

PRODUCT INFORMATION PACKET

Model No: 286TTFNA6580

Catalog No: E695

20 HP Severe Duty Motor, 3 phase, 1200 RPM, 575 V, 286T Frame, TEFC
Severe Duty Motors



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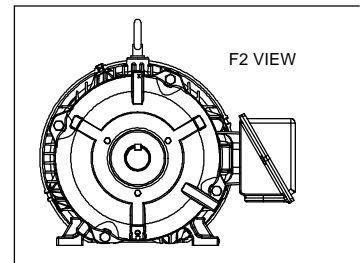
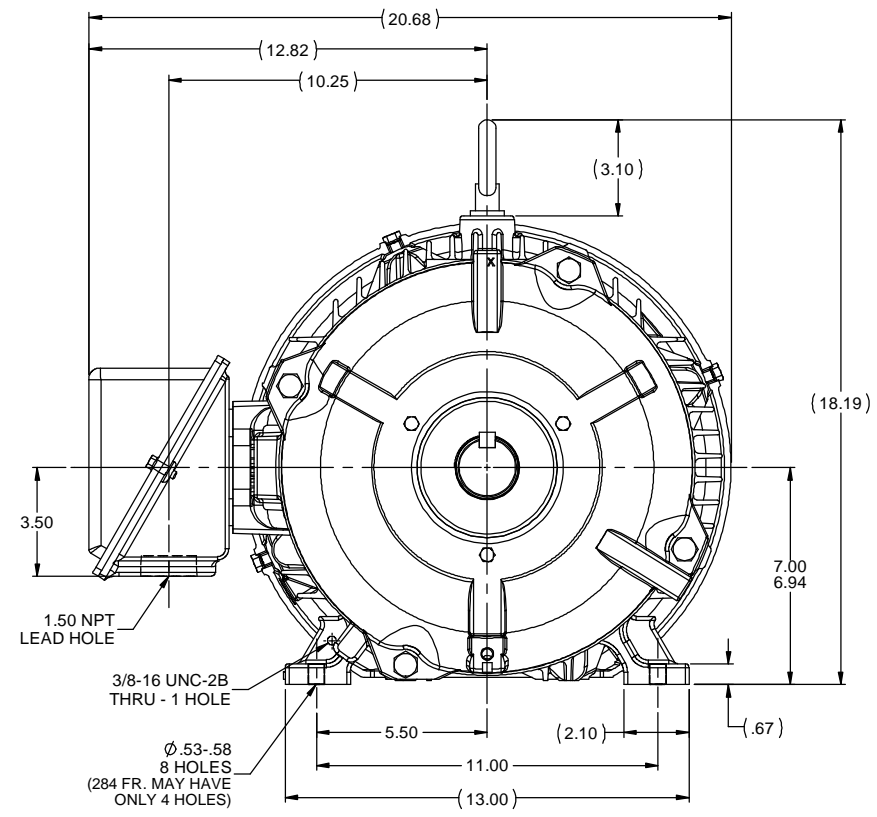
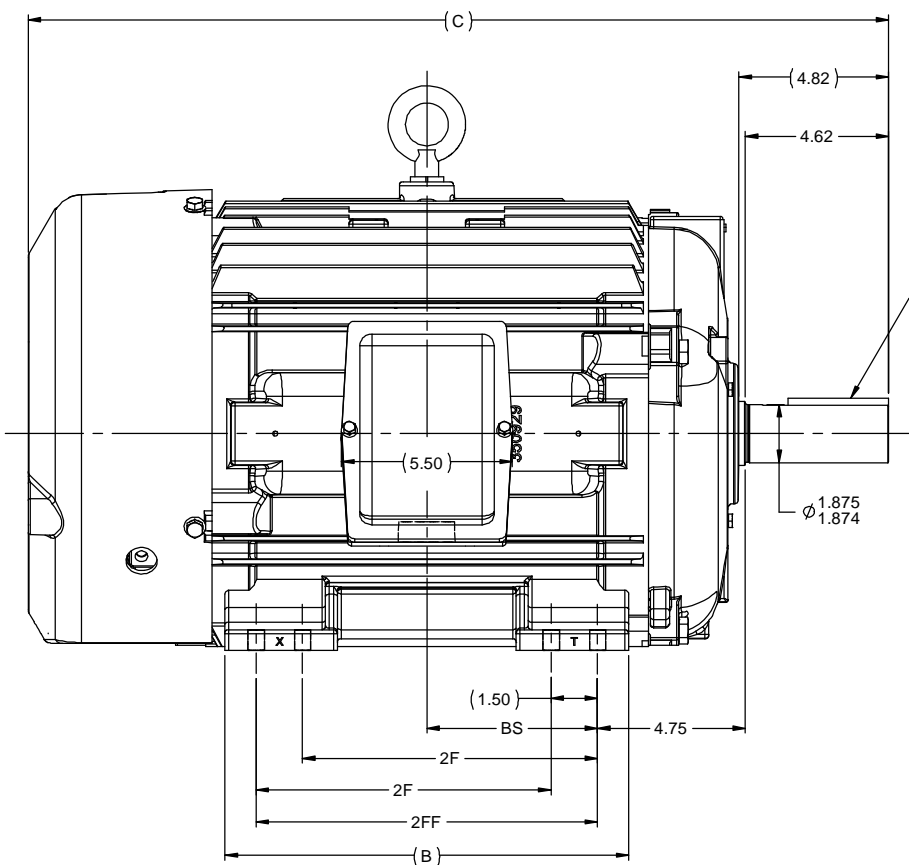
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	575 V
Current	21.5 A	Speed	1175 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	76
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286T	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	6	Rotation	Reversible
Resistance Main	.385 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	27.71 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-SS311057-1425	Connection Drawing	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 CAV 10-18-2000
		DEC INCHES				CHK ML 10-18-2000
4	UPDATED TO NEW FRAME DESIGN MU106205	MSG 08-22-2012	MSG	x	±.1	APPR BW 10-18-2000
3	REDRAWN IN AUTOCAD - NO CHANGE	TAT 06-29-2004	ML	xx	±.03	SCALE 1:4
2	ADDED NOTE 3 MU35810	DAH 02-06-2001	ML	xxx	±.005	REF
1	NEW DRAWING MU34031	MSG 08-23-2012	ML	xxxx	±.0005	FMF MU34031
NO	REVISION	BY & DATE	CHK	LANG	±1/2°	PAGE OF
		THIRD ANGLE PROJECTION		FINISH		REV
				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



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
 ORDER #: _____ REFERENCE MODEL #: 286TTFNA6580
 CONN. DIAGRAM: A-EE7300 CAT #: E695
 OUTLINE: B-SS311057-1425 CUSTOMER PART #: _____
 WINDING: 286654 NONE 5 MOUNTING: F1/F2 CAPABLE
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1200	1175	286T	TEFC	TFN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	21.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.7	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE
F.L. PF	76.0	3/4 LD PF	70.5	1/2 LD PF	59.5	91.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
89.0 LB-FT	116	157 LB-FT 176%	238 LB-FT 267%	60

@ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
56 dBA	65 dBA	4.8 LB-FT ²	350 LB-FT ²	20 SEC.	2	550 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	UM SEVERE	NONE	NO	NONE	BLUE (EPOXY)

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

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.366	0.386	1.956	1.989	30.021	0.080	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 20:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NONE					
	NONE					
	NONE					
	NONE PPR					

<p>PREPARED BY: EARL BABBITTS DATE: 13-07-17</p>	<p>BRAKE: NONE NONE NONE</p> <p>FT-LB: NA</p> <p>VOLTAGE: NONE HZ:</p> <p>UL: V-INS, CONST UL REC</p>
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FORM: 3531 REV_4 2/27/06

Data Sheet

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



286TTFNA6580

Submittal

Data @ 575 V

Motor Load Data

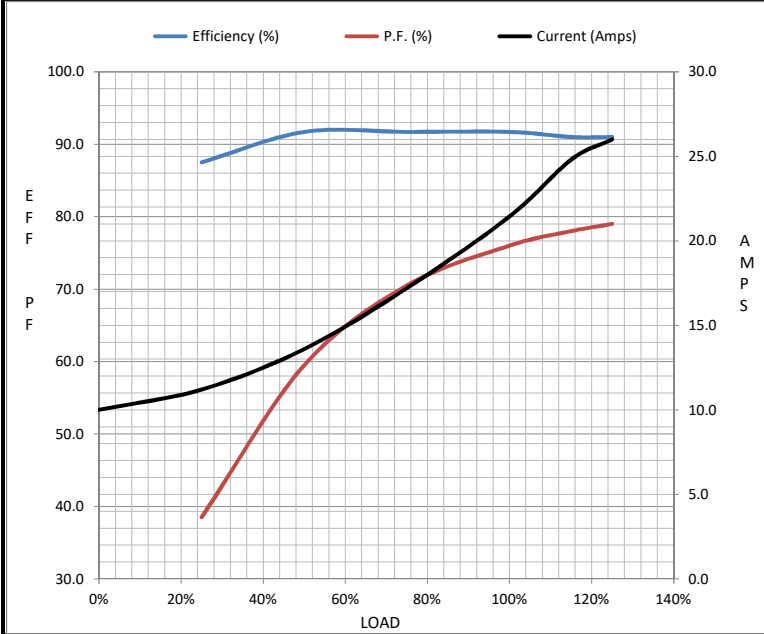
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	11.2	13.6	17.2	21.4	24.8	26.0	116
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	103	112	157
RPM	1200	1195	1190	1180	1175	1,170	1167	0
Efficiency (%)		87.5	91.7	91.7	91.7	91.0	91.0	
P.F. (%)	20.5	38.5	59.5	70.5	76.0	78.0	79.0	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1070	1175	1200
Current (Amps)	116	108	74.8	21.4	10.0
Torque (ft-lb)	157	152	238	89.0	0.00

Information Block

HP	20.0			
Sync. RPM	1200			
Frame	286			
Enclosure	TEFC			
Construction	TFS			
Voltage	575 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 wk ²	4.8 Lb-Ft ²			
Ref Wdg	286654 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS311057-1425			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3660	0.3860	1.9560	1.9890	30.0210



Speed - Torque Curve

