

# PRODUCT INFORMATION PACKET

Model No: 215THFND19033

Catalog No: W540A

10 HP Severe Duty Motor, 3 phase, 1800 RPM, 575 V, 215T Frame, TEFC  
Severe Duty Motors



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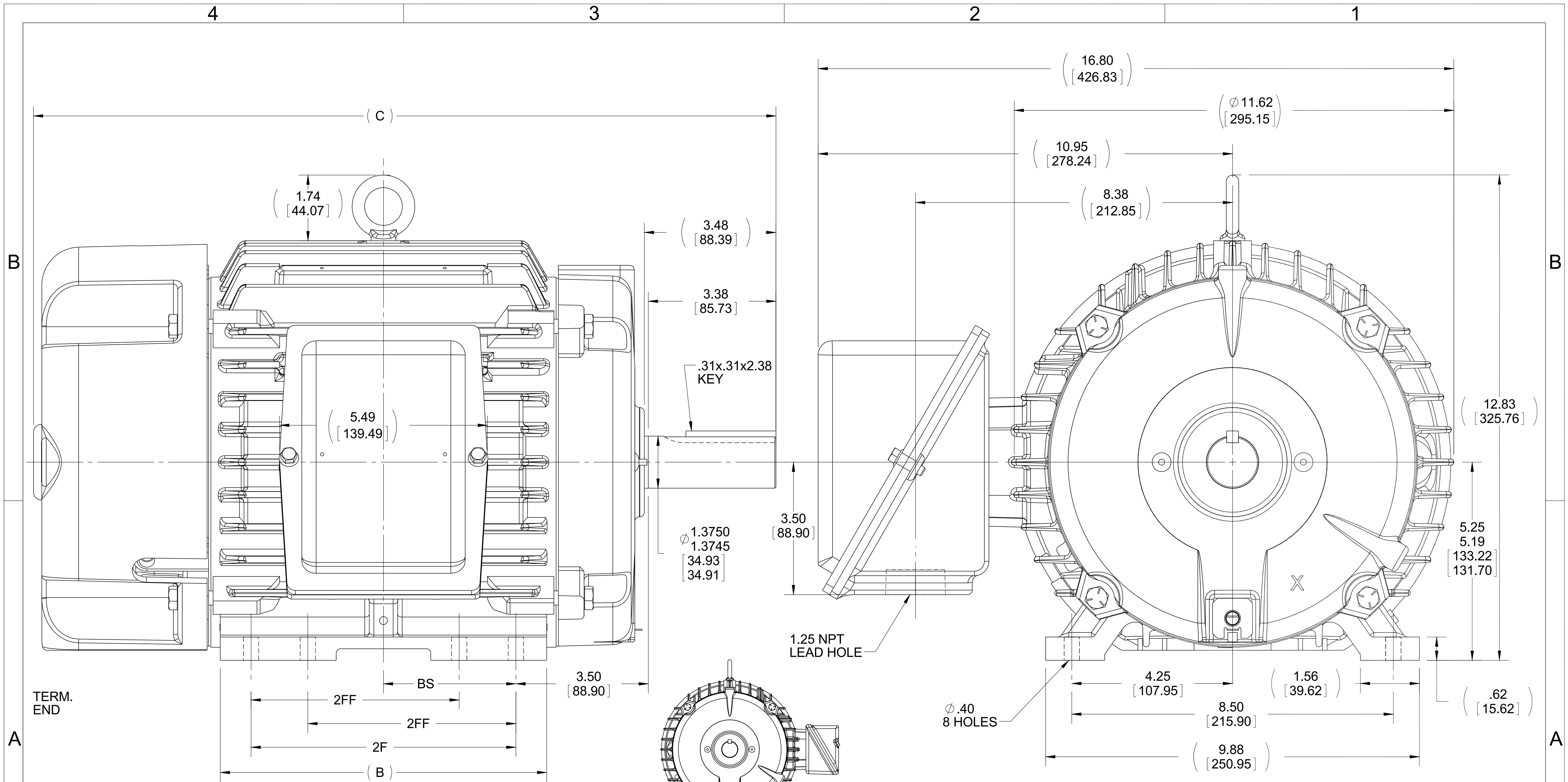
**Nameplate Specifications**

Output HP	<b>10 Hp</b>	Output KW	<b>7.5 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>10.7 A</b>	Speed	<b>1765 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Power Factor	<b>76.9</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Frame	<b>215T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6307</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>.941 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</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>	Overall Length	<b>22.63 in</b>
Frame Length	<b>12.12 in</b>	Shaft Diameter	<b>1.375 in</b>
Shaft Extension	<b>3.38 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Outline Drawing	<b>038010-1212</b>	Connection Drawing	<b>A-EE7300</b>

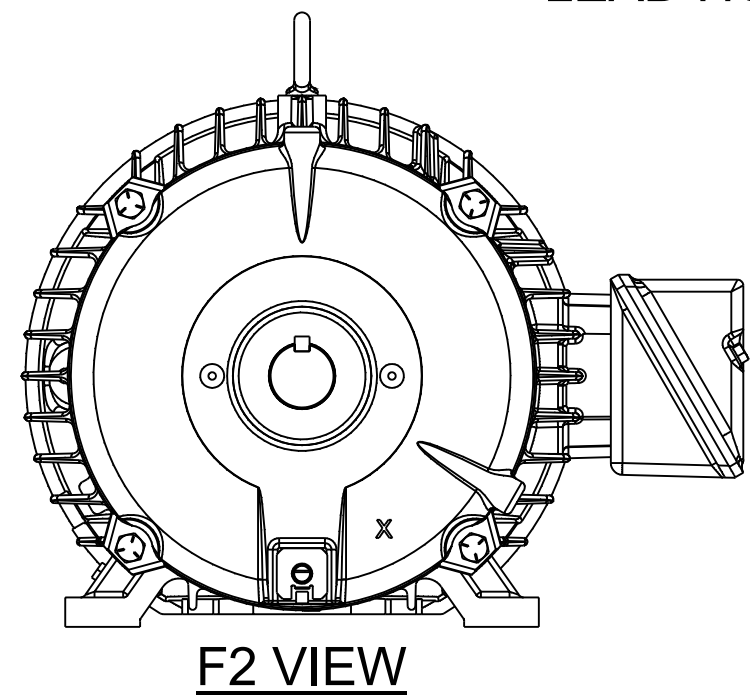
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NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED IN OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

1212	213/215	22.63	11.76	10	7	5
912	213/215	19.63	8.63	7	5.5	3.5
DASH	FRAME	C	B	2F	2FF	BS



DRAWING REVISION A	REVISION BY SAJID	DATE 07/06/2015
ECO ECO-0080958	APPROVED BY ST	DATE 07/06/2015
ECO DESCRIPTION NEW DRAWING		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°			
CORNER FILLETS: R.02 [0.51]			
MACHINED SURFACES: 200 INCH/mm 5.1			
mm SHOWN IN [BRACKETS]			

DRAWN BY SAJID
DATE 07/06/2015
APPROVED BY ST
DATE 07/06/2015
REFERENCE 037657
THIRD ANGLE PROJECTION

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION	OUTLINE
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER 038010
	SHEET 1 OF 1

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

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

- L1 \_\_\_\_\_ WHITE \_\_\_\_\_
- L2 \_\_\_\_\_ RED \_\_\_\_\_
- L3 \_\_\_\_\_ BLACK \_\_\_\_\_

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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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 <b>1 OF 1</b>	



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
 ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 215THFND19033  
 CONN. DIAGRAM: A-EE7300 CAT #: W540A  
 OUTLINE: TBD CUSTOMER PART #: \_\_\_\_\_  
 WINDING: K2154512 R3 4 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
10	7.5	1800	1765	215T	TEFC	TFN	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	10.7	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	90.9	1/2 LD EFF	90.6	GTD EFF	90.2	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	76.9	3/4 LD PF	70.1	1/2 LD PF	57.2				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
29.8 LB-FT	64.8	71.0 LB-FT 238%	89.0 LB-FT 299%	55

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 dBA	71 dBA	1.00 LB-FT <sup>2</sup>	50 LB-FT <sup>2</sup>	25 SEC.	2	150 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	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
BALL	BALL						
6307	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
0.957	0.714	2.898	3.369	56.074	0.080	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 20:1 INV. HP SPEED RANGE: NONE	
	ENCODER: NONE NONE NONE	
	BRAKE: NONE NONE NONE	
	FT-LB: NA VOLTAGE: NONE HZ:	
	UL: V - LI,ME-INS,CONST UL REC	

PREPARED BY: FAREEDA DUDEKULA  
 DATE: 9/12/2018

Data Sheet

Date: 12/3/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



215THFND19033

Submittal

Data @ 575 V

Motor Load Data

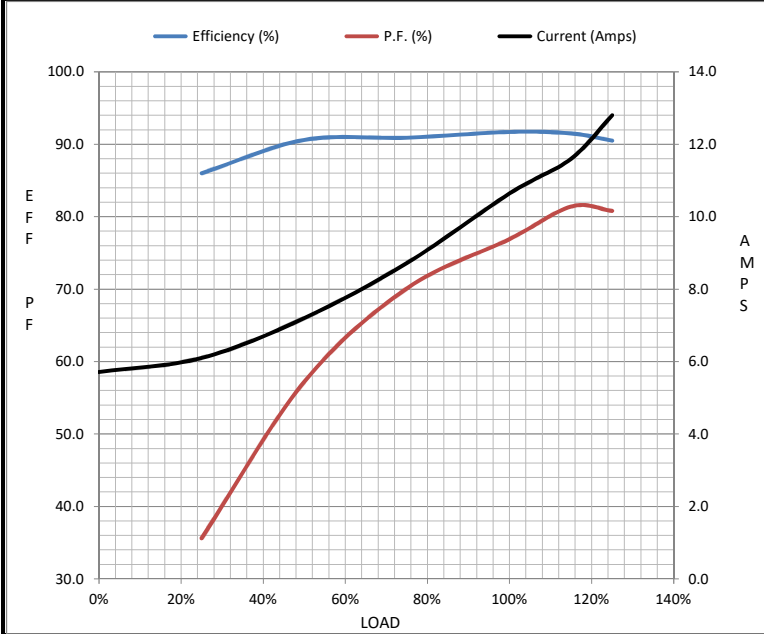
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	5.7	6.1	7.2	8.7	10.6	11.6	12.8	64.8
Torque (ft-lb)	0.00	7.3	14.7	22.0	29.8	34.5	37.4	71.0
RPM	1800	1791	1780	1771	1765	1,755	1755	0
Efficiency (%)		86.0	90.6	90.9	91.7	91.5	90.5	
P.F. (%)	4.7	35.6	57.2	70.1	76.9	81.4	80.8	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1575	1765	1800
Current (Amps)	64.8	57.6	39.2	10.6	5.7
Torque (ft-lb)	71.0	59.0	89.0	29.8	0.00

Information Block

HP	10.0			
Sync. RPM	1800			
Frame	215			
Enclosure	TEFC			
Construction	TFS			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	55 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	1.00 Lb-Ft <sup>2</sup>			
Ref Wdg	K2154512 R3			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	TBD			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.9570	0.7140	2.8980	3.3690	56.0740



Speed - Torque Curve

