

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 213THFND9030
Catalog No: W533A
7.50 HP Severe Duty Motor, 3 phase, 1800 RPM, 575 V, 213T Frame, TEFC
Severe Duty Motors



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RegalRexnord

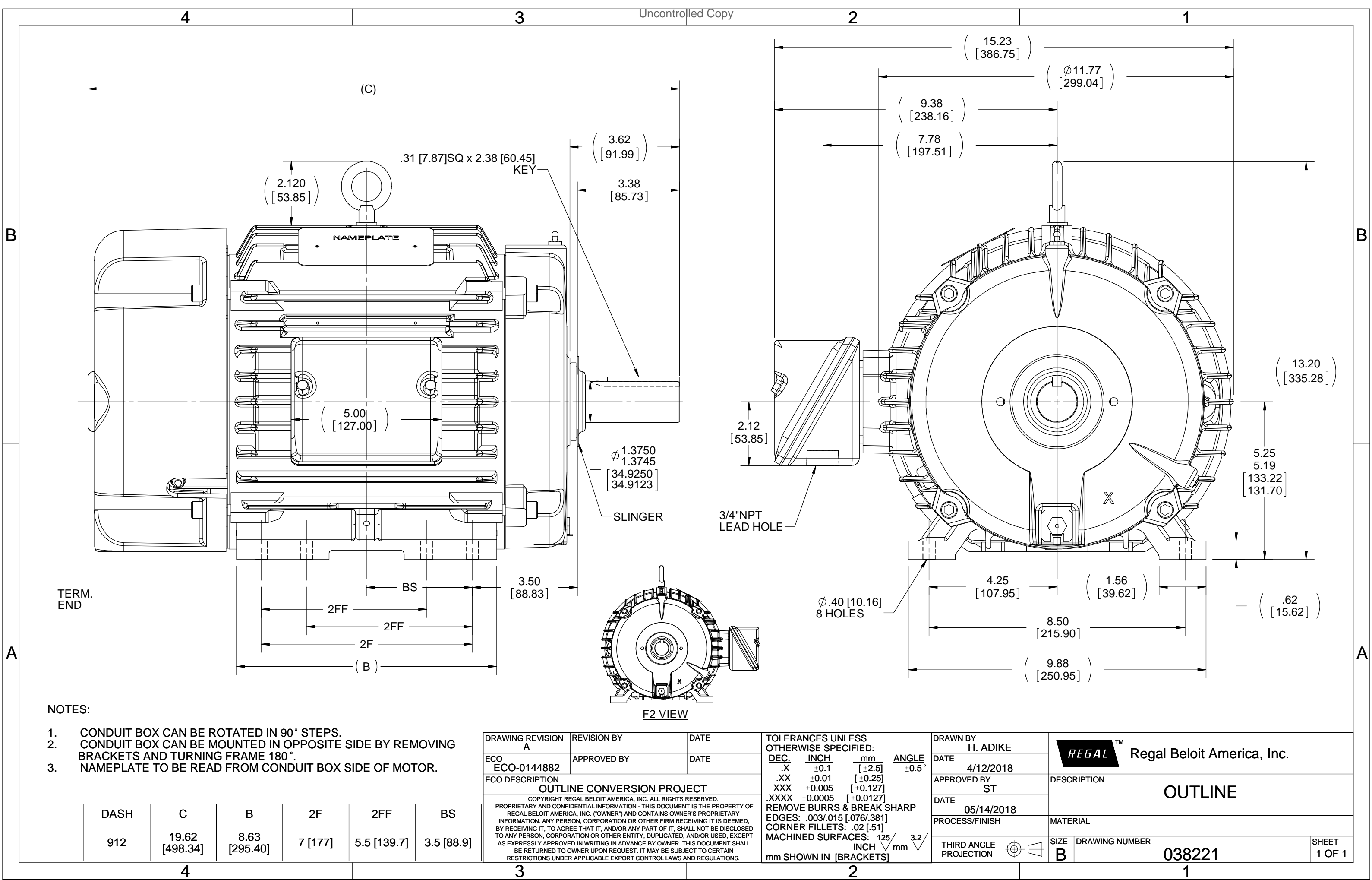
Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	575 V
Current	7.7 A	Speed	1765 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	79.2
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	213T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6307	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	1.18 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	19.62 in
Frame Length	9.12 in	Shaft Diameter	1.375 in
Shaft Extension	3.38 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7300	Outline Drawing	038221-912

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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.

DASH	C	B	2F	2FF	BS
912	19.62 [498.34]	8.63 [295.40]	7 [177]	5.5 [139.7]	3.5 [88.9]

DRAWING REVISION	REVISION BY	DATE
A		
ECO	APPROVED BY	DATE
ECO-0144882		
ECO DESCRIPTION		
OUTLINE CONVERSION PROJECT		
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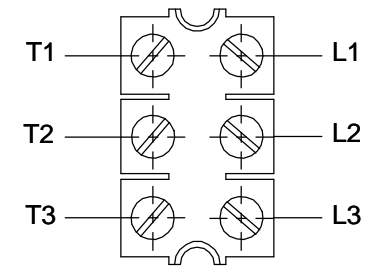
TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP			
EDGES: .003/.015 [0.076/.381]			
CORNER FILLETS: .02 [0.51]			
MACHINED SURFACES: 125 INCH 3.2 mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY	H. ADIKE	 Regal Beloit America, Inc.	
DATE	4/12/2018		
APPROVED BY	ST	DESCRIPTION	
DATE	05/14/2018	OUTLINE	
PROCESS/FINISH		MATERIAL	
THIRD ANGLE PROJECTION		SIZE	B
		DRAWING NUMBER	038221
		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



IF MOTOR HAS 6 LEADS



A-9806 DECAL

OPTIONAL CORD CONNECTION



VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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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
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7300
 REFERENCE MODEL #: 213THFND9030
 OUTLINE: 038221-912
 CAT #: W533A
 WINDING: K2134279 NONE 3
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1800	1765	213T	TEFC	TFN	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	7.7	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	92.2	1/2 LD EFF	91.6	GTD EFF	ELECT. TYPE
F.L. PF	79.2	3/4 LD PF	72.9	1/2 LD PF	61.1	91.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
22.3 LB-FT	50.8	52.9 LB-FT 237%	75.0 LB-FT 336%	50

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
62 dBA	71 dBA	0.85 LB-FT²	45 LB-FT²	25 SEC.	2	140 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	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
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
1.85625	2.7046875	6.0015625	7.746875	123.08125	0.080	ODE

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 2:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	

PREPARED BY: _____ DATE: 5/13/2020	BRAKE: NONE	
	NONE NONE	
	FT-LB: NA	HZ:
VOLTAGE: NONE		

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 5/6/2020

213THFND9030

Customer: _____

Attention: _____

Submitted by: _____



Submittal

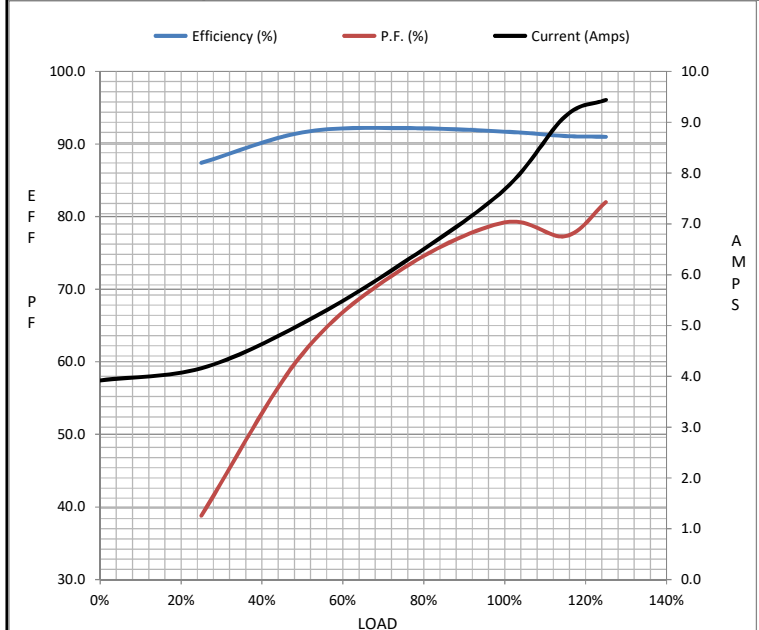
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.9	4.2	5.0	6.2	7.7	9.1	9.4	50.8	
Torque (ft-lb)	0.00	5.5	11.0	16.6	22.3	25.5	28.0	52.9	
RPM	1800	1792	1784	1775	1765	1,765	1756	0	
Efficiency (%)		87.4	91.6	92.2	91.7	91.1	91.0		
P.F. (%)	4.7	38.8	61.1	72.9	79.2	77.3	82.0	42.6	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1765	1800
Current (Amps)	50.8	45.6	32.8	7.7	3.9
Torque (ft-lb)	52.9	49.0	75.0	22.3	0.00



Information Block				
HP		7.5		
Sync. RPM		1800		
Frame		213		
Enclosure		TEFC		
Construction		TFN		
Voltage		575 V		
Frequency		60 Hz		
Design		B		
LR Code letter		H		
Service Factor		1.15		
Temp Rise @ FL		50 ° C		
Duty		CONT		
Ambient		40 ° C		
Elevation		3,300 feet		
Rotor/Shaft wk²		0.85 Lb-Ft²		
Ref Wdg		K2134279 NONE		
Sound Pressure @ 1M		62 dBA		
VFD Rating		CONSTANT 2:1		
Outline Dwg		038221-912		
Conn. Diag		A-EE7300		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.1880	1.7310	3.8410	4.9580	78.7720

Speed -Torque Curve

