

# PRODUCT INFORMATION PACKET



Model No: 825080.00  
Catalog No: 825080.00  
Explosion Proof Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM,  
284TSC Frame, EPFC



Regal and Leeson are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E



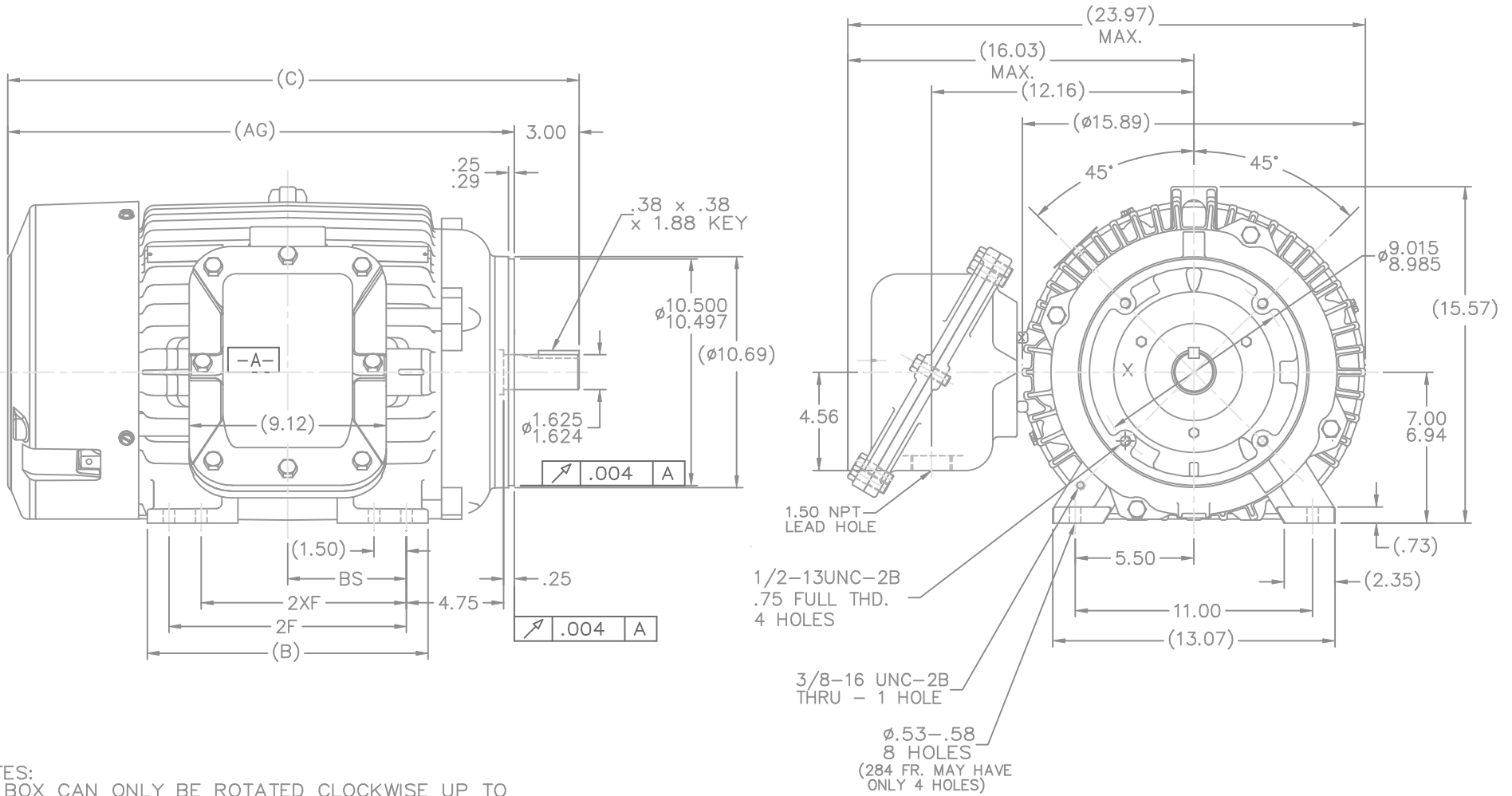


### Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	230/460 & 190/380 V
Speed	3558 & 2960 rpm	Service Factor	1.15 & 1.15
Frame	284TSC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	No Protection	Efficiency	93 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	57.5/28.8 & 56/28 A	Power Factor	87.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.0833 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	24.96 in
Frame Length	12.75 in	Shaft Diameter	1.625 in
Shaft Extension	3.25 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	SS311282LE-1275	Connection Drawing	EE7308T-LE



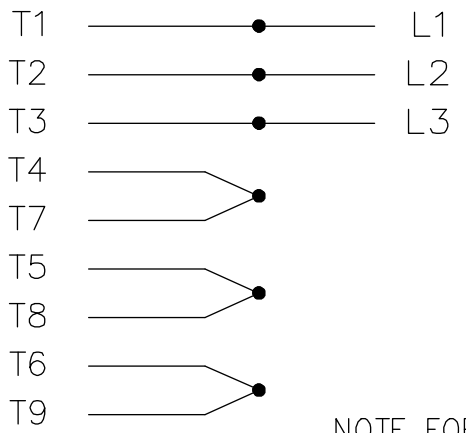
- NOTES:  
 1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.  
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	AG	C	2F	2XF	BS
1275	284TSC	12.50	21.96	24.96	9.50		4.75
1425	284/286TSC	13.00	23.46	26.46	11.00	9.50	5.50

		TOLERANCES UNLESS SPECIFIED		ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN	ERH 10-22-2003					
		DEC.	INCHES		CHK	ML 10-22-2003					
		.X	±.1		APPD	BW 10-22-2003					
		.XX	±.03	TITLE	SCALE	7=32					
		.XXX	±.005	OUTLINE-EXP. PR.-TGN		REF					
		.XXXX	±.0005	280TSC FR.-BB-STD-12.50 LAM.		FMF					
				MAT'L		MU 48623					
NO.	REVISION	BY & DATE	CHK	ANG	±7°30'	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	SS311282LE	SIZE	DRAWING NO.	PAGE	OF	REV.
			DIST	LB			B	SS311282LE			

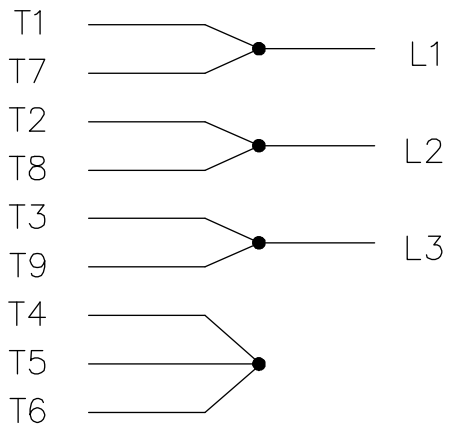
THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

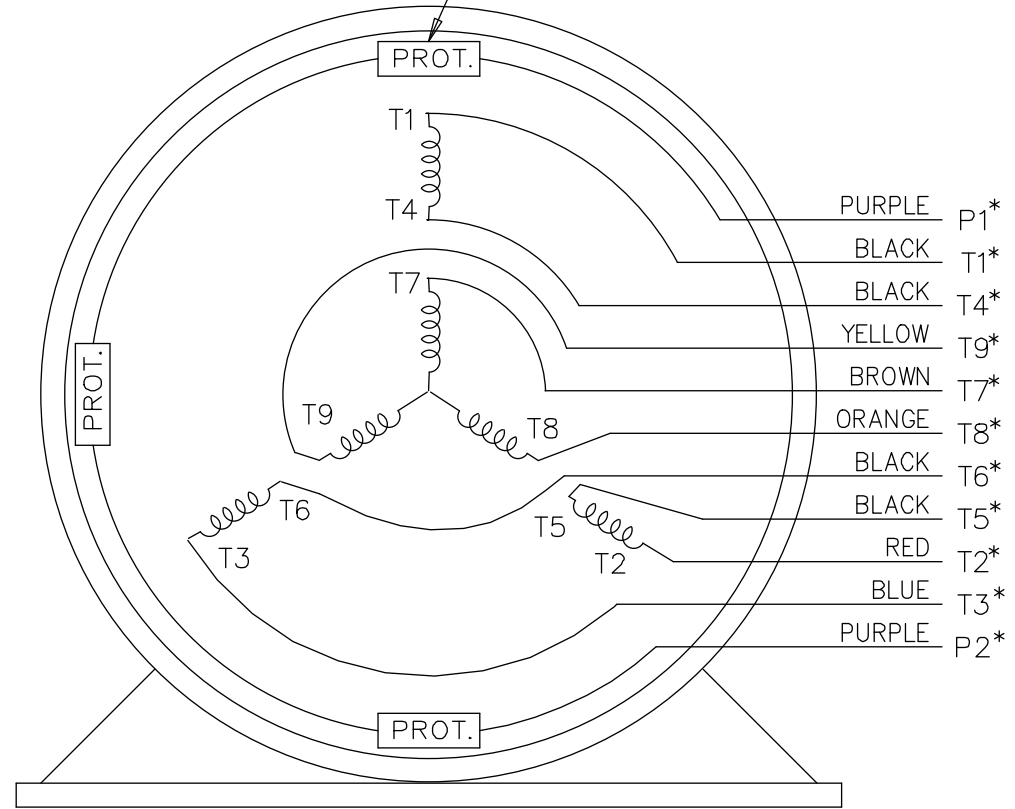


NOTE FOR FACTORY USE ONLY:  
 TO SURGE TEST FOR COMMON CONNECT:  
 HIGH VOLT: CONNECT P1 TO T1  
 THEN P2 TO L1  
 LOW VOLT: CONNECT P1 TO T1 & T7,  
 THEN P2 TO L1

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		



**1051 CHEYENNE AVE.  
GRAFTON, WI 53024  
PH. 262-377-8810**

**CERTIFICATION DATA SHEET**

**CONN. DIAGRAM:** A-EE7308T-LE

**CATALOG #:** 825080.00

**OUTLINE:** B-SS311282LE-1275

**MOUNTING:** F1 ONLY

**WINDING #:** K284282 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&20	18.7&14.9	3600	3558&2960	284TSC	EPFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	57.5/28.8&56/28	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	93&92.4	3/4 LOAD EFF:	93	1/2 LOAD EFF:	92.4	GTD. EFF	92.4	ELEC. TYPE	SQ CAGE INV RATED
FULL LOAD PF:	87.5&88	3/4 LOAD PF:	84	1/2 LOAD PF:	76	92.4			

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
37 LB-FT	364 / 182	50 LB-FT 135 %	103 LB-FT 278 %	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	2.3 LB-FT^2	32 LB-FT^2	20 SEC.	2	400 LBS.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE - LEESON (ENAMEL)

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

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

\*  
N  
O  
T  
E

<b>INVERTER TORQUE:</b> CONSTANT 10:1
<b>INV. HP SPEED RANGE:</b> NONE
<b>ENCODER:</b> NONE NONE NONE NONE NONE PPR
<b>BRAKE:</b> NONE NONE NONE P/N NONE NONE NONE FT-LB NONE V NONE HZ

Data Sheet

Date: 1/31/2018

825080.00



Data @ **460 V**

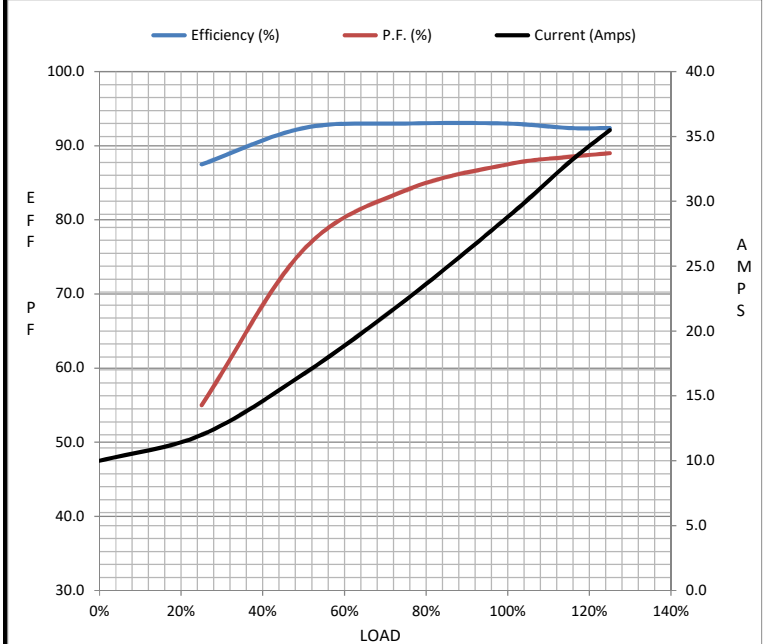
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	12.0	16.7	22.4	28.8	33.0	35.5	182
Torque (ft-lb)	0.00	9.0	18.5	27.5	37.0	42.0	46.5	50.0
RPM	3600	3590	3580	3570	3558	3,550	3545	0
Efficiency (%)		87.5	92.4	93.0	93.0	92.4	92.4	
P.F. (%)	6.0	55.0	76.0	84.0	87.5	88.5	89.0	31.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3350	3558	3600
Current (Amps)	182	167	118	28.8	10.0
Torque (ft-lb)	50.0	42.5	103	37.0	0.00

Information Block				
HP	25.0			
Sync. RPM	3600			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.30 Lb-Ft <sup>2</sup>			
Ref Wdg	K284282 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS311282LE-1275			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0600	0.0280	0.2450	0.1600	6.9010



Speed - Torque Curve

