

# PRODUCT INFORMATION PACKET



Model No: LM80144

Catalog No: LM80144

Fire Pump Motor, 125 & 100 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 405TS Frame,  
DP



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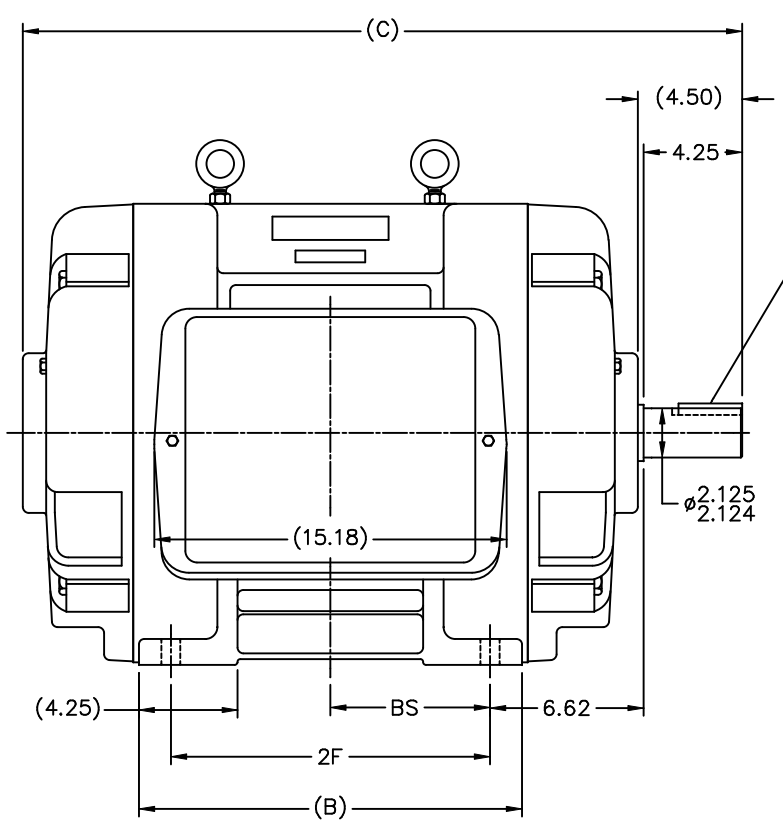


### Nameplate Specifications

Phase	3	Output HP	125 & 100 Hp
Output KW	93.0 & 75.0 kW	Voltage	230/460 & 190/380 V
Speed	1778 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	405TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.5 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	288/144 & 282/141 A	Power Factor	87
Duty	Continuous	Insulation Class	B
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	12
Number of Speeds	1		

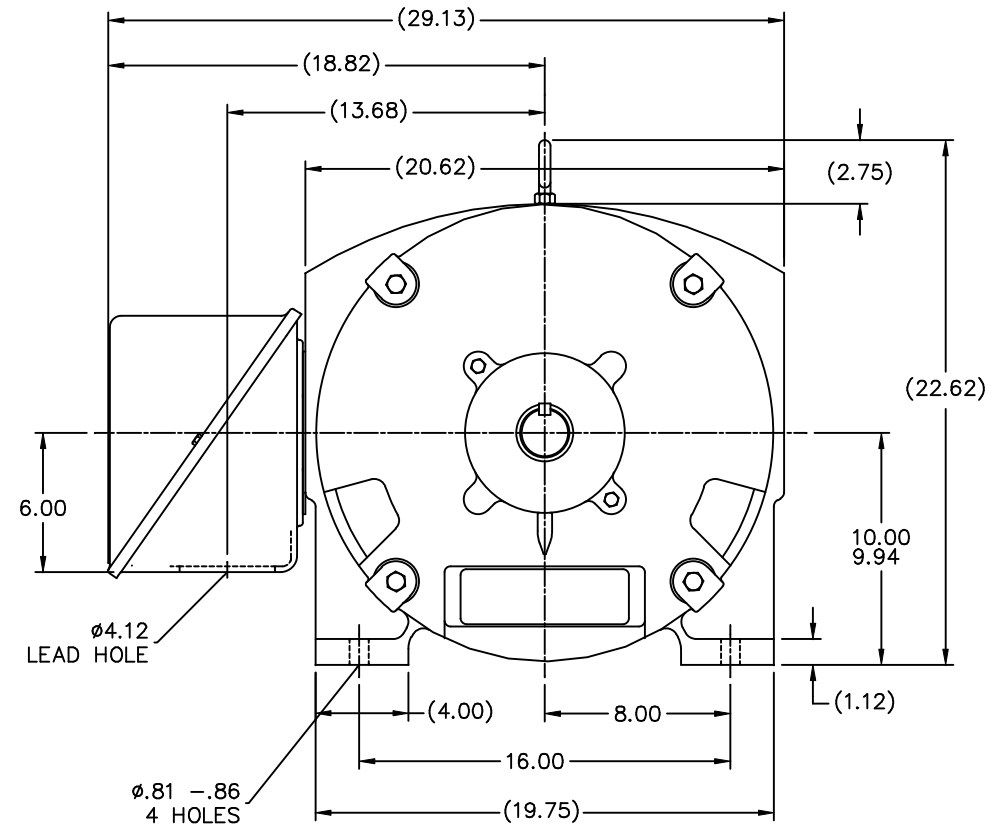
### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.045 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	31.00 in
Frame Length	17.02 in	Shaft Diameter	2.125 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308AA-LN	Outline Drawing	B-SS509257LN-1700



.50x.50x  
2.75 KEY

∅2.125  
2.124

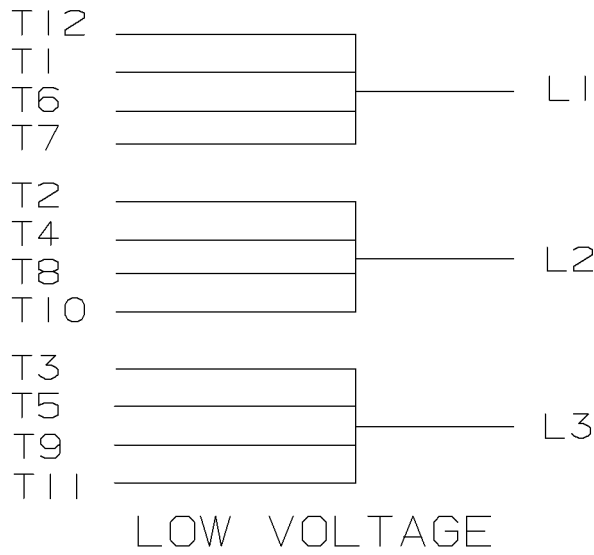


- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

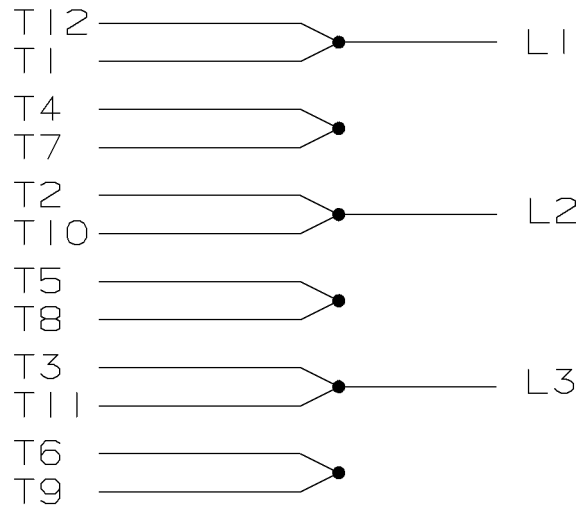
(B-SS511744)

DASH	FRAME	B	C	2F	BS
1550	404TS	15.00	29.50	12.25	6.12
1700	405TS	16.50	31.00	13.75	6.88

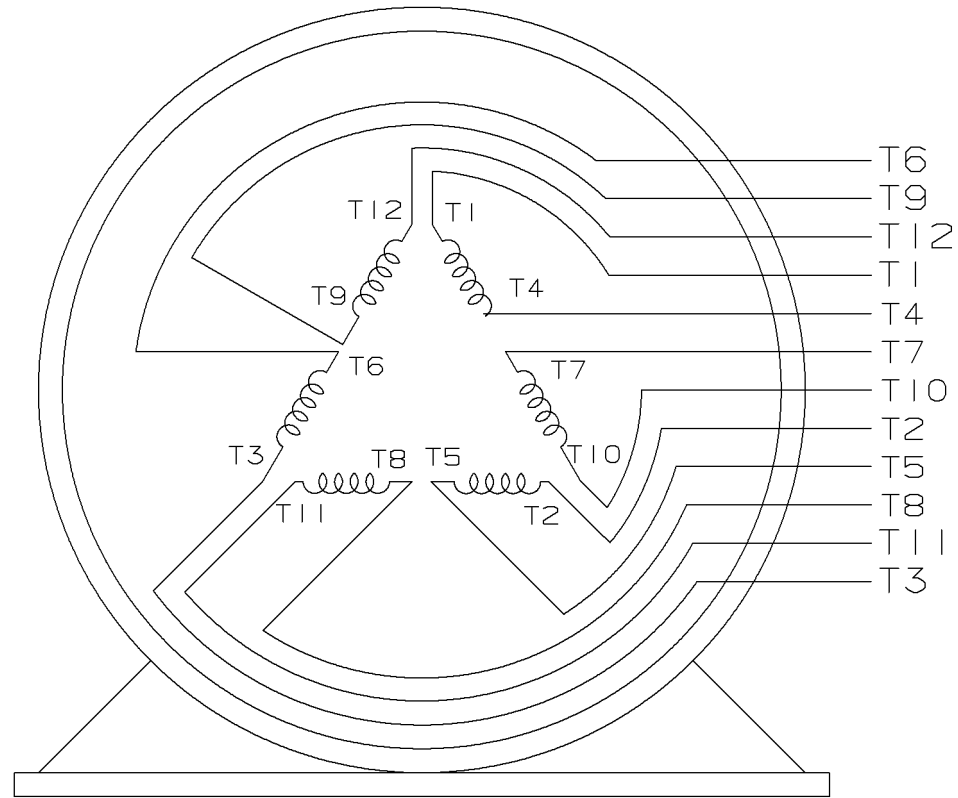
TOLERANCES UNLESS SPECIFIED		Lincoln MOTOR		DRAWN KL 07-20-2004	
DEC.	INCHES	CHK	ML	07-22-2004	APPD JES 07-22-2004
.X	±.1	TITLE OUTLINE		SCALE 3=16	
.XX	±.03	400TS FR. - DR.PR.		REF	
.XXX	±.005	MAT'L		FMF MU60811	
.XXXX	±.0005	FINISH		PREV	
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"
THIS DRAWING IN DESIGN 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	07-23-2004	CAD FILE SS509257LN
			DIST	WA	SIZE B
			DRAWING NO. SS509257LN		PAGE OF
					REV.



LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

					UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX±.02 XXX±.005 XXXX±.0005 ANGLES± 7'30"		
2	08-09-1999	RE-ISSUE, ADDED '-' TO PART NUMBER	BLR		MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED		DRAWN BY TRB 07-16-1999
1	06-18-1999	NEW DRAWING	TRB	FINISH		CHKD BY ML 06-18-1999	
				MATERIAL		APPD BY GK 06-18-1999	
REV	DATE	CHANGE	NAME	PART NAME 3 PHASE CONNECTION DIAGRAM 2/1 DELTA - 12 LEADS			DRWG NO A- EE7308AA-LN

PURCHASED

CADD FILE NO.

EE7308AALN

ERROR: undefined  
OFFENDING COMMAND: Pscrip  
  
STACK:



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7308AA-LN  
OUTLINE: B-SS509257LN-1700  
WINDING: T4054138

CAT #: LM80144

NONE 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
125	93	1800	1778	405TS	DP	TDS	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	288/144&282/141	PWS(LV ONLY) & YDRU	CONT	B	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	94.5	1/2 LD EFF	93.6	GTD EFF	ELECT. TYPE
F.L. PF	87.0	3/4 LD PF	84.5	1/2 LD PF	78.0	93.6	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
369 LB-FT	875	700 LB-FT 190%	950 LB-FT 257%	55

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
80 dBA	89 dBA		26.5 LB-FT²	0 LB-FT²	20 SEC.	0	1150 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	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
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
0.032	0.022	0.188	0.213	5.148	0.150	ODE

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

DATE: 8/31/2018

BRAKE: NONE  
NONE

FT-LB: NA  
VOLTAGE: NONE

UL: NONE-INS UL REC

Data Sheet

Date: 8/31/2018

LM80144



Data @ **460 V**

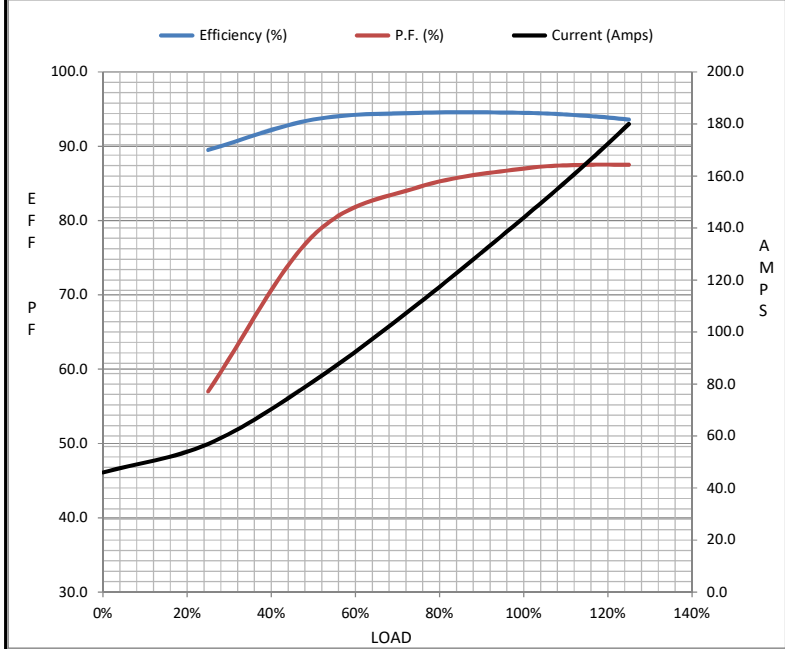
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	46.0	57.0	81.0	111	144	165	180	875
Torque (ft-lb)	0.00	91.5	183	276	369	425	463	700
RPM	1800	1795	1788	1782	1778	1,772	1768	0
Efficiency (%)		89.5	93.6	94.5	94.5	94.1	93.6	
P.F. (%)	6.0	57.0	78.0	84.5	87.0	87.5	87.5	35.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1715	1778	1800
Current (Amps)	875	800	500	144	46.0
Torque (ft-lb)	700	650	950	369	0.00

Information Block				
HP	125.0			
Sync. RPM	1800			
Frame	405			
Enclosure	DP			
Construction	TDS			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	26.5 Lb-Ft <sup>2</sup>			
Ref Wdg	T4054138 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS509257LN-1700			
Conn. Diag	A-EE7308AA-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0320	0.0220	0.1880	0.2130	5.1480



Speed - Torque Curve

