

PRODUCT INFORMATION PACKET



Model No: 825084.00
Catalog No: 825084.00
Explosion Proof Motor, 50 & 40 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
326TC Frame, EPFC



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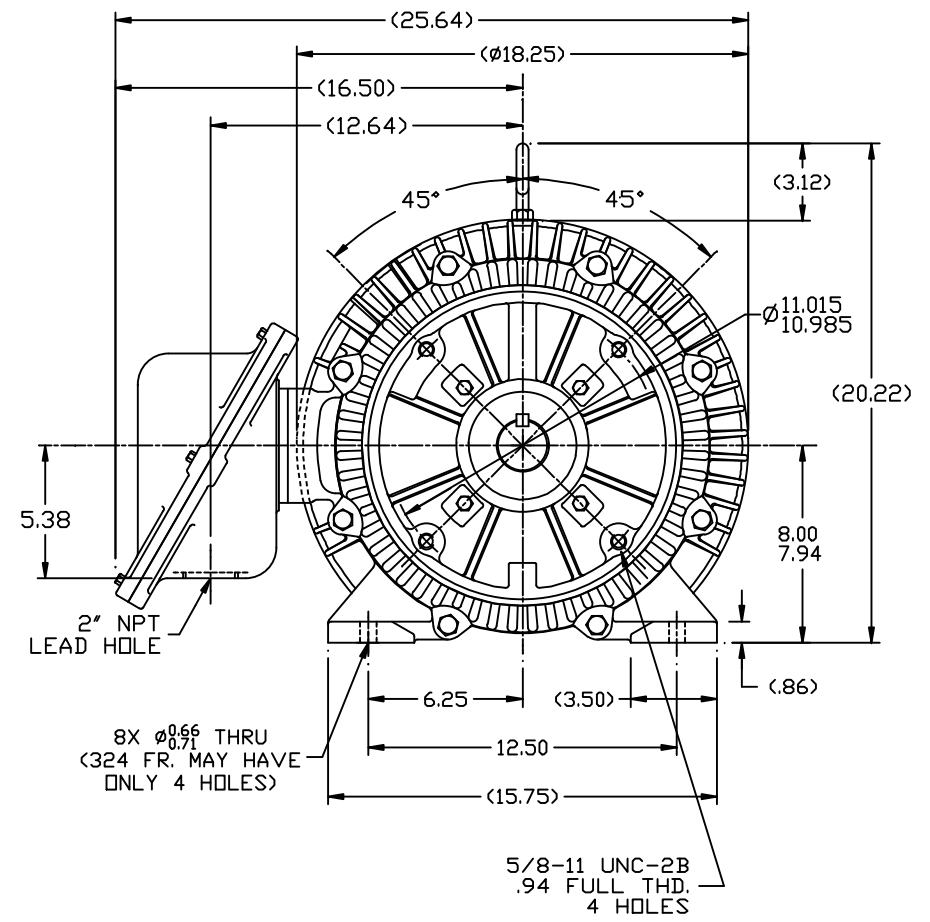
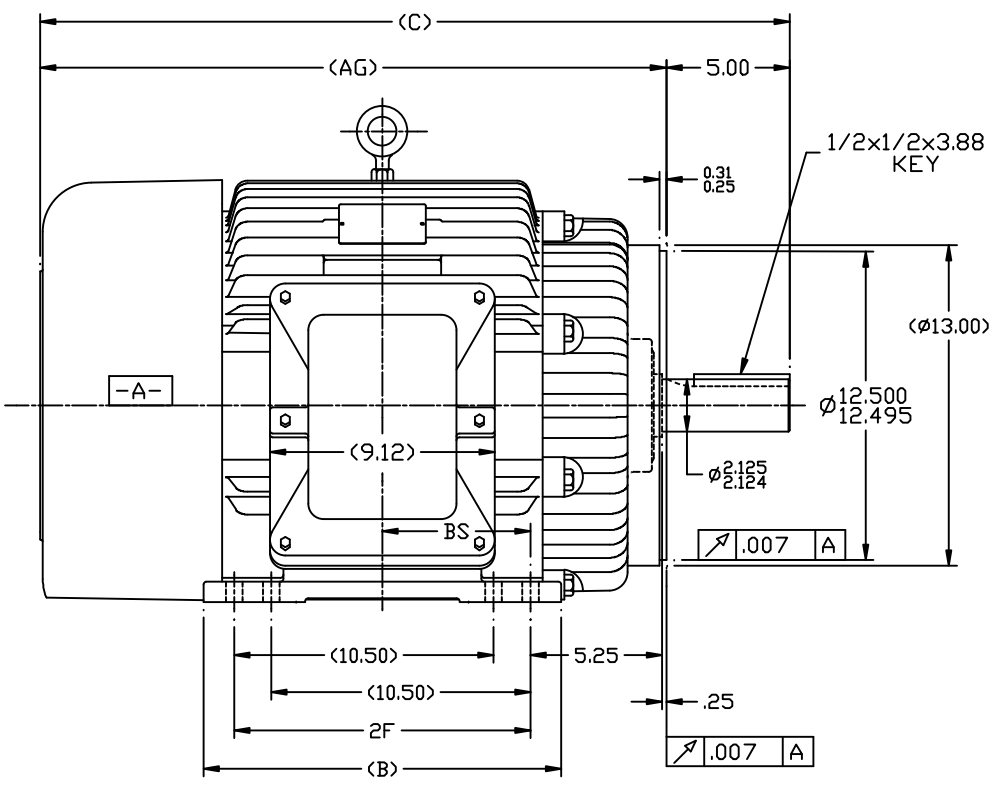


Nameplate Specifications

Phase	3	Output HP	50 & 40 Hp
Output KW	37.0 & 30.0 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1470 rpm	Service Factor	1.0 & 1.0
Frame	326TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	No Protection	Efficiency	94.5 & 94.1 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	120/60 & 116/58 A	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	312	Opp Drive End Bearing Size	311
UL	No	CSA	N
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	.112 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	13.01 in	Shaft Diameter	2.125 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	SS28696LE-1300	Connection Drawing	EE7308T-LE



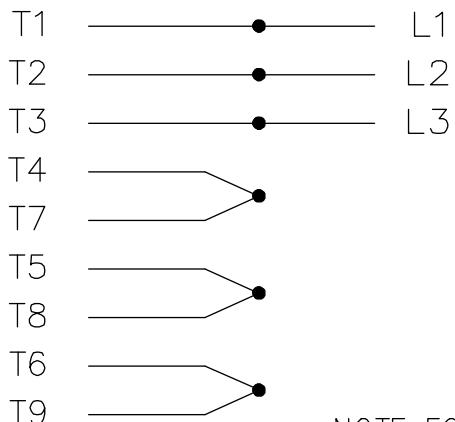
- NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

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		FMF
NO.	REVISION	BY & DATE	CHK	ANG	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 SS28696	SIZE DRAWING NO. PAGE DF REV.
				DIST LB	B	SS28696LE 1

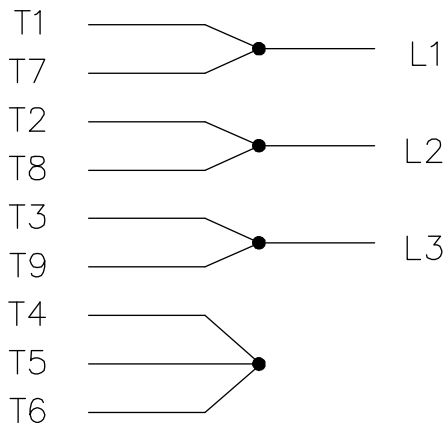
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

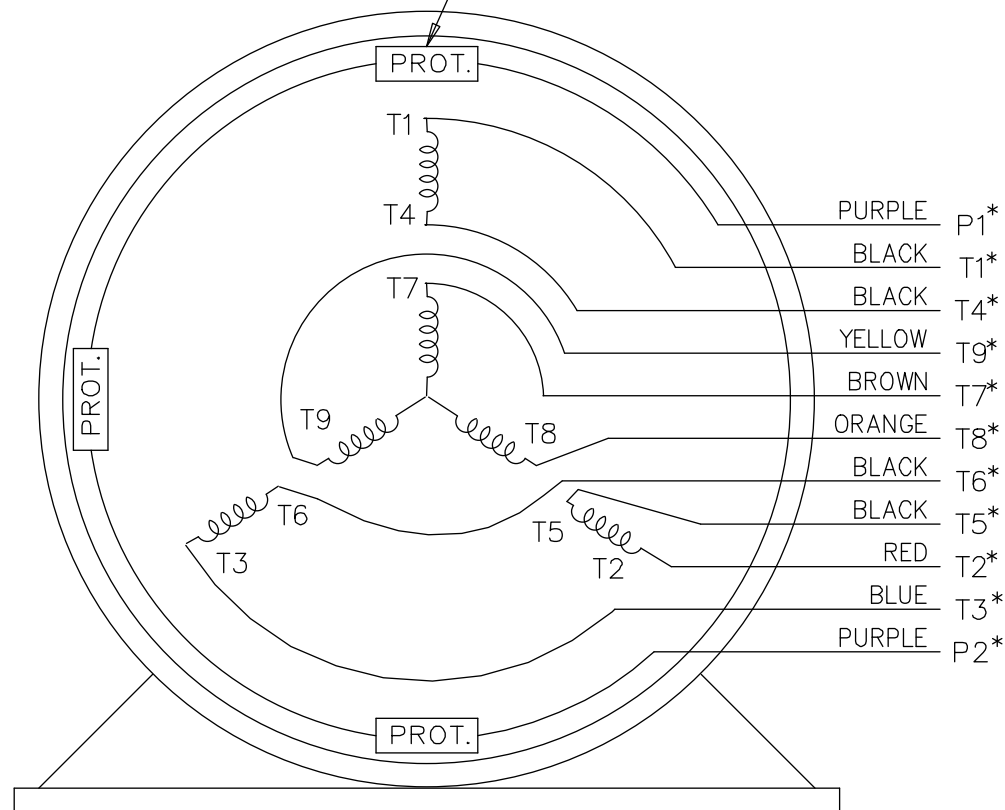


NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

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		



1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-277-8810

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T-LE
OUTLINE: B-SS28696LE-1300
WINDING: K3264168

CAT #: 825084.00

NONE 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
50	37	1800	1775	326TC	TEFC	TFN	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	120/60&118/59	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	94.5	1/2 LD EFF	94.5	GTD EFF	ELECT. TYPE
F.L. PF	82.0	3/4 LD PF	79.0	1/2 LD PF	71.0	94.1	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
148 LB-FT	335	250 LB-FT 169%	340 LB-FT 230%	75

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
65 dBA	74 dBA		9.7 LB-FT²	325 LB-FT²	25 SEC.	2	775 LB.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	OF CL I GR C&D CL II GR	NO	NONE	WATTSAVER

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						
312	311						

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
0.068	0.062	0.483	0.648	11.068	0.150	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 2:1 INV. HP SPEED RANGE: NONE					
	ENCODER: NONE NONE NONE					
	BRAKE: NONE NONE NONE					
	FT-LB: NA VOLTAGE: NONE					
	UL: NONE					

DATE: 8/29/2018

BRAKE: NONE
NONE

FT-LB: NA
VOLTAGE: NONE

UL: NONE

Data Sheet

Date: 8/29/2018

825084.00



Data @ **460 V**

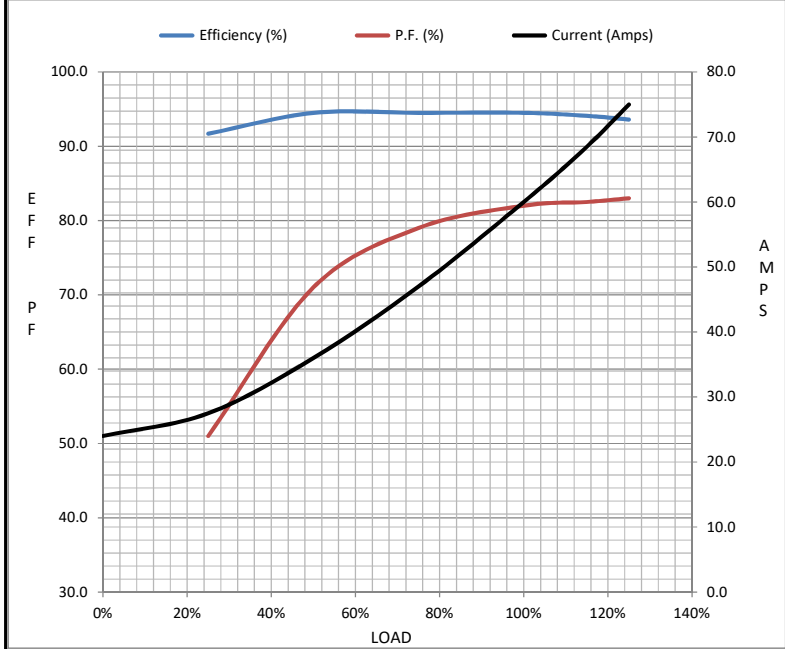
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	24.0	27.5	36.0	47.0	60.0	68.5	75.0	335
Torque (ft-lb)	0.00	36.6	73.5	111	148	170	185	250
RPM	1800	1795	1788	1782	1775	1,772	1770	0
Efficiency (%)		91.7	94.5	94.5	94.5	94.1	93.6	
P.F. (%)	4.0	51.0	71.0	79.0	82.0	82.5	83.0	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1775	1800
Current (Amps)	335	300	190	60.0	24.0
Torque (ft-lb)	250	230	340	148	0.00

Information Block				
HP	50.0			
Sync. RPM	1800			
Frame	326			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	75 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	9.7 Lb-Ft ²			
Ref Wdg	K3264168 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS28696LE-1300			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0680	0.0620	0.4830	0.6480	11.0680



Speed - Torque Curve

