

# PRODUCT INFORMATION PACKET

Model No: 254TPFSA10088  
Catalog No: SY010  
254FR 15HP IHP PM MOTOR  
SyMAX - Permanent Magnet AC Motors



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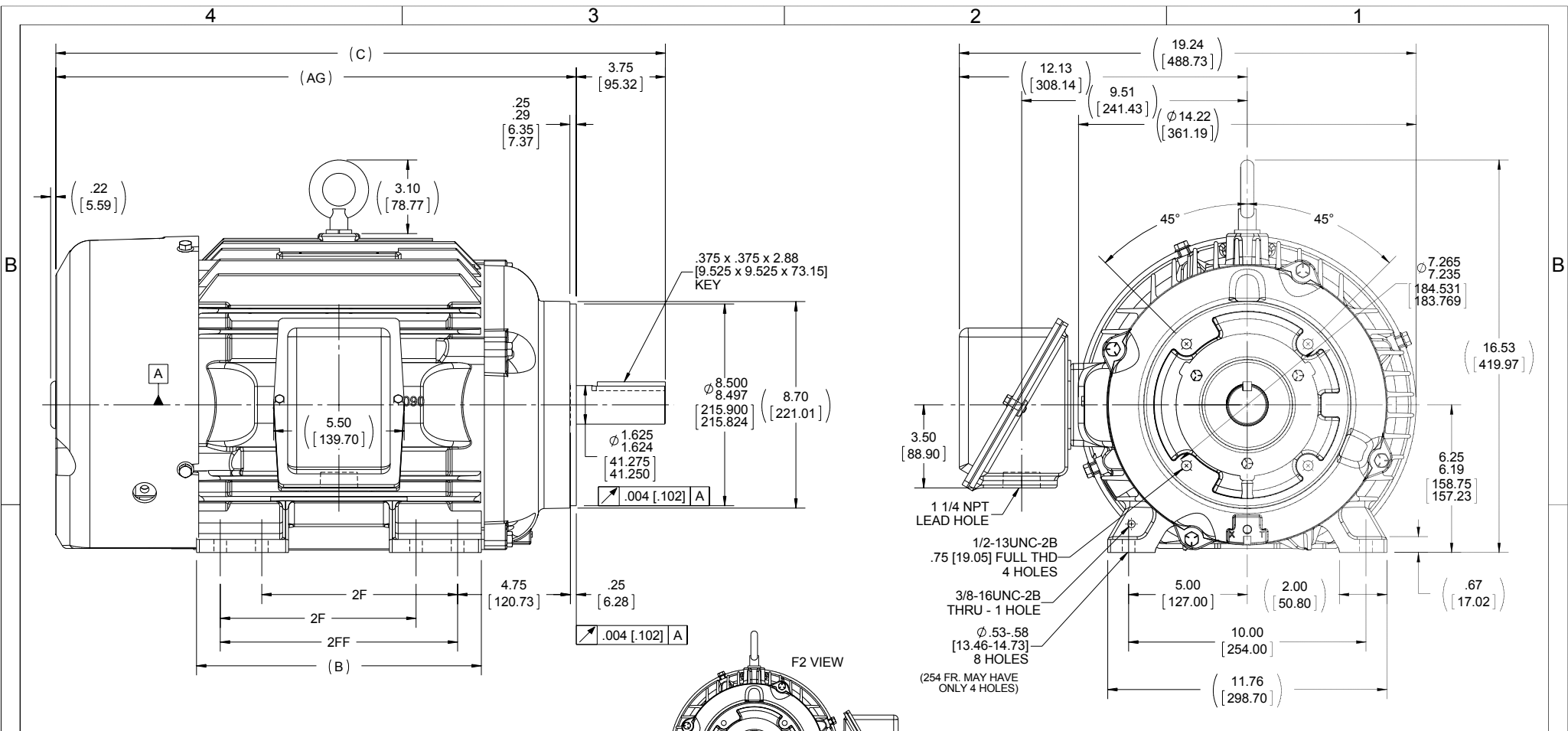


### Nameplate Specifications

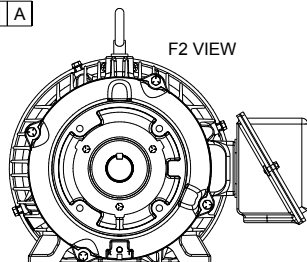
Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>120 Hz</b>	Voltage	<b>460 V</b>
Current	<b>18 A</b>	Speed	<b>1800 rpm</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>94 %</b>	Duty	<b>CONTINUOUS</b>
Insulation Class	<b>H</b>	Design Code	<b>PM</b>
KVA Code	<b>NO KVA CODE</b>	Frame	<b>254TC</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>6210</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>54</b>		

### Technical Specifications

Electrical Type	<b>AC PERMANENT MAGNET</b>	Starting Method	<b>INVERTER ONLY</b>
Poles	<b>8</b>	Rotation	<b>REV</b>
Mounting	<b>RIGID</b>	Motor Orientation	<b>HORIZONTAL</b>
Drive End Bearing	<b>BALL</b>	Opp Drive End Bearing	<b>BALL</b>
Frame Material	<b>CAST IRON</b>	Shaft Type	<b>T</b>
Overall Length	<b>25.68 in</b>	Frame Length	<b>12.25 in</b>
Shaft Diameter	<b>1.63 in</b>	Shaft Extension	<b>3.75 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>B-SS203152-1225</b>	Connection Diagram	<b>A-EE7300</b>



- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
  2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
(NOT FIELD MODIFIABLE ON PMAC MOTORS)
  3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.



DASH	FRAME	B	C	AG	2F	2FF	BS
1050	254TC	10.25 [260.35]	23.93 [607.82]	20.18 [512.57]	8.25 [209.55]		4.12 [104.65]
1225	254/256TC	12.00 [304.80]	25.68 [652.27]	21.93 [557.02]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION G	REVISION BY JHA	DATE 10-21-2015
ECO ECO-0087068	APPROVED BY TDB	DATE 10-22-2015
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	+0.1	[+2.5]
.XX	+0.03	[+0.76]
.XXX	+0.005	[+0.127]
.XXXX	+0.0005	[+0.0127]
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°		
CORNER FILLETS: R.02 [51]		
MACHINED SURFACES: 200 $\sqrt{\text{mm}}$ 5.1 $\sqrt{\text{INCH}}$		
mm SHOWN IN [BRACKETS]		

DRAWN BY PKG	DATE 09-03-1996
APPROVED BY BW	DATE 09-06-1996
REFERENCE	THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION	OUTLINE
250TC FR - TEFC - BB - TS - C'FACE - TFNA - CAST C'BOX	PROCESS/FINISH
MATERIAL	
SIZE B	DRAWING NUMBER SS203152
	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**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

- L1 \_\_\_\_\_ WHITE
- L2 \_\_\_\_\_ RED
- L3 \_\_\_\_\_ BLACK

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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DRAWN BY DA	Regal Beloit America, Inc.
DATE 03-26-1993	
APPROVED BY TB	DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
DATE 03-26-1993	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>A</b>
	DRAWING NUMBER <b>EE7300</b>
	SHEET <b>1 OF 1</b>

**CERTIFICATION DATA SHEET**

**Model#:** 254TPFSA10088 A      **WINDING#:** PM25608009 R1 1  
**CONN. DIAGRAM:** A-EE7300      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS203152-1225

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	1800	1800	254TC	TEFC	NO KVA CODE	PM

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	120	460	18	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300

FULL LOAD EFF: 94	3/4 LOAD EFF: -	1/2 LOAD EFF: -	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: -	1/2 LOAD PF: -	94	AC PERMANENT MAGNET	1.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
43.77 LB-FT	-	- LB-FT -	- LB-FT -	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	1.96 LB-FT^2	0 LB-FT^2	0 SEC.	0	286 LBS.

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

R1	R2	X1	X2	XM
0	0.073	2.27	3.65	111

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	PREMIUM SEVERE DUTY	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)	CAST IRON
BALL	BALL						
6309	6210						

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: 06/23/2017 01:57:46 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.