

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 254TTTNA17077
Catalog No: S513
7 1/2, 1200, TEAO, 254T, 3/60/460
Other Purpose



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REGAL[®]

Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	460 V
Current	9.8 A	Speed	1170 rpm
Service Factor	1.15	Phase	3
Efficiency	90.2 %	Duty	Continuous
Insulation Class	H	Design Code	B
KVA Code	H	Frame	254T
Enclosure	Totally Enclosed Air Over	Overload Protector	No
Ambient Temperature	90 °C	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6210	UL	Recognized
CSA	Y	CE	N
IP Code	54		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	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	20.61 in	Shaft Diameter	1.625 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS203092-1050	Connection Diagram	A-EE7300T

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3

Uncontrolled Copy

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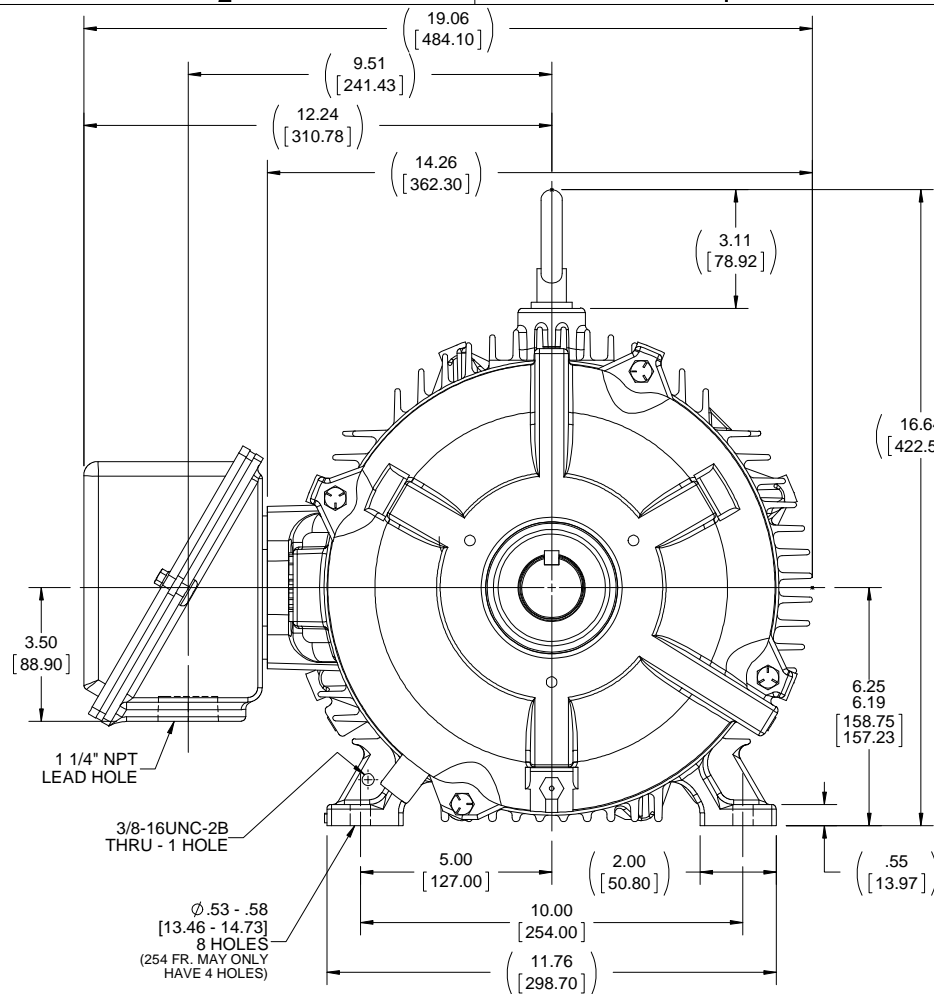
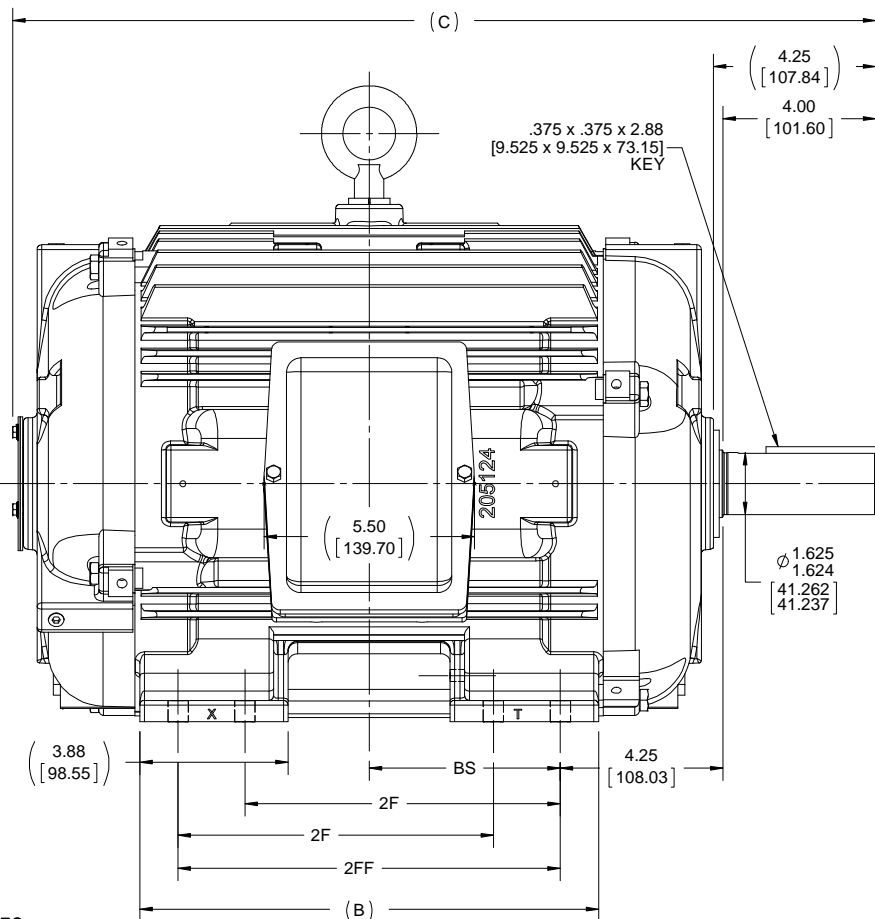
1

B

B

A

A



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°.
- 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
- 4. DIMENSIONS IN [] ARE IN MILLIMETERS.

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	20.83 [529.08]	8.25 [209.55]	---	4.12 [104.65]
1225	254/256T	12.00 [304.80]	22.58 [573.53]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION D	REVISION BY JJB	DATE 09-20-2017
ECO ECO-0130892	APPROVED BY DJK	DATE 09-20-2017
ECO DESCRIPTION UPDATED FRAME		

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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 INCH 5.1 mm		

DRAWN BY BLR	DATE 04-26-1996
APPROVED BY BW	DATE 04-24-1996
REFERENCE	THIRD ANGLE PROJECTION

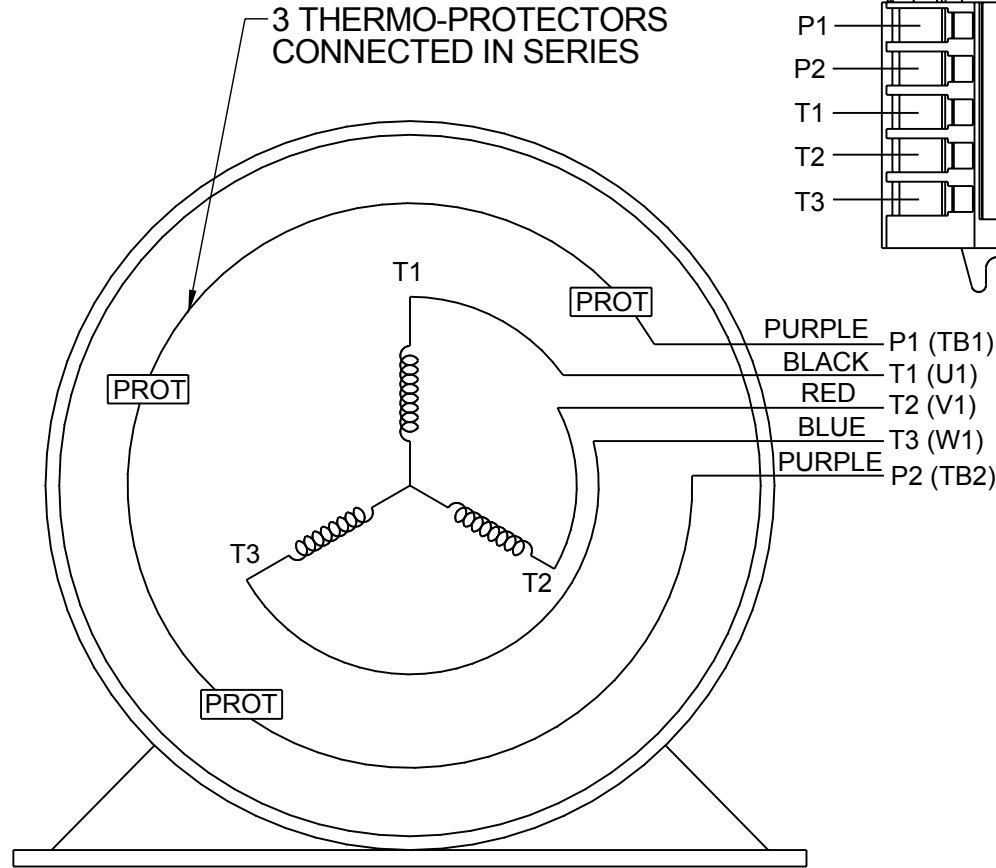
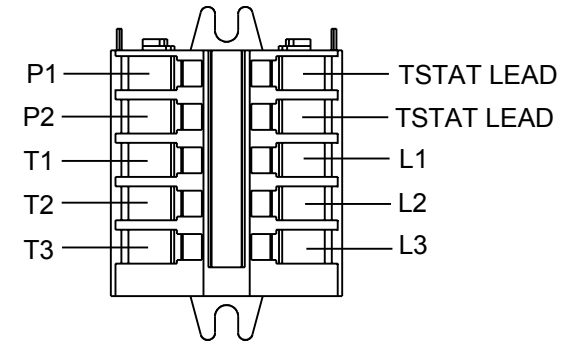
REGAL ™ Regal Beloit America, Inc.	
OUTLINE 250T FR. - TENV - BB - STD	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS203092
	SHEET 1 OF 1

**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

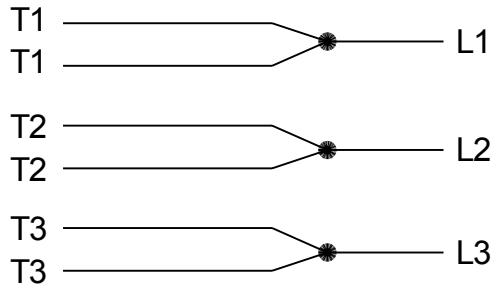


PURPLE P1 (TB1)
BLACK T1 (U1)
RED T2 (V1)
BLUE T3 (W1)
PURPLE P2 (TB2)

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

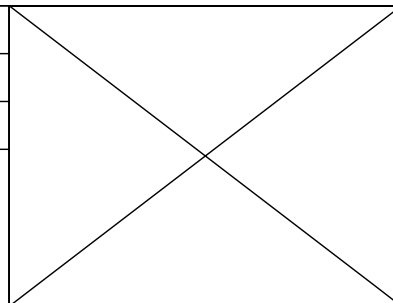
VIEW OF TERMINAL END

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



A-9806 DECAL

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#: 254TTTNA17077 BC **WINDING#:** 254680 NONE 2
CONN. DIAGRAM: A-EE7300T **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS203092-1050

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
7 1/2	5.595	1200	1170	254T	TEAO	H	B		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	9.8	LINE OR INVERTER	CONTINUOUS	H4	1.15	90	3300
FULL LOAD EFF: 90.2		3/4 LOAD EFF: 91	1/2 LOAD EFF: 90.2	GTD. EFF		ELEC. TYPE		NO LOAD AMPS	
FULL LOAD PF: 78		3/4 LOAD PF: 73	1/2 LOAD PF: 62	89.5		SQ CAGE INV RATED		4.8	
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C	
33.5 LB-FT		63.5		75 LB-FT 224		96 LB-FT 287		45	
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT			
- dBA	- dBA	2.5 LB-FT^2	120 LB-FT^2	20 SEC.	2	325 LBS.			

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	DC 44M	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL / HEAT STABILIZED	BALL / HEAT STABILIZED						
6309	6210						

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

If Inverter equals NONE, contact factory for further information

*
N
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S
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INVERTER TORQUE: VARIABLE 20:1 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

DATE: 06/23/2017 04:36:51 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 20-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



254TTTNA17077

Submittal

Data @ 460 V

Motor Load Data

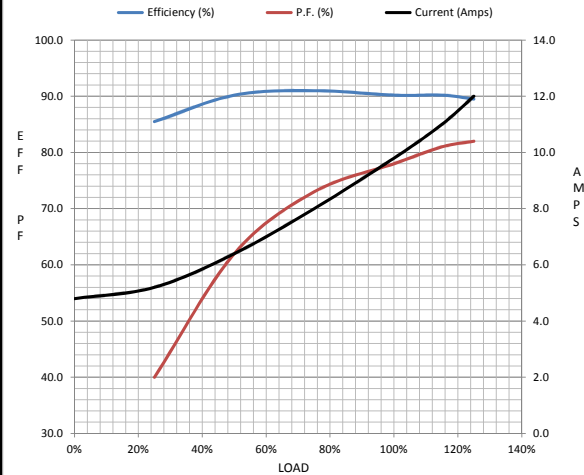
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.8	5.2	6.4	8.0	9.8	11.0	12.0	63.5
Torque (ft-lb)	0.00	8.0	16.5	25.0	33.5	38.5	42.0	75.0
RPM	1200	1192	1185	1180	1170	1,165	1162	0
Efficiency (%)		85.5	90.2	91.0	90.2	89.5		
P.F. (%)	5.5	40.0	62.0	73.0	78.0	81.0	82.0	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1000	1170	1200
Current (Amps)	63.5	57.0	39.5	9.8	4.8
Torque (ft-lb)	75.0	65.0	96.0	33.5	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	TEAO			
Construction	TTN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	0 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	2.50 Lb-Ft ²			
Ref Wdg	254680 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 20:1			
Outline Dwg	B-SS203092-1050			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.9000	0.7110	2.9180	2.8430	54.6590



Speed -Torque Curve

