

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 284TTFNA14102

Catalog No: L414A

XRI® General Purpose General Purpose Motor, 10 & 7.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
900 & 750 RPM, 284T Frame, TEFC



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**RegalRexnord**

## Nameplate Specifications

Phase	3	Output HP	10 & 7.5 Hp
Output KW	7.5 & 5.6 kW	Voltage	230/460 & 190/380 V
Speed	880 & 730 rpm	Service Factor	1.15 & 1.15
Frame	284T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 & 87.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	33/16.5 & 31/15.5 A	Power Factor	64
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

## Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	8	Rotation	Reversible
Resistance Main	.745 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	26.66 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-SS311111-1275	Connection Drawing	A-EE7308

4

3

Uncontrolled Copy

2

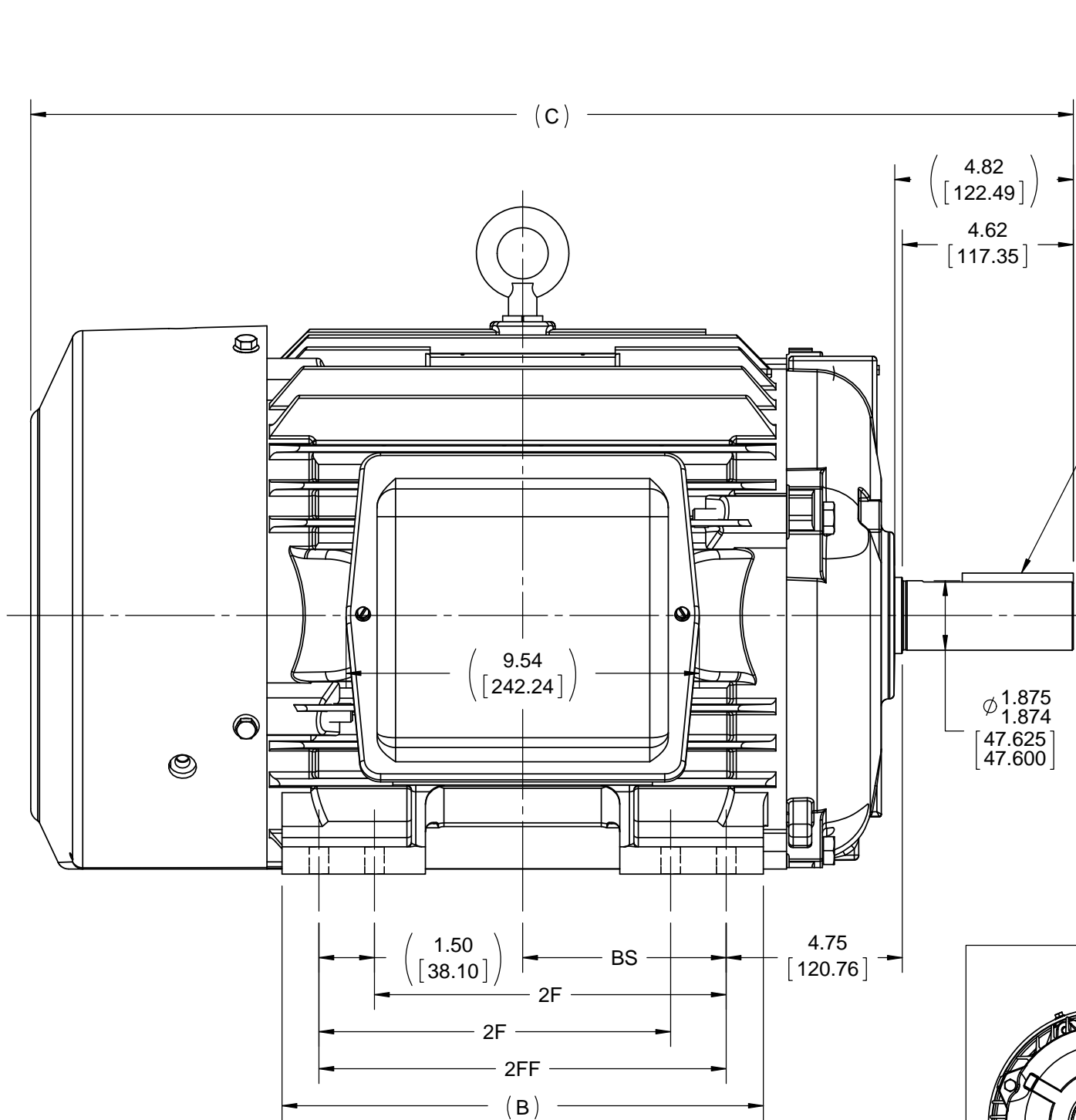
1

B

B

A

A



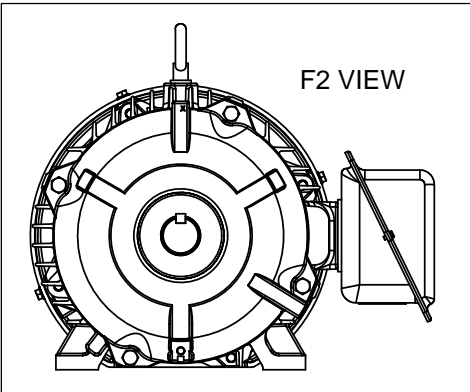
.500x.500x3.25  
[12.700x12.700x82.55]  
KEY

Ø1.875  
1.874  
[47.625]  
[47.600]

Ø2.00" LEAD HOLE  
Ø2.50" KNOCKOUT

3/8-16 UNC-2B  
THRU - 1 HOLE

Ø.53 - .58  
[13.46 - 14.73]  
8 HOLES  
(284 FR. MAY HAVE  
ONLY 4 HOLES)



F2 VIEW

3.50  
[88.90]

( 21.02 )  
[ 534.02 ]  
MAX

( 13.20 )  
[ 335.39 ]

( 10.51 )  
[ 266.83 ]

( 16.01 )  
[ 406.53 ]

( 3.10 )  
[ 78.77 ]

( 18.02 )  
[ 457.61 ]

7.00  
6.94  
[ 177.80 ]  
[ 176.28 ]

( .74 )  
[ 18.67 ]

5.50  
[ 139.70 ]

( 2.21 )  
[ 56.13 ]

11.00  
[ 279.40 ]

( 13.00 )  
[ 330.20 ]

- 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		
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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] CORNER FILLETS: .02 [0.51] MACHINED SURFACES: 200 INCH 5.1 mm			
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



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		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		REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
					±7'30"		PREV	
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					DIST WP		A	EE7308 5

## CERTIFICATION DATA SHEET

Model#: 284TTFNA14102 AA  
 CONN. DIAGRAM: A-EE7308  
 OUTLINE: B-SS311111-1275

WINDING#: K284834 R1 1  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10&7 1/2	7.5&5.6	900	880&730	284T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	33/16.5&31/15 .5	ACROSS THE LINE	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 89.5&87.5	3/4 LOAD EFF: 88.5	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 64&63	3/4 LOAD PF: 57.5	1/2 LOAD PF: 46	87.5	SQ CAGE IND RUN	20 / 10

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
60 LB-FT	142 / 71	80 LB-FT 133	130 LB-FT 217	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	4 LB-FT^2	- LB-FT^2	25 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	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6311	6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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: 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

DATE: 06/27/2017 01:10:36 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



284TTFNA14102

Submittal

Data @ 460 V

## Motor Load Data

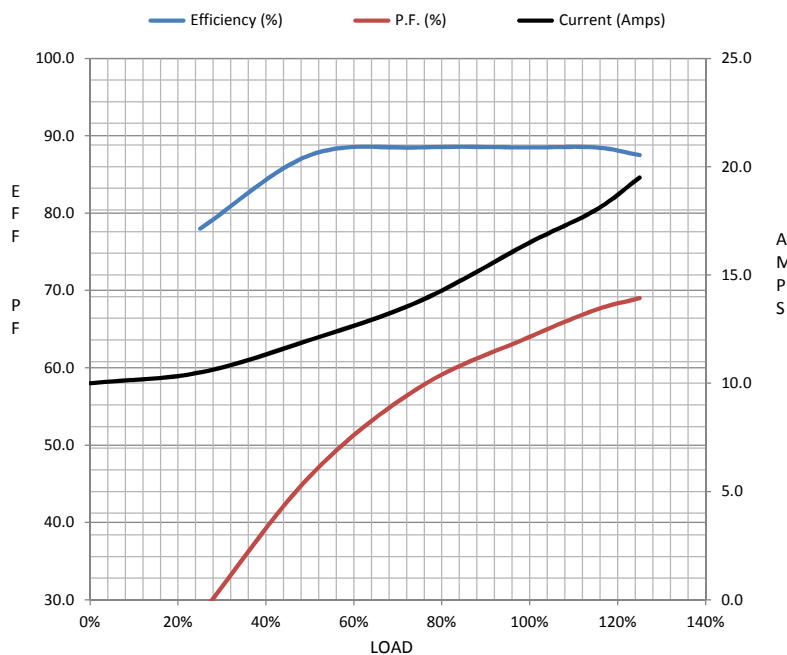
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.0	10.5	12.0	13.8	16.5	18.0	19.5	71.0	
Torque (ft-lb)	0.00	14.7	29.5	44.5	60.0	69.5	75.5	80.0	
RPM	900	895	890	885	880	875	872	0	
Efficiency (%)		78.0	87.5	88.5	88.5	88.5	87.5		
P.F. (%)	5.0	28.0	46.0	57.5	64.0	67.5	69.0	26.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	800	880	900
Current (Amps)	71.0	60.0	45.0	16.5	10.0
Torque (ft-lb)	80.0	72.0	130	60.0	0.00

## Information Block

HP	10.0			
Sync. RPM	900			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/38(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 wk <sup>2</sup>	4.0 Lb-Ft <sup>2</sup>			
Ref Wdg	K284834 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS311111-1275			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4740	0.4710	2.3740	3.5220	25.1910



## Speed - Torque Curve

