

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 213THFW7726  
Catalog No: Y994  
7 1/2, 1800, TEFC, 213TC, 3/60/230/460  
1000:1 Speed Ratio



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**REGAL**<sup>®</sup>



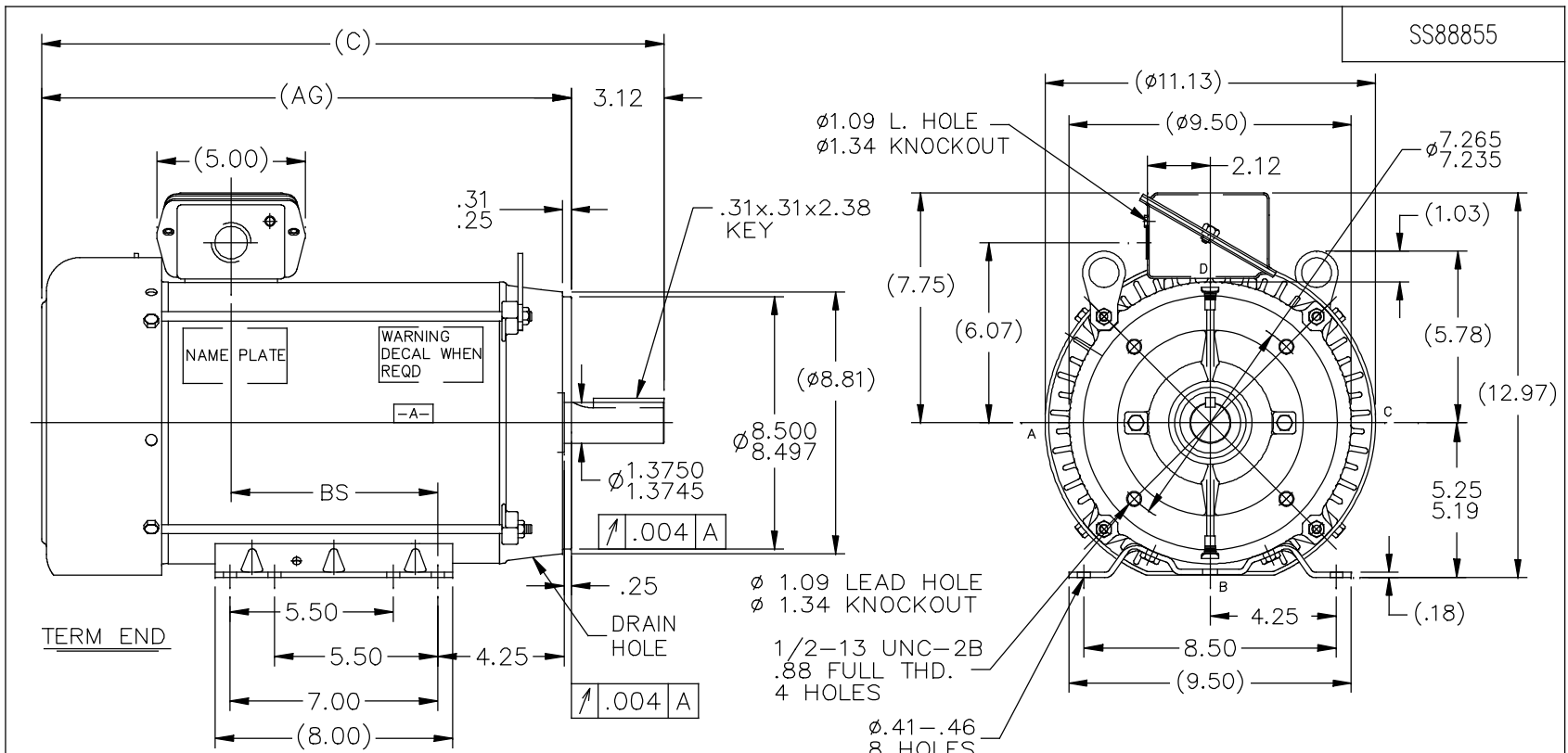
### Nameplate Specifications

Output HP	<b>7.50 Hp</b>	Output KW	<b>5.6 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>21.4/10.7 A</b>	Speed	<b>1770 rpm</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>89.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>H</b>	Design Code	<b>INV</b>
KVA Code	<b>K</b>	Frame	<b>213TC</b>
Enclosure	<b>Totally Enclosed Fan Cooled</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>Bolt-on Base</b>	Motor Orientation	<b>Horizontal Or Shaft Down</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>20.97 in</b>	Frame Length	<b>11.15 in</b>
Shaft Diameter	<b>1.375 in</b>	Shaft Extension	<b>3.12 in</b>
Assembly/Box Mounting	<b>F3</b>		
Outline Drawing	<b>A-SS88855-1115</b>	Connection Diagram	<b>A-EE7308</b>

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- NOTES:
1. NAMEPLATE LOC. BETWEEN C & D READ FROM LOC. C
  2. BOX CAN BE MOUNTED IN 90° STEPS.
  3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180° (EXCEPT AS NOTED.)
  4. BASE IS REMOVABLE.
  5. PROVISIONS ONLY FOR DRIP COVER.

DASH	FR.	C	AG	BS	MOUNTING
965	213T	19.47	16.35	5.43	
1115	213/15T	20.97	17.85	6.93	
1240	213/15T	22.22	19.10	8.18	F1 ONLY

		TOLERANCES UNLESS SPECIFIED		REGAL™ Regal Beloit America, Inc.		DRAWN NJS 04-25-2003					
		DEC.	INCHES			CHK DRS 04-25-2003					
		X	±.1			APPD TB 04-25-2003					
		.XX	±.03	TITLE OUTLINE - TEFC		SCALE 1=5					
2	ADDED WARNING DECAL	MVG	12/19/17	GR	.XXX	±.005	REF				
1	NEW DRAWING	NJS	04-25-2003	TB	.XXXX	±.0005	FMF				
NO.	REVISION	BY & DATE	CHK	ANG	FINISH		PREV				
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	CAD FILE ss88855		SIZE	DRAWING NO.	PAGE	OF	REV.
				DIST	LB	A	SS88855			2	

EE7308

THREE PHASE  
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

L1 — WHITE  
L2 — RED  
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02			SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
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							DIST WP					



**CERTIFICATION DATA SHEET**

**Model#:** 213THFW7726 BB      **WINDING#:** K2134228 NONE 1  
**CONN. DIAGRAM:** A-EE7308      **ASSEMBLY:** F3  
**OUTLINE:** A-SS88855-1115

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.6	1800	1770	213TC	TEFC	K	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	21.4/10.7	INVERTER ONLY	CONTINUOUS	H3	1.0	40	3300

FULL LOAD EFF: 89.5	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 72.5	3/4 LOAD PF: 65	1/2 LOAD PF: 52	87.5	SQ CAGE INV DUTY	12.4 / 6.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	152 / 76	61 LB-FT 274	80 LB-FT 359	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.75 LB-FT^2	0 LB-FT^2	0 SEC.	0	125 LBS.

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

R1	R2	X1	X2	XM
0.70686	0.48762	2.38518	3.20922	41.3532

RM	ZREF	XR	TD	TD0
3519.18	37.8	3.7	0.012	0.245

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	BOLT-ON	HORIZONTAL OR SHAFT DOWN	FALSE	NONE	PROVISIONS ONLY	NONE	BLACK (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL
BALL	BALL						
6309	6206						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs	NONE	FALSE	NONE VOLTS
NONE	NOT	NONE	NONE			

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE

\*  
N  
O  
T  
E  
S  
\*

NONE	P/N	NONE
NONE	NONE	
- FT-LB	NONE V	NONE Hz

DATE: 06/21/2017 11:02:02 AM  
FORM 3531 REV.3 02/07/99  
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Data Sheet

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



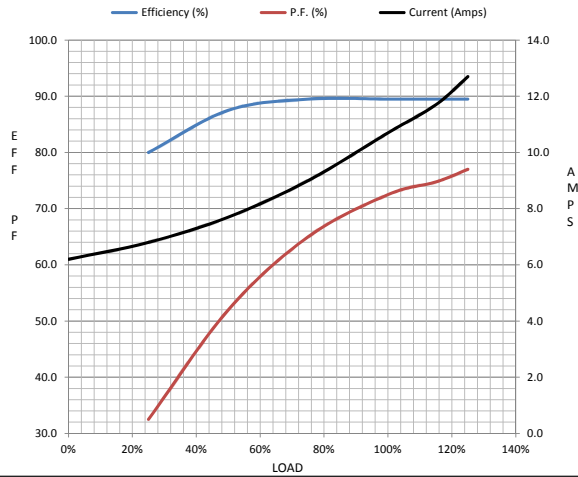
213THFW7726

Submittal

Data @ 460 V

Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	6.2	6.8	7.7	9.0	10.7	11.7	12.7	76.0	
Torque (ft-lb)	0.00	5.5	11.0	16.8	22.3	25.2	28.0	61.0	
RPM	1800	1792	1785	1778	1770	1,766	1760	0	
Efficiency (%)		80.0	87.5	89.5	89.5	89.5	89.5		
P.F. (%)	6.5	32.5	52.0	65.0	72.5	74.8	77.0	43.0	

Motor Speed Data						Information Block	
	LR	Pull-Up	BD	Rated	Idle		
Speed (RPM)	0	700	1600	1770	1800	HP	7.5
Current (Amps)	76.0	68.0	45.0	10.7	6.2	Sync. RPM	1800
Torque (ft-lb)	61.0	72.0	80.0	22.3	0.00	Frame	213



Enclosure	TEFC			
Construction	TFW			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.75 Lb-FT²			
Ref Wdg	K2134228 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	A-SS88955-1115			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7070	0.4880	2.3850	3.2090	41.3530

