

PRODUCT INFORMATION PACKET



Model No: 825083.00
Catalog No: 825083.00
Explosion Proof Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
324TC Frame, EPFC



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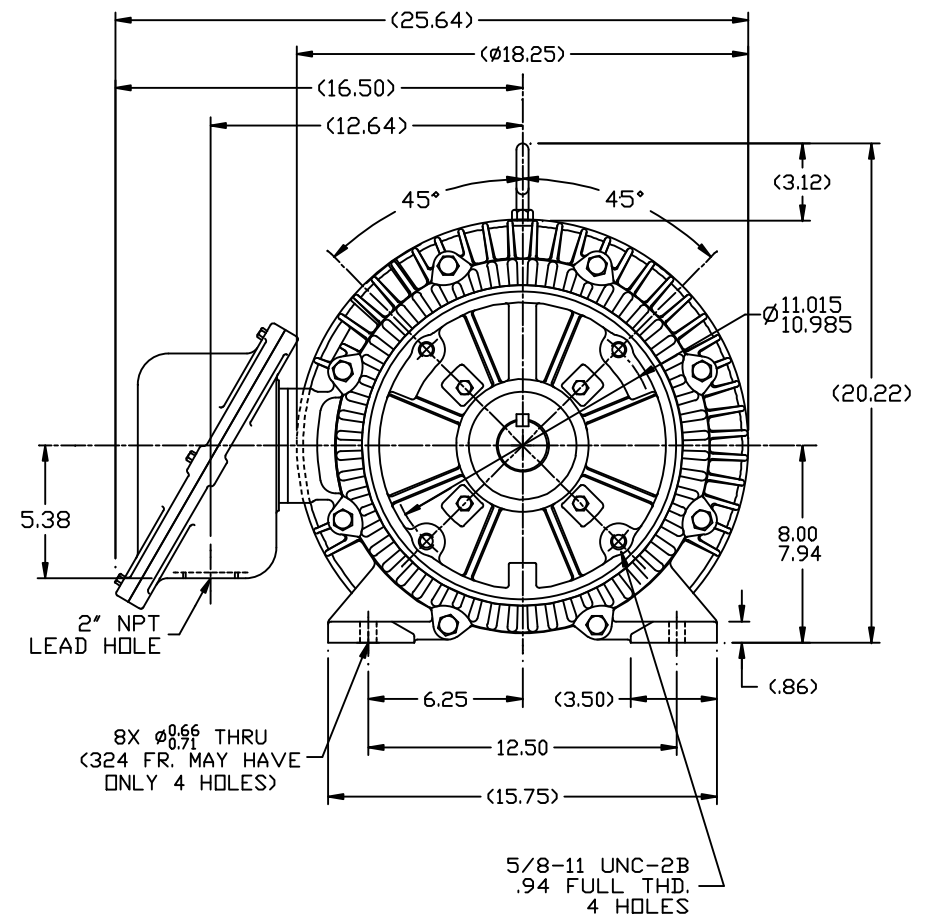
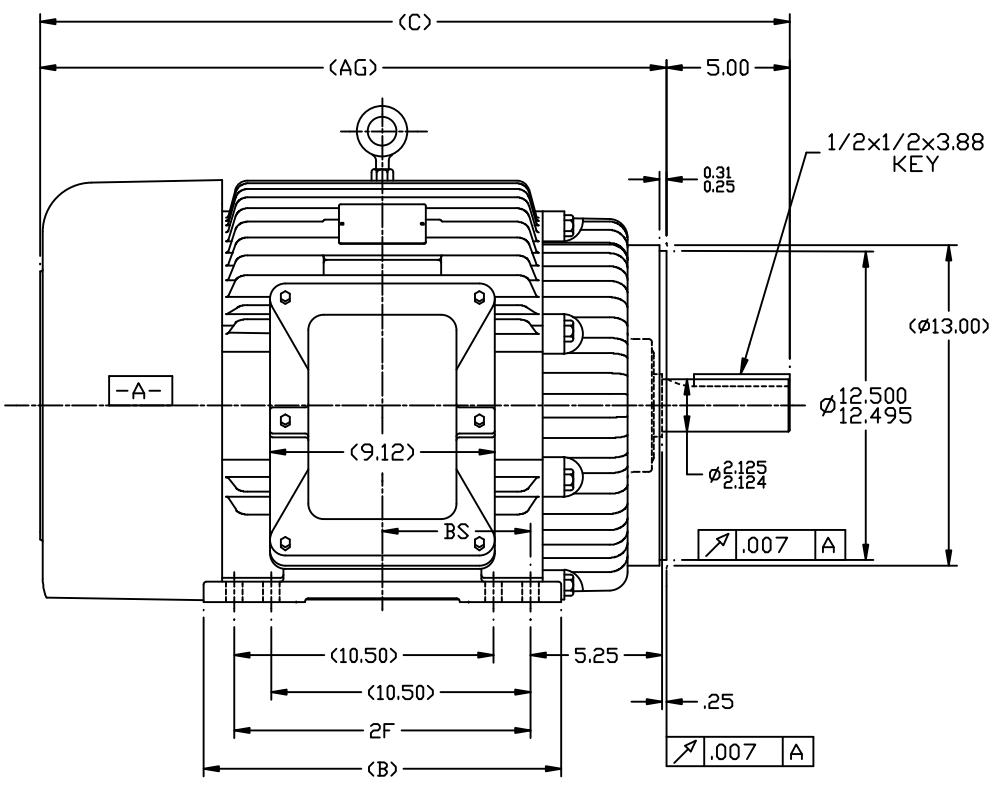


Nameplate Specifications

Phase	3	Output HP	40 & 30 Hp
Output KW	30.0 & 22.4 kW	Voltage	230/460 & 190/380 V
Speed	1780 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	324TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	No Protection	Efficiency	94.1 & 94.1 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	95/47.5 & 87/43.5 A	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
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	4	Rotation	Reversible
Resistance Main	.135 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	30.37 in
Frame Length	13.00 in	Shaft Diameter	2.125 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	EE7308T-LE	Outline Drawing	SS28696LE-1300



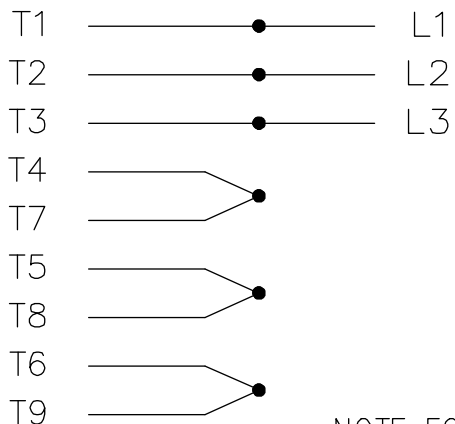
- NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

DASH	FRAME	C	AG	B	2F	BS
1150	324T	28.87	23.87	13.00	10.50	5.25
1300	324/6T	30.37	25.37	14.50	12.00	6.00

		TOLERANCES UNLESS SPECIFIED			ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN CAV 05-21-2002
		DEC.	INCHES			CHK
		.X	±.1	TITLE OUTLINE - C'FACE		APPD
		.XX	±.03	324-26T FR. - BB - EXP. PR.		SCALE 1=5
		.XXX	±.005	MAT'L.		REF
1 NEW DRAWING MU41877		CAV	.XXXX ±.0005	FINISH		PREV
NO. REVISION		BY & DATE	CHK ANG ±7°30'	CAD FILE SS28696		SIZE DRAWING NO. PAGE DF REV.
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 SS28696	B SS28696LE 1
				DIST LB		

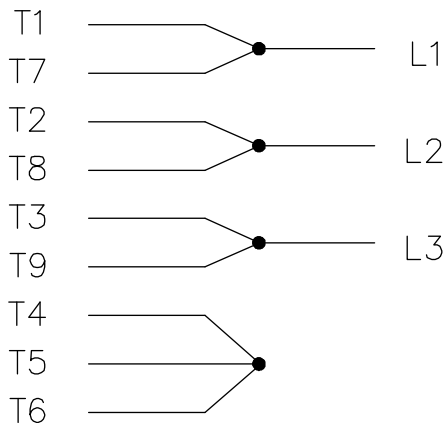
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

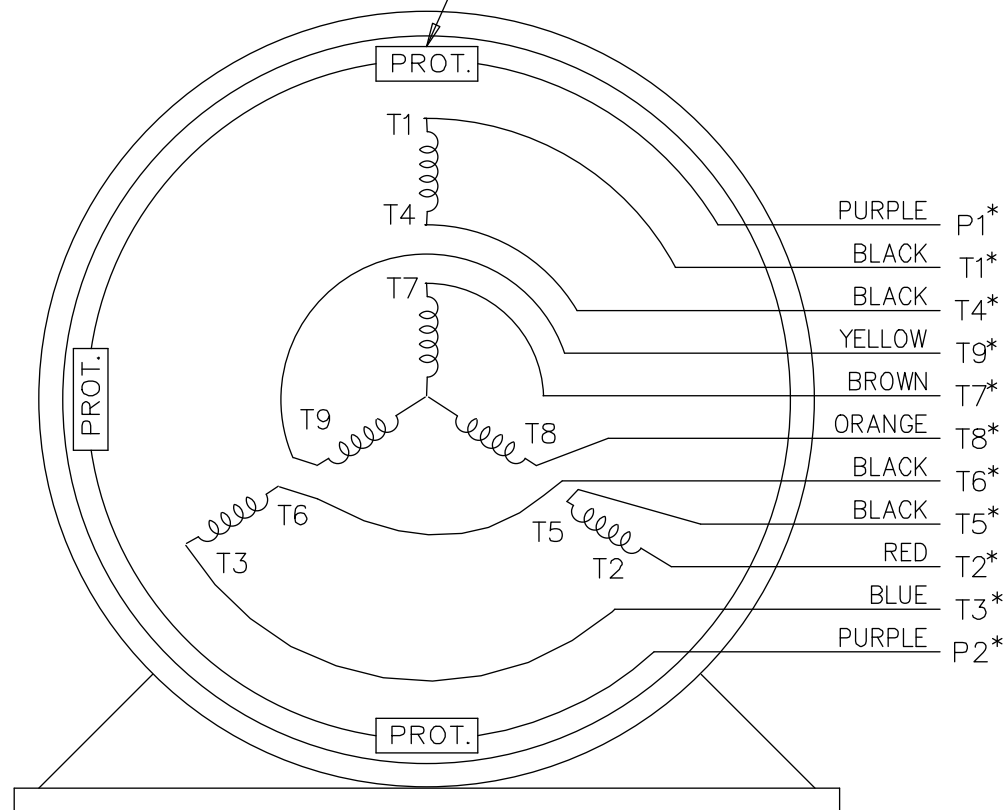


NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

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						
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							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		



2100 WASHINGTON ST.
GRAFTON, WI
PH. 262-277-8810

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T-LE

OUTLINE: B-SS28696LE-1300

CATALOG # : 825083.00

WINDING #: K3244127 1

MOUNTING: F1 ONLY

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	324TC	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
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	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
6312	6311						

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
S

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

Data Sheet

Date: 1/22/2018

825083.00



Data @ 460 V

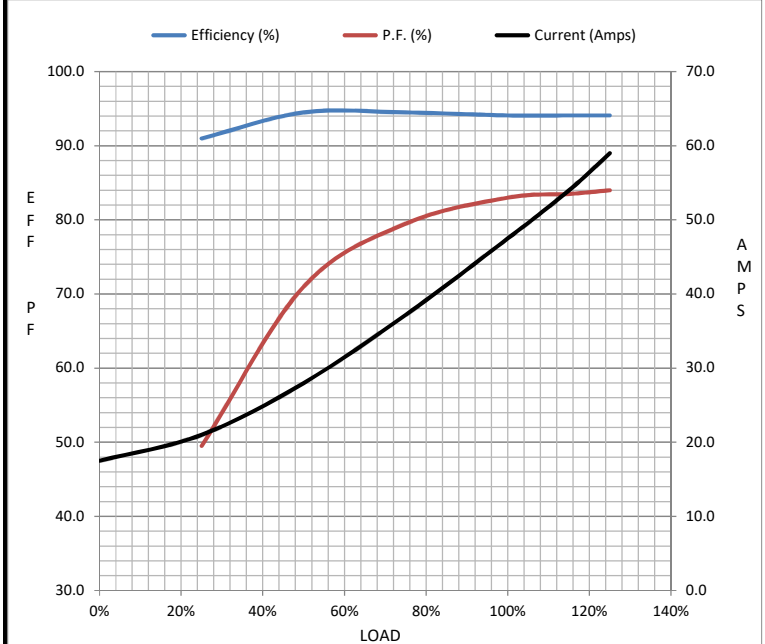
Motor Load Data

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 ²	8.8 Lb-Ft ²			
Ref Wdg	K3244127 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS28696LE-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

