PRODUCT INFORMATION PACKET

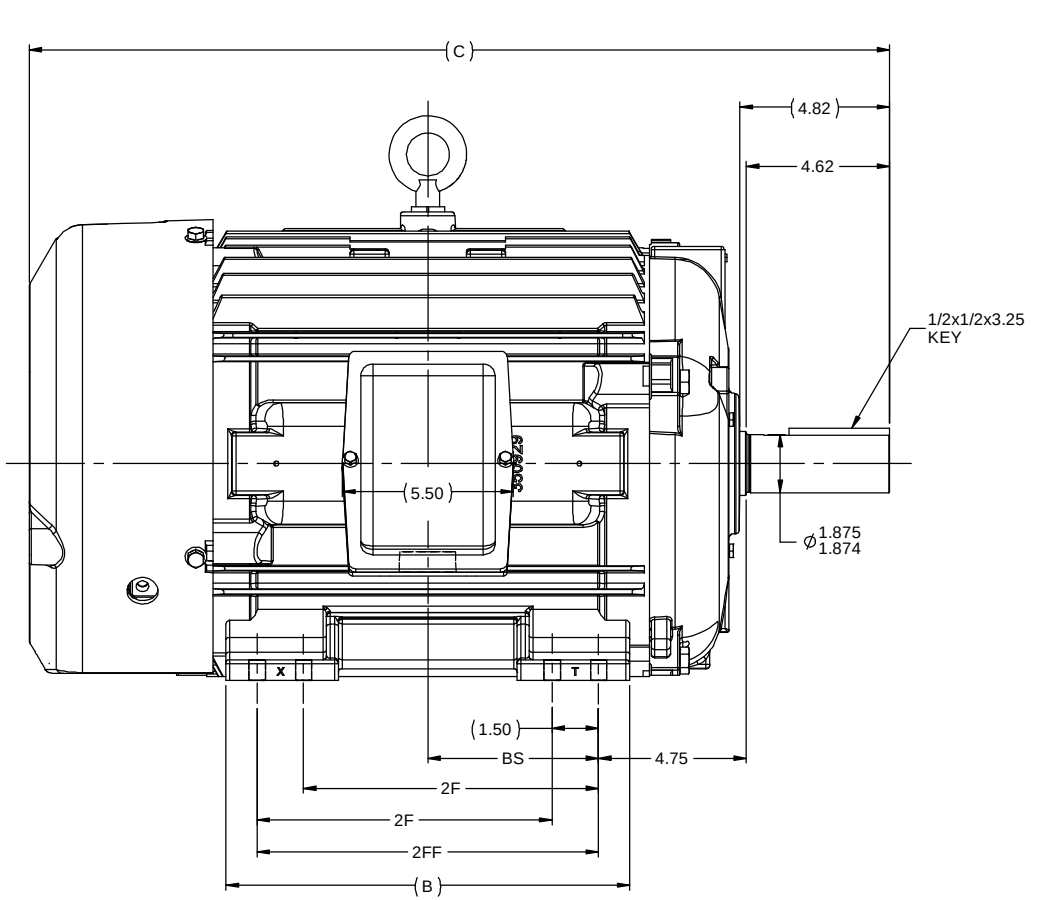
Model No: 284TTFNA16851
Catalog No: E622-P
25 HP, Severe Duty Motors, 3 phase, 1800 RPM, 460 V, 284T Frame, TEFC
Severe Duty Motors

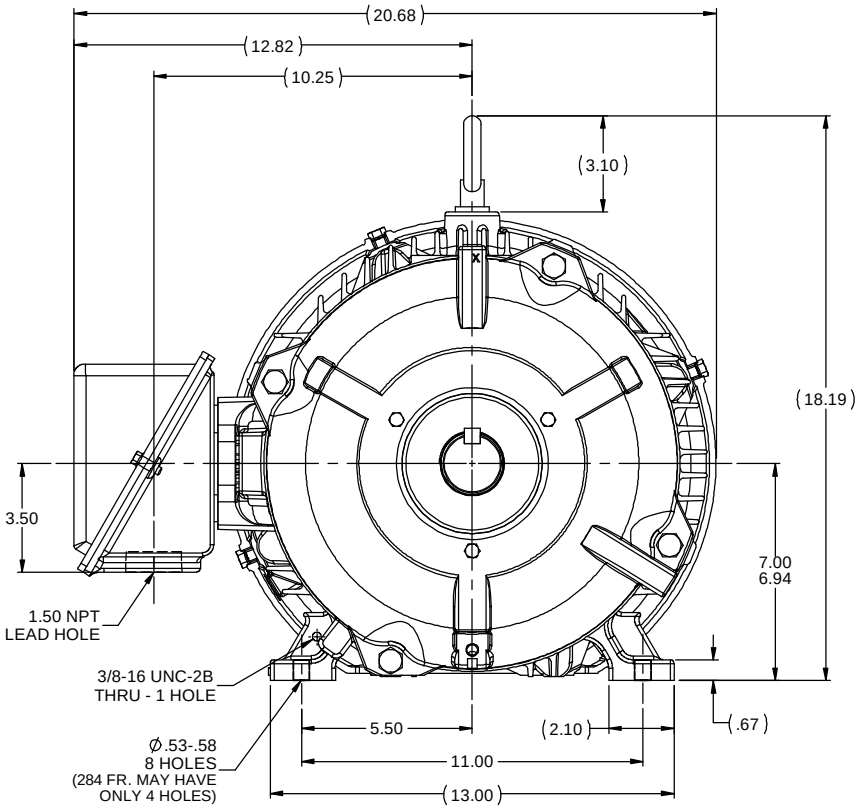
Nameplate Specifications

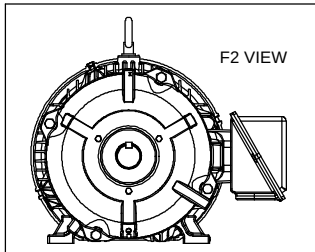
Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	460 V
Current	31.0 A	Speed	1772 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.271 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	26.21 in
Frame Length	12.75 in	Shaft Diameter	1.875 in
Shaft Extension	4.82 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	EE7300	Outline Drawing	SS311057-1275







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.

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

NO	REVISION	BY & DATE	CHK
4	UPDATED TO NEW FRAME DESIGN MU106205	MSG 08-22-2012	MSG
3	REDRAWN IN AUTOCAD - NO CHANGE	TAT 06-29-2004	ML
2	ADDED NOTE 3 MU35810	DAH 02-06-2001	ML
1	NEW DRAWING MU34031	MSG 08-23-2012	ML

TOLERANCES UNLESS SPECIFIED: DEC INCHES; .X ±.1; .XX ±.03; .XXX ±.005; .XXXX ±.0005; ANG ±1/2°

THIRD ANGLE PROJECTION

RFP 10-18-2000 | PREV | NETWORK FILE NAME SS311057

marathon electric

TITLE OUTLINE - TEFC - TGN
280T FR. - BB - STD - 12.50 LAM.

MAT'L | FINISH

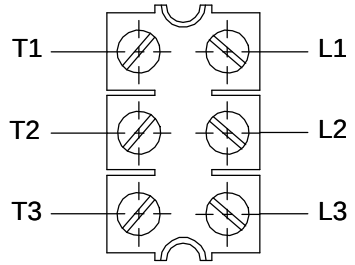
DRAWN CAV 10-18-2000
CHK ML 10-18-2000
APPR BW 10-18-2000
SCALE 1:4
REF
FMF MU34031
PAGE OF

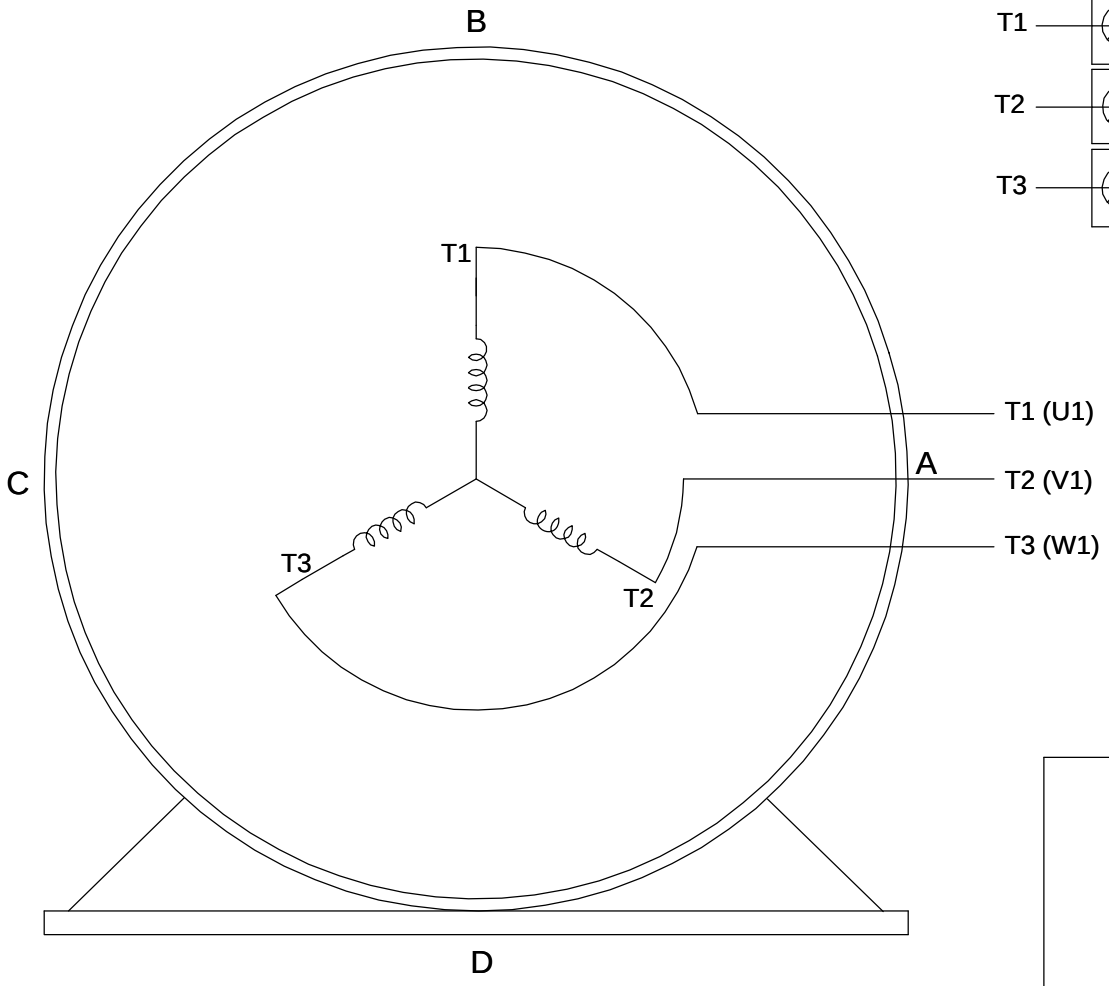
SIZE B | DRAWING NO SS311057 | REV 4

THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

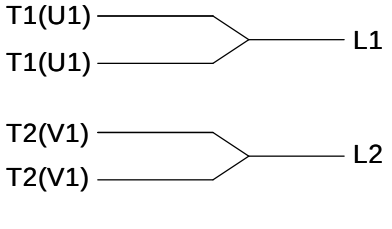
TERMINAL BLOCK WHEN SPECIFIED





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		

DRAWN BY: DA	
DATE: 03-26-1993	
APPROVED BY: TB	
DATE: 03-26-1993	
REFERENCE	
THIRD ANGLE PROJECTION	

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300	1 OF 1

CERTIFICATION DATA SHEET

Model#:	284TTFNA16851 AA	**WINDING#:**	K2844161 NONE 1
CONN. DIAGRAM:	EE7300	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	SS311057-1275		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1772	284T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	31	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81	3/4 LOAD PF: 76	1/2 LOAD PF: 65.5	93	SQ CAGE INV RATED	13

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	182	138 LB-FT 186	185 LB-FT 250	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	4.2 LB-FT^2	175 LB-FT^2	50 SEC.	2	475 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	NONE	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6311	BALL 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

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

*
NOTES
*

DATE: 06/21/2017 10:17:16 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 1/25/2019
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® Motors

284TTFNA16851

Submittal

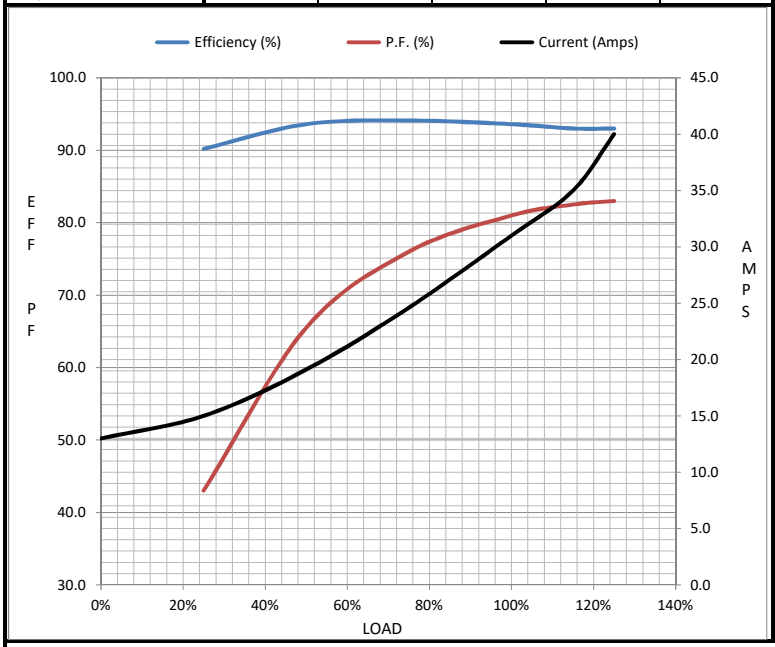
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	13.0	15.0	19.1	24.6	31.0	35.0	40.0	182	
Torque (ft-lb)	0.00	18.3	37.0	55.5	74.0	85.5	93.0	138	
RPM	1800	1793	1787	1780	1772	1,767	1763	0	
Efficiency (%)		90.2	93.6	94.1	93.6	93.0	93.0		
P.F. (%)	3.0	43.0	65.5	76.0	81.0	82.5	83.0	33.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1662	1772	1800
Current (Amps)	182	169	108	31.0	13.0
Torque (ft-lb)	138	117	185	74.0	0.00



Information Block

HP	25.0	
Sync. RPM	1800	
Frame	284	
Enclosure	TEFC	
Construction	TFS	
Voltage	460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	60	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	4.2	Lb-Ft²
Ref Wdg	K2844161 NONE	
Sound Pressure @ 1M	65	dBA
VFD Rating	CONSTANT 20:1	
Outline Dwg	SS311057-1275	
Conn. Diag	EE7300	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1810	0.1570	0.8480	1.0850	19.7750