

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 284TTFNA14102
Catalog No: L414A
10,900, TEFC, 284T, 3/60/230/460
Totally Enclosed Fan Cooled (TEFC)



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REGAL[®]



Nameplate Specifications

Output HP	10 Hp	Output KW	7.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	33.0/16.5 A	Speed	880 rpm
Service Factor	1.15	Phase	3
Efficiency	89.5 %	Duty	Continous
Insulation Class	F	Design Code	B
KVA Code	G	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	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	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 Diagram	A-EE7308

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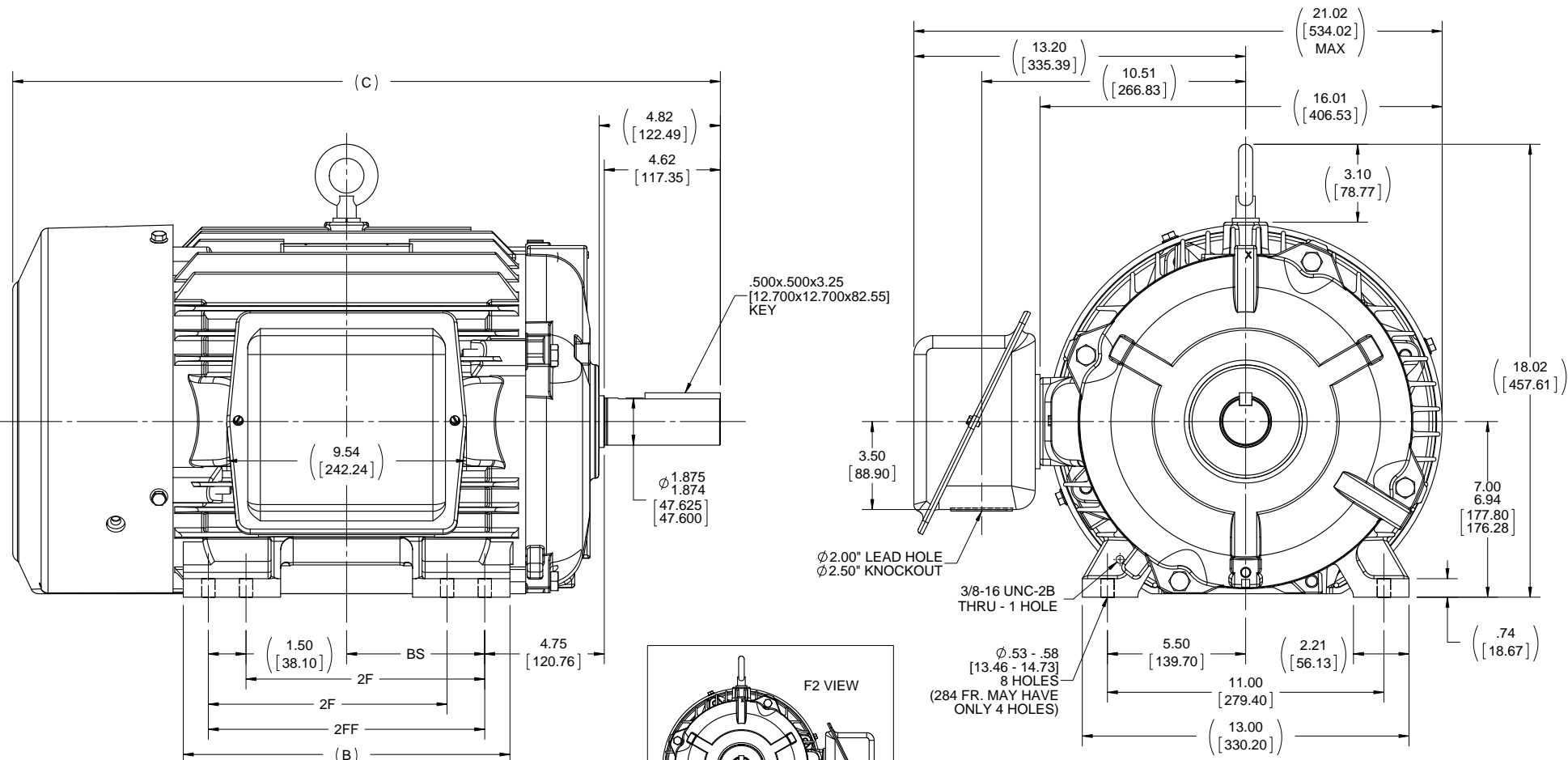
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B

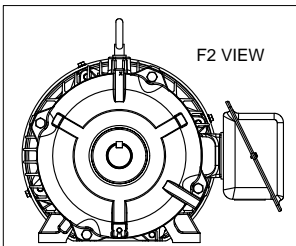
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A

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		

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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 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					



Regal Beloit America, Inc.

REGAL™
3Ø - DUAL VOLTAGE MOTOR

CERTIFICATION DATA SHEET

Model#: 284TFNA14102 AA **WINDING#:** K284834 R1 1
CONN. DIAGRAM: A-EE7308 **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS311111-1275

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	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6311	6210						

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

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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

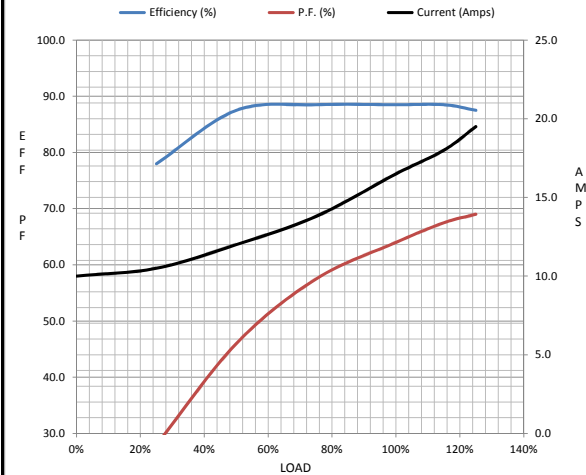
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	10.5	12.0	13.8	16.5	18.0	19.5	71.0
Torque (ft-lb)	0.00	14.7	29.5	44.5	60.0	69.5	75.5	80.0
RPM	900	895	890	885	880	875	872	0
Efficiency (%)		78.0	87.5	88.5	88.5	88.5	87.5	
P.F. (%)	5.0	28.0	46.0	57.5	64.0	67.5	69.0	26.0

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	30/460#190/38V			
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 ²	4.0 Lb-Ft ²			
Ref Wdg	K284834 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS31111-1275			
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

