

# PRODUCT INFORMATION PACKET

Model No: 182TPFRB10181

Catalog No: SY036

SyMAX® Fan & Blower Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 182TC Frame, TEFC



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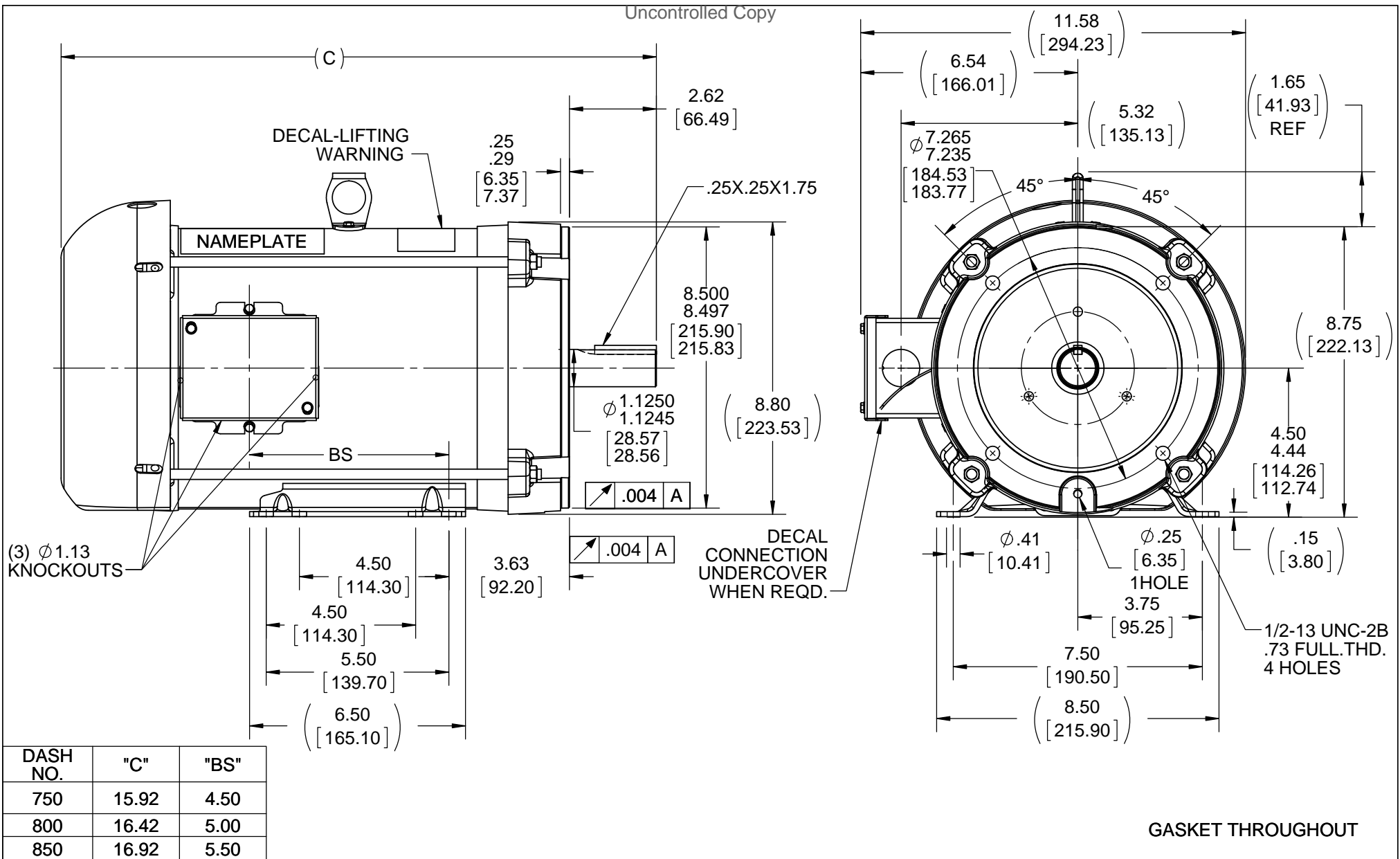
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>3 Hp</b>
Output KW	<b>2.2 kW</b>	Voltage	<b>230/460 V</b>
Speed	<b>1200 rpm</b>	Service Factor	<b>1.00</b>
Frame	<b>182TC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>93 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>7.0/3.5 A</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>No Design Code</b>	KVA Code	<b>N/A</b>
Drive End Bearing Size	<b>6207</b>	Opp Drive End Bearing Size	<b>6205</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>AC Permanent Magnet</b>	Starting Method	<b>Inverter Only</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>0 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>Rolled Steel</b>
Shaft Type	<b>T</b>	Overall Length	<b>16.42 in</b>
Frame Length	<b>8.00 in</b>	Shaft Diameter	<b>1.125 in</b>
Shaft Extension	<b>2.62 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 20:1</b>		
Outline Drawing	<b>036225-800</b>	Connection Drawing	<b>A-EE7308T</b>





DASH NO.	"C"	"BS"
750	15.92	4.50
800	16.42	5.00
850	16.92	5.50

DRAWING REVISION D  
 REVISION BY SR  
 DATE 04/13/2017  
 ECO ECO-0121776  
 APPROVED BY SR  
 DATE 04/13/2017  
 ECO DESCRIPTION  
 ITEM #900 AND ABOVE REMOVED FROM TABLE  
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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 [.076/.381] X 45°  
 CORNER FILLETS: R.02 [.51]  
 MACHINED SURFACES: 125/3.2 INCH/mm  
 mm SHOWN IN [BRACKETS]

DRAWN BY SR  
 DATE 05/03/16  
 APPROVED BY SR  
 DATE 05/03/16  
 REFERENCE  
 THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.  
 DESCRIPTION  
**OUTLINE**  
 180T-FRAME TEFC RIGID-C\_FACE-PMAC  
 MATERIAL - PROCESS/FINISH -  
 SIZE A DRAWING NUMBER 036225 SHEET 1 OF 1

**HIGH VOLTAGE**



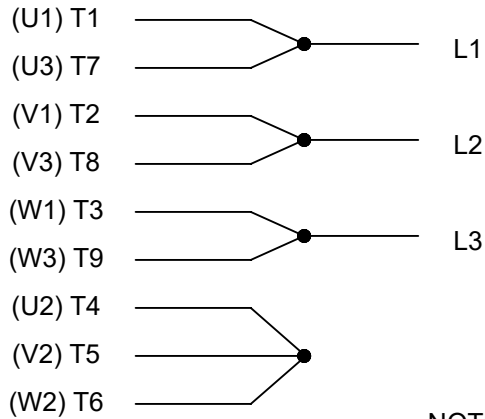
**THREE PHASE  
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS  
CONNECTED IN SERIES



**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**



**VIEW OF TERMINAL END**

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

DRAWING REVISION <b>T</b>	REVISION BY <b>ZR</b>	DATE <b>01-14-2019</b>		DRAWN BY <b>SMC</b>	Regal Beloit America, Inc.	
ECO <b>ECO-0159915</b>	APPROVED BY <b>DR</b>	DATE <b>01-15-2019</b>		DATE <b>05-13-1992</b>		
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</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>	SHEET <b>1 OF 1</b>

**CERTIFICATION DATA SHEET**

**Model#:** 182TPFRB10181 AA      **WINDING#:** PM18406004 NONE 2  
**CONN. DIAGRAM:** A-EE7308T      **ASSEMBLY:** F1 ONLY  
**OUTLINE:** 036225-800

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3	2.24	1200	1200	182TC	TEFC	NO KVA CODE	PM

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	7/3.5	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300

FULL LOAD EFF: 93	3/4 LOAD EFF: 92.7	1/2 LOAD EFF: 91.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: -	1/2 LOAD PF: -	93	AC PERMANENT MAGNET	1.2 / .6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
13.1 LB-FT	/	- LB-FT -	- LB-FT -	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.46 LB-FT^2	0 LB-FT^2	0 SEC.	0	79 LBS.

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

R1	R2	X1	X2	XM
0	1.74	39.4	48.3	336

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	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
6207	6205						

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

DATE: 06/27/2017 01:24:51 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 182TPFRB10181

(Model No. may contain prefix and/or suffix characters)

Catalog No : SY036

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**