

# PRODUCT INFORMATION PACKET

Model No: 284TTFNA6576

Catalog No: E638

15 HP Severe Duty Motor, 3 phase, 1200 RPM, 460 V, 284T Frame, TEFC  
Severe Duty Motors



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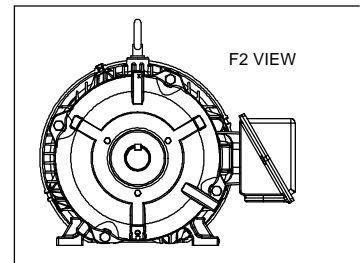
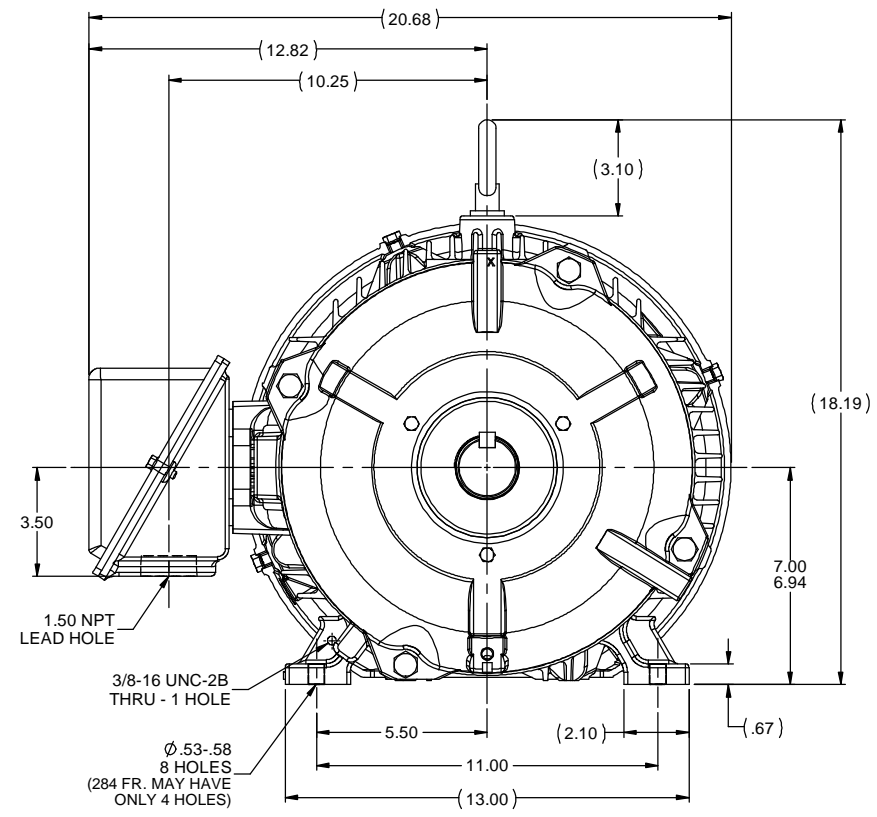
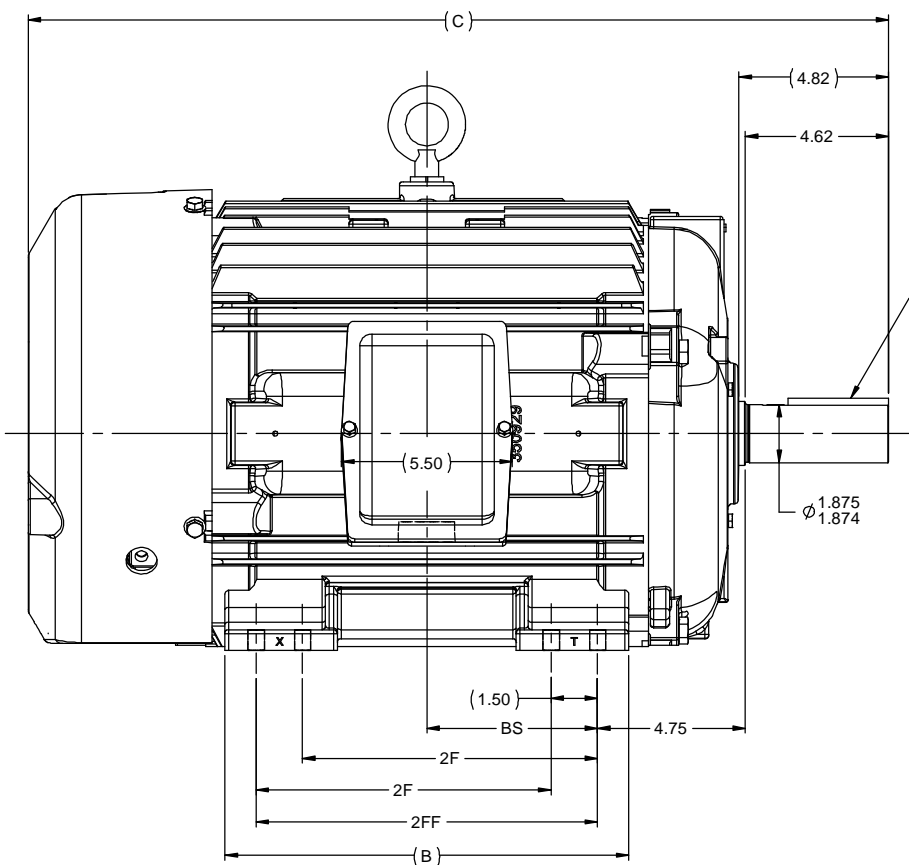
### Nameplate Specifications

Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>20.4 A</b>	Speed	<b>1178 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Power Factor	<b>75</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>284T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6311</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.5026 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>26.21 in</b>
Frame Length	<b>12.75 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>4.82 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Connection Drawing	<b>A-EE7300</b>	Outline Drawing	<b>B-SS311057-1275</b>

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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
<b>DASH</b>	<b>FRAME</b>	<b>C</b>	<b>B</b>	<b>2F</b>	<b>2FF</b>	<b>BS</b>

		TOLERANCES UNLESS SPECIFIED		marathon electric		DRAWN
		DEC	INCHES			CAV 10-18-2000
4	UPDATED TO NEW FRAME DESIGN	MU106205	MSG 08-22-2012	MSG	x	±.1
3	REDRAWN IN AUTOCAD - NO CHANGE		TAT 06-29-2004	ML	xx	±.03
2	ADDED NOTE 3	MU35810	DAH 02-06-2001	ML	xxx	±.005
1	NEW DRAWING	MU34031	MSG 08-23-2012	ML	xxxx	±.0005
NO	REVISION	BY & DATE	CHK	LANG	±1/2°	FINISH
			RFP 10-18-2000		PREV	
			NETWORK FILE NAME SS311057		SIZE	DRAWING NO
					<b>B</b>	<b>SS311057</b>
						REV
						<b>4</b>



**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**



DRAWING REVISION <b>AB</b>	REVISION BY <b>JJB</b>	DATE <b>06-27-2017</b>
ECO <b>ECO-0125361</b>	APPROVED BY <b>TB</b>	DATE <b>06-27-2017</b>
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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DRAWN BY <b>DA</b>
DATE <b>03-26-1993</b>
APPROVED BY <b>TB</b>
DATE <b>03-26-1993</b>
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>	
DESCRIPTION <b>CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR</b>	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>
SHEET <b>1 OF 1</b>	

**CERTIFICATION DATA SHEET**

**Model#:** 284TTFNA6576 AA  
**CONN. DIAGRAM:** A-EE7300  
**OUTLINE:** B-SS311057-1275

**WINDING#:** 284658 NONE 7  
**ASSEMBLY:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	1200	1178	284T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	20.4	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 75	3/4 LOAD PF: 69	1/2 LOAD PF: 57.5	91	SQ CAGE INV RATED	10

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
66.9 LB-FT	116	120 LB-FT 179	205 LB-FT 306	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	4.1 LB-FT^2	280 LB-FT^2	20 SEC.	2	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	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

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

\*  
N  
O  
T  
E  
S  
\*

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 NONE FT-LB NONE V NONE Hz

DATE: 06/27/2017 01:29:00 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

**Data Sheet**

**Date:** 16-06-2017  
**Customer:** \_\_\_\_\_  
**Attention:** \_\_\_\_\_  
**Submitted by:** FAREEDA DUDEKULA



284TTFNA6576

**Submittal**

Data @ **460 V**

**Motor Load Data**

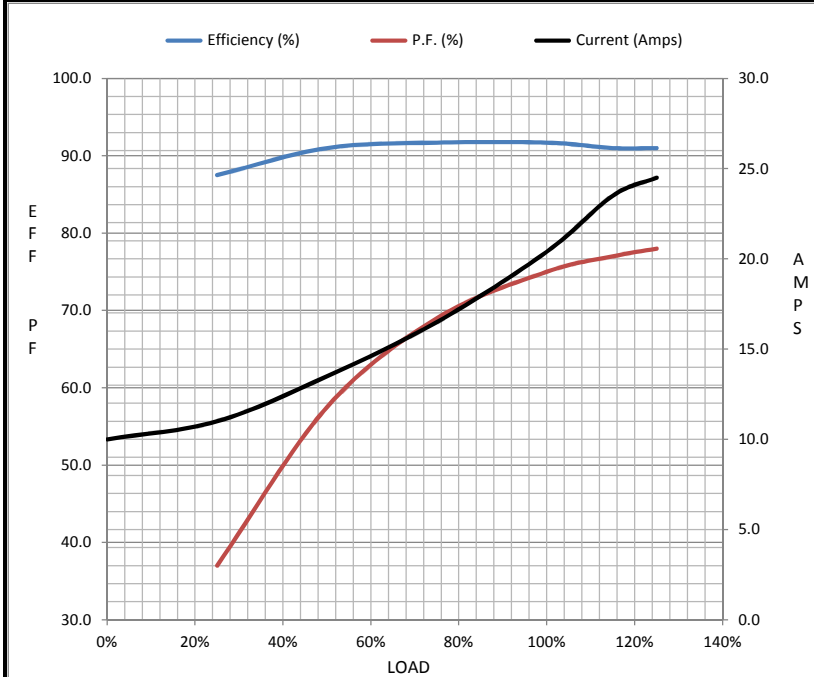
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	11.0	13.5	16.5	20.4	23.5	24.5	116
Torque (ft-lb)	0.00	16.5	33.0	50.0	66.9	77.0	84.0	120
RPM	1200	1194	1190	1184	1178	1,174	1172	0
Efficiency (%)		87.5	91.0	91.7	91.7	91.0	91.0	
P.F. (%)	5.1	37.0	57.5	69.0	75.0	77.0	78.0	35.5

**Motor Speed Data**

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1085	1178	1200
Current (Amps)	116	110	75.0	20.4	10.0
Torque (ft-lb)	120	115	205	66.9	0.00

**Information Block**

HP	15.0			
Sync. RPM	1200			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 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>	4.1 Lb-Ft <sup>2</sup>			
Ref Wdg	284658 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS311057-1275			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3580	0.3580	1.8640	2.0430	28.8150



**Speed - Torque Curve**

