

PRODUCT INFORMATION PACKET

Model No: 286THFPA8086
Catalog No: Y582
20,1200,TEBC,286TC,3/60/230/460
2000:1 With Encoder Provision



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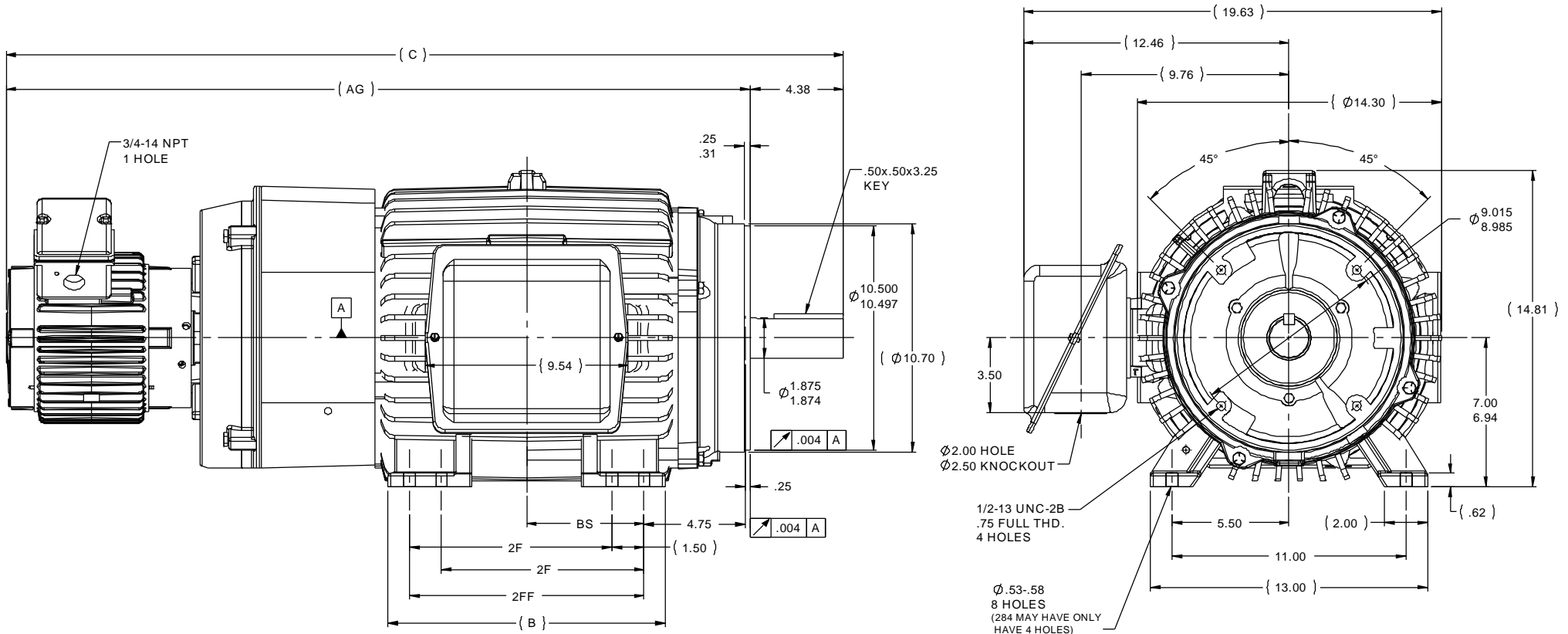
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	52.5/26.2 A	Speed	1160 rpm
Service Factor	1	Phase	3
Efficiency	87.5 %	Duty	CONTINUOUS
Insulation Class	H	Design Code	INV
KVA Code	F	Frame	286TC
Enclosure	TEBC-AXIAL	Overload Protector	NOT
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	SQ CAGE INV DUTY	Starting Method	INVERTER ONLY
Poles	6	Rotation	REV
Mounting	RIGID	Motor Orientation	HORIZONTAL
Drive End Bearing	BALL	Opp Drive End Bearing	BALL
Frame Material	CAST IRON	Shaft Type	T
Overall Length	39.31 in	Frame Length	14.25 in
Shaft Diameter	1.88 in	Shaft Extension	4.37 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	B-SS311263-1425	Connection Diagram	A-EE7308T

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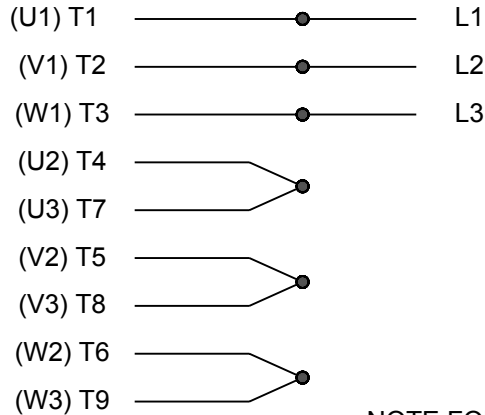
NOTES:

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

DASH	FRAME	C	AG	B	2F	2FF	BS
1275	284TC	37.81	33.43	11.50	9.50		4.75
1425	286TC	39.31	34.93	13.00	9.50	11.00	5.50

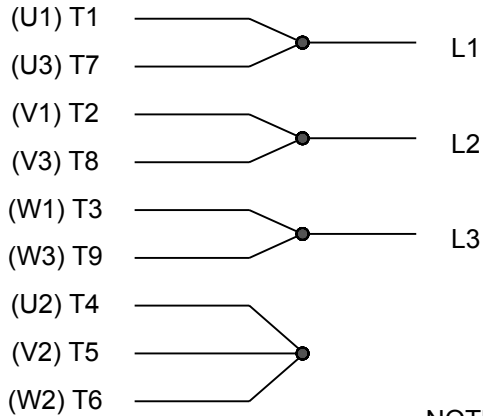
		TOLERANCES UNLESS SPECIFIED		DRAWN CAV 12-26-2001	
		DEC	INCHES	CHK	ML 01-04-2002
		X	±.1	APPR	DD 01-04-2002
3	REVISED MOUNTING HOLE QUANTITY CN 40694	DRS 10-25-2006	ML XX ±.03	TITLE OUTLINE - TFPA SERIES	
2	REDRAWN IN AUTOCAD	TAT 06-24-2005	XXX ±.005	280TC FR. - TEBC	
1	NEW DRAWING MU39842	CAV 01-02-2002	XXXX ±.0005	MAT'L	SCALE 1:4.5
NO	REVISION	BY & DATE	CHK ANG ±7'30"	FINISH	REF
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.				CAD FILE	SS311263
THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				DIST	LB
				SIZE	DRAWING NO
				B	SS311263
				REV	3

HIGH VOLTAGE

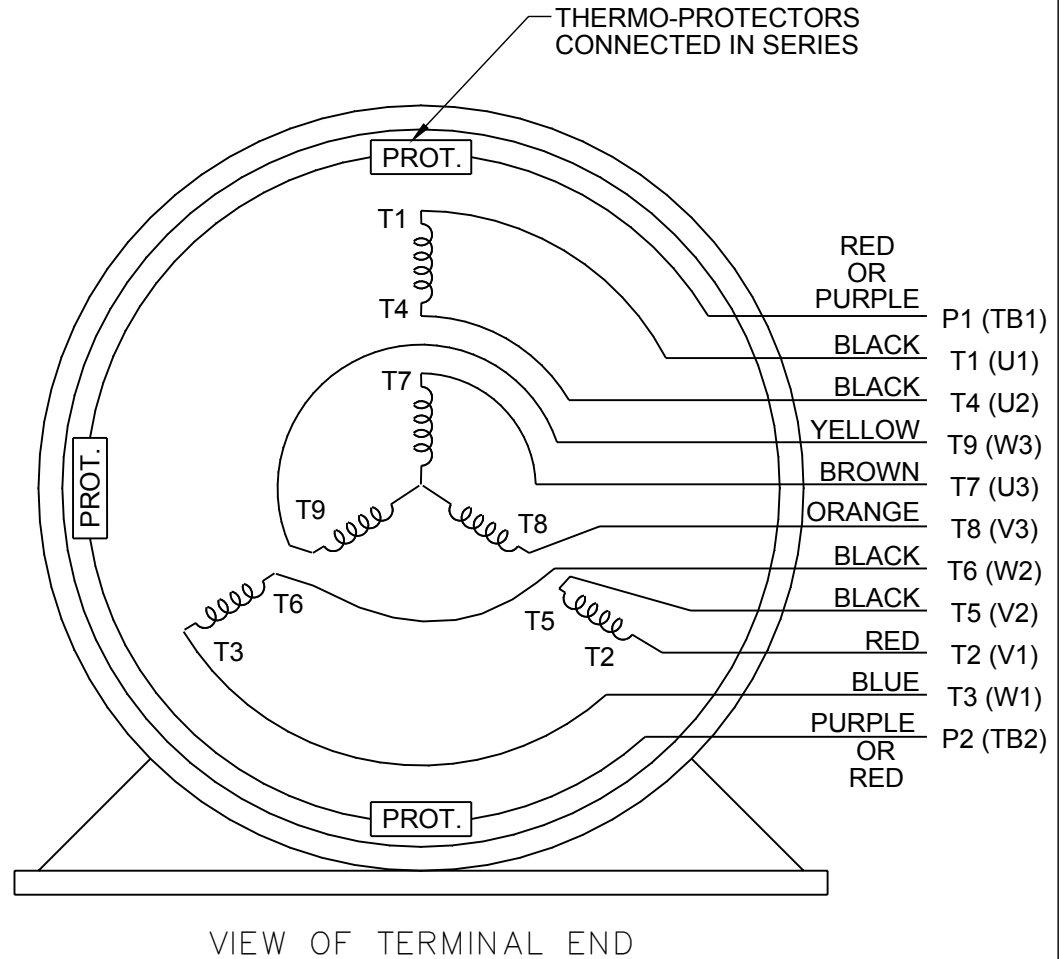


**NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:**
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



THREE PHASE DUAL VOLTAGE MOTOR



NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION R	REVISION BY AJW	DATE 07-17-2015		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015		DATE 05-13-1992	
ECO DESCRIPTION REV'D IEC NOTATIONS PER IEC 60034-8				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>				DATE 05-13-1992	3 PHASE - DUAL VOLTAGE MOTOR
			REFERENCE EE7308/EE7300	MATERIAL	PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7308T

CERTIFICATION DATA SHEET

Model#: 286THFPA8086 AC **WINDING#:** 256667 R6 6
CONN. DIAGRAM: A-EE7308T **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS311263-1425

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20	14.9	1200	1160	286TC	TEBC-AXIAL	F	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	52.5/26.2	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 87.5	3/4 LOAD EFF: 88.5	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82	3/4 LOAD PF: 78	1/2 LOAD PF: 69	85.5	SQ CAGE INV DUTY	22 / 11

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
90 LB-FT	280 / 140	150 LB-FT 167	215 LB-FT 239	88

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	3.1 LB-FT^2	- LB-FT^2	- SEC.	-	525 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.38198	0.33938	1.3419	1.27374	24.85
RM	ZREF	XR	TD	TD0
1391.6	14.2	3.3	0.0108	0.204

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2000:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE

*
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NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/27/2017 01:43:47 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 19-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



286THFA8086

Submittal

Data @ 460 V

Motor Load Data

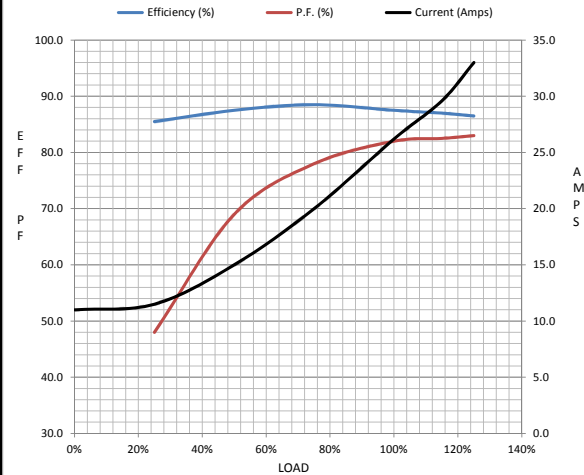
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	11.0	11.5	15.0	20.0	26.2	29.6	33.0	140
Torque (ft-lb)	0.00	22.0	44.0	67.0	90.0	102	114	150
RPM	1200	1190	1180	1170	1160	1,156	1150	0
Efficiency (%)		85.5	87.5	88.5	87.5	87.0	86.5	
P.F. (%)	6.5	48.0	69.0	78.0	82.0	82.5	83.0	41.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	1100	1160	1200
Current (Amps)	140	132	87.0	26.2	11.0
Torque (ft-lb)	150	135	215	90.0	0.00

Information Block

HP	20.0			
Sync. RPM	1200			
Frame	284			
Enclosure	TEBC			
Construction	TBP			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.0			
Temp Rise @ FL	88 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	3.1 Lb-Ft ²			
Ref Wdg	256667 R6			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS311263-1425			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3820	0.3390	1.3420	1.2740	24.8500



Speed -Torque Curve

