

# PRODUCT INFORMATION PACKET

Model No: 213TPFRB10230  
Catalog No: SY068  
7.5,1800,TEFC,213TC,3/90/230/460  
SyMAX - Permanent Magnet AC Motors



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### Nameplate Specifications

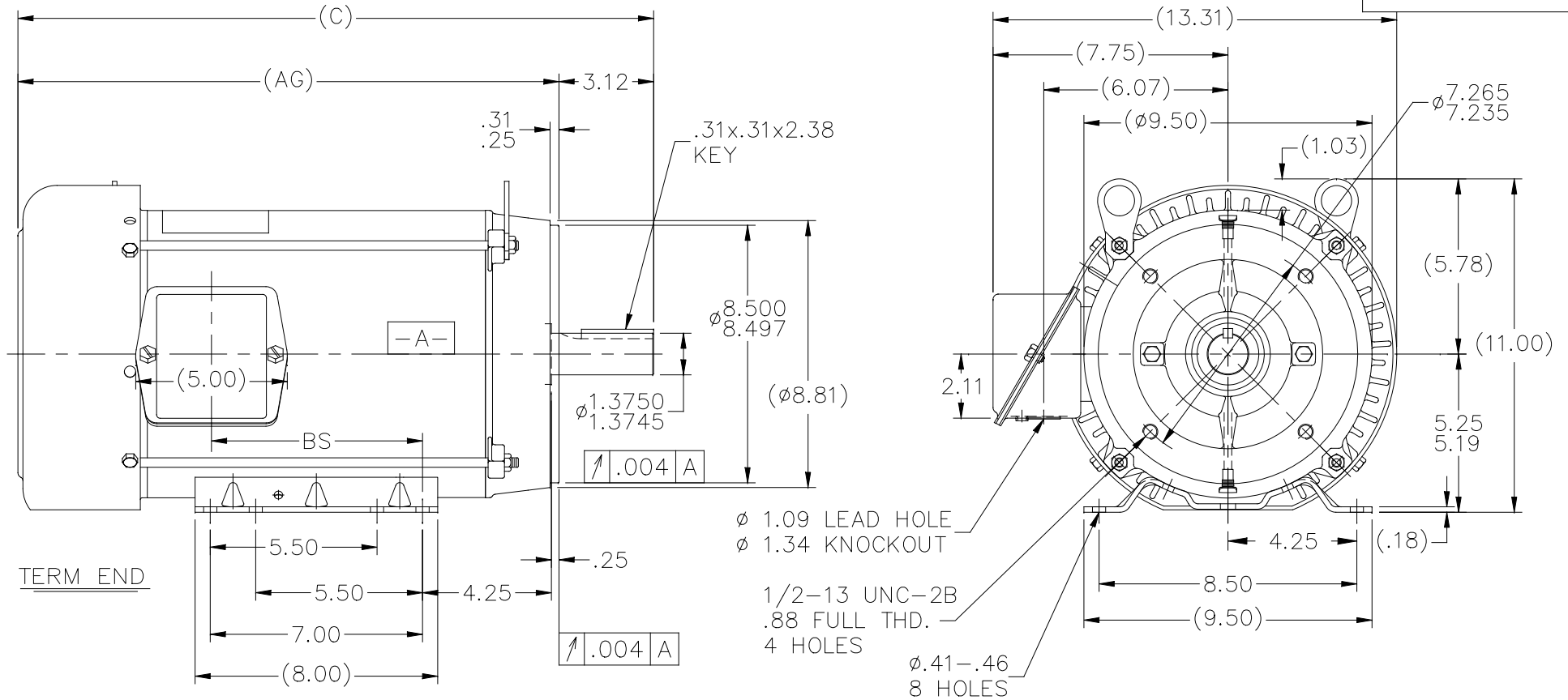
Output HP	<b>7.5 Hp</b>	Output KW	<b>5.6 kW</b>
Frequency	<b>90 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>17.2/8.6 A</b>	Speed	<b>1800 rpm</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>93.8 %</b>	Duty	<b>CONTINUOUS</b>
Insulation Class	<b>F</b>	Design Code	<b>PM</b>
KVA Code	<b>NO KVA CODE</b>	Frame	<b>213TC</b>
Enclosure	<b>TEFC</b>	Overload Protector	<b>NOT</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6309</b>
Opp Drive End Bearing Size	<b>6206</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>N</b>
IP Code	<b>43</b>		

### Technical Specifications

Electrical Type	<b>AC PERMANENT MAGNET</b>	Starting Method	<b>INVERTER ONLY</b>
Poles	<b>6</b>	Rotation	<b>REV</b>
Mounting	<b>BOLT-ON</b>	Motor Orientation	<b>HORIZONTAL</b>
Drive End Bearing	<b>BALL</b>	Opp Drive End Bearing	<b>BALL</b>
Frame Material	<b>ROLLED STEEL</b>	Shaft Type	<b>T</b>
Overall Length	<b>19.47 in</b>	Frame Length	<b>9.65 in</b>
Shaft Diameter	<b>1.38 in</b>	Shaft Extension	<b>3.12 in</b>
Assembly/Box Mounting	<b>F1 ONLY</b>		
Outline Drawing	<b>036254-965</b>	Connection Diagram	<b>EE7308T</b>

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036254



Ø 1.09 LEAD HOLE  
Ø 1.34 KNOCKOUT

1/2-13 UNC-2B  
.88 FULL THD.  
4 HOLES

Ø .41-.46  
8 HOLES

NOTES:

1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.
3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180° (EXCEPT AS NOTED.)
3. (NOT FIELD MODIFIABLE ON PMAC)

DASH	FR.	C	AG	BS	MOUNTING
965	213T	19.47	16.35	5.43	
1115	213/15T	20.97	17.85	6.93	
1240	213/15T	22.22	19.10	8.18	F1 ONLY

				TOLERANCES UNLESS SPECIFIED		DRAWN GR 06-10-16	
				DEC.	INCHES	CHK	
				.X	±.1	APPD	
				.XX	±.03	SCALE 1=5	
				.XXX	±.005	REF	
				.XXXX	±.0005	FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	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	SS86630	CAD FILE	036254
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TITLE OUTLINE  
210T FR. - BB - TS - TEFC- R/S-C' FACE

MAT'L.  
FINISH

## HIGH VOLTAGE

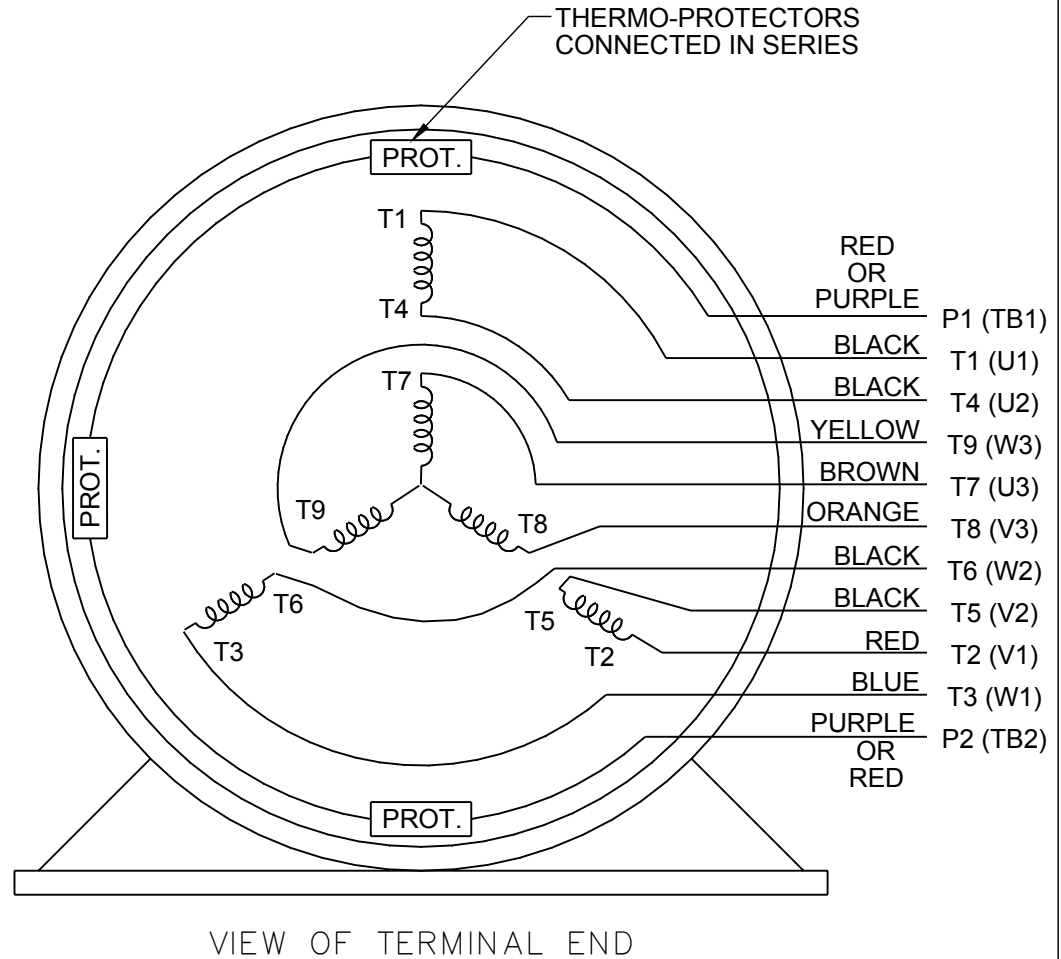


**NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:**  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

## LOW VOLTAGE



## THREE PHASE DUAL VOLTAGE MOTOR



**NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT**

DRAWING REVISION <b>R</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>		DRAWN BY <b>SMC</b>	<b>Regal Beloit America, Inc.</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>		DATE <b>05-13-1992</b>	
ECO DESCRIPTION <b>REV'D IEC NOTATIONS PER IEC 60034-8</b>				APPROVED BY <b>TB</b>	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b>
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>				DATE <b>05-13-1992</b>	<b>3 PHASE - DUAL VOLTAGE MOTOR</b>
			REFERENCE <b>EE7308/EE7300</b>	MATERIAL	PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7308T</b>

**CERTIFICATION DATA SHEET**

Model#: 213TPFRB10230 AA      WINDING#: PM21506025 NONE 2  
 CONN. DIAGRAM: EE7308T      ASSEMBLY: F1 ONLY  
 OUTLINE: 036254-965

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.6	1800	1800	213TC	TEFC	NO KVA CODE	PM

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	90	230/460	17.2/8.6	INVERTER ONLY	CONTINUOUS	F1	1.0	40	3300

FULL LOAD EFF: 93.8	3/4 LOAD EFF: -	1/2 LOAD EFF: -	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86.3	3/4 LOAD PF: -	1/2 LOAD PF: -	92.4	AC PERMANENT MAGNET	.8 / .4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
21.88 LB-FT	/	- LB-FT -	- LB-FT -	34

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.58 LB-FT^2	0 LB-FT^2	0 SEC.	0	94 LBS.

**EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)**

R1	R2	X1	X2	XM
0	0.67	15	28.3	226

RM	ZREF	XR	TD	TD0
0	1	0	0	0

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	BOLT-ON	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
BALL	BALL						
6309	6206						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS 140(N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: 1.2 X BASE SPEED
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE

\*  
N  
O  
T  
E  
S  
\*

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

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