

# PRODUCT INFORMATION PACKET



Model No: 825101.00

Catalog No: 825101.00

Explosion Proof Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,  
324T 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



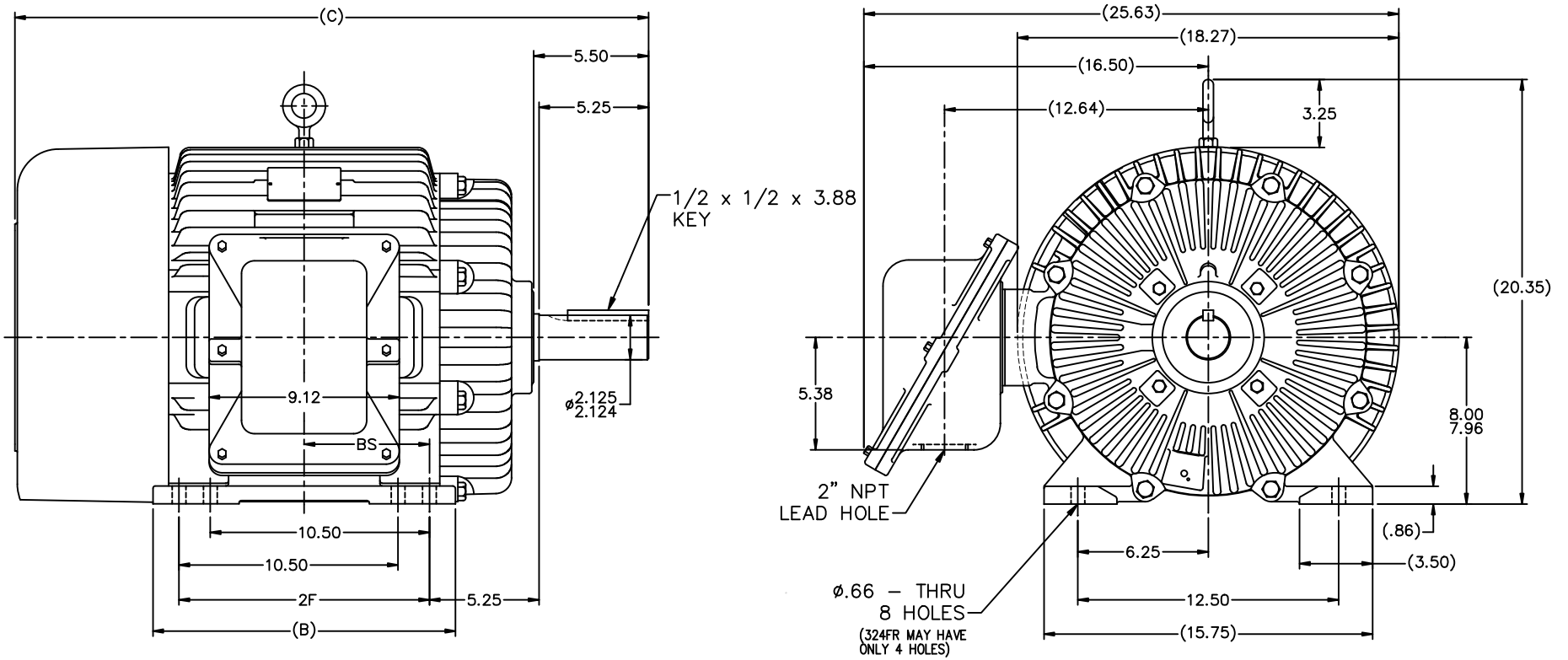


### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>40 &amp; 30 Hp</b>
Output KW	<b>30.0 &amp; 22.4 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1780 &amp; 1480 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>324T</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>94.1 &amp; 94.1 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>95/47.5 &amp; 87/43.5 A</b>	Power Factor	<b>83</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>312</b>	Opp Drive End Bearing Size	<b>311</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>.135 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>30.37 in</b>
Frame Length	<b>13.00 in</b>	Shaft Diameter	<b>2.125 in</b>
Shaft Extension	<b>5.25 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Outline Drawing	<b>B-SS28022LE-1300</b>	Connection Drawing	<b>A-EE7308T-LE</b>



NOTES:

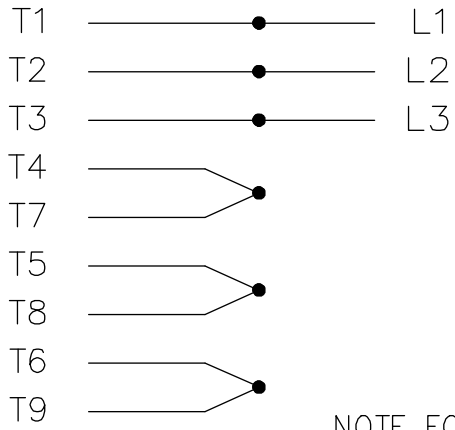
1. BOX CAN BE ROTATED IN 90° STEPS
2. NAMEPLATE TO BE READ FROM CONDUIT BOX PAD SIDE OF MOTOR

DASH	FR.	C	B	BS	2F
1150	324T	28.87	13.00	5.25	10.50
1300	324/326T	30.37	14.50	6.00	12.00

NO.		REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN	EDK	01-10-2011
								DEC.	INCHES		CHK	MH	01-10-2011
								.X	±.1		APPD	MJS	01-10-2011
								.XX	±.03		SCALE 1=5		
								.XXX	±.005	REF			
								.XXXX	±.0005	FMF MU100145			
								TITLE OUTLINE		PREV			
								320T FR. - BB - TS - EXP. PR.		RFP 01-10-2011 CAD FILE SS28022LE			
								MAT'L		SIZE	DRAWING NO.	PAGE	OF
								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		B	SS28022LE		REV.
								DIST LB		REV.			

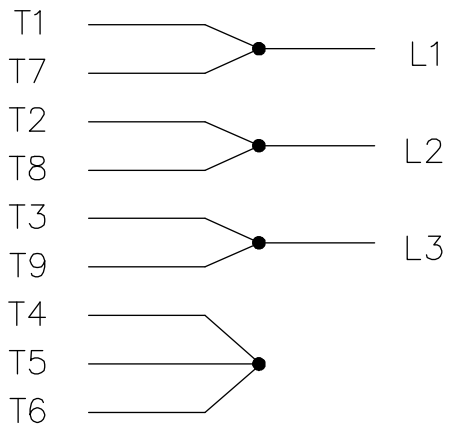
THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

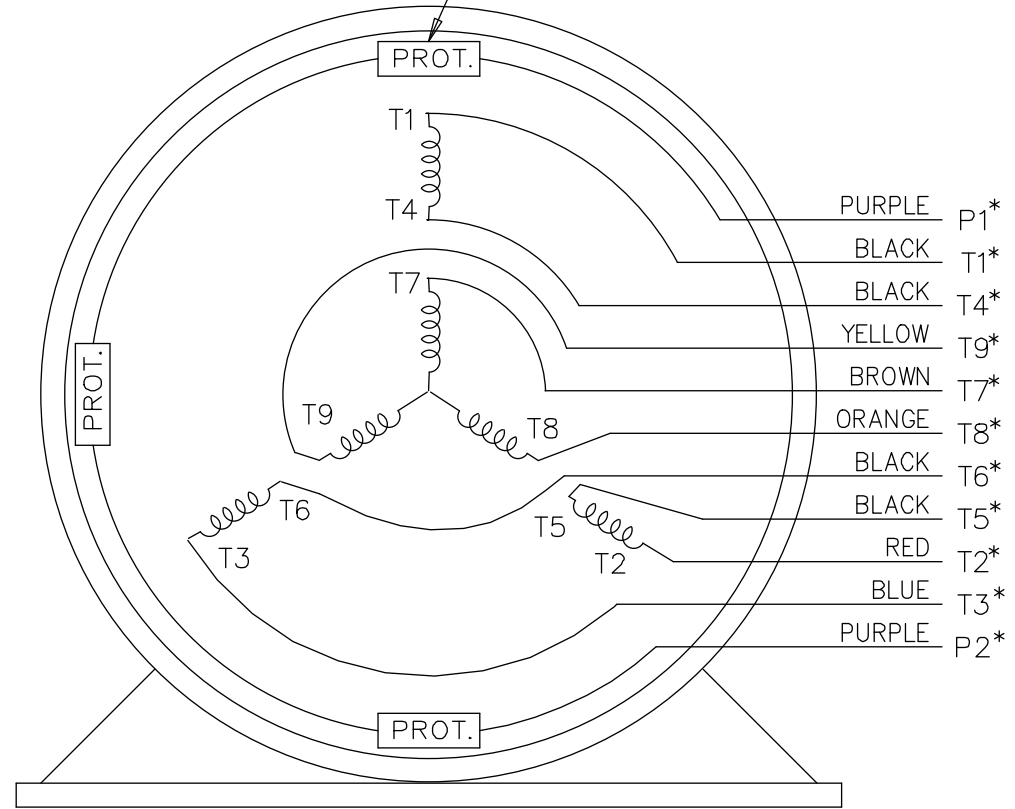


NOTE FOR FACTORY USE ONLY:  
 TO SURGE TEST FOR COMMON CONNECT:  
 HIGH VOLT: CONNECT P1 TO T1  
 THEN P2 TO L1  
 LOW VOLT: CONNECT P1 TO T1 & T7,  
 THEN P2 TO L1

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	DRAWN TJB 05-07-2002	
					DEC.	INCHES			
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD	DEC.	INCHES			CHK ML 05-08-2002	
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML	.X	±.1			APPD TB 05-08-2002	
03	RE-ISSUE	NJS 04-21-2004	JET	.XX	±.02			SCALE 1=1	
02	REDRAWN	TAT 04-20-2004	ML	.XXX	±.005			REF	
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML	.XXXX	±.0005			FMF	
					±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 EE7308T_LE			SIZE A	DRAWING NO. EE7308T-LE	PAGE OF 05
			DIST	LB-WP-LE					REV. 05



ELECTRIC MOTORS  
GEARMOTORS  
AND DRIVES

TITLE CONNECTION DIAGRAM  
3 PHASE - DUAL VOLTAGE MOTOR



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

**CERTIFICATION DATA SHEET**

**CATALOG #:** 825101.00

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

**#:**

**OUTLINE:** B-SS28022LE-1300

**MOUNTING:** F1 ONLY

**WINDING #:** K3244127 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
40&30	30.0&22.4	1800	1780&1480	324T	EPFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	95/47.5&87/43.5	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	94.1&94.1	3/4 LOAD EFF:	94.5	1/2 LOAD EFF:	94.5	GTD. EFF	93.6	ELEC. TYPE	SQ CAGE INV RATED
FULL LOAD PF:	83&82	3/4 LOAD PF:	79.5	1/2 LOAD PF:	71				

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B,D. TORQUE	F.L. RISE°C
118 LB-FT	580 / 290	218 LB-FT 185 %	305 LB-FT 258 %	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	8.8 LB-FT^2	275 LB-FT^2	25 SEC.	2	700 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	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
312	311						

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

Data Sheet

Date: 1/22/2018

825101.00



Data @ 460 V

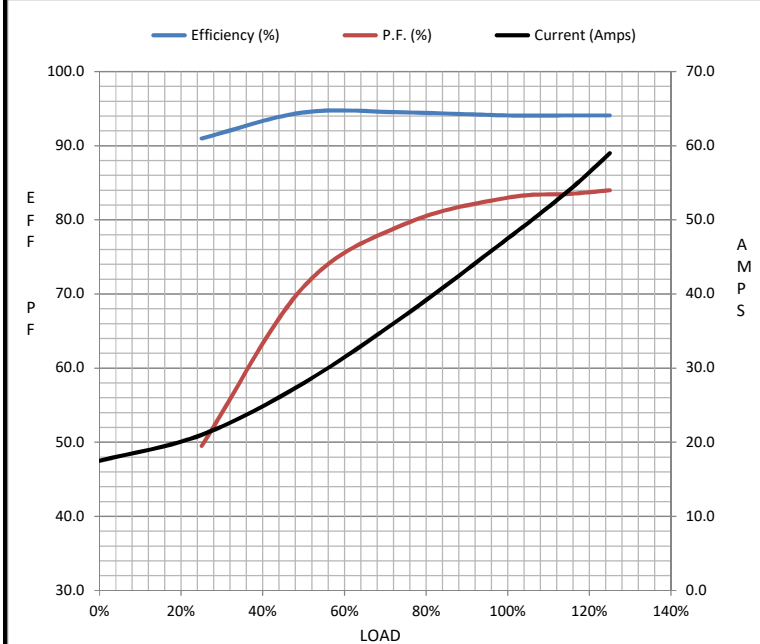
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	17.5	21.0	28.0	37.2	47.5	54.0	59.0	290
Torque (ft-lb)	0.00	29.5	58.5	88.5	118	136	148	218
RPM	1800	1795	1790	1785	1780	1.775	1772	0
Efficiency (%)		91.0	94.5	94.5	94.1	94.1	94.1	
P.F. (%)	4.5	49.5	71.0	79.5	83.0	83.5	84.0	34.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1685	1780	1800
Current (Amps)	290	255	165	47.5	17.5
Torque (ft-lb)	218	190	305	118	0.00

Information Block				
HP	40.0			
Sync. RPM	1800			
Frame	324			
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	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	8.8 Lb-Ft <sup>2</sup>			
Ref Wdg	K3244127 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS28022LE-1300			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0820	0.0660	0.5790	0.7980	13.5140



Speed - Torque Curve

