

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 213TTFW16085

Catalog No: M877B

3 HP Vertical Solid Shaft P-Base Motor, 3 phase, 1200 RPM, 230/460 V, 213HPV Frame, TEFC  
Vertical Pump Motors



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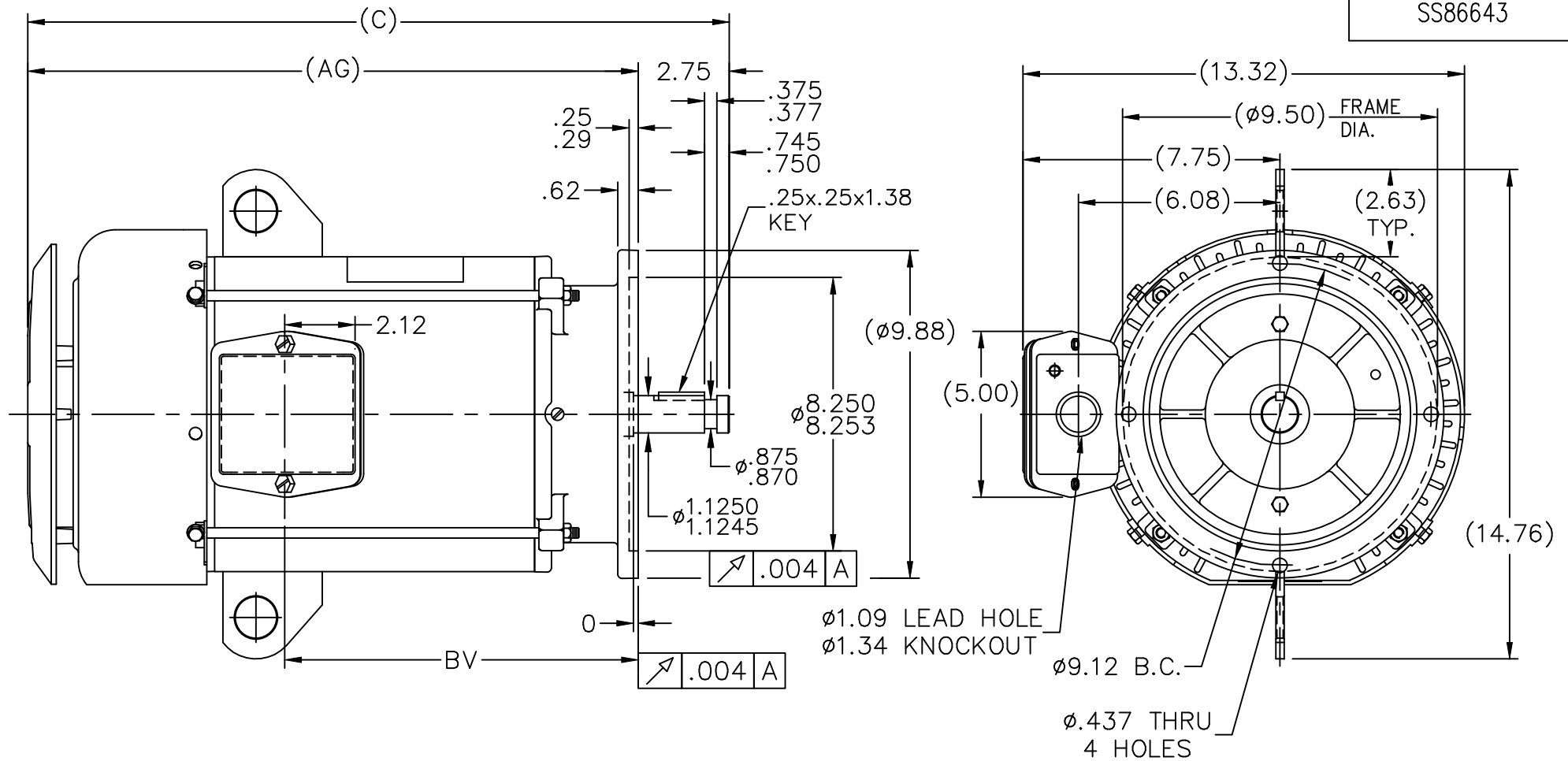
**RegalRexnord**

### Nameplate Specifications

Output HP	3 Hp	Output KW	2.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	8.8/4.4 A	Speed	1175 rpm
Service Factor	1.15	Phase	3
Efficiency	89.5 %	Power Factor	71.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	K
Frame	213HPV	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6206
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Resistance Main	2.7431 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	HP	Overall Length	22.66 in
Frame Length	11.15 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	005010.01	Outline Drawing	A-SS86643-1115



## NOTES:

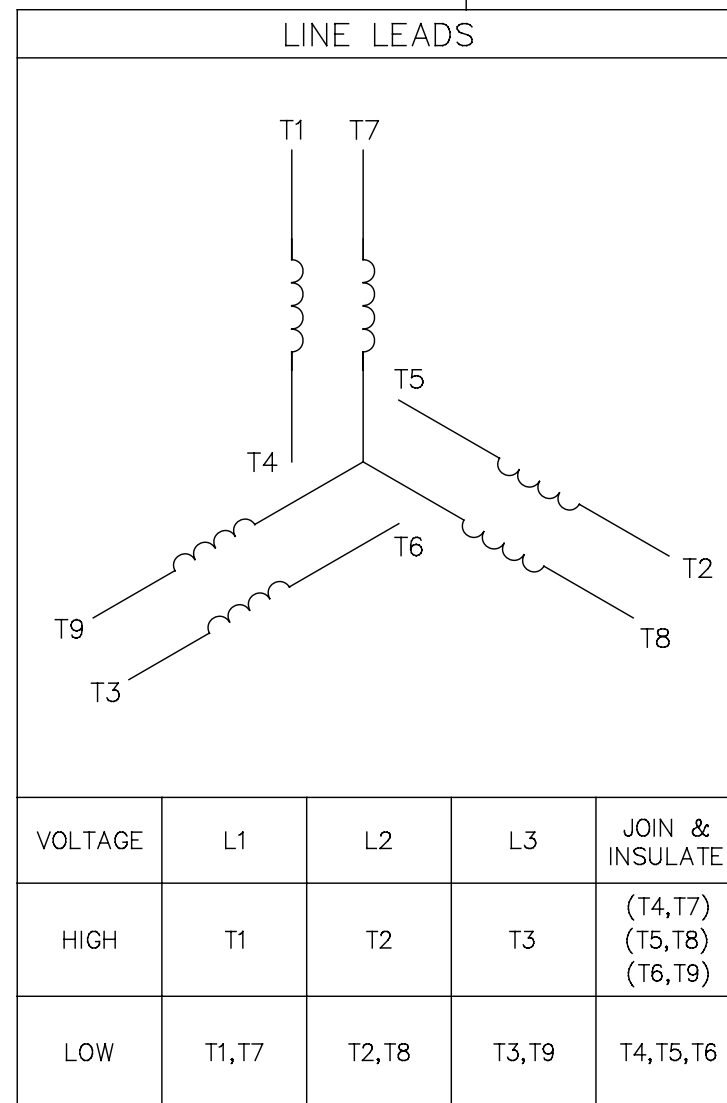
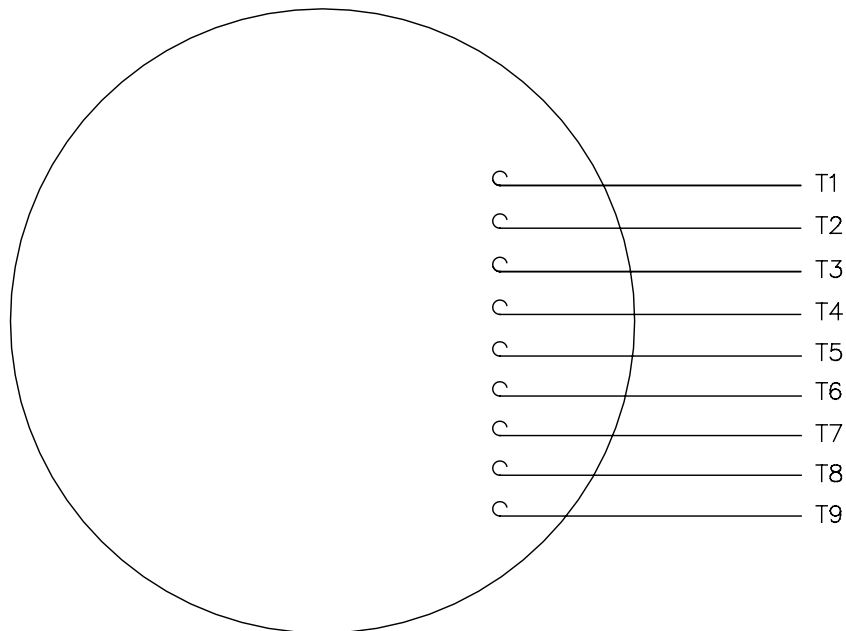
1. NAMEPLATE TO BE READ FROM SHAFT EXT. END OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.


DASH	FR.	C	AG	BV
965	213T	21.16	18.41	10.66
1115	213/15T	22.66	19.91	12.16
1240	213/15T	23.91	21.16	13.41

				TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN MRB 11-05-1996	
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"		CHK	ML 11-07-1996
7	UPDATED DRAWING	TJW 04/30/2007		DEC.	INCHES	TITLE OUTLINE 210T FR.-TEFC-P' BASE-R/S FRAME	APPD	DN 11-08-1996
6	REDRAWN IN AUTOCAD	TAT 07-22-2004	ML	.X	±.1		SCALE	7=32
5	ADDED $\phi 9.12$ B.C. & $\phi .437$ (4) HOLES CN 29200-1501	HLB 02-27-2001		.XX	±.03		REF	
4	UPDATED C' BOX GEOMETRY CN 28425	DRS 01-31-2000		.XXX	±.005		FMF	
3	REMOVED GROUND SCREW FROM FRAME CN 24453	MJD 10-01-1997		.XXXX	±.0005		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 ss86643		SIZE A	DRAWING NO.	PAGE OF	REV.
		DIST LB				SS86643		7

005010-01

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



				TOLERANCES UNLESS SPECIFIED		 <b>Regal Beloit America, Inc.</b>			DRAWN RDW 04/12/02		
				DEC.	INCHES				CHK		
				.X	±.1				APPD		
				.XX	±.01				SCALE 1=1		
				.XXX	±.005	TITLE EXTERNAL WIRING DIAGRAM 3 PHASE W/O PROTECTOR			REF FIG.2-51		
A	UPDATED TO REGAL LOGO	SAJ 06/26/15	AJY	.XXXX	±.0005				MAT'L. DECAL - 004014		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH			PREV		
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				DIST BRF-NLV							

## CERTIFICATION DATA SHEET

Model#: 213TTFW16085 AA  
 CONN. DIAGRAM: 005010.01  
 OUTLINE: A-SS86643-1115

WINDING#: K213699 FW 2  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3	2.24	1200	1175	213HPV	TEFC	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	8.8/4.4	ACROSS THE LINE	CONTINUOUS	F4	1.15	40	3300

FULL LOAD EFF: 89.5	3/4 LOAD EFF: 88.7	1/2 LOAD EFF: 86.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 71.5	3/4 LOAD PF: 64.1	1/2 LOAD PF: 52.4	87.5	SQ CAGE IND RUN	5.2 / 2.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
13.43 LB-FT	64 / 32	31 LB-FT 231	47 LB-FT 351	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
55 dBA	65 dBA	0.8 LB-FT^2	90 LB-FT^2	25 SEC.	2	160 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6206	POLYREX EM	HP	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL

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: NONE
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 05:56:43 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



213TTFW16085

Submittal

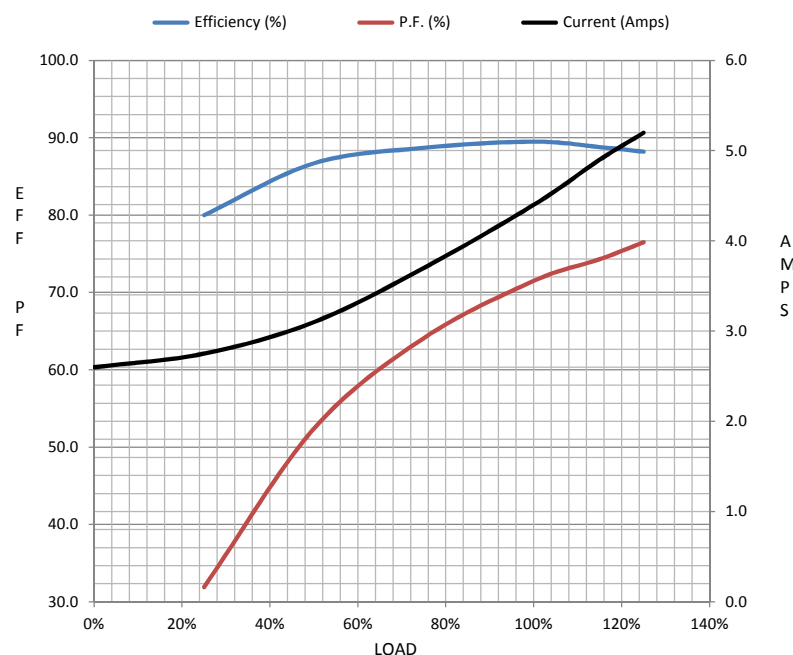
Data @ 460 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.60	2.75	3.1	3.7	4.4	4.9	5.2	32.0	
Torque (ft-lb)	0.00	3.3	6.7	10.0	13.4	15.5	16.9	31.0	
RPM	1200	1194	1188	1180	1175	1,170	1166	0	
Efficiency (%)		80.0	86.7	88.7	89.5	88.8	88.2		
P.F. (%)	7.2	31.9	52.4	64.1	71.5	74.3	76.5	40.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	600	1025	1175	1200	HP	3.0
Current (Amps)	32.0	28.0	20.0	4.4	2.60	Sync. RPM	1200
Torque (ft-lb)	31.0	30.0	47.0	13.4	0.00	Frame	213



Frame	213			
Enclosure	TEFC			
Construction	TFW			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.80 Lb-Ft²			
Ref Wdg	K213699 FW			
Sound Pressure @ 1M	55 dBA			
VFD Rating	NONE			
Outline Dwg	A-SS86643-1115			
Conn. Diag	005010.01			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.7210	1.5030	6.7130	7.1380	98.2080

## Speed -Torque Curve

