

# PRODUCT INFORMATION PACKET



Model No: LM80059  
Catalog No: LM80059  
7.50 HP Fire Pump Motor, 3 phase, 3600 RPM, 230/460 V, 213T Frame, TEFC  
Fire Pump Motors



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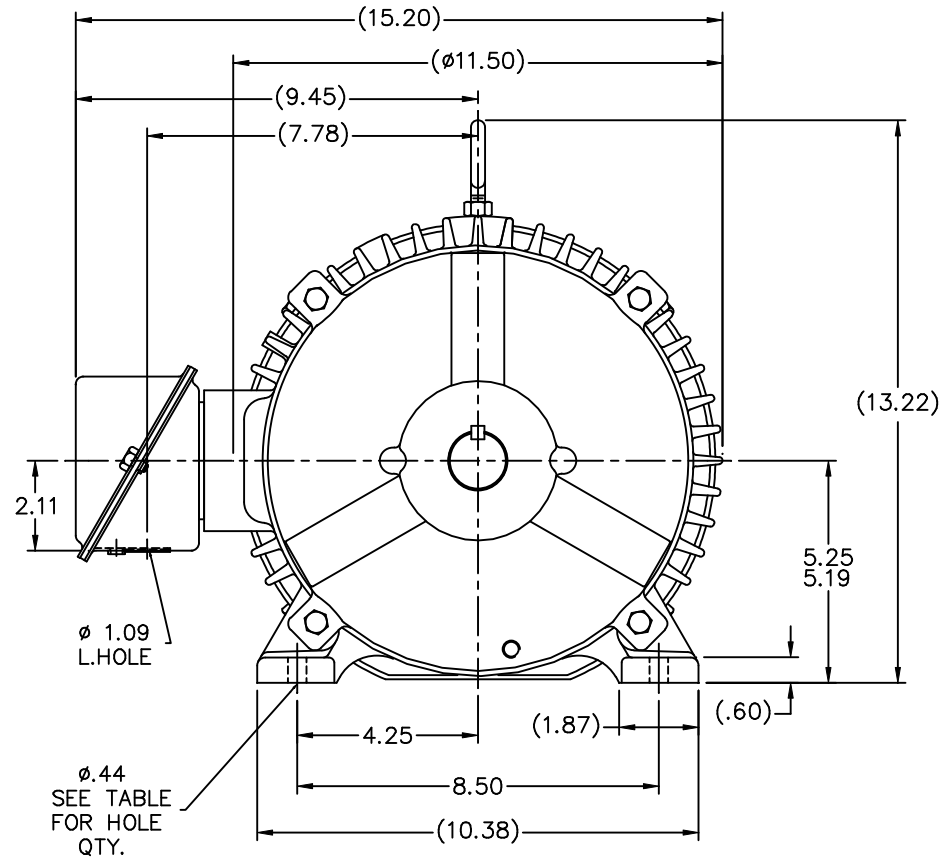
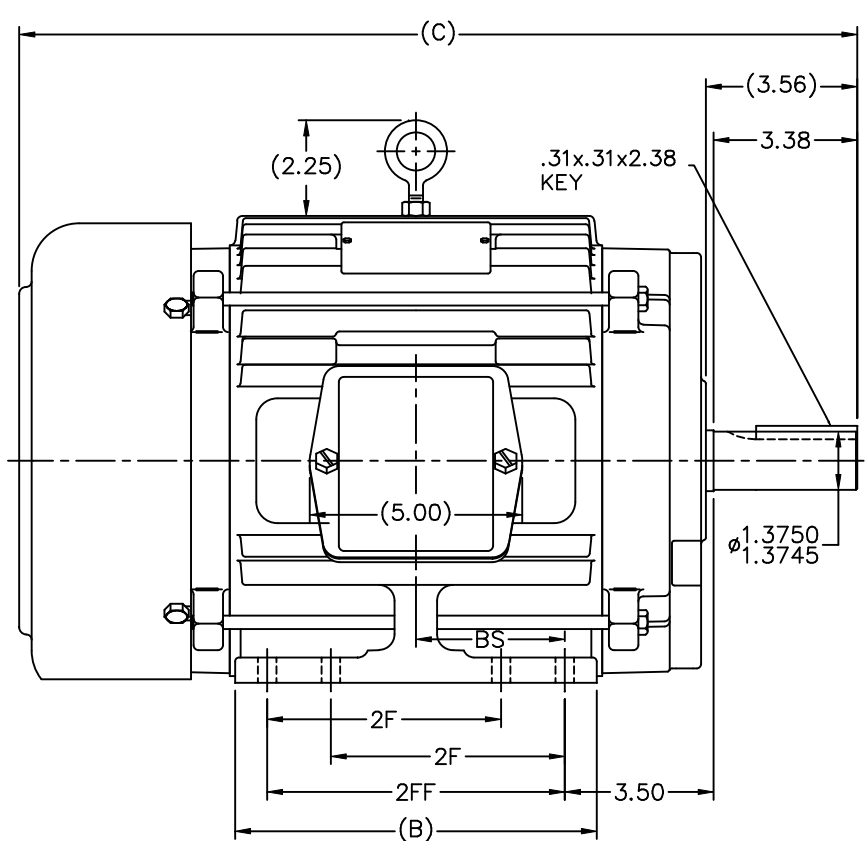
### Nameplate Specifications

Output HP	<b>7.50 Hp</b>	Output KW	<b>5.6 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>19.0/9.5 A</b>	Speed	<b>3530 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>88.5 %</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Frame	<b>213T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>307</b>	Opp Drive End Bearing Size	<b>206</b>
UL	<b>No</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.15 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>18.20 in</b>
Frame Length	<b>7.25 in</b>	Shaft Diameter	<b>1.375 in</b>
Shaft Extension	<b>3.38 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Connection Drawing	<b>A-EE7308-LN</b>	Outline Drawing	<b>B-SS84278LN-725</b>

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- 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	B	C	2F	2FF	BS	FOOT HOLE QTY.	MOUNTING
725	213T	7.00	18.20	-	5.50	2.75	4	F1 OR F2
875	215T	8.50	19.70	-	7.00	3.50	4	F1 OR F2
875	213/5T	8.50	19.70	5.50	7.00	3.50	8	F1 OR F2
1000	213T	9.75	20.95	5.50	8.25	4.12	8	F1 OR F2
1000	215T	9.75	20.95	7.00	8.25	4.12	8	F1 OR F2

		TOLERANCES UNLESS SPECIFIED		Lincoln MOTOR		DRAWN TRB 09-20-1999	
		DEC.	INCHES	CHK	ML	09-21-1999	
		.X	±.1	APPD	TB	09-21-1999	
		.XX	±.03	TITLE		SCALE 11-32	
		.XXX	±.005	OUTLINE		REF	
		.XXXX	±.0005	210T FR. - TEFC - STEEL C' BOX		FMF	
NO.	REVISION	BY & DATE	CHK	ANG	FINISH	PREV	
1	NEW DRAWING	TRB 09-20-1999	RFP	±7'30"	CAD FILE ss84278ln	SIZE	DRAWING NO. PAGE OF 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						B	SS84278LN 1
						DIST	LB

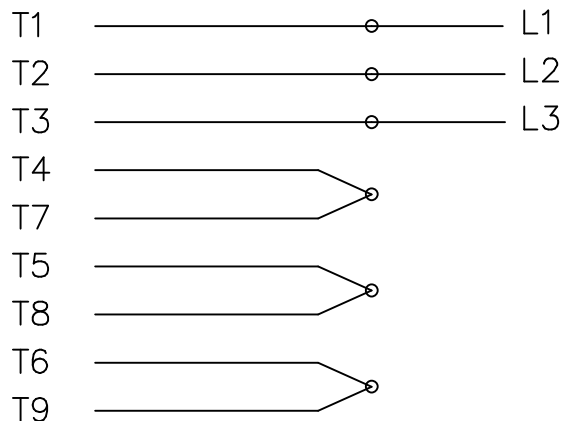
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OFFENDING COMMAND: --nostringval--
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```
STACK:
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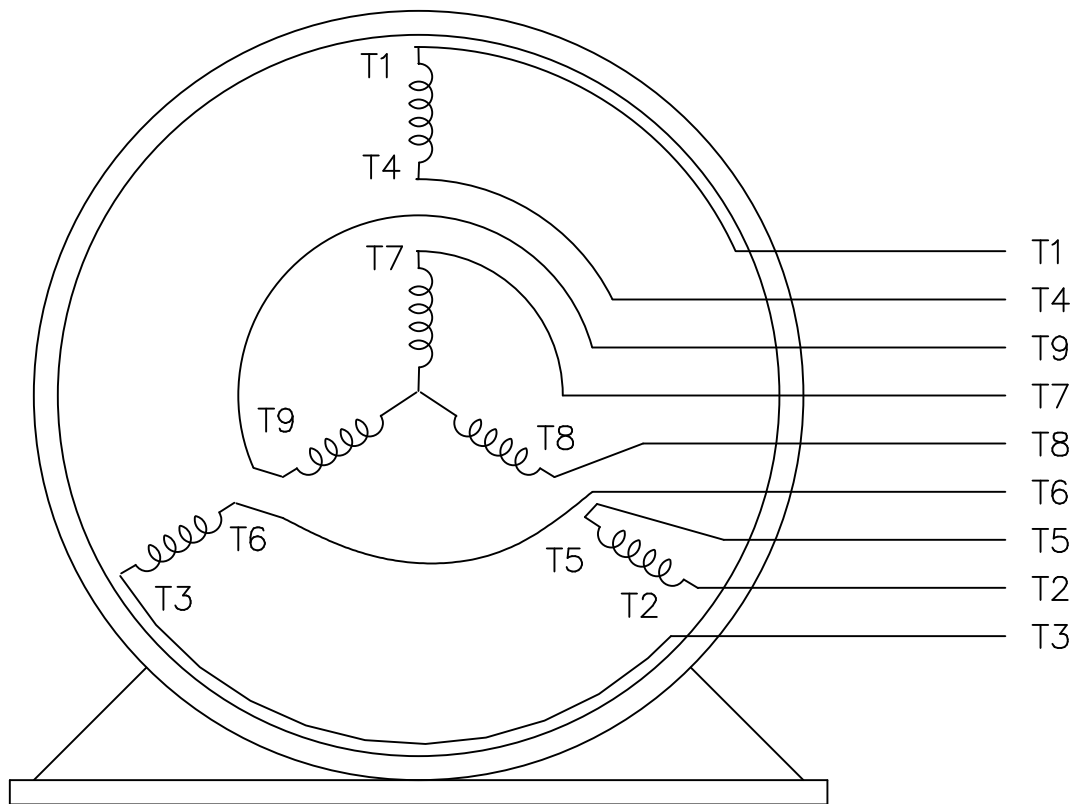
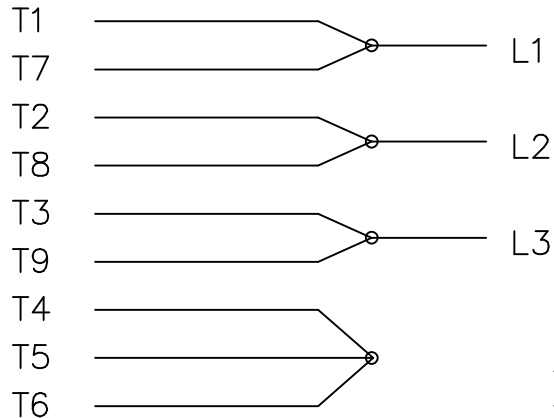
```
0  
/im  
-savelevel-
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THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

L1 — WHITE —  
L2 — RED —  
L3 — BLACK —

NO.	REVISION	BY & DATE	CHK	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN	DATE				
				DEC.	INCHES							
				.X	±.1		BLR	06/11/1999				
							ML	06/18/1999				
							GK	06/18/1999				
3	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XX	±.02	TITLE CONNECTION DIAGRAM		SCALE 1=1				
2	RE-ISSUE, ADDED '-' TO PART NUMBER	BLR 08/09/1999	GK	.XXX	±.005	3∅ - DUAL VOLTAGE MOTOR		REF				
1	NEW DRAWING	BLR 06/18/1999	GK	.XXXX	±.0005	MAT'L.		FMF				
				ANG	±7'30"			PREV				
				RFP	CAD FILE EE7308LN			SIZE	DRAWING NO.	PAGE	OF	REV.
				DIST	WP	A			EE7308-LN			3





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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7308-LN  
OUTLINE: B-SS84278LN-725  
WINDING: K2132100

CAT #: LM80059

NONE 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	3600	3530	213T	TEFC	TFN	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	19/9.5	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	88.5	3/4 LD EFF	89.5	1/2 LD EFF	88.5	GTD EFF	ELECT. TYPE
F.L. PF	86.0	3/4 LD PF	82.0	1/2 LD PF	73.0	86.5	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
11.2 LB-FT	59.5	21.5 LB-FT 192%	35.0 LB-FT 313%	38

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
72 dBA	81 dBA		0.45 LB-FT²	12 LB-FT²	15 SEC.	2	150 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	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
BALL	BALL						
307	206						

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
0.801	0.552	2.703	2.132	79.38	0.150	ODE

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

DATE:	8/31/2018	BRAKE: NONE NONE	NONE	FT-LB: NA	VOLTAGE: NONE	HZ:
UL: NONE						

Data Sheet

Date: 8/31/2018

LM80059



Data @ **460 V**

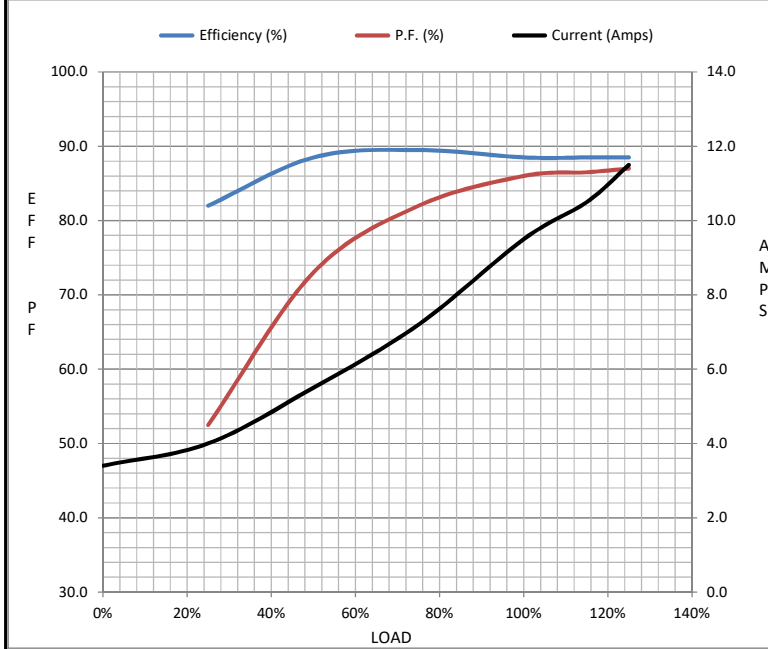
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	3.4	4.0	5.5	7.2	9.5	10.5	11.5	59.5
Torque (ft-lb)	0.00	2.80	5.5	8.4	11.2	12.8	14.0	21.5
RPM	3600	3585	3565	3550	3530	3,520	3510	0
Efficiency (%)		82.0	88.5	89.5	88.5	88.5	88.5	
P.F. (%)	10.0	52.5	73.0	82.0	86.0	86.5	87.0	39.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1500	3175	3530	3600
Current (Amps)	59.5	52.0	37.0	9.5	3.4
Torque (ft-lb)	21.5	20.0	35.0	11.2	0.00

Information Block				
HP	7.5			
Sync. RPM	3600			
Frame	213			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	38 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.45 Lb-Ft <sup>2</sup>			
Ref Wdg	K2132100 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS84278LN-725			
Conn. Diag	A-EE7308-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.8010	0.5520	2.7030	2.1320	79.3800



Speed - Torque Curve

