

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 254THTL5726  
Catalog No: Y549  
15,1800,TENV,254TC,3/60/230/460  
1000:1 Speed Ratio



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**REGAL**<sup>®</sup>

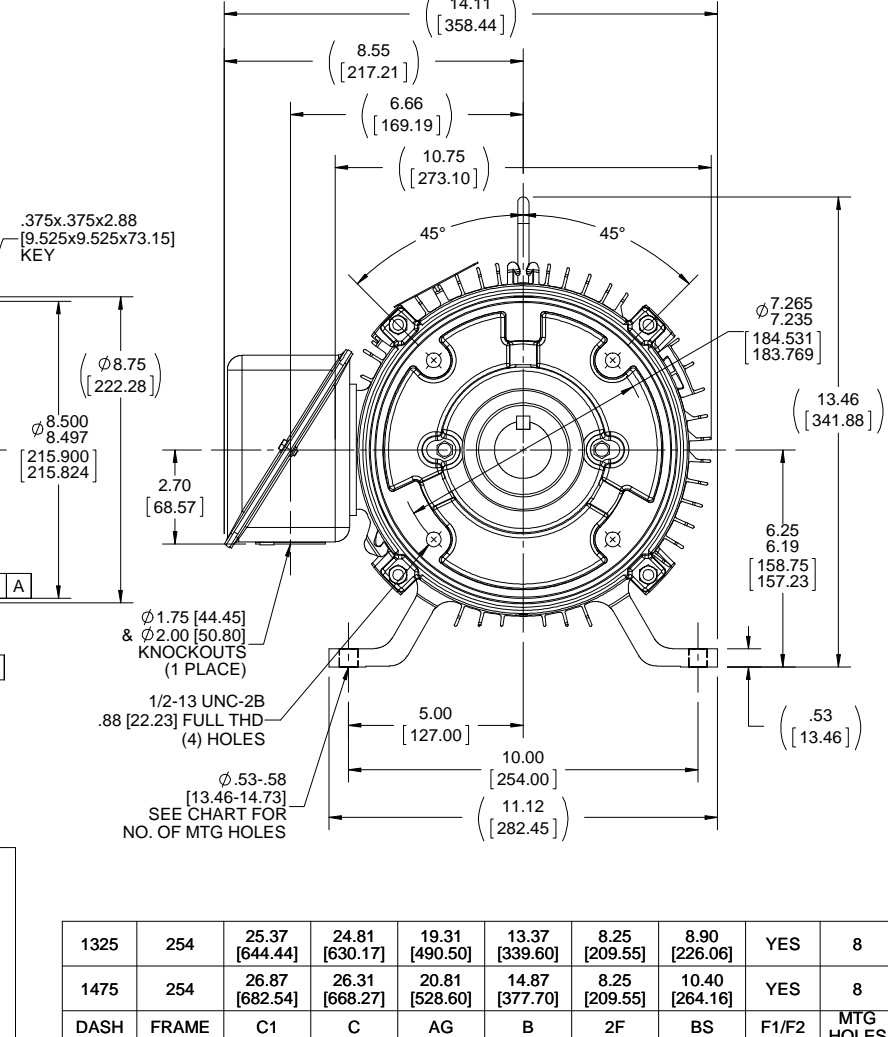
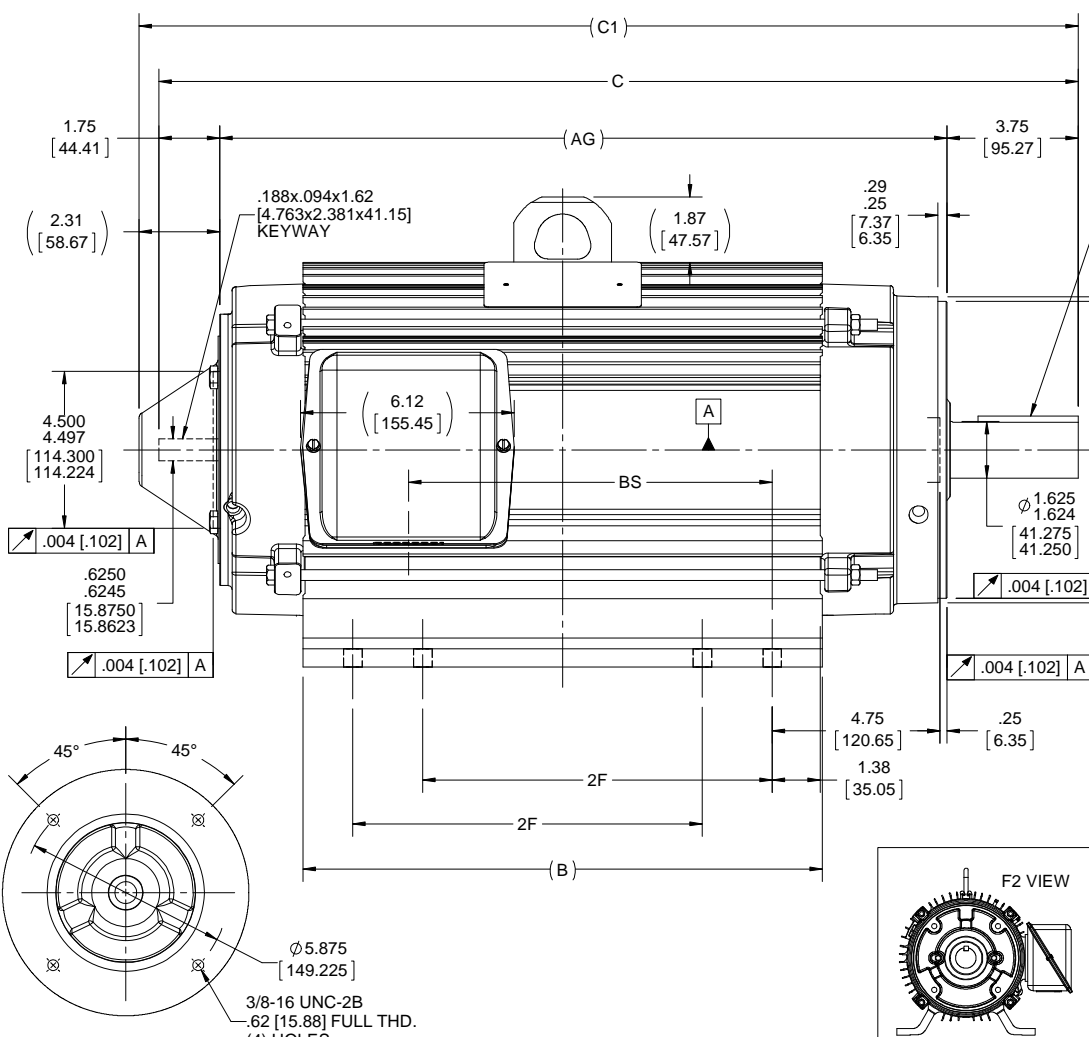


### Nameplate Specifications

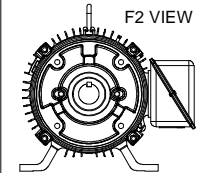
Output HP	<b>15 HP</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>40.0/20.0 A</b>	Speed	<b>1765 RPM</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>H</b>	Design Code	<b>INV</b>
KVA Code	<b>K</b>	Frame	<b>254TC</b>
Enclosure	<b>Totally Enclosed Non Ventilated</b>	Overload Protector	<b>No</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>Y</b>
IP Code	<b>43</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Duty</b>	Starting Method	<b>Inverter Only</b>
Poles	<b>4</b>	Rotation	<b>Reversible</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>Aluminum</b>	Shaft Type	<b>T</b>
Overall Length	<b>26.87 in</b>	Frame Length	<b>14.75 in</b>
Shaft Diameter	<b>1.625 in</b>	Shaft Extension	<b>3.75 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS330110-1475</b>	Connection Diagram	<b>A-EE7308T</b>



FRONT END VIEW (SHAFT COVER REMOVED)



- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
  2. SEE CHART FOR "F2" CAPABILITY. IF YES, BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
  3. NAMEPLATE READ FROM CONDUIT BOX SIDE OF MOTOR.

DRAWING REVISION F	REVISION BY W. JOERGER	DATE 01-19-2018
ECO ECO-0131008	APPROVED BY E. HEIL	DATE 01-19-2018
ECO DESCRIPTION REMOVED 256 FRAME DASH -1475		
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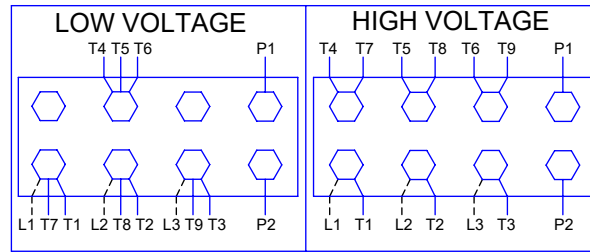
TOLERANCES UNLESS OTHERWISE SPECIFIED:

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]

1325	254	25.37 [644.44]	24.81 [630.17]	19.31 [490.50]	13.37 [339.60]	8.25 [209.55]	8.90 [226.06]	YES	8
1475	254	26.87 [682.54]	26.31 [668.27]	20.81 [528.60]	14.87 [377.70]	8.25 [209.55]	10.40 [264.16]	YES	8
DASH	FRAME	C1	C	AG	B	2F	BS	F1/F2	MTG HOLES
DRAWN BY MJK		Regal Beloit America, Inc.							
DATE 04-18-2005		DESCRIPTION <b>OUTLINE</b> 210 FR. - 254 MTG - ALUMINUM FRAME							
APPROVED BY CGD		DATE 08-18-2005		MATERIAL		PROCESS/FINISH			
REFERENCE		THIRD ANGLE PROJECTION		DRAWING NUMBER SS330110		SHEET 1 OF 1			

**HIGH VOLTAGE**



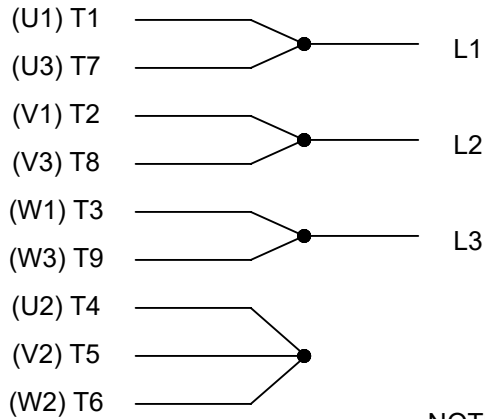
**THREE PHASE  
DUAL VOLTAGE MOTOR**

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 T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A

CERTIFICATION DATA SHEET

Model#: 254THTL5726 FH  
 CONN. DIAGRAM: A-EE7308T  
 OUTLINE: B-SS330110-1475

WINDING#: K2154371 NONE 1  
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
15	11.2	1800	1765	254TC	TENV	K	INV		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	40/20	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91.8	1/2 LOAD EFF: 90	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 76	3/4 LOAD PF: 70	1/2 LOAD PF: 56.4	91	SQ CAGE INV DUTY	22 / 11

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.6 LB-FT	310 / 155	140 LB-FT 314	170 LB-FT 381	105

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	1.6 LB-FT^2	0 LB-FT^2	0 SEC.	0	229 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.31374	0.31563	1.04706	1.5687	22.1508
RM	ZREF	XR	TD	TD0
2079	18.9	4	0.0115	0.2

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (ENAMEL)
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL		
DE	OPE				1045 HOT ROLLED (C-204)	ALUMINIUM		
BALL	BALL	POLYREX EM	T	NONE				
6309	6206							

THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs	THERMISTORS	CONTROL	SPACE /n HEATERS
TSTATS (NIC)	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  
 O  
 T  
 E  
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 \*

NONE	NONE	NONE	NONE HZ
NONE FT-LB	NONE V		

DATE: 06/23/2017 01:53:21 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 19-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



254HTL5726

Submittal

Data @ 460 V

Motor Load Data

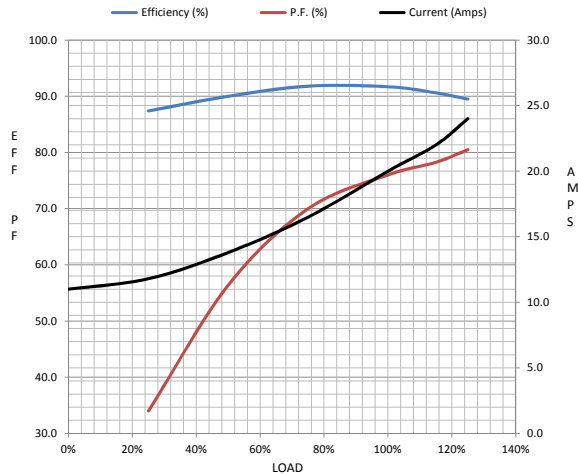
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	11.0	11.8	13.8	16.5	20.0	22.0	24.0	155
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.6	48.1	51.5	140
RPM	1800	1790	1785	1775	1765	1,761	1755	0
Efficiency (%)		87.4	90.0	91.8	91.7	90.6	89.5	
P.F. (%)	5.7	34.0	56.4	70.0	76.0	78.3	80.5	43.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1575	1765	1800
Current (Amps)	155	140	95.0	20.0	11.0
Torque (ft-lb)	140	130	170	44.6	0.00

Information Block

HP	15.0			
Sync. RPM	1800			
Frame	254			
Enclosure	TENV			
Construction	TTL			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1.0			
Temp Rise @ FL	105 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	1.60 Lb-Ft <sup>2</sup>			
Ref Wdg	K2154371 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	B-SS330110-1475			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3140	0.3160	1.0470	1.5690	22.1510



Speed -Torque Curve

