

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 284THFNA19102
Catalog No: W543
10,900,TEFC,284T,3/60/460
Severe Duty



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REGAL[®]



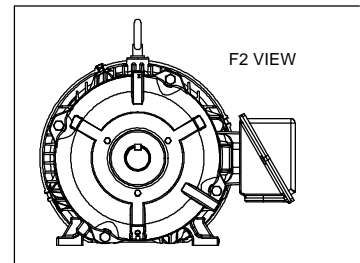
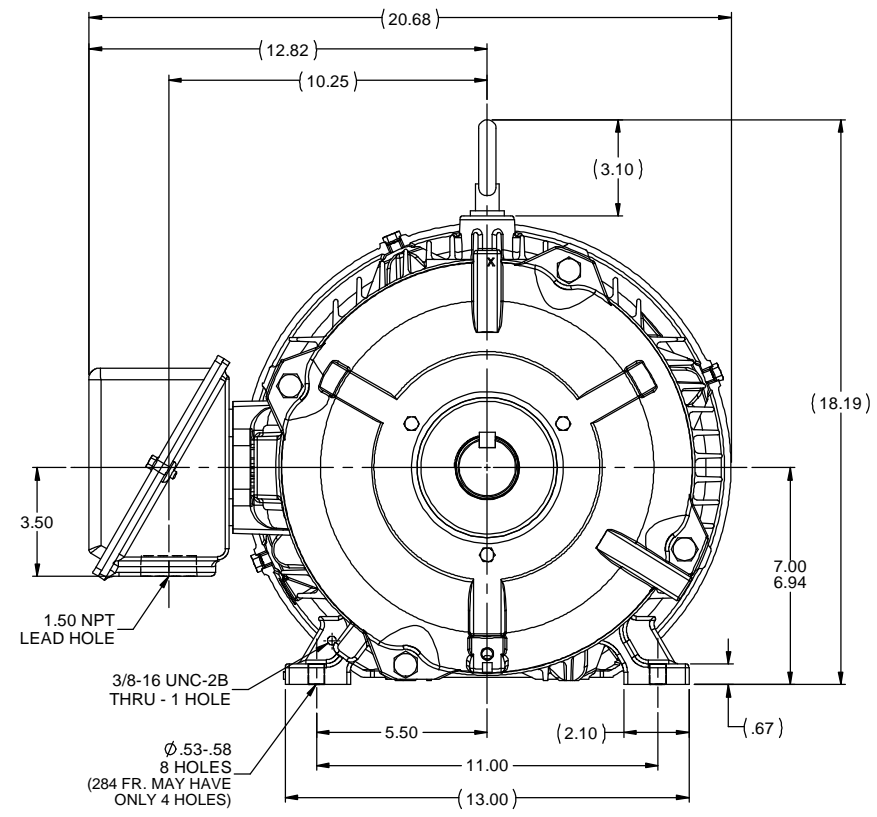
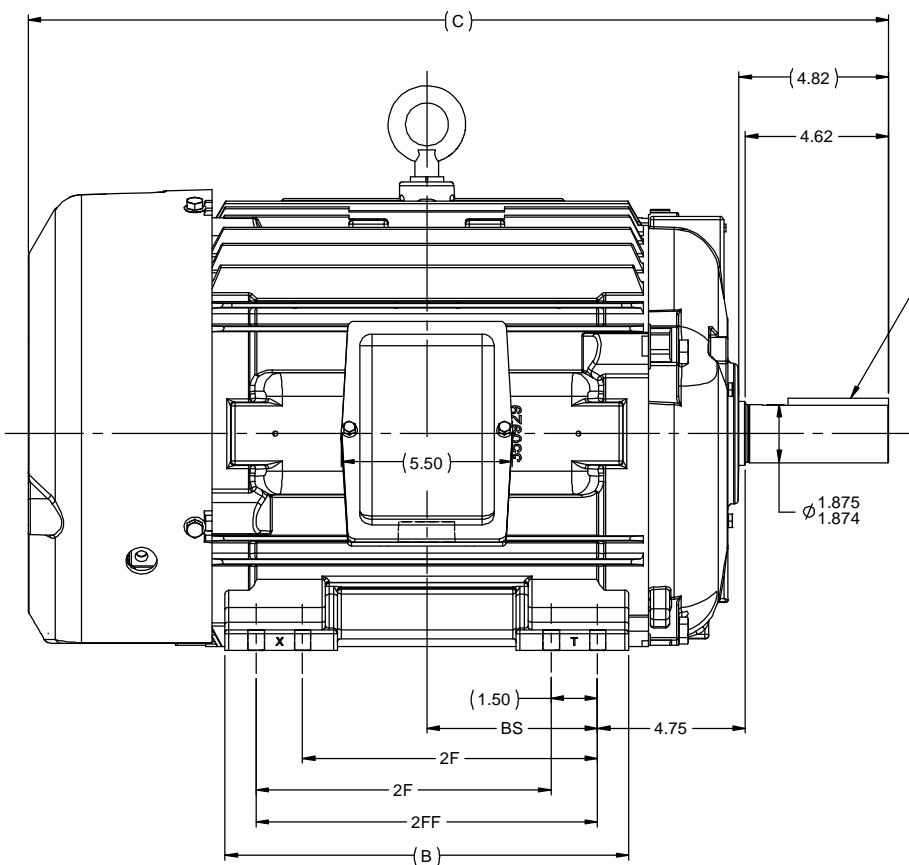
Nameplate Specifications

Output HP	10 Hp	Output KW	7.5 kW
Frequency	60 Hz	Voltage	460 V
Current	15.5 A	Speed	880 rpm
Service Factor	1.15	Phase	3
Efficiency	90.2 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	F	Frame	284T
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6311
Opp Drive End Bearing Size	6210	UL	Recognized
CSA	Y	CE	Y
IP Code	56		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
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	4.82 in
Assembly/Box Mounting	F1/F2 Capable		
Outline Drawing	B-SS311057-1275	Connection Diagram	A-EE7300

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- NOTES:
 1. CONDUIT BOX CAN BE ROTATED UP TO 270 ° FROM ITS ORIGINAL POSITION.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180 °.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

1275	284T	26.21	12.50	9.50	---	4.75
1425	284/286T	27.71	13.00	9.50	11.00	5.50
DASH	FRAME	C	B	2F	2FF	BS

		TOLERANCES UNLESS SPECIFIED		marathon electric		DRAWN
		DEC	INCHES			CAV 10-18-2000
4	UPDATED TO NEW FRAME DESIGN	MU106205	MSG 08-22-2012	MSG	x	±.1
3	REDRAWN IN AUTOCAD - NO CHANGE		TAT 06-29-2004	ML	xx	±.03
2	ADDED NOTE 3	MU35810	DAH 02-06-2001	ML	xxx	±.005
1	NEW DRAWING	MU34031	MSG 08-23-2012	ML	xxxx	±.0005
NO	REVISION	BY & DATE	CHK	LANG	± 1/2°	FINISH
			RFP 10-18-2000		PREV	
			NETWORK FILE NAME SS311057		SIZE	DRAWING NO
					B	SS311057
						REV
						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 AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.		
		DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
MATERIAL	PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 284THFNA19102 BB **WINDING#:** K284842 NONE 7
CONN. DIAGRAM: A-EE7300 **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS311057-1275

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10	7.5	900	880	284T	TEFC	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	15.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 90.2	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 67	3/4 LOAD PF: 60	1/2 LOAD PF: 48	89.5	SQ CAGE INV RATED	9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
60 LB-FT	72	85 LB-FT 140	132 LB-FT 220	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
54 dBA	64 dBA	4 LB-FT^2	- LB-FT^2	20 SEC.	-	460 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	1045 HOT ROLLED (C-204)	CAST IRON
6311	6210						

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

INVERTER TORQUE: CONSTANT 10:1
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

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DATE: 06/23/2017 07:32:08 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 15-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



284THFNA19102

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	9.0	9.5	11.0	13.0	15.5	17.5	19.0	72.0
Torque (ft-lb)	0.00	14.5	29.5	44.5	60.0	69.5	76.0	85.0
RPM	900	895	890	885	880	875	872	0
Efficiency (%)		82.5	88.5	90.2	90.2	89.5	88.5	
P.F. (%)	5.0	30.0	48.0	60.0	67.0	69.5	71.0	28.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	500	805	880	900
Current (Amps)	72.0	68.0	42.0	15.5	9.0
Torque (ft-lb)	85.0	75.0	132	60.0	0.00

Information Block				
HP	10.0			
Sync. RPM	900			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	50 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	4.0 Lb-Ft²			
Ref Wdg	K284842 NONE			
Sound Pressure @ 1M	54 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS311057-1275			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4690	0.4540	2.4990	3.8910	28.8260

