

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 215THFS9026  
Catalog No: W539  
10,1800,TEFC,215T,3/60/460  
IEEE 841



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**REGAL**<sup>®</sup>



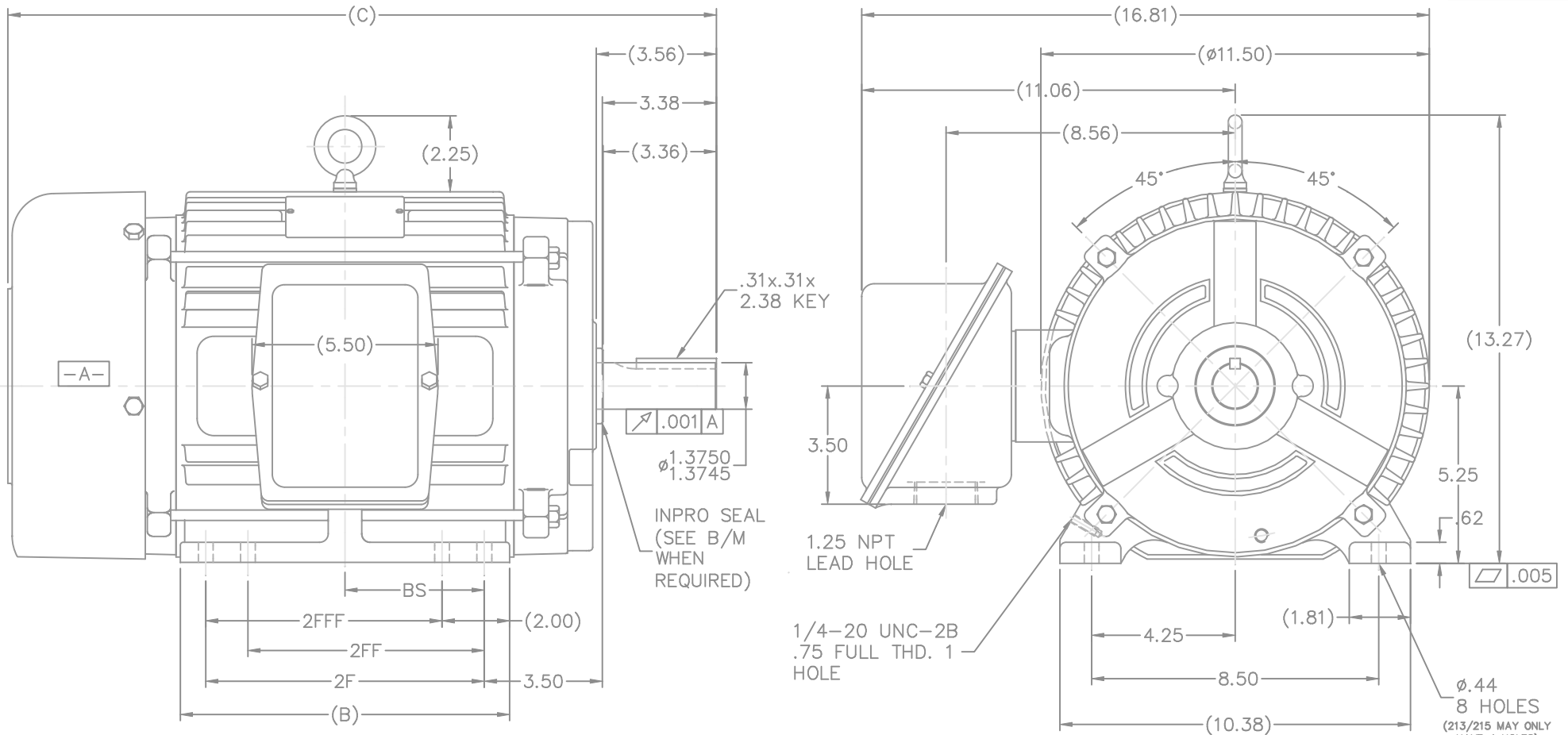
### Nameplate Specifications

Output HP	<b>10 HP</b>	Output KW	<b>7.5 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>12.5 A</b>	Speed	<b>1765 RPM</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>215T</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6307</b>
Opp Drive End Bearing Size	<b>6206</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>56</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</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>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>19.73 in</b>	Frame Length	<b>8.75 in</b>
Shaft Diameter	<b>1.375 in</b>	Shaft Extension	<b>3.56 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS87359E-875</b>	Connection Diagram	<b>A-EE7300</b>

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NOTES:

1. BOX CAN BE ROTATED IN 90° STEPS.
2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR

DASH	FRAME	B	2F	2FF	2FFF	BS	C
875	213/5T	8.50	7.00	5.50	5.50	3.50	19.73
1000	213T	9.75	8.25	5.50	5.50	4.12	20.98
1000	215T	9.75	8.25	7.00	7.00	4.12	20.98

		TO TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRWN DRS 09-15-1999
NO.	REVISION	BY & DATE	CHK	ANG	FINISH	PREV
4	SHOW FLAT ON FAN GUARD	RJW 02-05-2007	ML	DEC.	INCHES	CHK ML 09-15-1999
3	REMOVED DASH 725, 875(215) - CLARIFIED HOLE QTY	TAT 04-08-2004	ML	.X	±.1	APPD GK 09-15-1999
2	UPDATED EYEBOLT AND STUD GEOMETRY AND	DRS 01-22-2002	ML	.XX	±.03	SCALE 11=32
2	REMOVED DE BRG CAP MTG HOLES CN 31447			.XXX	±.005	REF
1	NEW DRAWING	DRS 09-15-1999		.XXXX	±.0005	FMF
				ANG	±7'30"	
			RFP	CAD FILE ss87359e		SIZE DRAWING NO. PAGE OF REV.
			DIST	LB	B	SS87359E 4

**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**

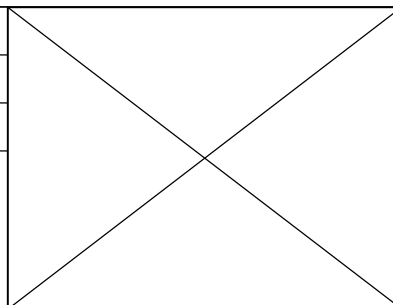




A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

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

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

CERTIFICATION DATA SHEET

Model#: 215THFS9026 AF WINDING#: K2154249 NONE 2  
 CONN. DIAGRAM: A-EE7300 ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS87359E-875

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10	7.5	1800	1765	215T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	12.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82	3/4 LOAD PF: 78	1/2 LOAD PF: 68	91	SQ CAGE INV RATED	5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.8 LB-FT	80	60 LB-FT 201	81 LB-FT 272	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	1.2 LB-FT^2	192 LB-FT^2	20 SEC.	2	240 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	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
6307	6206						

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

If Inverter equals NONE, contact factory for further information

\*  
N  
O  
T  
E  
S  
\*

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

DATE: 06/22/2017 07:06:26 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 29-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



215THFS9026

Submittal

Data @ 460 V

Motor Load Data

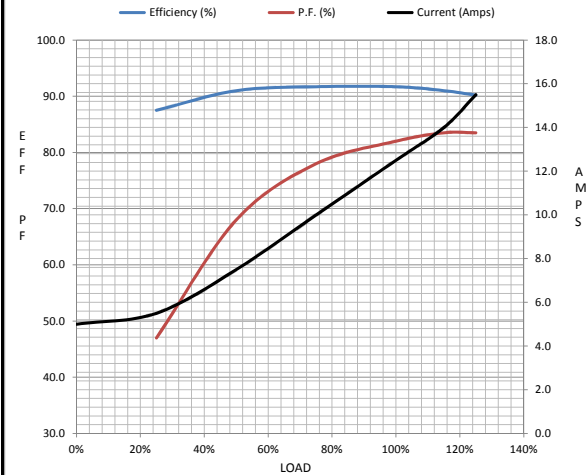
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	5.0	5.5	7.5	10.0	12.5	14.0	15.5	80.0
Torque (ft-lb)	0.00	7.5	14.5	22.0	29.8	34.5	37.5	60.0
RPM	1800	1790	1785	1775	1765	1,755	1750	0
Efficiency (%)		87.5	91.0	91.7	91.0	91.0	90.2	
P.F. (%)	6.5	47.0	68.0	78.0	82.0	83.5	83.5	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1765	1800
Current (Amps)	80.0	72.0	46.0	12.5	5.0
Torque (ft-lb)	60.0	54.0	81.0	29.8	0.00

Information Block

HP	10.0			
Sync. RPM	1800			
Frame	215			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	1.20 Lb-FT²			
Ref Wdg	K2154249 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS87359E-875			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.5400	0.4880	2.0930	3.2090	51.1200



Speed -Torque Curve

