

PRODUCT INFORMATION PACKET



Model No: LM80194

Catalog No: LM80194

Fire Pump Motor, 125 & 100 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM, 444TS Frame, TEFC



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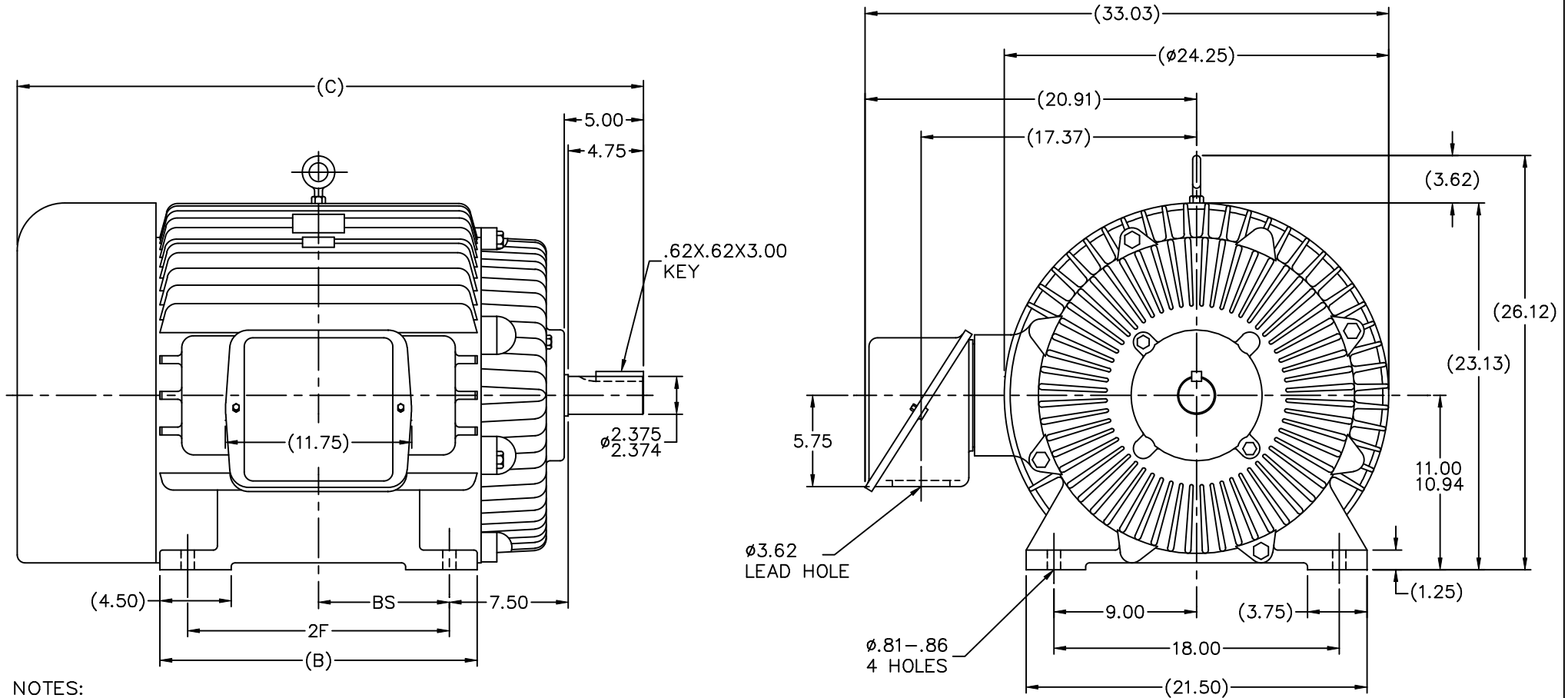


Nameplate Specifications

Phase	3	Output HP	125 & 100 Hp
Output KW	93.0 & 75.0 kW	Voltage	460 & 380 V
Speed	1780 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	444TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.5 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	142 & 140 A	Power Factor	86.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	No	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.035 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	37.50 in
Frame Length	18.52 in	Shaft Diameter	2.375 in
Shaft Extension	4.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS504864LN-1850	Connection Drawing	A-EE7300BH-LN



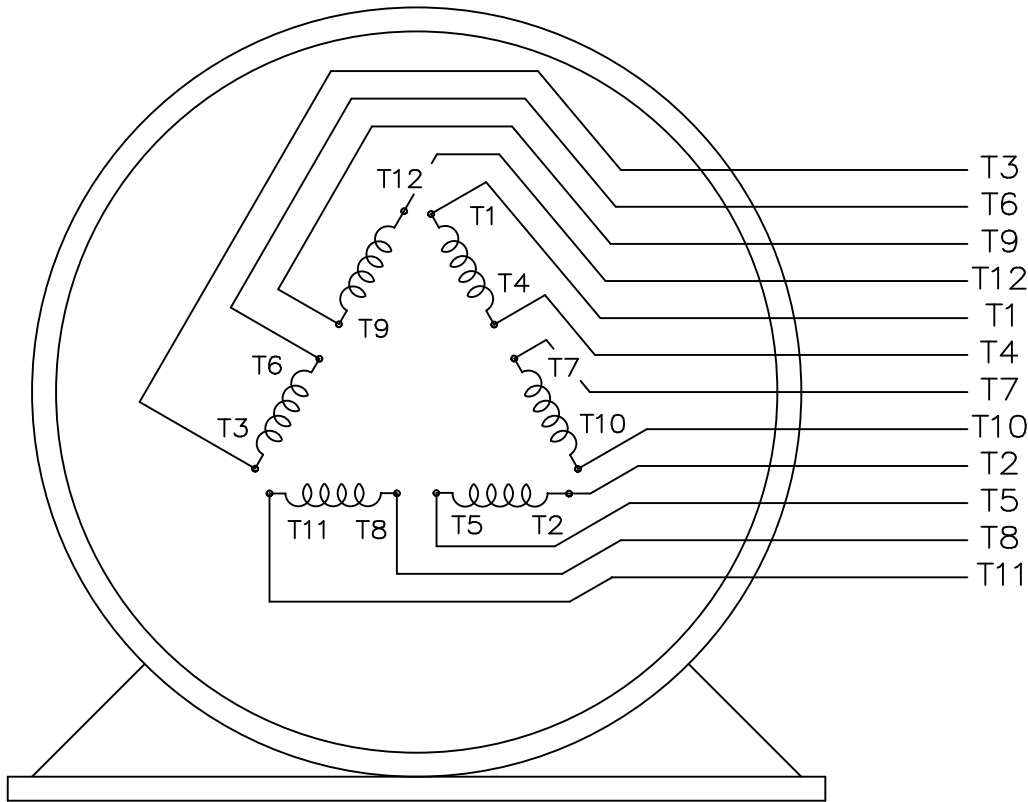
NOTES:

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

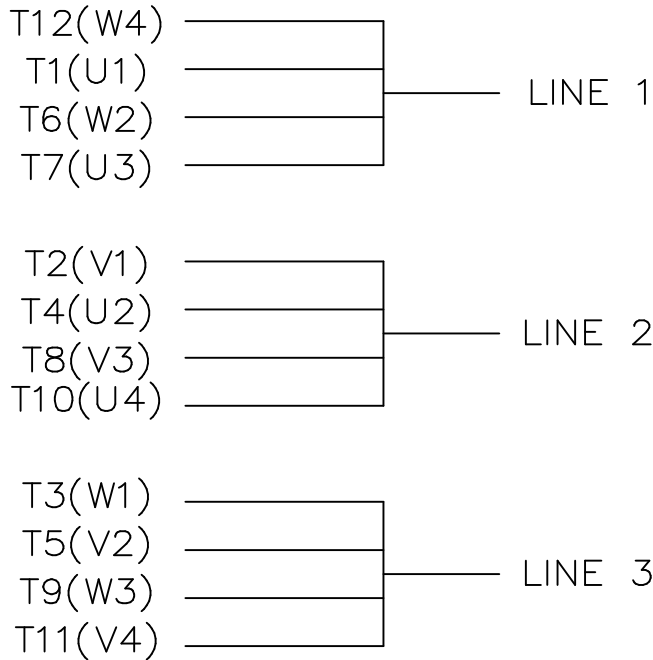
DASH	FRAME	B	C	2F	BS
1850	444TS	18.00	37.50	14.50	7.25
2050	445TS	20.00	39.50	16.50	8.25

TOLERANCES UNLESS SPECIFIED		DEC. INCHES		Lincoln MOTOR		DRAWN JJB 07-28-2009	
.X		±.1				CHK MH 07-28-2009	
.XX		±.03				APPD MJS 07-29-2009	
.XXX		±.005		TITLE OUTLINE		SCALE 1=6	
.XXX		±.0005		440TS FR. - TEFC - STD.		REF	
.XXX		±.0005		MAT'L		FME MU91865	
NO.		REVISION		BY & DATE		PREV	
RFP		07-30-2009		CAD FILE SS504864LN		SIZE B	
DIST		WA				DRAWING NO. SS504864LN	
						PAGE OF	
						REV.	

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VIEW OF TERMINAL END



				TOLERANCES UNLESS SPECIFIED						DRAWN KL 04-23-2002		
				DEC.	INCHES					CHK DJK 04-24-2002		
				.X	±.1					APPD EAB 04-24-2002		
				.XX	±.01	TITLE CONNECTION DIAGRAM – EXTERNAL 12 LEAD – SINGLE VOLTAGE				SCALE 1=1		
2	ADDED IEC TERMINAL MARKINGS CN 41429	JJB 05/24/2004	ML	.XXX	±.005					REF		
1	NEW DRAWING MU41562	KL 04-12-02		.XXXX	±.0005	MAT'L.				FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	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 ee7300bh_ln				SIZE	DRAWING NO.	PAGE OF	REV.
			DIST WA-SB						A	EE7300BH-LN		2



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7300BH-LN

CAT #: LM80194

OUTLINE: B-SS514023LN-1850

WINDING: T4444139

NONE 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
125	93	1800	1780	444TS	TEFC	TFS	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	460#380	142&140	PWS & YDRUN	CONT	F	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	94.5	1/2 LD EFF	94.1	GTD EFF		ELECT. TYPE	
F.L. PF	86.5	3/4 LD PF	84.5	1/2 LD PF	79.0	93.6		SQ CAGE IND RUN	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
368 LB-FT	875	675 LB-FT 183%	825 LB-FT 224%	80

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA		41.0 LB-FT²	750 LB-FT²	25 SEC.	2	1750 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	WATTSaver

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313 6313						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	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
0.027	0.02	0.204	0.266	6.472	0.150	ODE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE	NONE PPR

DATE: 9/4/2018	BRAKE: NONE NONE	NONE
	FT-LB: NA	
	VOLTAGE: NONE	HZ:
	UL: NONE	

Data Sheet

Date: 9/4/2018

LM80194



Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	40.5	53.0	79.0	110	142	164	179	875	
Torque (ft-lb)	0.00	91.0	183	276	368	425	462	675	
RPM	1800	1795	1790	1785	1780	1,778	1775	0	
Efficiency (%)		91.0	94.1	94.5	94.5	94.5	94.1		
P.F. (%)	6.0	60.0	79.0	84.5	86.5	86.5	86.5	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																	
Speed (RPM)	0	900	1725	1780	1800																																	
Current (Amps)	875	800	475	142	40.5																																	
Torque (ft-lb)	675	600	825	368	0.00																																	
— Efficiency (%) — P.F. (%) — Current (Amps) <table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0</td><td>-</td><td>6</td><td>40.5</td></tr><tr><td>25</td><td>91</td><td>60</td><td>475</td></tr><tr><td>50</td><td>93</td><td>80</td><td>700</td></tr><tr><td>75</td><td>94</td><td>85</td><td>800</td></tr><tr><td>100</td><td>94.5</td><td>86.5</td><td>875</td></tr><tr><td>125</td><td>94</td><td>86</td><td>-</td></tr></tbody></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	0	-	6	40.5	25	91	60	475	50	93	80	700	75	94	85	800	100	94.5	86.5	875	125	94	86	-	Information Block				
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						Construction		TFS																														
						Voltage		460#380	V																													
						Frequency		60	Hz																													
						Design		B																														
						LR Code letter		G																														
Service Factor		1.15																																				
Temp Rise @ FL		80	° C																																			
Duty		CONT																																				
Ambient		40	° C																																			
Elevation		1,000	feet																																			
Rotor/Shaft wk ²		41.0	Lb-Ft ²																																			
Ref Wdg		T4444139	NONE																																			
Sound Pressure @ 1M		75	dBA																																			
VFD Rating		NONE																																				
Outline Dwg		B-SS514023LN-1850																																				
Conn. Diag		A-EE7300BH-LN																																				
Additional Specifications:																																						
0																																						
0																																						
EQUIV CKT (OHMS / PHASE)																																						
R1		R2		X1	X2	Xm																																
0.0270		0.0200		0.2040	0.2660	6.4720																																

Speed - Torque Curve

