

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 213THFS9030

Catalog No: W533

7.50 HP Severe Duty Motor, 3 phase, 1800 RPM, 575 V, 213T Frame, TEFC  
Severe Duty Motors



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**RegalRexnord**

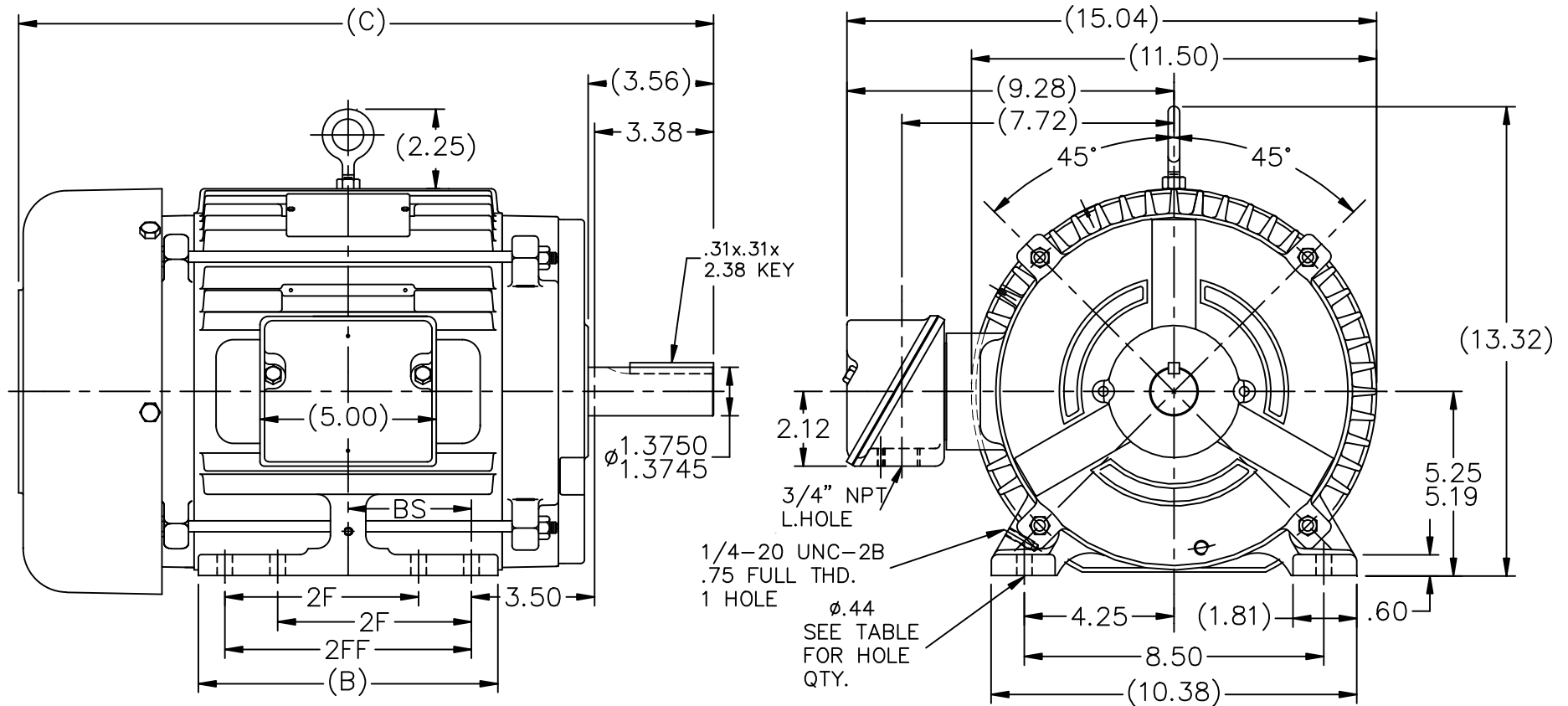
**Nameplate Specifications**

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	575 V
Current	7.7 A	Speed	1770 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	80
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	6206
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	1.17 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	19.72 in
Frame Length	8.75 in	Shaft Diameter	1.375 in
Shaft Extension	3.56 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	A-SS87301-875	Connection Drawing	A-EE7300

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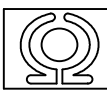


## NOTES:

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

DASH	FR.	C	B	BS	2F	2FF	FOOT HOLE QTY.	MOUNTING
725	213T	18.22	7.00	2.75	—	5.50	4	F1 OR F2
875	215T	19.72	8.50	3.50	—	7.00	4	F1 OR F2
875	213/5T	19.72	8.50	3.50	5.50	7.00	8	F1 OR F2
1000	215T	20.97	9.75	4.12	7.00	8.25	8	F1 OR F2

11	UPDATED DRAWING	TJW 04/30/2007		TOLERANCES UNLESS SPECIFIED
10	REVISED TOL. WAS 5.22/5.16 NOW 5.25/5.19	RJW 05-01-2006	ML	DEC. INCHES
9	ADDED FOOT HOLE QTY. & MTG. TO TABLE CN 37322	TAT 01-14-2004	ML	.X $\pm .1$
8	REMOVED NOTE 'SEE FRAME WHEN REQ'D'	DRS 04-23-2001		.XX $\pm .03$
8	FROM GROUND HOLE CN 29200-1698			.XXX $\pm .005$
7	UPDATED C' BOX GEOMETRY CN 28426	HLB 11-10-2000		.XXXX $\pm .0005$
NO.	REVISION	BY & DATE	CHK	ANG $\pm 7'30''$

	<b>MARATHON ELECTRIC</b>	DRAWN PGK 07-29-1997
		CHK ML 08-07-1997
		APPD PH 08-11-1997
		SCALE 7=32
		REF
		FMF
		PREV

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RFP  
DIST LB

CAD FILE ss87301

SIZE A  
DRAWING NO. SS87301  
PAGE OF  
REV. 11

# 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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## CERTIFICATION DATA SHEET

Model#: 213THFS9030 AC  
 CONN. DIAGRAM: A-EE7300  
 OUTLINE: A-SS87301-875

WINDING#: K2134158 NONE 5  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.60	1800	1770	213T	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	7.7	LINE OR INVERTER	CONTINUOU S	F3	1.15	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 74	1/2 LOAD PF: 63	89.2	SQ CAGE INV RATED	3.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	50.8	52 LB-FT 233	72 LB-FT 323	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.95 LB-FT^2	75 LB-FT^2	25 SEC.	2	170 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6307	6206	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further  
information

INVERTER TORQUE: CONSTANT 2:1  
 INV. HP SPEED RANGE: NONE

ENCODER: NONE  
 NONE NONE  
 NONE NONE PPR

BRAKE: NONE NONE  
 NONE P/N NONE  
 NONE NONE  
 NONE FT-LB NONE V NONE Hz

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DATE: 06/22/2017 04:01:08 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 29-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



213THFS9030

Submittal

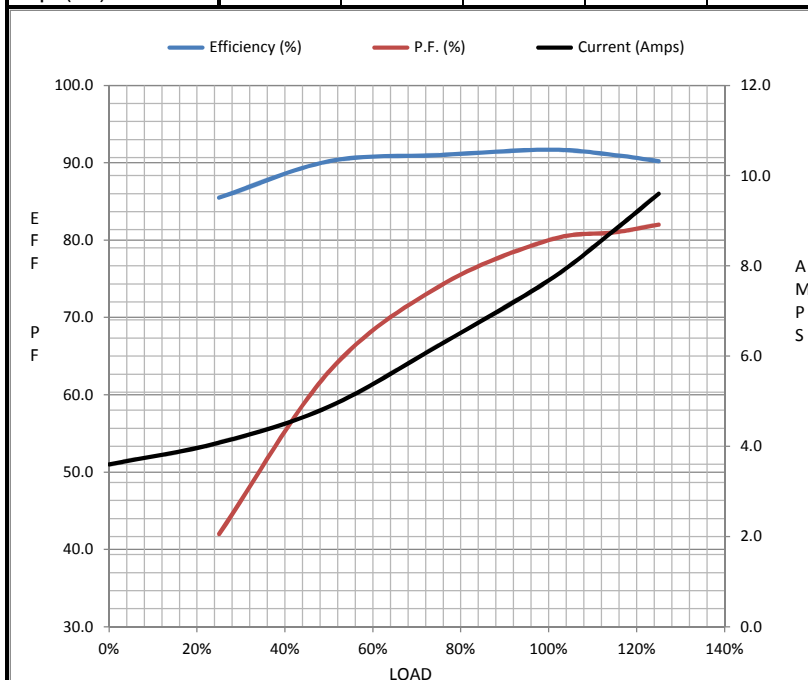
Data @ 575 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.6	4.1	4.9	6.2	7.7	8.8	9.6	50.8	
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.3	25.5	28.0	52.0	
RPM	1800	1790	1785	1775	1770	1,765	1760	0	
Efficiency (%)		85.5	90.2	91.0	91.7	91.0	90.2		
P.F. (%)	5.5	42.0	63.0	74.0	80.0	81.0	82.0	45.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	900	1600	1770	1800	HP	7.5
Current (Amps)	50.8	45.6	36.0	7.7	3.6	Sync. RPM	1800
Torque (ft-lb)	52.0	49.0	72.0	22.3	0.00	Frame	213



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	1,000 feet			
Rotor/Shaft wk²	0.95 Lb-Ft²			
Ref Wdg	K2134158 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	A-SS87301-875			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.9330	0.7090	3.6620	5.4690	81.5060

## Speed -Torque Curve

