

PRODUCT INFORMATION PACKET

Model No: 810001.00

Catalog No: 810001.00

Encoder Motors, TEBC - Axial, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1160 RPM, 286TC Frame



Regal and are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

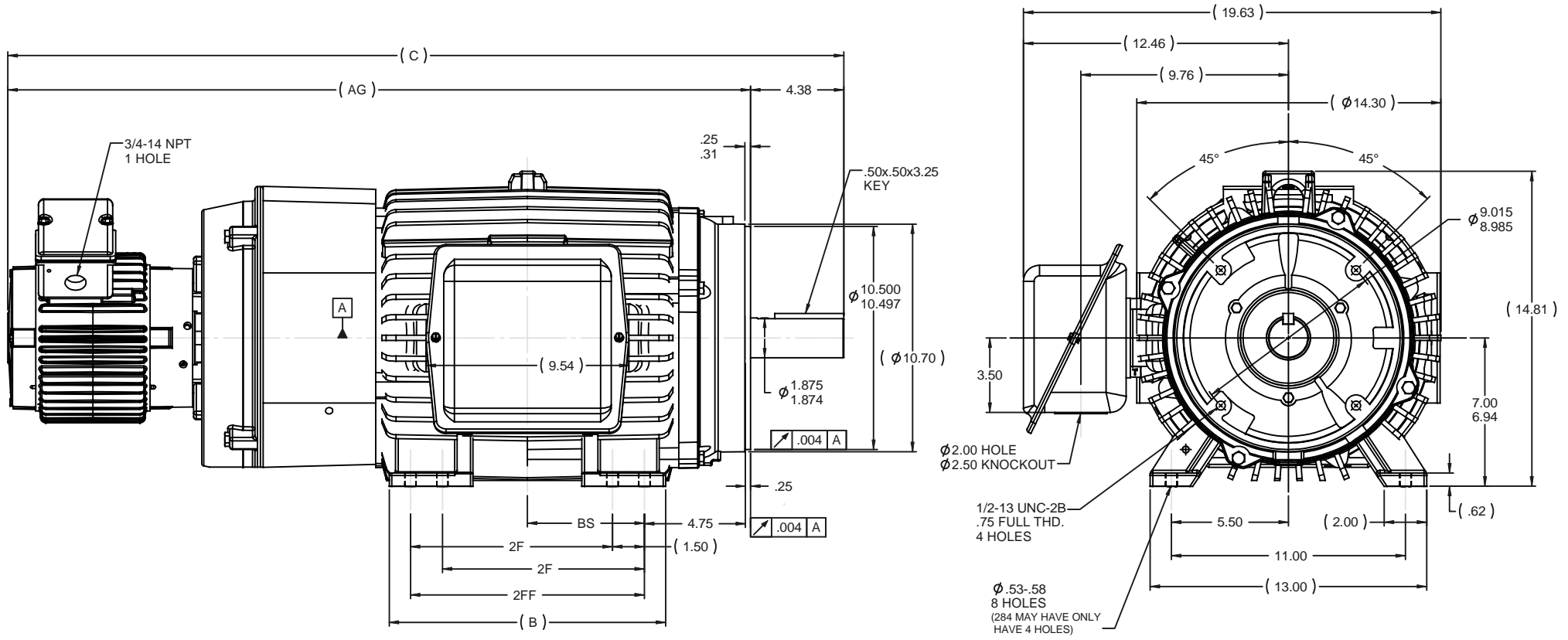
Nameplate Specifications

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 %	Power Factor	82
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	F
Frame	286TC	Enclosure	Totally Enclosed Blower cooled - Axial
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	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	6	Rotation	Reversible
Resistance Main	.58 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	39.31 in
Frame Length	14.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	B-SS311263LE-1425	Connection Drawing	A-EE7308T-LE

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:05/18/2022



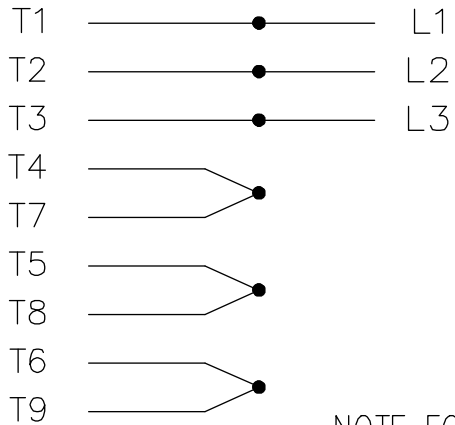
- NOTES:
 1- C'BOX CAN BE ROTATED IN 90° STEPS.
 2- C'BOX CAN BE MOUNTED ON OPPOSITE SIDE
 BY REMOVING BRACKETS AND TURNING FRAME 180°
 3- NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.

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		LEESON		ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN NJS 05-16-2002	
		DEC	INCHES					CHK	ML 05-20-2002
		x	\pm .1					APPR	TB 05-20-2002
		.xx	\pm .03	TITLE		OUTLINE - TFPA SERIES		SCALE 1:4.5	
2	REVISED MOUNTING HOLE QUANTITY CN 40694	DRS 10-25-2008	ML	xxx	\pm .005	280TC FR. - TBC		REF	
1	NEW DRAWING CN 35134	NJS 05-20-2002	TB	xxxx	\pm .0005	MATL		FMF	
NO	REVISION	BY & DATE	CHK	ANG	\pm 7'30"	FINISH		PREV	
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	SS311263LE	SIZE	DRAWING NO
				DIST	LB			B	SS311263LE
								REV	2

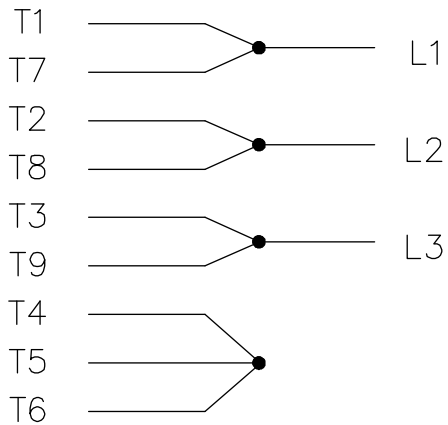
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

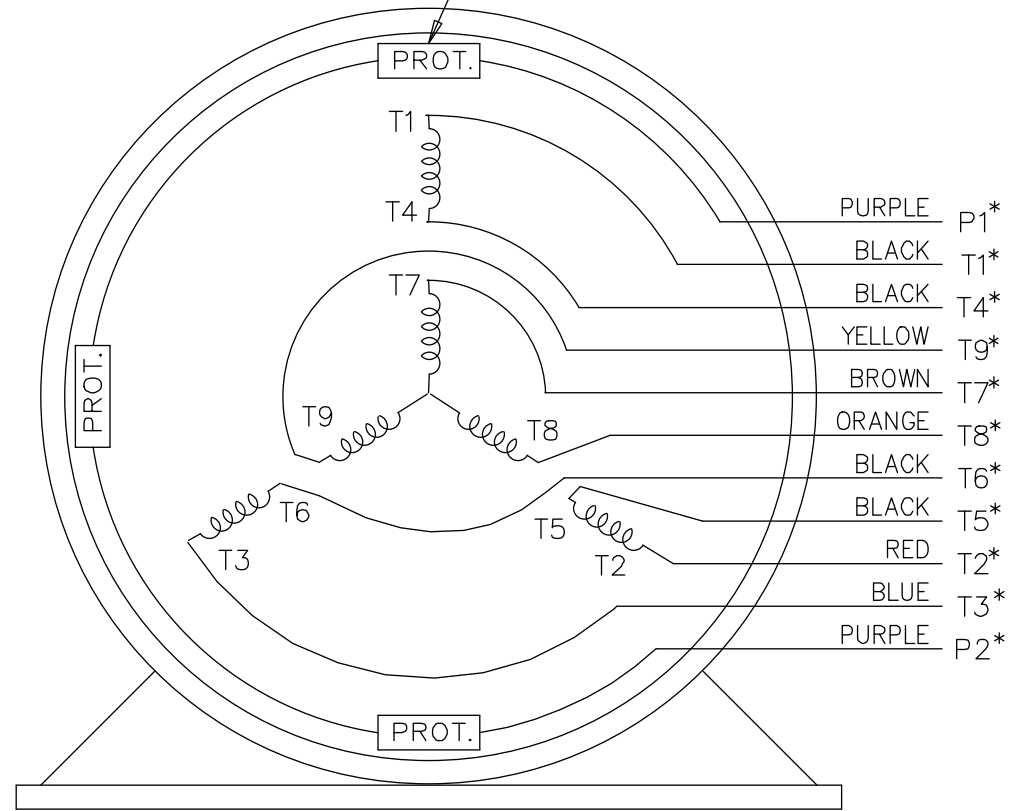


NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1

LOW VOLTAGE



THREMO-PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

* USE LEADS AS PER PLANT STANDARD IRRWSPECTIVE OF THEIR COLOUR.

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWING NO.	PAGE OF	REV.	
					DEC.	INCHES					
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD	DEC.	INCHES						
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML	.X	±.1						
03	RE-ISSUE	NJS 04-21-2004	JET	.XX	±.02						
02	REDRAWN	TAT 04-20-2004	ML	.XXX	±.005						
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML	.XXXX	±.0005						
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 EE7308T_LE	SIZE A	DRAWING NO. EE7308T-LE	PAGE OF 05
							DIST LB-WP-LE				



ELECTRIC MOTORS
GEARMOTORS
AND DRIVES

TITLE CONNECTION DIAGRAM
3 PHASE - DUAL VOLTAGE MOTOR

DRAWN	TJB	05-07-2002
CHK	ML	05-08-2002
APPD	TB	05-08-2002
SCALE	1=1	
REF		
FMF		
PREV		

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



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T-LE
 OUTLINE: B-SS311263LE-1425
 WINDING: 256667

CAT #: 810001.00

R6 6

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1200	1160	286TC	TEBC	TBP	F	INF

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	52.5/26.2	INVERTER ONLY	CONT	H	1.15	40	3300

F.L. EFF	87.5	3/4 LD EFF	88.5	1/2 LD EFF	87.5	GTD EFF	ELECT. TYPE
F.L. PF	82.0	3/4 LD PF	78.0	1/2 LD PF	69.0	85.5	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
90.0 LB-FT	140	150 LB-FT 167%	215 LB-FT 239%	88

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	3.1 LB-FT²	0 LB-FT²	0 SEC.	0	525 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	RIGID	HORIZONTAL	NO	NONE	NO	NONE	JE - LEESON (ENAM)

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

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	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
0.382	0.339	1.342	1.274	24.85	0.150	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NORTHSTAR ST56 NONE					
	NONE PPR					
	BRAKE: NONE NONE NONE					
	FT-LB: NA VOLTAGE: NONE					

DATE: 2/1/2018

UL: Y-(LEESON UL REC)

Data Sheet

Date: 2/1/2018

810001.00



Data @ 460 V

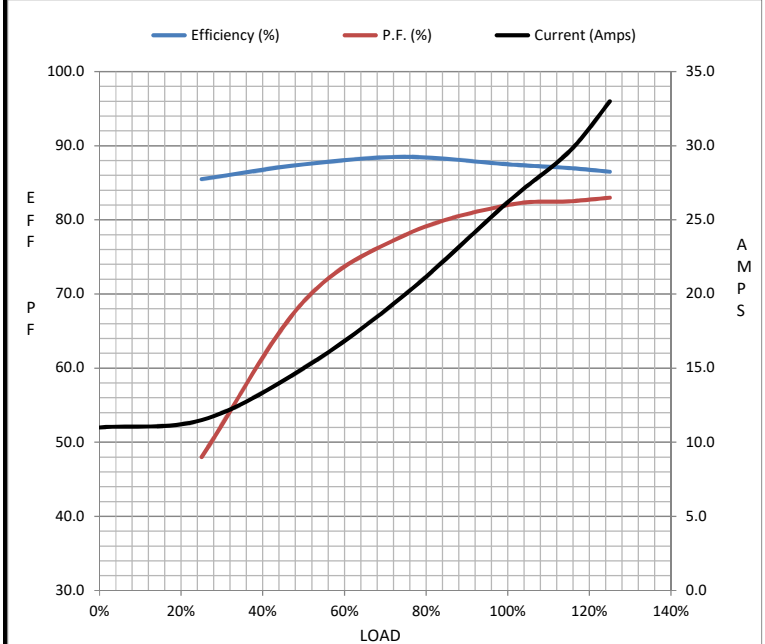
Motor Load Data

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-SS311263LE-1425			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3820	0.3390	1.3420	1.2740	24.8500



Speed - Torque Curve

