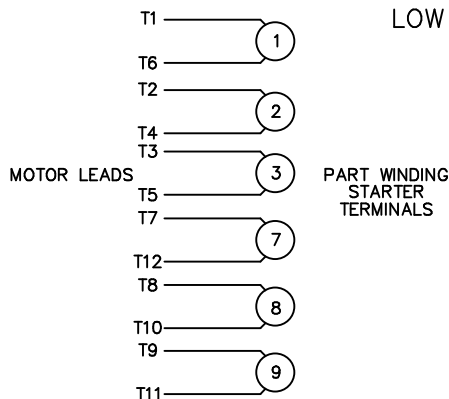
LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



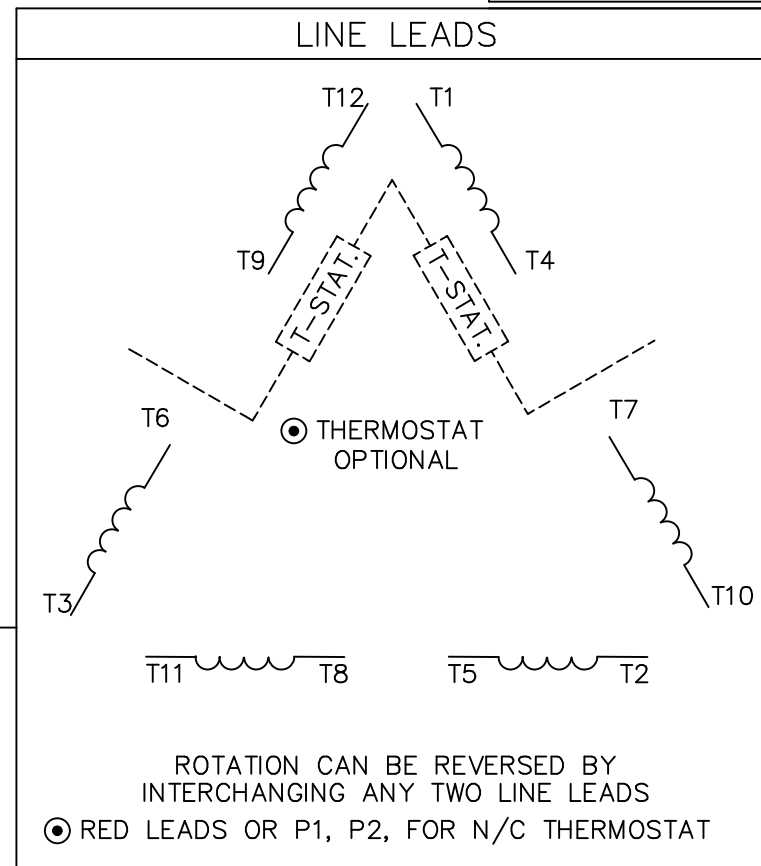
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

PART WINDING START USABLE ON 4 & 6 POLE MOTORS  
LOW VOLTAGE CONNECTION ONLY



REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER - HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.



ACROSS THE LINE START & RUN				
	LINE 1	LINE 2	LINE 3	JOIN & INSULATE SEPARATELY
HIGH VOLT	T1,T12	T2,T10	T3,T11	(T4,T7) (T5,T8) (T6,T9)
LOW VOLT	T1,T6 T7,T12	T2,T4 T8,T10	T3,T5 T9,T11	

				TOLERANCES UNLESS SPECIFIED		ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN	WLV 09/08/77	
				DEC.	INCHES		CHK	RPB 09/12/77	
				.X	±.1		APPD	JCW 09/12/77	
03	REV'D LOW VOLTAGE CONN. LEADS PER ELEC.	BJB 06/07/00	.XX	±.01	TITLE	DELTA - WYE CONNECTION DIAGRAM	SCALE	1=1	
02	ADDED T-STAT. NOTES PER ELECTRICAL	KMM 06/02/98	.XXX	±.005			REF		
01	REDRAWN TO CAD	DBT 06/02/97	.XXXX	±.0005	MAT'L.		FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH	PREV		
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	CAD FILE	00417201	SIZE	DRAWING NO.	REV.
				DIST			A	004172-01	03



P.O. BOX 9003  
WAUSAU, WI 54401-9003  
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: \_\_\_\_\_  
ORDER #: 004172.01  
CONN. DIAGRAM: SS622238  
OUTLINE: T12906020  
WINDING: NONE 3  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: 160L TFC6588  
CAT #: R335A  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
15	11.2	1200	1180	160L	TEFC	TEFC	G	N	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#200/400	40/20832/16	PWS & YDRUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	92.4	1/2 LD EFF	91.7	GTD EFF	66.0	ELECT. TYPE	SO CAGE INV RATED
F.L. PF	77.0	3/4 LD PF	74.5	1/2 LD PF	66.0	90.2			

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	107 LB-FT	B.D. TORQUE	164 LB-FT	F.L. RISE (°C)	45
66.8 LB-FT	98.0						

@ 3 FT.	POWER	ROTOR WK <sup>3</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
55	64	0.00	0	0	0	332 LB.

\*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	UM SEVERE	NONE	NO	NONE	BLUE (ENAMEL)
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL	
DE BALL 6309	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204		CAST IRON	

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA
R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0	0	0	0	0	0.080	ODE

INVERTER TORQUE: CONSTANT 2:1  
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: NONE	NONE	NONE	NONE	BRAKE: NONE	NONE	NONE	NONE	PPR
---------------	------	------	------	-------------	------	------	------	-----

PREPARED BY: EARL BABBITTS  
DATE: 5/5/2017  
FORM: 3531 REV\_4 2/27/06  
UL: NONE  
HZ:

Data Sheet



160L TFC6588

Date: 5/5/2017  
 Customer: EARL BABBITTS  
 Attention: EARL BABBITTS  
 Submitted by:

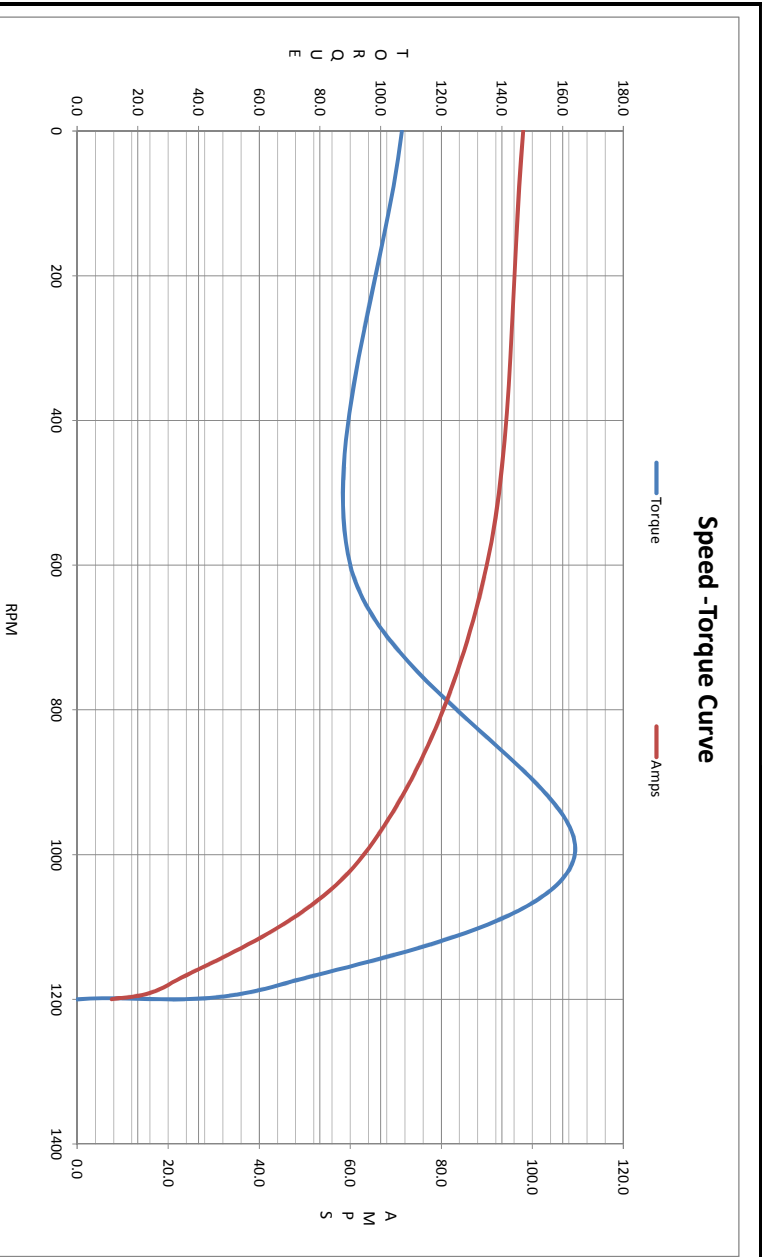
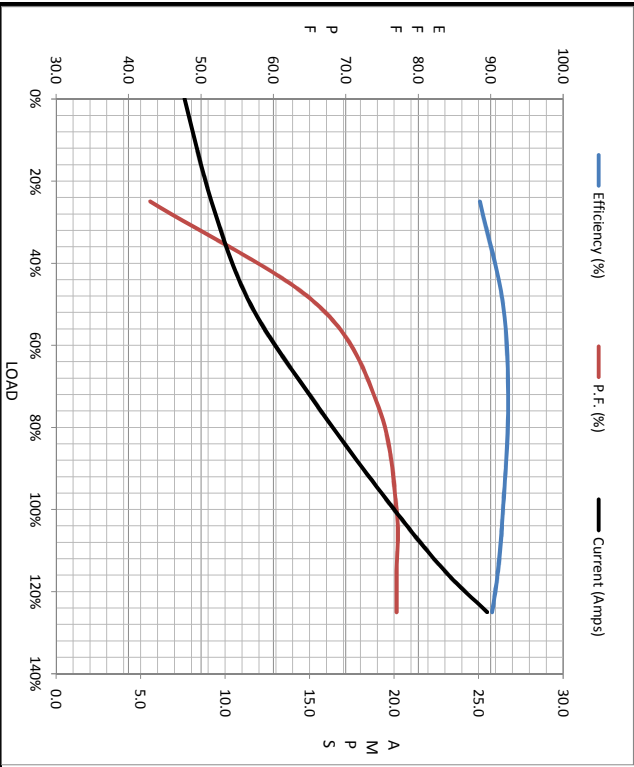
Submital  
 Data @ 460 V

Load	Motor Load Data							
	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	7.6	9.2	11.5	15.5	20.0	23.0	25.5	98.0
Torque (ft-lb)	0.00	15.4	33.2	50.0	66.8	77.5	84.5	107
RPM	1200	1195	1190	1185	1180	1,175	1170	0
Efficiency (%)		88.5	91.7	92.4	91.7	91.0	90.2	
P.F. (%)	5.0	43.0	66.0	74.5	77.0	77.0	77.0	37.0

	Motor Speed Data					
	LR	Pull-Up	BD	Rated	Idle	
Speed (RPM)	0	600	1000	1180	1200	
Current (Amps)	98.0	90.0	63.0	20.0	7.6	
Torque (ft-lb)	107	90.0	164	66.8	0.00	

Information Block

HP	15.0			
Sync. RPM	1200			
Frame	160			
Enclosure	TEFC			
Construction	TFC			
Voltage	30/460#200/40 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Motor/Shaft wk <sup>2</sup>	0.00 Lb-Ft <sup>2</sup>			
Ret Wdg	T12906020 NONE			
Sound Pressure @ 1M	55 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	SS622238			
Conn. Diag	004172.01			
Additional Specifications:				
0				
0				
	EQUIV CKT (OHMS / PHASE)			
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Date: 5/5/2017  
 Customer: EARL BABBITTS  
 Attention: EARL BABBITTS  
 Submitted by: EARL BABBITTS



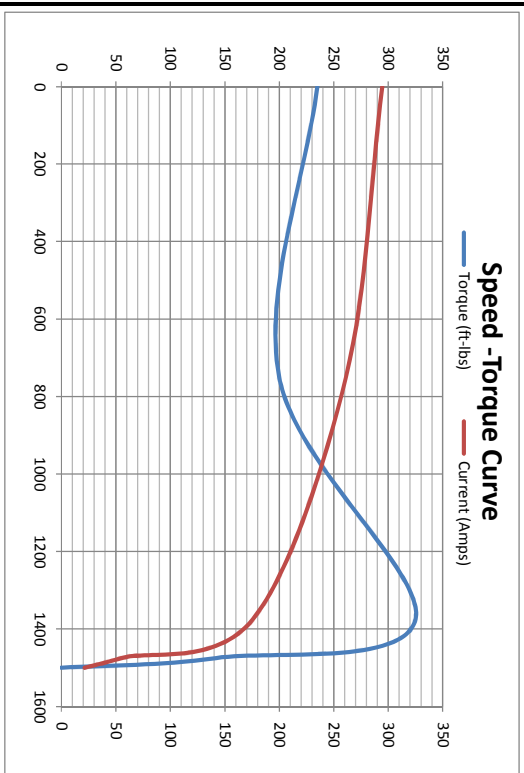
**Torque Capability Curve**

REF: 160LTFCS588  
 Data @ 460 Volts

HP	0.00	0.00	15	15	15	125	
Min CT RPM			Base RPM	CHP RPM	Max CHP RPM	Max RPM	Peak RPM
0.00	0	0	60	460	460	460	
0	0	0	60	90	91	134	
20.0	20.0	20.0	1,180	1,800	1,800	2,582	
66.8	66.8	66.8	20.0	20.0	20.0	167	158
151	151	151	66.8	43.8	43.8	245	
			62.2	62.2	62.2	26.9	

**Motor Speed Data**

	Locked Rotor	Pull-Up	Breakdown	Rated Load	Idle	Information Block
Speed (RPM)	0	750	1375	1475	1500	HP 15.0
Current (Amps)	295	261	176	55.1	21.4	Sync. RPM 1,200
Torque (ft-lbs)	235	200	325	142	0.00	Frame 160
						Enclosure TEFC
						Construction TFC
						Voltage 230/460#200/400
						Frequency 60 Hz
						Duty CONT
						Design B
						LR Code letter G
						Poles 6
						Temp Rise @ FL 45 °C
						Ambient 40 °C
						Elevation 1,000 feet
						Ref Wdg T12906020
						R # NONE
						dBa @ 1M 55
						VFD rating CONSTANT 2:1
						OUTLINE: SS622238
						CONN DIAG: 004172.01
						0



HP	15.0
Sync. RPM	1,200
Frame	160
Enclosure	TEFC
Construction	TFC
Voltage	230/460#200/400
Frequency	60 Hz
Duty	CONT
Design	B
LR Code letter	G
Poles	6
Temp Rise @ FL	45 °C
Ambient	40 °C
Elevation	1,000 feet
Ref Wdg	T12906020
R #	NONE
dBa @ 1M	55
VFD rating	CONSTANT 2:1
OUTLINE:	SS622238
CONN DIAG:	004172.01
	0

