

PRODUCT INFORMATION PACKET



Model No: LM80137
Catalog No: LM80137
100 HP Fire Pump Motor, 3 phase, 1800 RPM, 200/400 V, 404TS Frame, ODP
Fire Pump Motors



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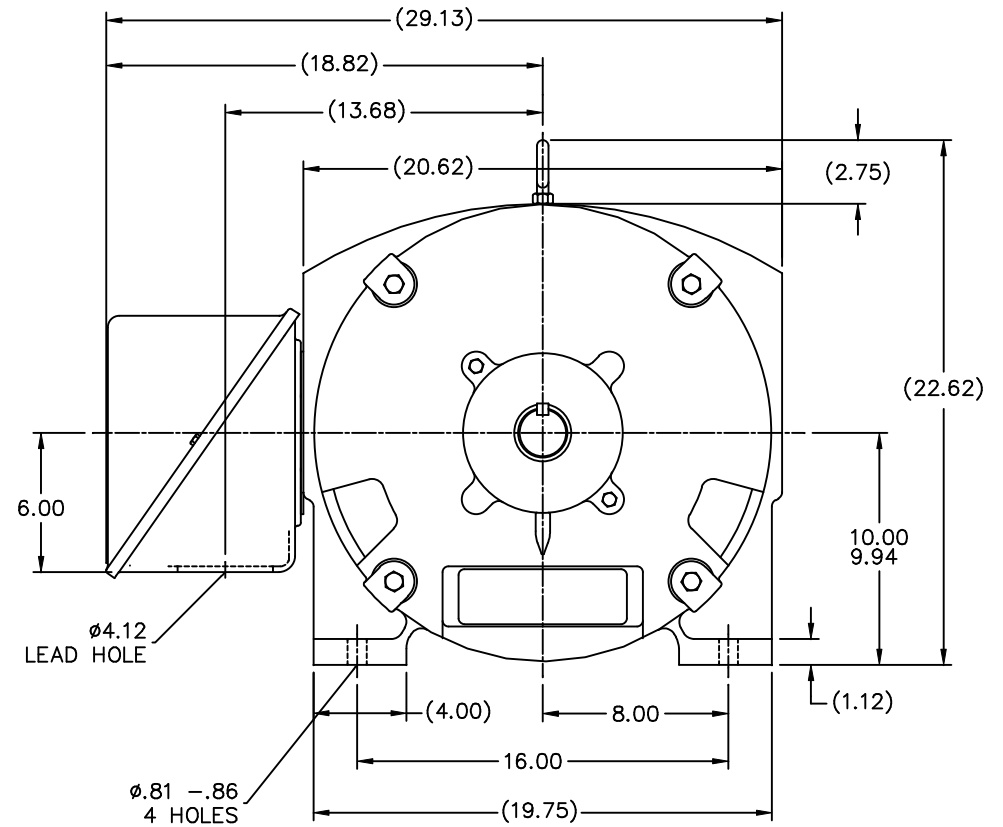
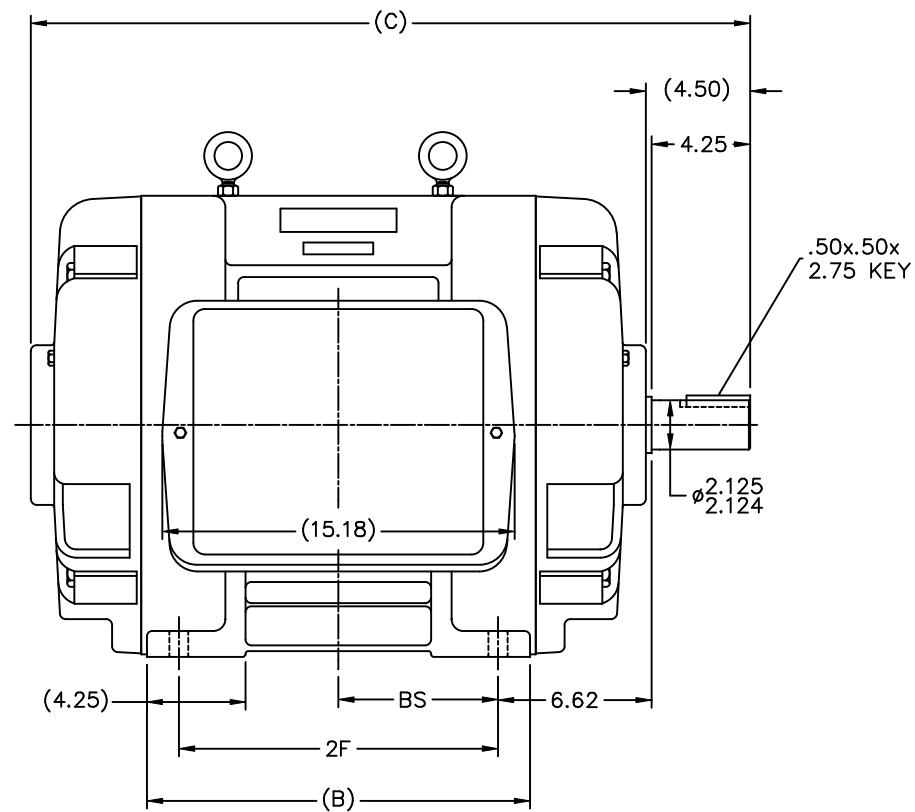
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	200/400 V
Current	267.0/133.0 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	86
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	404TS	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
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	.061 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	29.50 in
Frame Length	15.51 in	Shaft Diameter	2.125 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS509257LN-1550	Connection Drawing	A-EE7308AA-LN


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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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

(B-SS511744)

										TOLERANCES UNLESS SPECIFIED				DRAWN KL 07-20-2004											
								DEC.		INCHES				CHK ML 07-22-2004											
								.X		±.1				APPD JES 07-22-2004											
								.XX		±.03		TITLE OUTLINE 400TS FR. – DR.PR.		SCALE 3=16											
								.XXX		±.005				REF											
								.XXXX		±.0005		MAT'L		FMF MU60811											
						NO.		REVISION		BY & DATE		CHK ANG ±730"		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 07-23-2004		CAD FILE SS509257LN		SIZE B		DRAWING NO. PAGE OF SS509257LN		REV.	
																DIST WA									
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																				

T12 _____
 T1 _____
 T6 _____ L1
 T7 _____

T2 _____
 T4 _____
 T8 _____ L2
 T10 _____

T3 _____
 T5 _____
 T9 _____ L3
 T11 _____

LOW VOLTAGE

T12 _____ L1
 T1 _____

T4 _____
 T7 _____

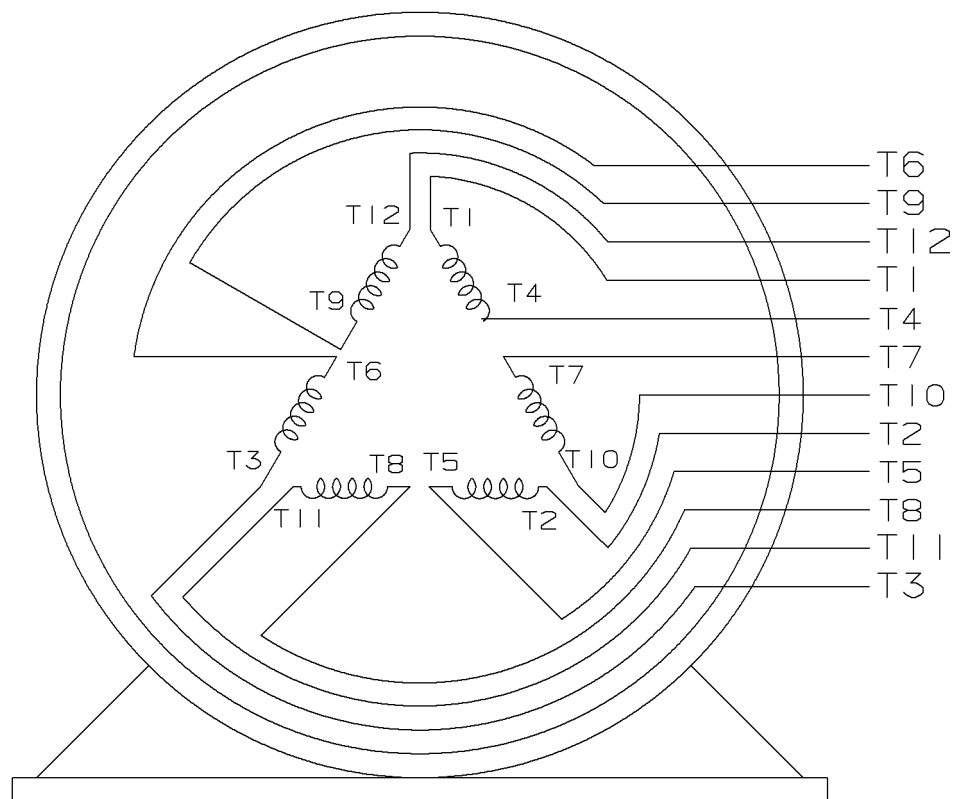
T2 _____ L2
 T10 _____

T5 _____
 T8 _____

T3 _____ L3
 T11 _____

T6 _____
 T9 _____

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
					FINISH		CHKD BY ML 06-18-1999
1	06-18-1999	NEW DRAWING	TRB		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

CAT #: LM80137

OUTLINE: B-SS509257LN-1550

WINDING: T4054120

NONE 8

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1800	1775	404TS	DP	TDS	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	200/400	267/133	PWS(LV ONLY) & YDRU	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	ELECT. TYPE
F.L. PF	86.0	3/4 LD PF	83.0	1/2 LD PF	76.0	93.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
295 LB-FT	776	480 LB-FT 163%	700 LB-FT 237%	55

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
80 dBA	89 dBA		24.0 LB-FT²	0 LB-FT²	20 SEC.	0	1050 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
0.028	0.023	0.192	0.207	5.304	0.150	ODE

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

DATE: 8/30/2018	BRAKE: NONE NONE	NONE
	FT-LB: NA	
	VOLTAGE: NONE	HZ:
	UL: NONE	

Data Sheet

Date: 8/30/2018

LM80137



Data @ 400 V

Motor Load Data

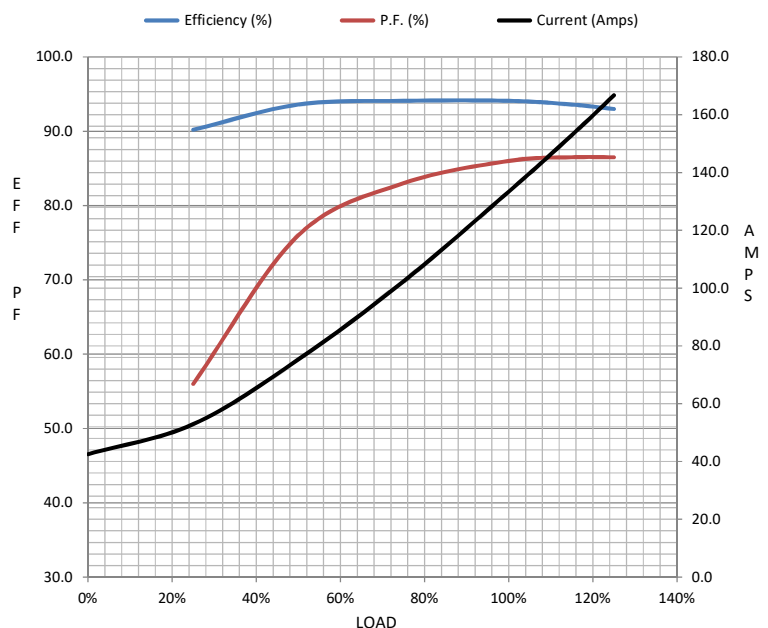
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	42.6	52.9	75.3	102	133	153	167	776	
Torque (ft-lb)	0.00	73.5	147	221	295	340	370	480	
RPM	1800	1795	1790	1780	1775	1,772	1770	0	
Efficiency (%)		90.2	93.6	94.1	94.1	93.6	93.0		
P.F. (%)	6.0	56.0	76.0	83.0	86.0	86.5	86.5	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1775	1800
Current (Amps)	776	690	420	133	42.6
Torque (ft-lb)	480	425	700	295	0.00

Information Block

HP	100.0			
Sync. RPM	1800			
Frame	404			
Enclosure	DP			
Construction	TDS			
Voltage	200/400		V	
Frequency	60		Hz	
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	55		° C	
Duty	CONT			
Ambient	40		° C	
Elevation	1,000		feet	
Rotor/Shaft wk²	24.0		Lb-Ft²	
Ref Wdg	T4054120 NONE			
Sound Pressure @ 1M	80		dBA	
VFD Rating	NONE			
Outline Dwg	B-SS509257LN-1550			
Conn. Diag	A-EE7308AA-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0280	0.0230	0.1920	0.2070	5.3040



Speed - Torque Curve

