

PRODUCT INFORMATION PACKET

Model No: 284TPFSA10112

Catalog No: SY012

25 HP, Permanent Magnet (PMAC) Motors, 3 phase, 1800 RPM, 460 V, 284TC Frame, TEFC
Permanent Magnet (PMAC) Motors

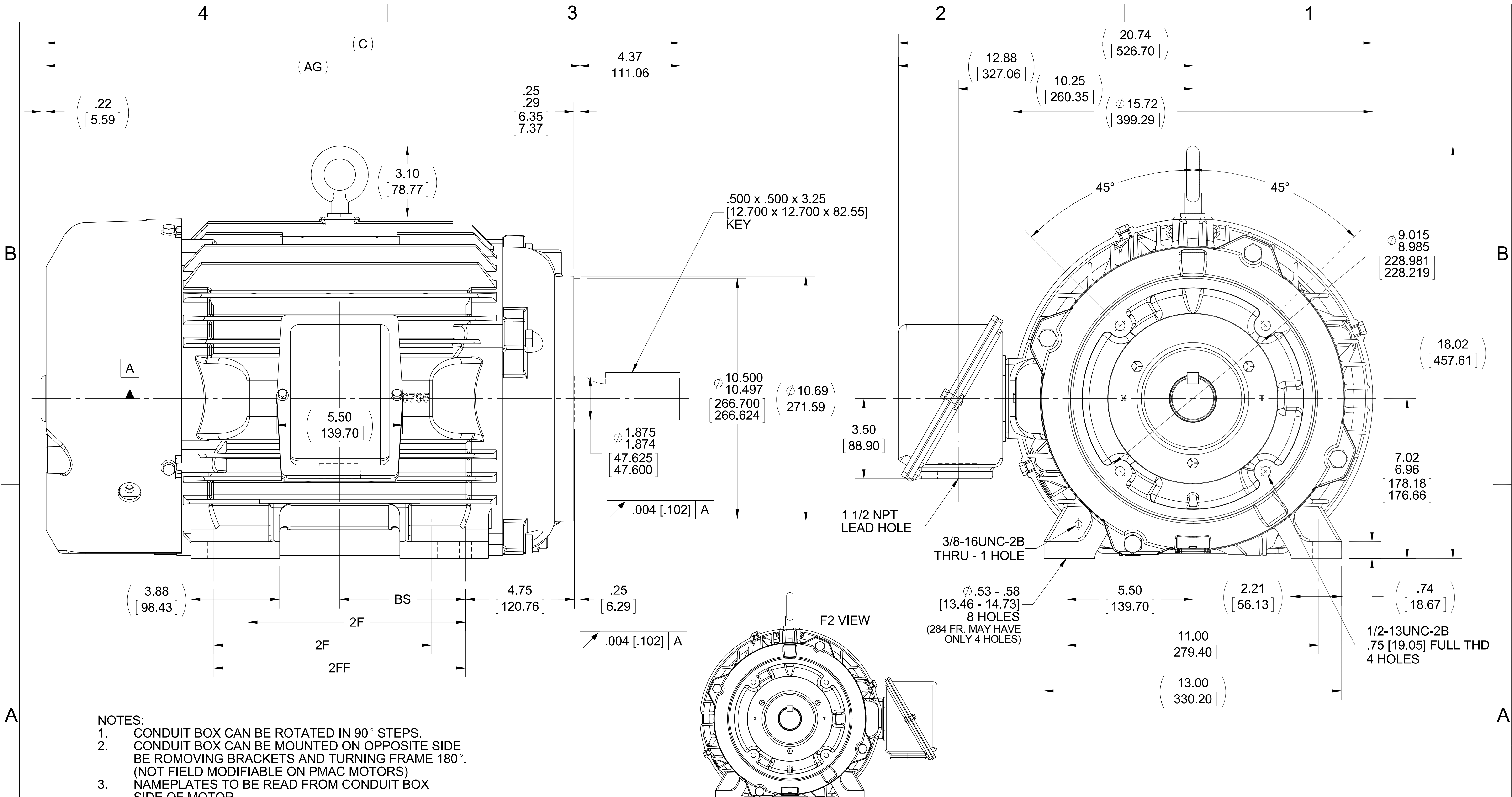


Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	120 Hz	Voltage	460 V
Current	30.0 A	Speed	1800 rpm
Service Factor	1	Phase	3
Efficiency	94.5 %	Power Factor	80
Duty	Continuous	Insulation Class	H
Design Code	No Design Code	KVA Code	NO KVA CODE
Frame	284TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostats 140 deg. C (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

Technical Specifications

Electrical Type	AC Permanent Magnet	Starting Method	Inverter Only
Poles	8	Rotation	Reversible
Mounting	Rigid Base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	T
Overall Length	26.21 in	Frame Length	12.75 in
Shaft Diameter	1.875 in	Shaft Extension	4.37 in
Assembly/Box Mounting	F1 ONLY	Inverter Load	CONSTANT 20:1
Connection Drawing	A-EE7300T	Outline Drawing	B-SS311211-1275



- 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
1275	284TC	12.50 [317.50]	26.21 [665.73]	21.83 [554.48]	---	9.50 [241.30]	4.75 [120.65]
1425	284/286TC	13.00 [330.20]	27.71 [703.83]	23.33 [592.58]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]

DRAWING REVISION E	REVISION BY JHA	DATE 10-22-2015
ECO ECO-0087127	APPROVED BY TDB	DATE 10-23-2015
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.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 INCH 5.1 mm SHOWN IN [BRACKETS]

DRAWN BY DAH
DATE 08-06-2001
APPROVED BY DD
DATE 08-07-2001
REFERENCE
THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
280TC FR - TEFC - BB - STD - 12.50 LAM

MATERIAL PROCESS/FINISH

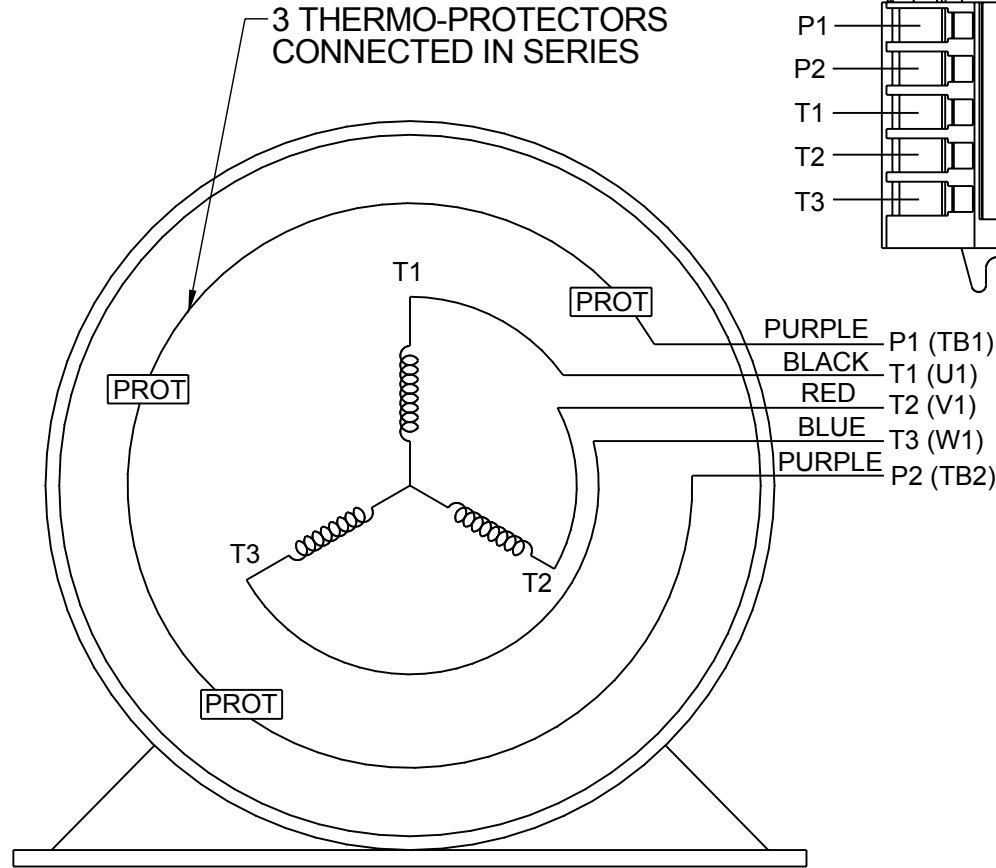
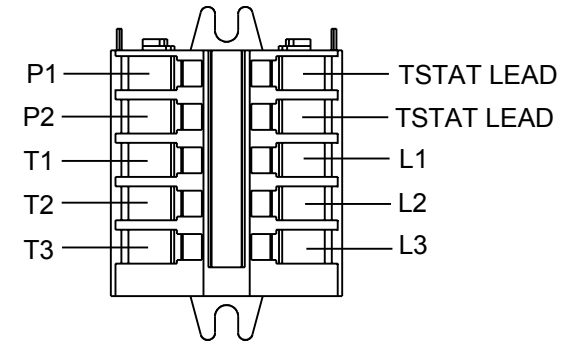
SIZE **B** DRAWING NUMBER **SS311211** SHEET 1 OF 1

**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS**

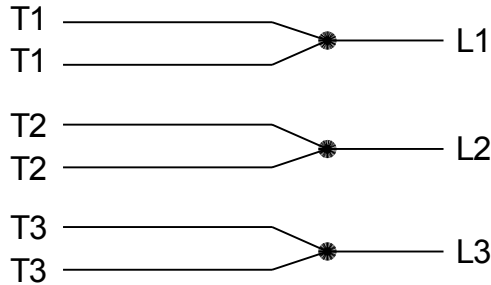
**NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1**

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

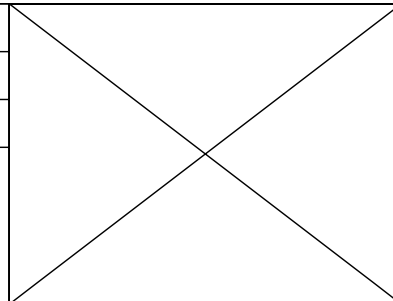
**IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S**



A-9806 DECAL

- T2BM
- T6AW
- T6AL
- T6Z
- T4EG
- T4BF
- T8A
- T6H
- T6A
- T4AX
- T4A
- T2A
- T2F

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-04-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994	MATERIAL	
REFERENCE	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300T
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 284THTNA7036 BB **WINDING#:** K2844139 R2.3
CONN. DIAGRAM: A-EE7300T **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS311154-1275

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1770	284TC	TENV	K	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	24.8	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 74	1/2 LOAD PF: 62	92.4	SQ CAGE INV DUTY	11.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74.2 LB-FT	224	163 LB-FT 220	330 LB-FT 445	96

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	4.4 LB-FT^2	- LB-FT^2	- SEC.	-	475 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.1425	0.1596	0.7239	0.6783	13.965

RM	ZREF	XR	TD	TD0
1413.6	11.4	5.5	0.012	0.24

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE AND ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (ENAMEL)

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)	CAST IRON
6311	6311						

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

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR ST56 NONE NONE PPR
BRAKE: PROVISIONS ONLY NONE NONE P/N NONE

*
N
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T
E
S
*

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/23/2017 07:36:56 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.