

PRODUCT INFORMATION PACKET

Model No: 286TTFNA6876

Catalog No: E486

XRI®-SD Severe Duty Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 286T Frame, TEFC



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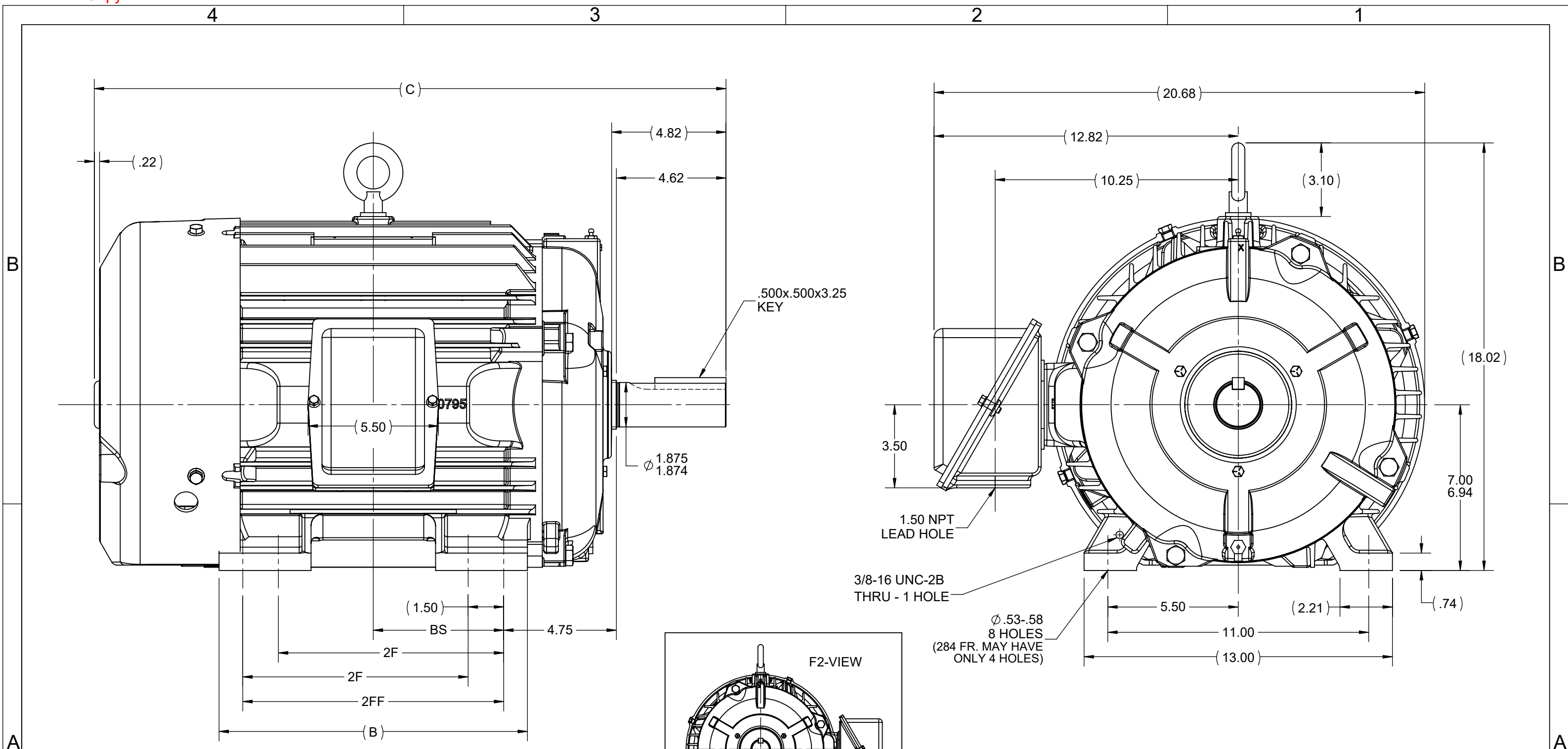
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	53.5/26.8 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 Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

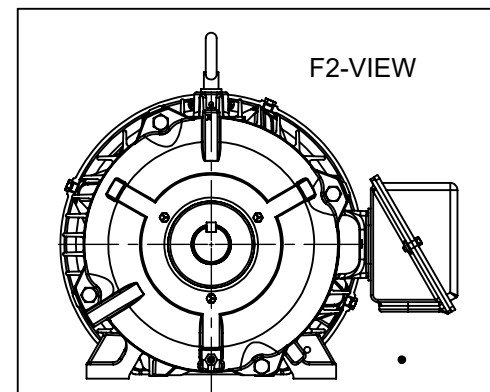
Technical Specifications

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
Inverter Load	CONSTANT 20:1		
Connection Drawing	A-EE7308	Outline Drawing	B-SS311057-1425

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- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.



DASH	FRAME	C	B	2F	2FF	BS
1275	284T	26.63	12.50	9.50	---	4.75
1425	284/286T	28.13	13.00	9.50	11.00	5.50

DRAWING REVISION E	REVISION BY VS	REV DATE/© DATE 14th-June-2022
REQUEST NUMBER NMR-0214673	APPROVED BY VS	DATE 14th-June-2022
REQUEST NUMBER DESCRIPTION RIB PLUG ADDED		
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TOLERANCES (EXCEPT AS NOTED):
 DEC. INCH mm ANGLE
 .X ±0.1 [±3] ±7° 30"
 .XX ±0.03 [±0.8]
 .XXX ±0.005 [±0.13]
 .XXXX ±0.0005 [±0.013]
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°
 CORNER FILLETS: R.02 [.5]
 MACHINED SURFACES: 200/5.1 INCH/mm
 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY CAV
DATE 10-18-2000
APPROVED BY BW
DATE 10-18-2000
REFERENCE
THIRD ANGLE PROJECTION

		Regal Beloit America, Inc.	
		DESCRIPTION	
		OUTLINE	
		280T FR. - BB - STD 12.50 LAM	
MATERIAL		PROCESS/FINISH	
SIZE B	DRAWING NUMBER SS311057	SHEET 1 OF 1	



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED	FINISH	DRAWN RM				
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES	Regal Beloit America, Inc.	11/20/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		CHK ML 11/21/1990				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		APPD SAS 04/24/2003				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		SCALE 1=1				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		REF				
					±7'30"	MAT'L.	FMF				
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					

CERTIFICATION DATA SHEET

Model#: 286TTFNA6576 AA WINDING#: 286654 NONE 7
CONN. DIAGRAM: A-EE7300 ASSEMBLY: F1/F2 CAPABLE
OUTLINE: B-SS311057-1425

TYPICAL MOTOR PERFORMANCE DATA

Table with 8 columns: HP, KW, SYNC. RPM, F.L. RPM, FRAME, ENCLOSURE, KVA CODE, DESIGN. Values: 20, 14.9, 1200, 1175, 286T, TEFC, G, B.

Table with 10 columns: PH, Hz, VOLTS, FL AMPS, START TYPE, DUTY, INSL, S.F, AMB°C, ELEVATION. Values: 3, 60, 460, 26.8, LINE OR INVERTER, CONTINUOUS, F3, 1.15, 40, 3300.

Table with 7 columns: FULL LOAD EFF: 91.7, 3/4 LOAD EFF: 91.7, 1/2 LOAD EFF: 91.7, GTD. EFF, ELEC. TYPE, NO LOAD AMPS. Values: 91, SQ CAGE INV RATED, 12.5.

Table with 5 columns: F.L. TORQUE, LOCKED ROTOR AMPS, L.R. TORQUE, B.D. TORQUE, F.L. RISE°C. Values: 89 LB-FT, 145, 157 LB-FT 176, 238 LB-FT 267, 60.

Table with 7 columns: SOUND PRESSURE @ 3 FT., SOUND POWER, ROTOR WK^2, MAX. WK^2, SAFE STALL TIME, STARTS /HOUR, APPROX. MOTOR WGT. Values: 56 dBA, 66 dBA, 4.8 LB-FT^2, 350 LB-FT^2, 20 SEC., 2, 550 LBS.

*** SUPPLEMENTAL INFORMATION ***

Table with 9 columns: DE BRACKET TYPE, ODE BRACKET TYPE, MOUNT TYPE, ORIENTATION, SEVERE DUTY, HAZARDOUS LOCATION, DRIP COVER, SCREENS, PAINT. Values: STANDARD, STANDARD, RIGID, HORIZONTAL, PREMIUM SEVERE DUTY, DIVISION 2 T2B, FALSE, NONE, BLUE (EPOXY).

Table with 8 columns: BEARINGS (DE, OPE), GREASE, SHAFT TYPE, SPECIAL DE, SPECIAL ODE, SHAFT MATERIAL, FRAME MATERIAL. Values: BALL, BALL, POLYREX EM, T, NONE, NONE, 1045 HOT ROLLED (C-204), CAST IRON.

Table with 7 columns: THERMO-PROTECTORS (THERMOSTATS, PROTECTORS, WDG RTDs, BRG RTDs), THERMISTORS, CONTROL, SPACE /n HEATERS. Values: NONE, NOT, NONE, NONE, NONE, FALSE, NONE VOLTS.

If Inverter equals NONE, contact factory for further information

*
N
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*

Table with 3 rows: INVERTER TORQUE: CONSTANT 20:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED; ENCODER: 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 04:05:16 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/20/2017

286TFNA6876

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

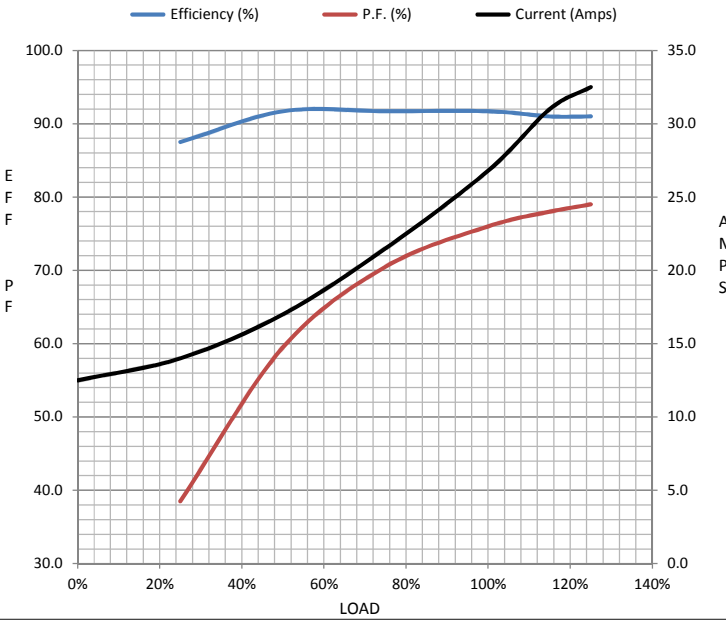
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.5	14.0	17.0	21.5	26.8	31.0	32.5	145
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	103	112	157
RPM	1200	1195	1190	1180	1175	1,170	1167	0
Efficiency (%)		87.5	91.7	91.7	91.7	91.0	91.0	
P.F. (%)	20.5	38.5	59.5	70.5	76.0	78.0	79.0	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1070	1175	1200
Current (Amps)	145	135	93.5	26.8	12.5
Torque (ft-lb)	157	152	238	89.0	0.00

Information Block

HP	20.0
Sync. RPM	1200
Frame	286
Enclosure	TEFC
Construction	TFN
Voltage	230/460 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	1,000 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-EE7308



Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.2340	0.2470	1.2520	1.2730	19.2130

Speed -Torque Curve

