

# PRODUCT INFORMATION PACKET



Model No: LM80057  
Catalog No: LM80057

Fire Pump Motor, 5 & 3 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 184T Frame, TEFC



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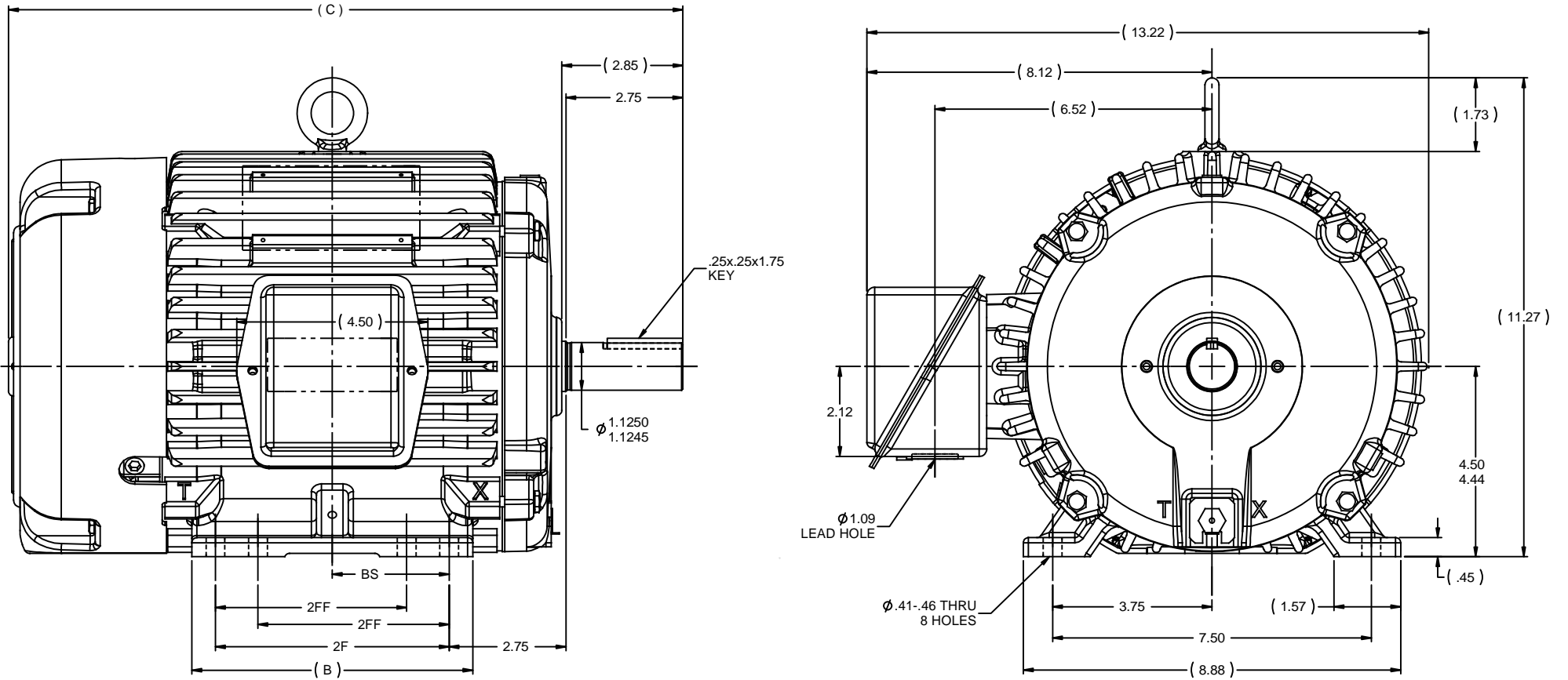


### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>5 &amp; 3 Hp</b>
Output KW	<b>3.7 &amp; 2.2 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1745 &amp; 1465 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>184T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>87.5 &amp; 88.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>13/6.5 &amp; 10/5 A</b>	Power Factor	<b>83</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>J</b>
Drive End Bearing Size	<b>206</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>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>3.05 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/F2 CAPABLE</b>
Connection Drawing	<b>A-EE7308-LN</b>	Outline Drawing	<b>035662LN-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 BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°

800	182/184	15.87	6.61	5.50	4.50	2.75
DASH	FRAME	C	B	2F	2FF	BS

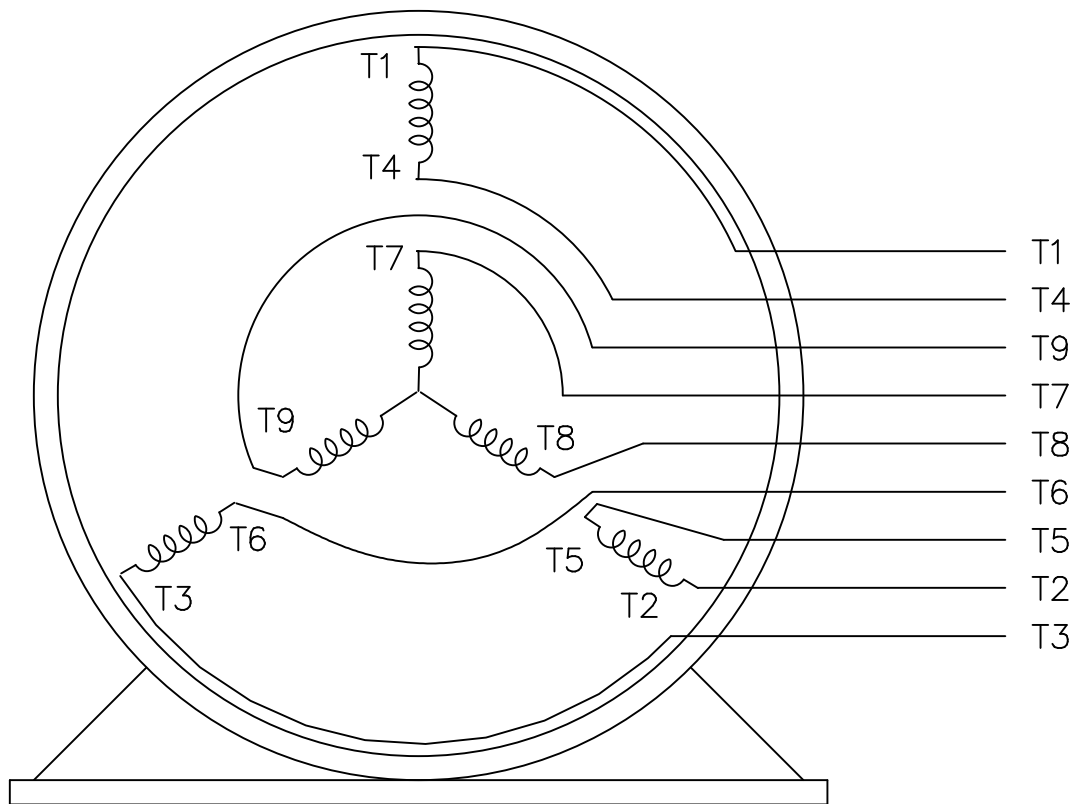
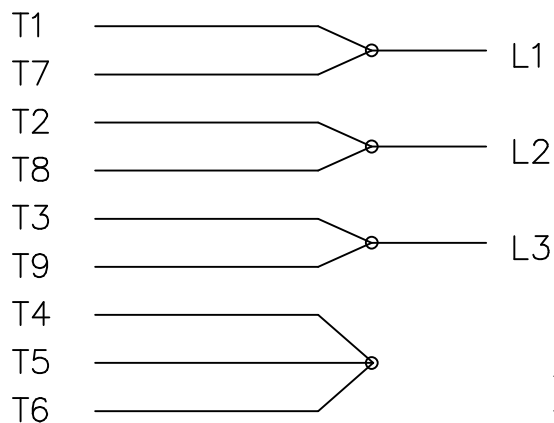
TOLERANCES UNLESS SPECIFIED		Lincoln MOTORS	DRAWN SR 05/17/2011
DEC	INCHES		
.X	±.1	TITLE OUTLINE - TEFC 180 FR. - SHEET METAL C'BOX	APPR AK 05/17/2011
.XX	±.03		SCALE 7:16
.XXX	±.005		REF
.XXXX	±.0005		FMF
NO	REVISION	BY & DATE	PREV
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED 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		CHK ANG ±7'30"	FINISH
RFP	DIST WA - NLV	CAD FILE 035662LN	SIZE B
			DRAWING NO 035662LN
			REV 01

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	



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7308-LN  
OUTLINE: 035662LN-800  
WINDING: K1844218

CAT #: LM80057

FS 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
5	3.7	1800	1745	184T	TEFC	TFS	J	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	13/6.5	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	87.5	3/4 LD EFF	87.2	1/2 LD EFF	86.5	GTD EFF	ELECT. TYPE
F.L. PF	83.0	3/4 LD PF	77.2	1/2 LD PF	65.9	85.5	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
15.0 LB-FT	45.0	30.0 LB-FT 200%	49.0 LB-FT 327%	60

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 dBA	71 dBA		0.38 LB-FT²	40 LB-FT²	25 SEC.	2	110 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						
206	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
1.967	1.332	3.963	5.358	93.555	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	NONE	FT-LB: NA VOLTAGE: NONE	HZ: UL: NONE
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Data Sheet

Date: 8/31/2018

LM80057



Data @ **460 V**

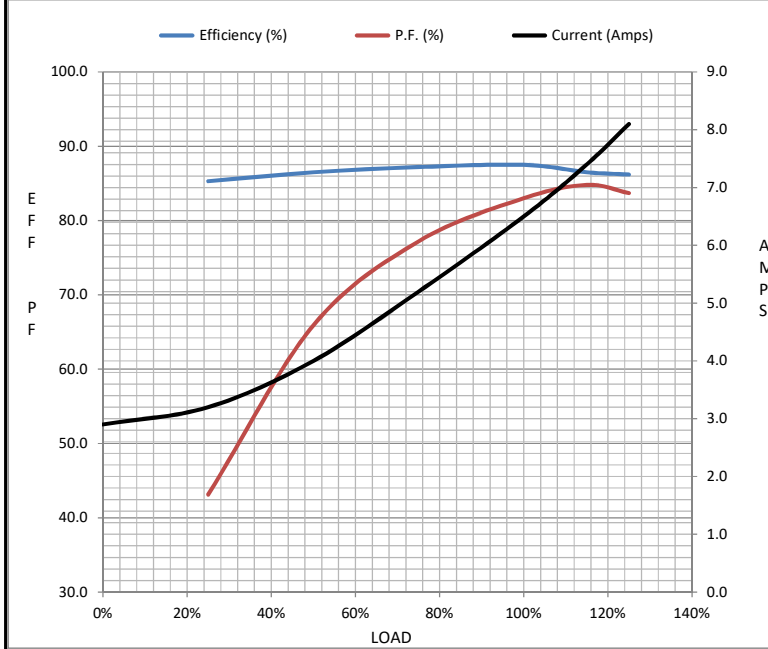
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	2.90	3.2	4.0	5.2	6.5	7.4	8.1	45.0
Torque (ft-lb)	0.00	3.7	7.4	11.2	15.0	17.5	19.0	30.0
RPM	1800	1785	1775	1755	1745	1,735	1725	0
Efficiency (%)		85.3	86.5	87.2	87.5	86.5	86.2	
P.F. (%)	10.8	43.1	65.9	77.2	83.0	84.8	83.7	50.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1425	1745	1800
Current (Amps)	45.0	42.0	30.0	6.5	2.90
Torque (ft-lb)	30.0	28.0	49.0	15.0	0.00

Information Block				
HP	5.0			
Sync. RPM	1800			
Frame	184			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.38 Lb-Ft <sup>2</sup>			
Ref Wdg	K1844218 FS			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	035662LN-800			
Conn. Diag	A-EE7308-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.9670	1.3320	3.9630	5.3580	93.5550



Speed - Torque Curve

