

# PRODUCT INFORMATION PACKET



Model No: 825082.00

Catalog No: 825082.00

Explosion Proof Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,  
286TC 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





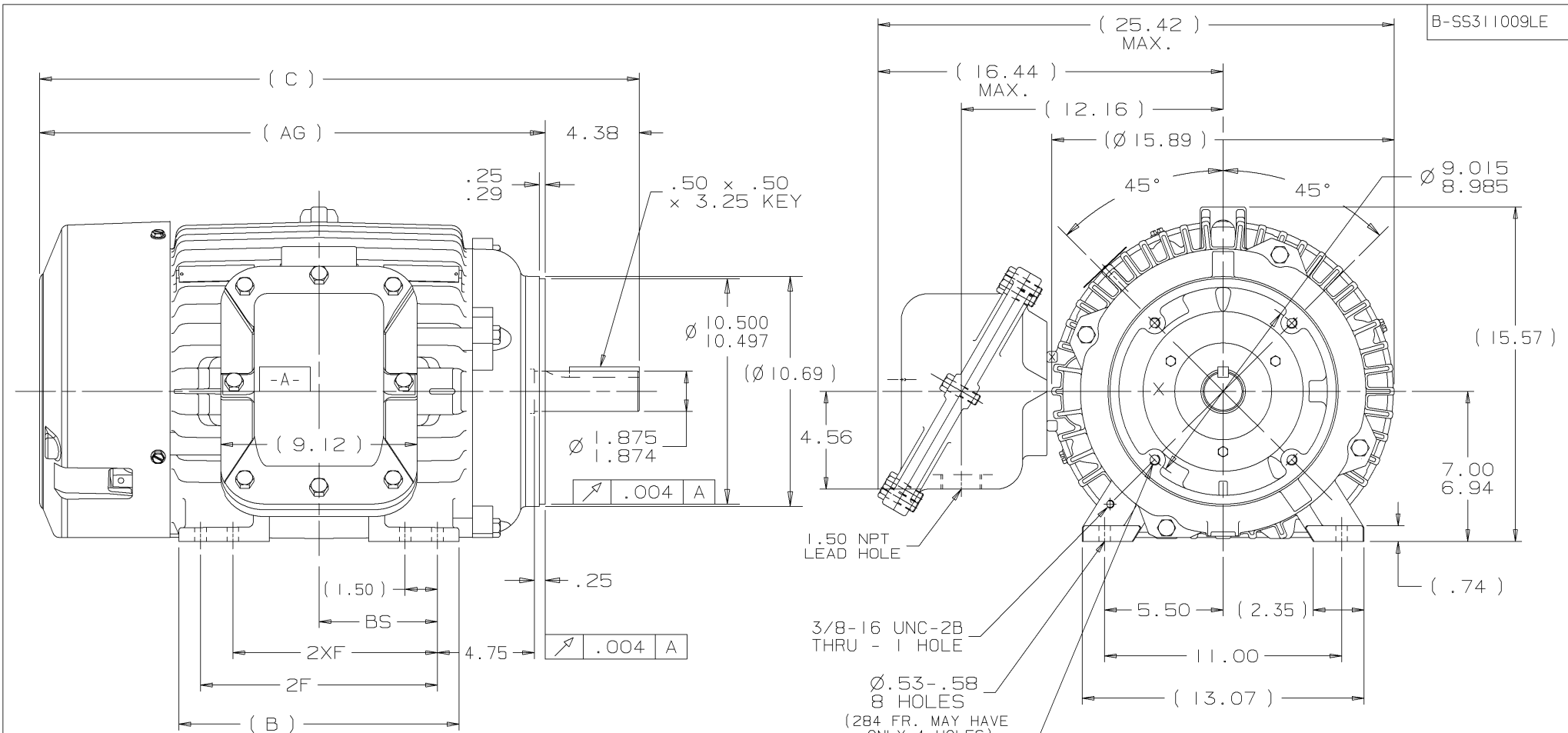
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>30 &amp; 25 Hp</b>
Output KW	<b>22.4 &amp; 18.7 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1773 &amp; 1475 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>286TC</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>94.1 &amp; 93.6 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>73/36.5 &amp; 74/37 A</b>	Power Factor	<b>82</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6311</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>UL Listed And CSA Certified</b>	CSA	<b>Y</b>
CE	<b>N</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>EXP PROOF CL I GR C&amp;D CL II GR F&amp;G T3B</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.205 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>27.84 in</b>
Frame Length	<b>14.25 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>4.62 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Outline Drawing	<b>SS311009LE-1425</b>	Connection Drawing	<b>EE7308T-LE</b>





B-SS311009LE

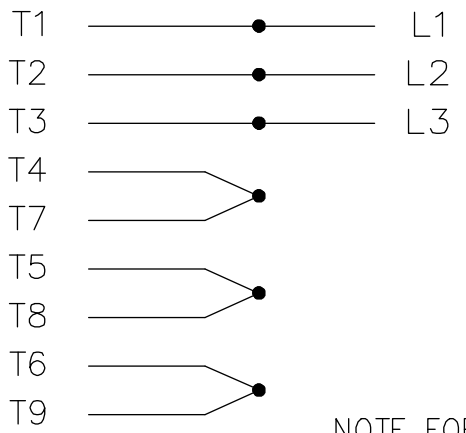
- NOTES:  
 1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.  
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

								TOLERANCES UNLESS SPECIFIED		<b>LEESON</b> ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN CAV 05-29-2002	
								DEC.	TOLERANCE			CHK ML 05-30-2002	
								.X	± .1	APPD BW 05-30-2002		SCALE	
								.XX	± .03	TITLE OUTLINE EXP. PR. TGN		REF	
								.XXX	± .005	280TC FR. BB STD. 12.50 LAM		FNF	
								.XXXX	± .0005	✓ SURFACE ROUGHNESS UNLESS SPECIFIED		PREV	
								CHK ANG	± 7'30"	MAT'L. FINISH		SIZE B	
								PURCHASED		CAD FILE 55311009		SHOP BOOK	
								DIST <del>WA</del> - <del>LB</del> - <del>WC</del> - <del>OK</del> - <del>OR</del> - <del>PA</del>		DRAWING NO. B SS311009LE		REV. I	

DASH	FRAME	B	AG	C	2F	2XF	BS
1275	284TC	12.50	21.96	26.34	9.50		4.75
1425	284/286TC	13.00	23.46	27.84	11.00	9.50	5.50

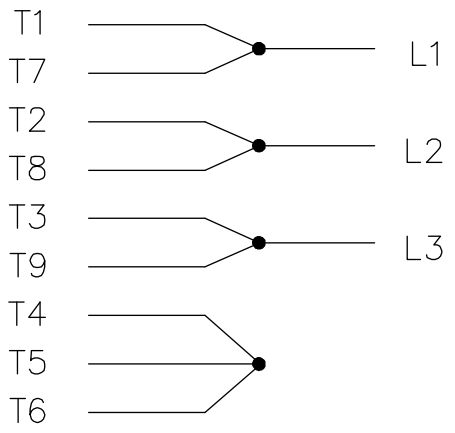
THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

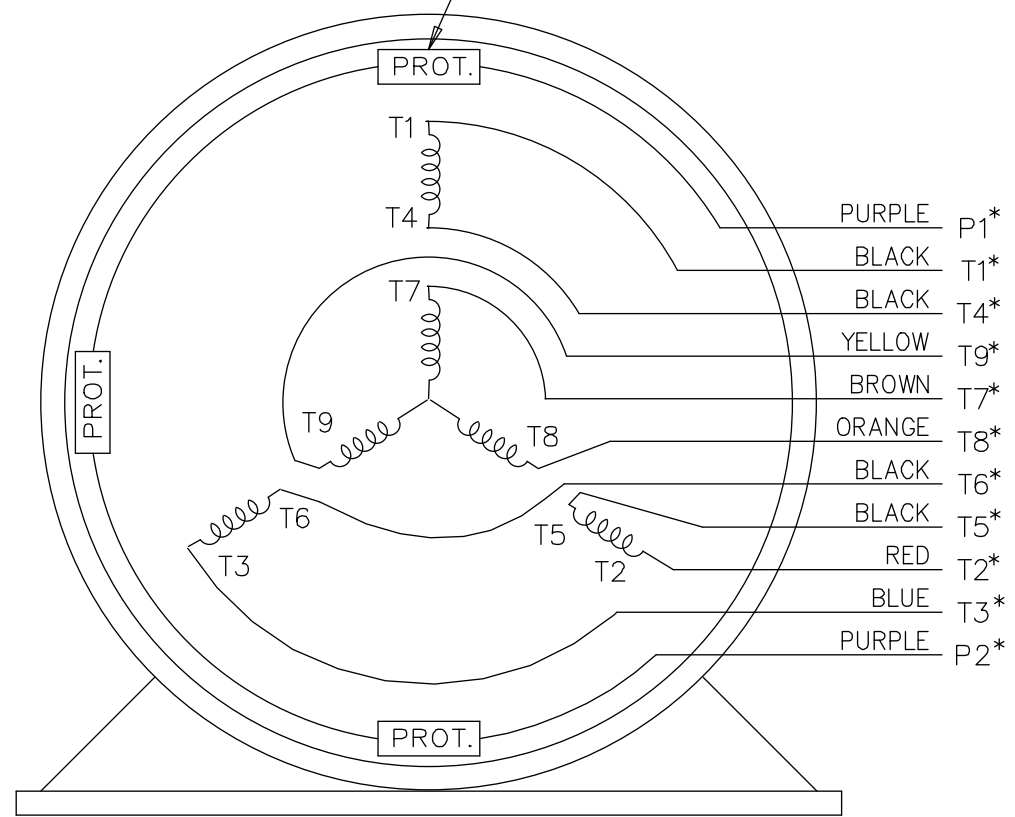


NOTE FOR FACTORY USE ONLY:  
 TO SURGE TEST FOR COMMON CONNECT:  
 HIGH VOLT: CONNECT P1 TO T1  
 THEN P2 TO L1  
 LOW VOLT: CONNECT P1 TO T1 & T7,  
 THEN P2 TO L1

LOW VOLTAGE




THREMO-PROTECTORS  
CONNECTED IN SERIES.



VIEW OF TERMINAL END

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

				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN TJB 05-07-2002		
NO.	REVISION	BY & DATE	CHK	ANG	±		FINISH	CHK	ML
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			05-08-2002	
03	RE-ISSUE	NJS 04-21-2004	JET	.XX	±.02	TITLE CONNECTION DIAGRAM 3 PHASE - DUAL VOLTAGE MOTOR	APPD	TB 05-08-2002	
02	REDRAWN	TAT 04-20-2004	ML	.XXX	±.005		SCALE	1=1	
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML	.XXXX	±.0005	MAT'L.	REF		
					±7'30"		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 EE7308T_LE	SIZE	DRAWING NO. PAGE OF	REV.
				DIST	LB-WP-LE		A	EE7308T-LE	05



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

**CERTIFICATION DATA SHEET**

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

**CATALOG #:** 825082.00

**OUTLINE:** B-SS311009LE-1425

**MOUNTING:** F1 ONLY

**WINDING #:** K2864159 6

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&25	22.4&18.7	1800	1773&1475	286TC	EPFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	73/36.5&74/37	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	94.1&93.6	3/4 LOAD EFF:	94.1	1/2 LOAD EFF:	93.6	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	82&81.5	3/4 LOAD PF:	77	1/2 LOAD PF:	67.5	93.6		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	434 / 217	165 LB-FT 185 %	245 LB-FT 275 %	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	4.6 LB-FT^2	225 LB-FT^2	25 SEC.	2	540 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	T	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: 1/24/2018

825082.00



Data @ **460 V**

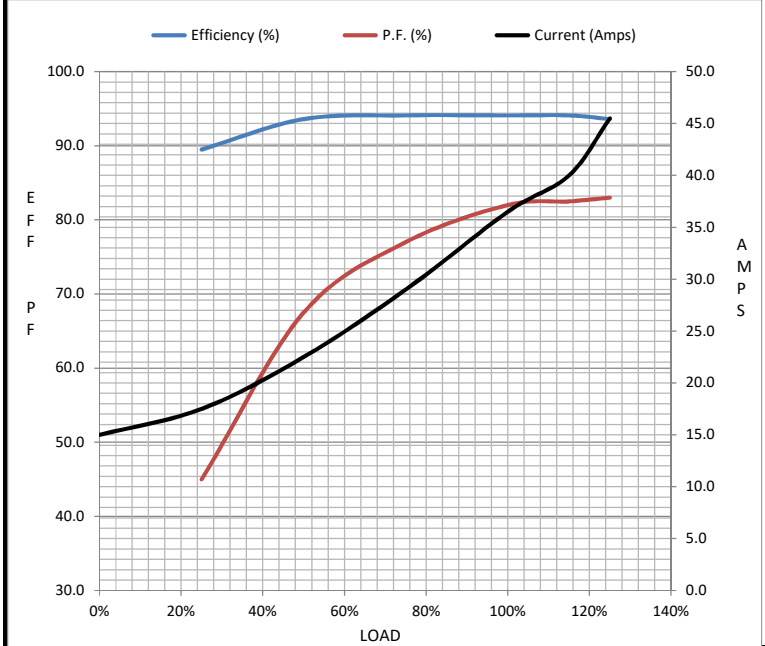
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	15.0	17.5	22.5	29.0	36.5	40.0	45.5	217
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	100	112	165
RPM	1800	1795	1785	1780	1773	1.770	1765	0
Efficiency (%)		89.5	93.6	94.1	94.1	94.1	93.6	
P.F. (%)	6.0	45.0	67.5	77.0	82.0	82.5	83.0	34.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1773	1800
Current (Amps)	217	200	130	36.5	15.0
Torque (ft-lb)	165	155	245	89.0	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380 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 <sup>2</sup>	4.6 Lb-Ft <sup>2</sup>			
Ref Wdg	K2864159 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS311009LE-1425			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1250	0.1360	0.7240	0.9370	17.7850



Speed - Torque Curve

