

# PRODUCT INFORMATION PACKET



Model No: 825085.00

Catalog No: 825085.00

Explosion Proof Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,  
182T Frame, EPFC



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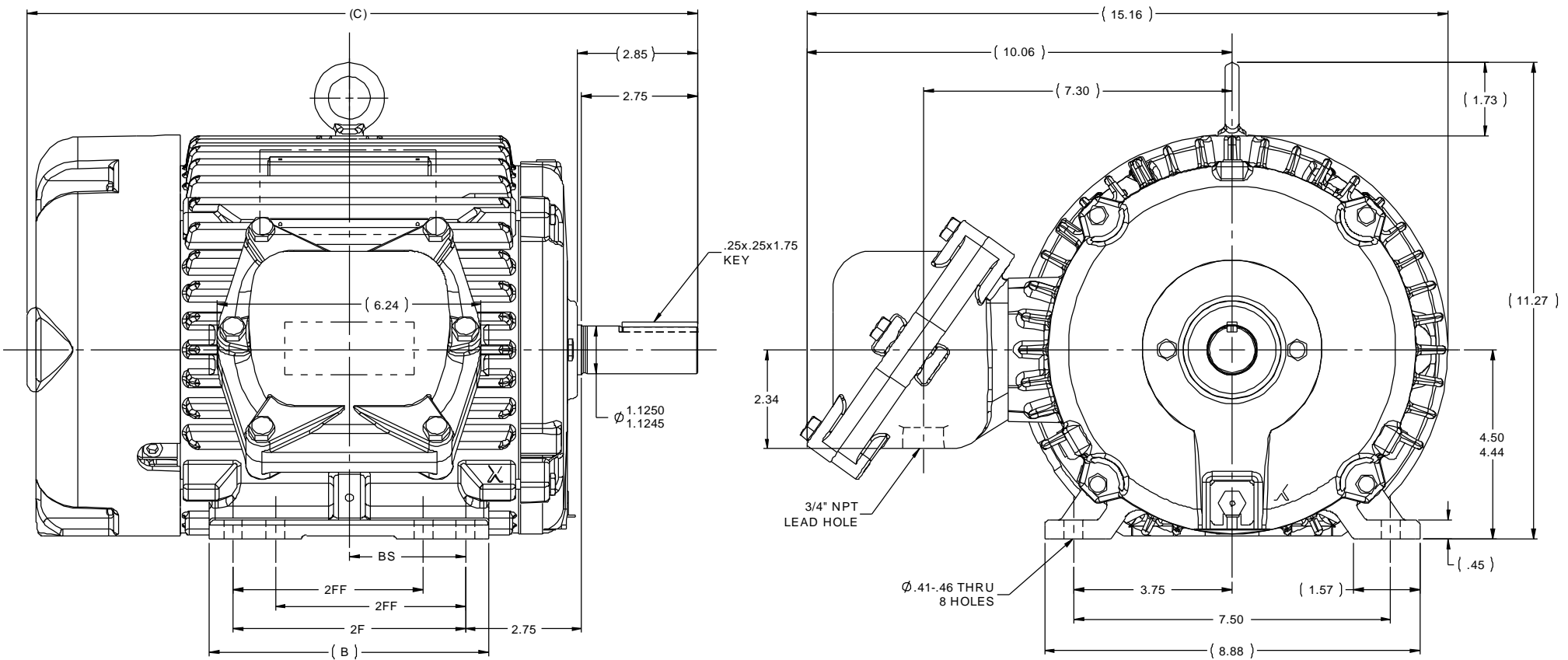
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>3 &amp; 2 Hp</b>
Output KW	<b>2.2 &amp; 1.5 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1765 &amp; 1470 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>182T</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>90.2 &amp; 88.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>8/4 &amp; 6.8/3.4 A</b>	Power Factor	<b>80</b>
Duty	<b>Continuous</b>	Insulation Class	<b>B</b>
Design Code	<b>B</b>	KVA Code	<b>K</b>
Drive End Bearing Size	<b>206</b>	Opp Drive End Bearing Size	<b>206</b>
UL	<b>UL Listed; also, UL Certified for Canada</b>	CSA	<b>N</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>3.76 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>15.87 in</b>
Frame Length	<b>8.00 in</b>	Shaft Diameter	<b>1.125 in</b>
Shaft Extension	<b>2.75 in</b>	Assembly/Box Mounting	<b>F1 Only</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Connection Drawing	<b>A-EE7308T-LE</b>	Outline Drawing	<b>035660LE-800</b>





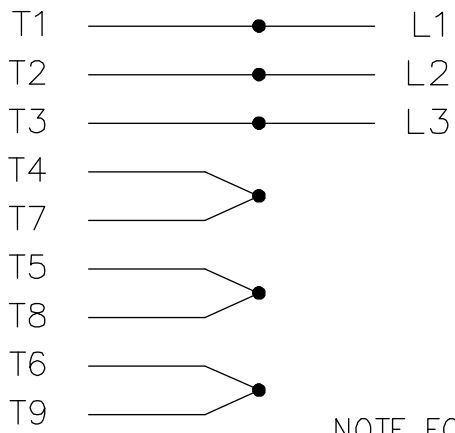
- NOTES:  
 1. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.  
 2. CONDUIT BOX CAN ROTATED IN 90° STEPS.  
 3. CONDUIT BOX CAN MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORIGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ. TITLED "MOTORS AND GENERATORS REBUILT FOR USE IN HAZARDOUS LOCATIONS."

1000	184	17.87	8.61	7.50	5.50	3.75
800	182/184	15.87	6.61	5.50	4.50	2.75
DASH	FRAME	C	B	2F	2FF	BS

		TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN ST 8-25-2009	
		DEC	INCHES			CHK VV 8-25-2009	
		X	±.1	TITLE OUTLINE - EPFC		APPR	
		XX	±.03	180 FR.		SCALE 7:16	
		XXX	±.005	MOTL		REF 035660.00	
01	FRAME & BS DIM. 1000DSH WAS 182/184 & 2.75 RESP.	PVR	7/11/2012	AK	±.0005	FMF	
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						CAD FILE 035660LE	
DIST WA - NLV						SIZE B	DRAWING NO 035660LE
						REV 01	

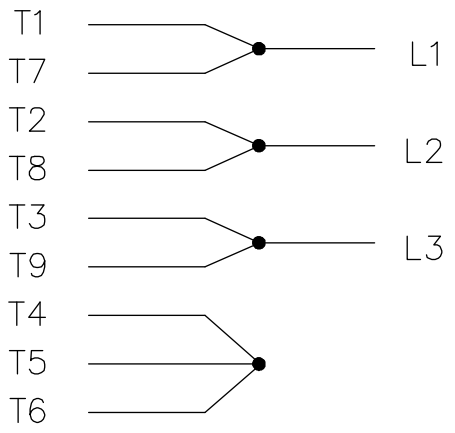
THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

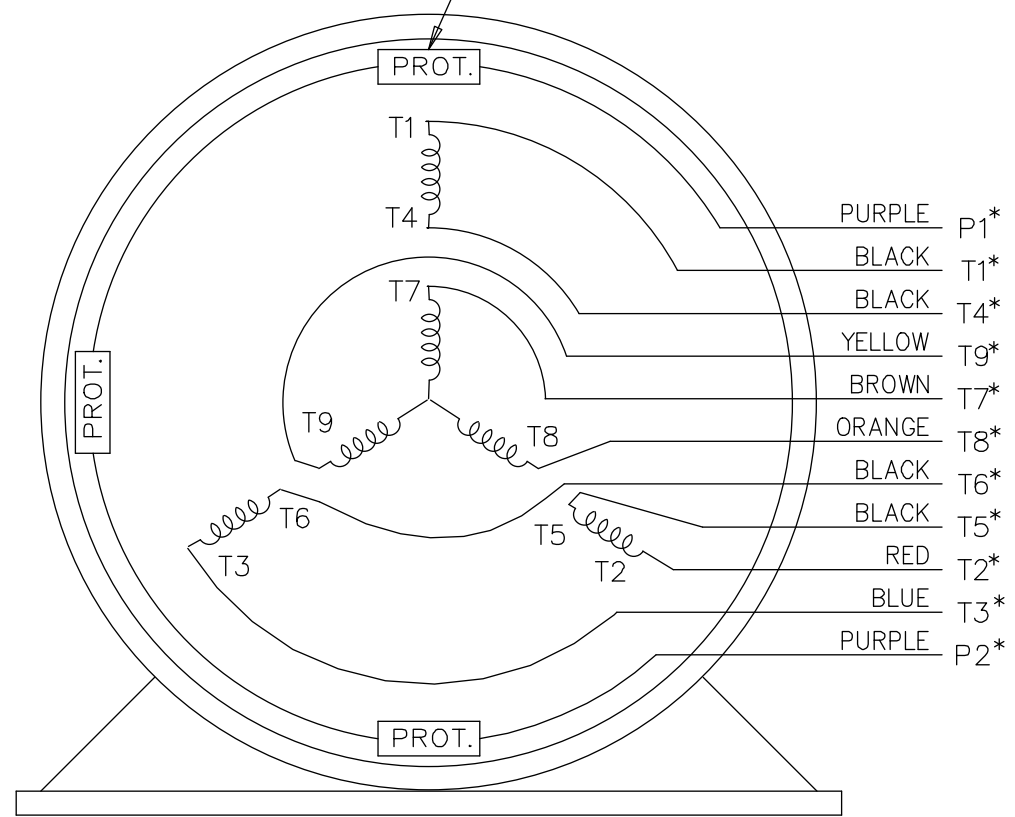


NOTE FOR FACTORY USE ONLY:  
 TO SURGE TEST FOR COMMON CONNECT:  
 HIGH VOLT: CONNECT P1 TO T1  
 THEN P2 TO L1  
 LOW VOLT: CONNECT P1 TO T1 & T7,  
 THEN P2 TO L1

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		05-08-2002	
02	REDRAWN	TAT 04-20-2004	ML	.XXX	±.005	3 PHASE - DUAL VOLTAGE MOTOR	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 #:** 825085.00

**OUTLINE:** 035660LE-800

**MOUNTING:** F1 ONLY

**WINDING #:** K1824116 R1 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3&2	2.24&1.49	1800	1765&1470	182T	EPFC	K	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	8/4&6.8/3.4	LINE OR INVERTER	CONTINUOUS	B3	1.15/1.15	40

FULL LOAD EFF:	90.2&88.5	3/4 LOAD EFF:	90.2	1/2 LOAD EFF:	89.5	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	80&76	3/4 LOAD PF:	75	1/2 LOAD PF:	63	89.5		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B,D. TORQUE	F.L. RISE°C
9 LB-FT	64 / 32	22.5 LB-FT 250 %	35 LB-FT 389 %	30

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.4 LB-FT^2	40 LB-FT^2	25 SEC.	2	95 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	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 206	BALL 206	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON

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 NONE FT-LB NONE V NONE HZ

Data Sheet

Date: 1/24/2018

825085.00



Data @ 460 V

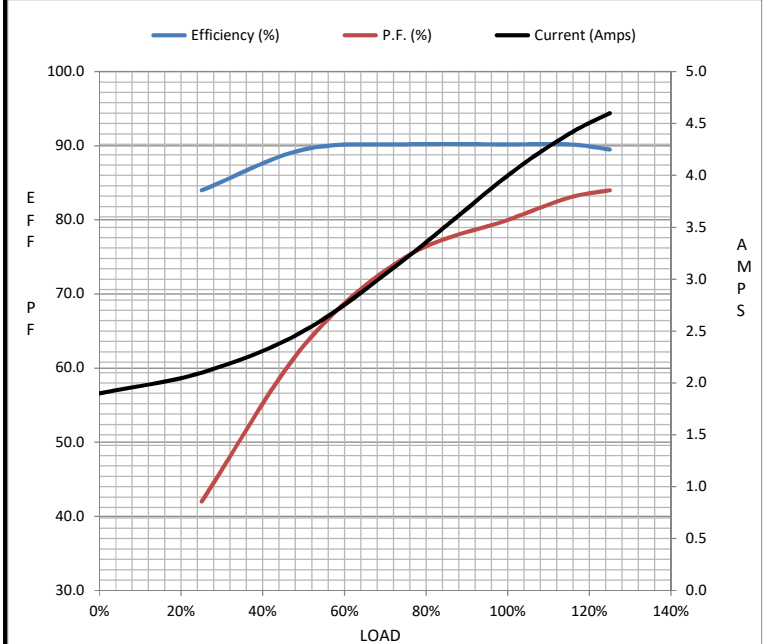
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.90	2.10	2.50	3.2	4.0	4.4	4.6	32.0
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.4	11.2	22.5
RPM	1800	1790	1785	1775	1765	1.760	1755	0
Efficiency (%)		84.0	89.5	90.2	90.2	90.2	89.5	
P.F. (%)	6.5	42.0	63.0	75.0	80.0	83.0	84.0	47.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1500	1765	1800
Current (Amps)	32.0	30.0	23.0	4.0	1.90
Torque (ft-lb)	22.5	20.0	35.0	9.0	0.00

Information Block				
HP	3.0			
Sync. RPM	1800			
Frame	182			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	30 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.40 Lb-Ft <sup>2</sup>			
Ref Wdg	K1824116 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	035660LE-800			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
2.3530	1.6160	5.0840	7.9000	130.4100



Speed - Torque Curve

