

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 286TTFNA16106
Catalog No: L415B
15,900, TEFC, 286T, 3/60/230/460
Totally Enclosed Fan Cooled (TEFC)



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E

REGAL[®]



Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	44.0/22.0 A	Speed	875 rpm
Service Factor	1.15	Phase	3
Efficiency	90.2 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	F	Frame	286T
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	43		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
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	28.16 in	Frame Length	14.25 in
Shaft Diameter	1.875 in	Shaft Extension	4.82 in
Assembly/Box Mounting	F1/F2 Capable		
Outline Drawing	B-SS311111-1425	Connection Diagram	A-EE7308

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 06/29/2018

4

3

Uncontrolled Copy

2

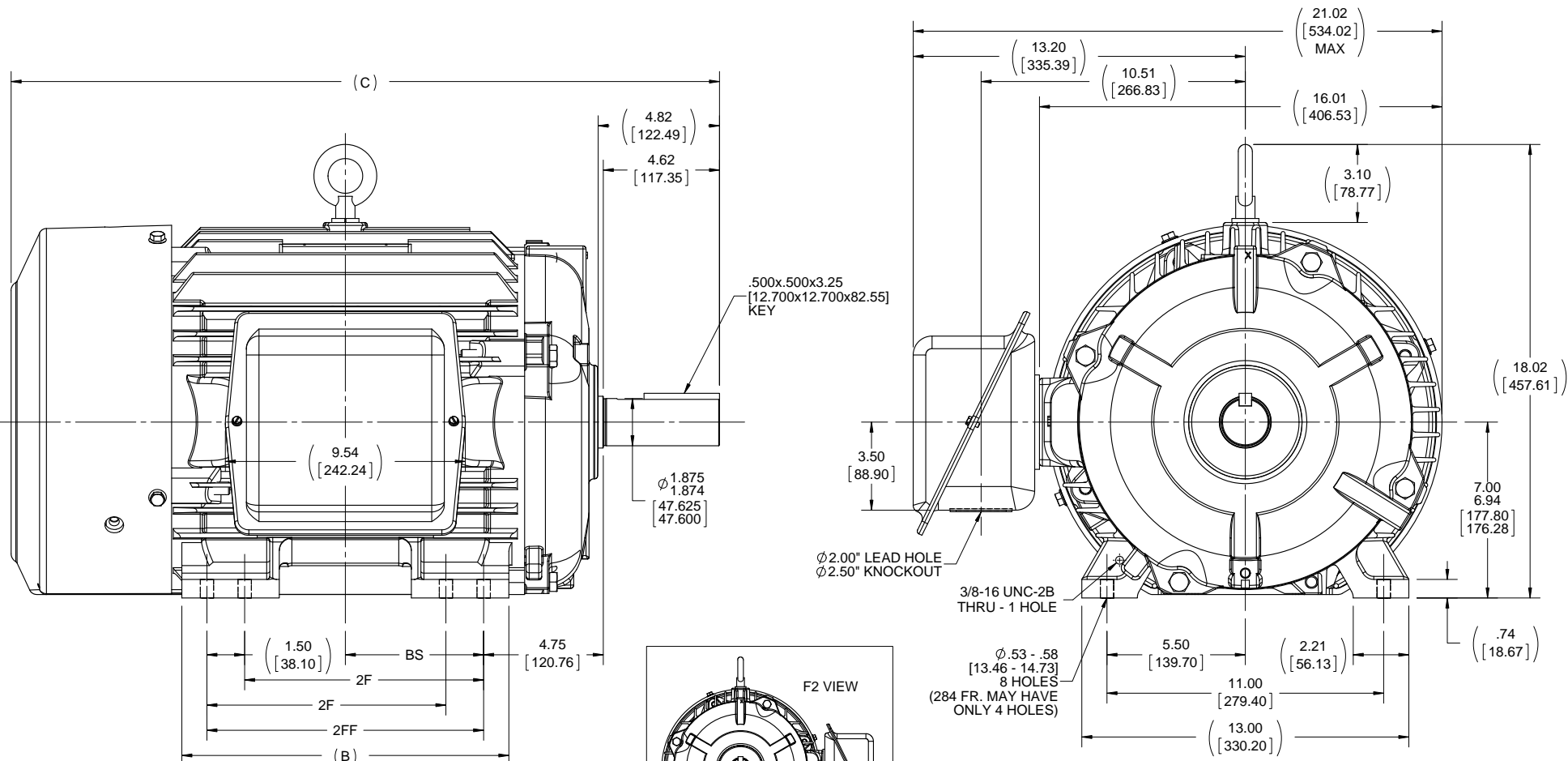
1

B

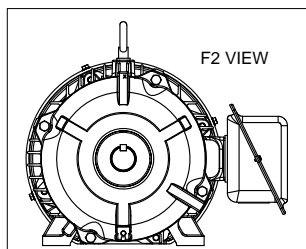
B

A

A



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



DASH	FRAME	B	C	2F	2FF	BS
1275	284T	12.50 [317.50]	26.66 [677.16]	---	9.50 [241.30]	4.75 [120.65]
1425	284/ 286T	13.00 [330.20]	28.16 [715.26]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]

DRAWING REVISION D	REVISION BY M GERTSCHEN	DATE 12-05-2016
ECO ECO-0113979	APPROVED BY T VUE	DATE 12-05-2016
ECO DESCRIPTION ADDED F2 VIEW		

COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.
 PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. (OWNER) AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

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]
 CORNER FILLETS: .02 [0.51]
 MACHINED SURFACES: 200 INCH 5.1 mm SHOWN IN [BRACKETS]

DRAWN BY CAV	DATE 01-31-2001
APPROVED BY DD	DATE 01-31-2001
REFERENCE	THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 280T FR. - TEFC - 12.50 LAM.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS311111
	SHEET 1 OF 1

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				
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 ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5	REV. 5
							DIST WP					



CERTIFICATION DATA SHEET

Model#: 286TTFNA16106 AA **WINDING#:** K286839 NONE 6
CONN. DIAGRAM: A-EE7308 **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS311111-1425

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&10	11.2&7.5	900	875&730	286T	TEFC	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	44/22&39/19.5	ACROSS THE LINE	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 90.2&88.5	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 70.5&66	3/4 LOAD PF: 62.5	1/2 LOAD PF: 50	88.5	SQ CAGE IND RUN	25 / 12.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
90 LB-FT	210 / 105	120 LB-FT 133	200 LB-FT 222	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
55 dBA	65 dBA	4.8 LB-FT^2	- LB-FT^2	20 SEC.	-	550 LBS.

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

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

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: NONE
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

*
N
O
T
E
S
*

DATE: 06/27/2017 03:55:16 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



286TTFNA16106

Submittal

Data @ 460 V

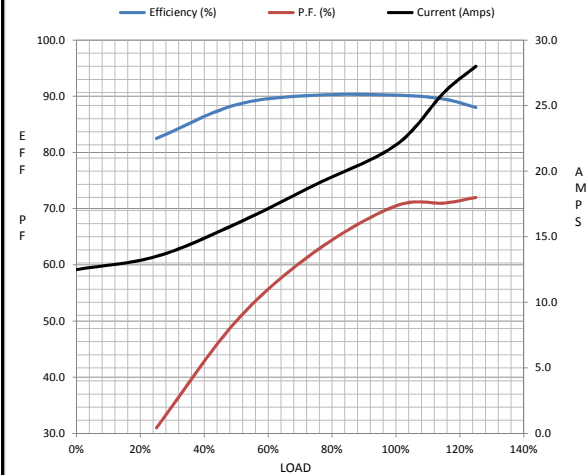
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.5	13.5	16.0	19.0	22.0	26.0	28.0	105
Torque (ft-lb)	0.00	22.0	44.5	67.0	90.0	104	114	120
RPM	900	895	890	885	875	870	865	0
Efficiency (%)		82.5	88.5	90.2	90.2	89.5	88.0	
P.F. (%)	5.5	31.0	50.0	62.5	70.5	71.0	72.0	30.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	450	810	875	900
Current (Amps)	105	95.0	65.0	22.0	12.5
Torque (ft-lb)	120	105	200	90.0	0.00

Information Block				
HP	15.0			
Sync. RPM	900			
Frame	286			
Enclosure	TEFC			
Construction	TFN			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	4.8 Lb-Ft ²			
Ref Wdg	K286839 NONE			
Sound Pressure @ 1M	55 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS31111-1425			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3670	0.3520	1.8940	2.6790	21.2800



Speed -Torque Curve

