

# PRODUCT INFORMATION PACKET

Model No: 215THFCD9040

Catalog No: W039-P

Severe Duty Motors, TEFC, 10 HP, 3 Ph, 60 Hz, 460 V, 1762 RPM, 215TCV Frame



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**Nameplate Specifications**

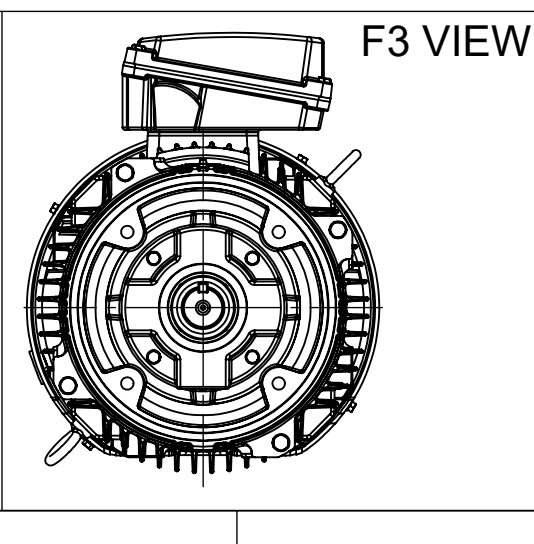
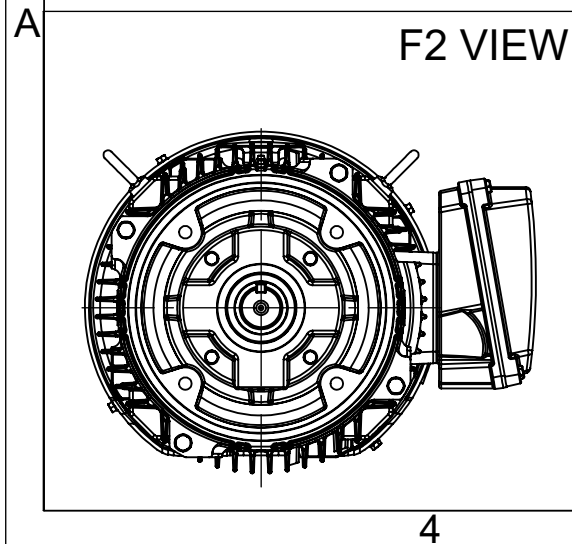
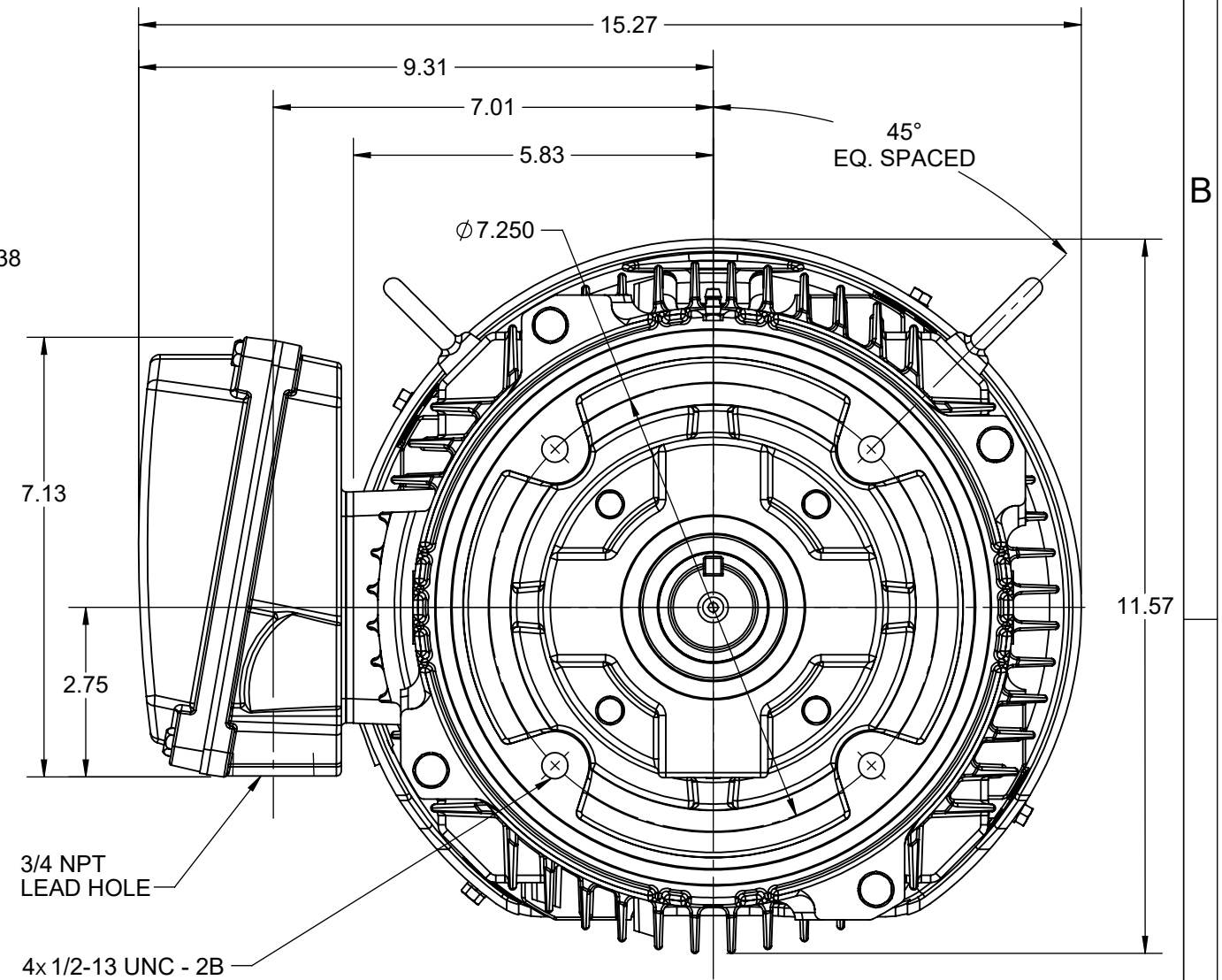
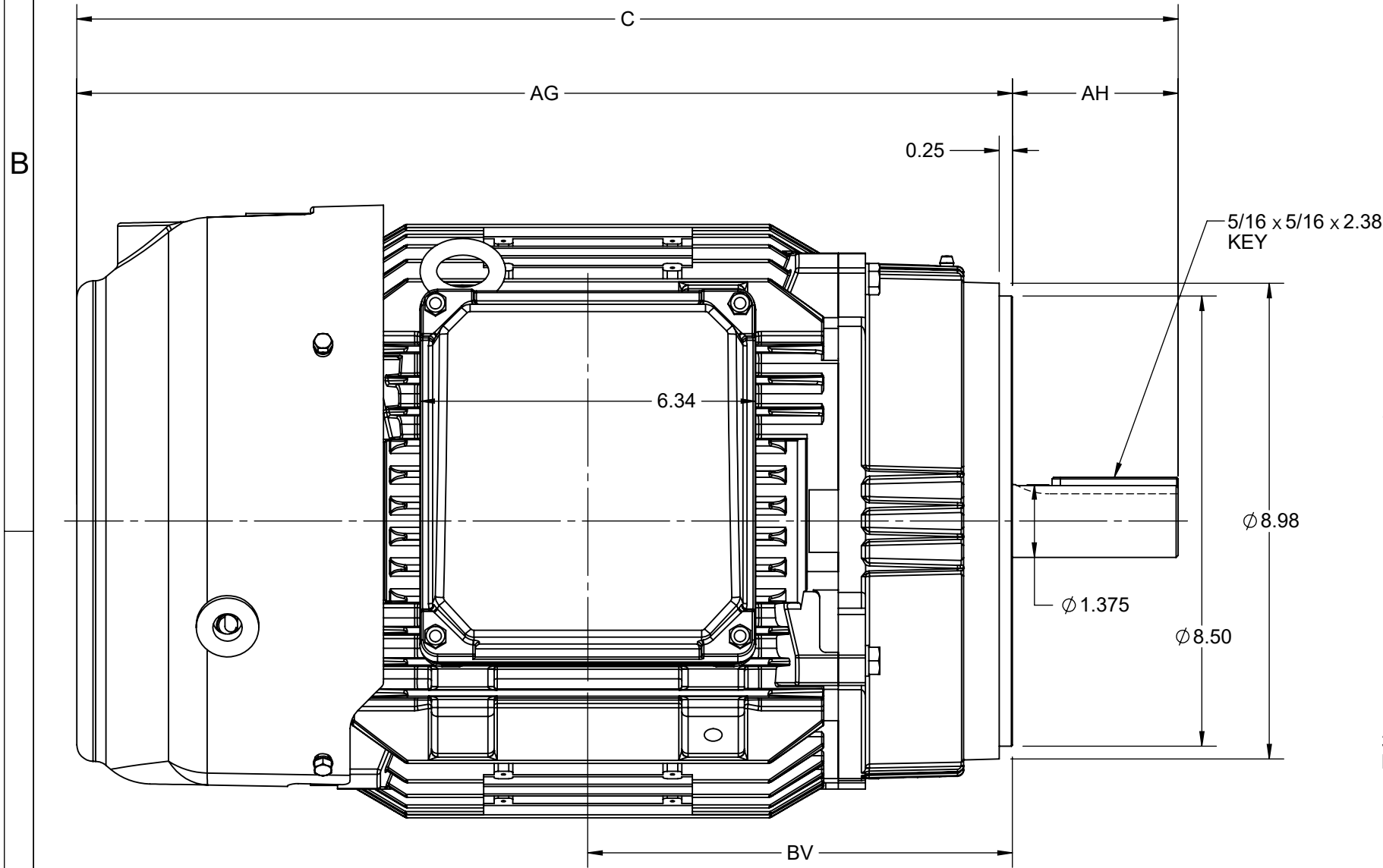
Output HP	<b>10 Hp</b>	Output KW	<b>7.5 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>12.5 A</b>	Speed	<b>1762 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Power Factor	<b>81.3</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Frame	<b>215TCV</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6208</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Number of Speeds	<b>1</b>		

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.155 Ohms</b>	Mounting	<b>Round</b>
Motor Orientation	<b>Horizontal Or Shaft Down</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Shaft Diameter	<b>1.375 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 10:1/VARIABLE 10:1</b>
Outline Drawing	<b>SS621008-200</b>	Connection Drawing	<b>EE7300</b>

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DASH NO.	4				3	
	C	AG	AH	BV	MOUNTING	FRAME
100	19.28	16.15	3.12	7.26	F1 OR F2 OR F3	213TC
200	20.78	17.65		8.00		213/215TC



DRAWING REVISION D	REVISION BY SP	REV DATE/© DATE 09/09/2021
ECO CR-0004389	APPROVED BY GNK	DATE 09/09/2021
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DRAWN BY BISWA	<b>REGAL</b> ® Regal Beloit America, Inc.
DATE 04/02/2020	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 213/215TC FR-NEMA-SD & IEEE841-ROUND
DATE 04/02/2020	MATERIAL PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>B</b>
	DRAWING NUMBER <b>SS621008</b>
	SHEET 1 OF 1

THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS



VIEW OF TERMINAL END

**OPTIONAL CORD CONNECTION**

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

		Regal Beloit America, Inc.	
DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR			
MATERIAL		PROCESS/FINISH	
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>		SHEET 1 OF 1



P.O. BOX 8003  
 WAUSAU, WI 54401-8003  
 PH. 715-675-3311

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER:  
 ORDER #: \_\_\_\_\_  
 CONN. DIAGRAM: EE7300  
 OUTLINE: SS621008-215TC  
 WINDING: HA31324013 R1 1  
 SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
 REFERENCE MODEL #: 215THFCD9040  
 CAT #: W039-P  
 CUSTOMER PART #: \_\_\_\_\_  
 MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
10	7.5	1800	1762	215TCV	TEFC	TFC	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	12.5	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.8	1/2 LD EFF	90.8	GTD EFF	ELECT. TYPE
F.L. PF	81.3	3/4 LD PF	76.6	1/2 LD PF	66.0	91.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
29.8 LB-FT	79.0	59.0 LB-FT	198%	74.0 LB-FT 248%

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
62 dBA	71 dBA		1.10 LB-FT <sup>2</sup>	85 LB-FT <sup>2</sup>	25 SEC.	2	210 LB.	

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	SHAFT DOWN	PREMIUM SEVERE DUTY	NONE	YES	NONE	BLUE - RAL 5003 (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	6208						

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
0.741	0.466	2.147	2.579	46.775	0.080	ODE

NOTES	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1					
	INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE PPR					

PREPARED BY: _____	BRAKE: NONE
DATE: 10/29/2021	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE
	HZ: _____
FORM: 3531 REV. 4 2/27/06	UL: V - L1ME-INS.CONST UL REC

Data Sheet

Date: 10/29/2021  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



215THFCD9040

Submittal

Data @ 460 V

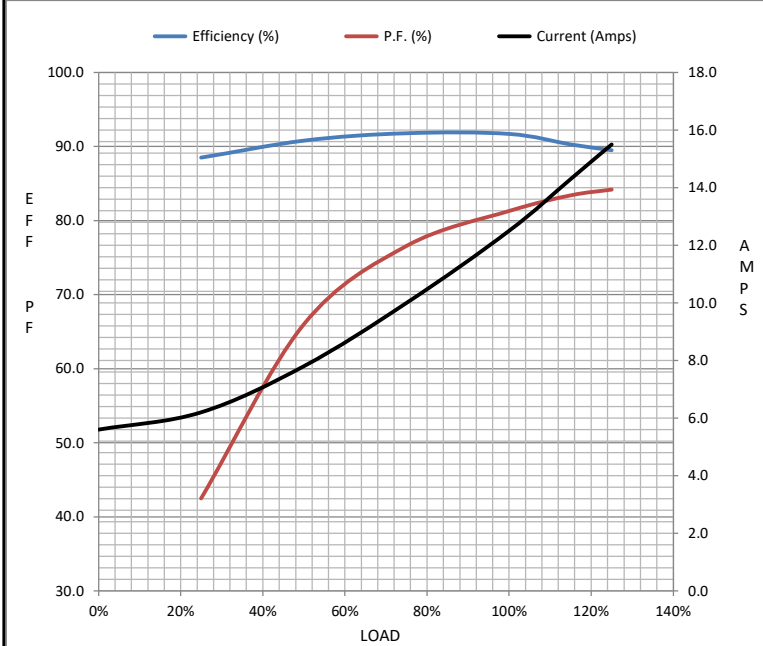
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	5.6	6.2	7.8	10.0	12.5	14.3	15.5	79.0
Torque (ft-lb)	0.00	7.3	14.7	22.2	29.8	34.4	37.4	59.0
RPM	1800	1792	1782	1772	1762	1,756	1752	0
Efficiency (%)		88.5	90.8	91.8	91.7	90.3	89.5	
P.F. (%)	9.0	42.5	66.0	76.6	81.3	83.4	84.2	44.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1565	1762	1800
Current (Amps)	79.0	73.0	45.0	12.5	5.6
Torque (ft-lb)	59.0	51.0	74.0	29.8	0.00

Information Block				
HP	10.0			
Sync. RPM	1800			
Frame	215			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	1.10 Lb-F <sup>2</sup>			
Ref Wdg	HA31324013 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1/VARIABLE 10:1			
Outline Dwg	SS621008-215TC			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7410	0.4660	2.1470	2.5790	46.7750



Speed - Torque Curve

