

# PRODUCT INFORMATION PACKET



Model No: LM80117  
Catalog No: LM80117  
50 HP Fire Pump Motor, 3 phase, 3600 RPM, 200/400 V, 324TS Frame, ODP  
Fire Pump Motors



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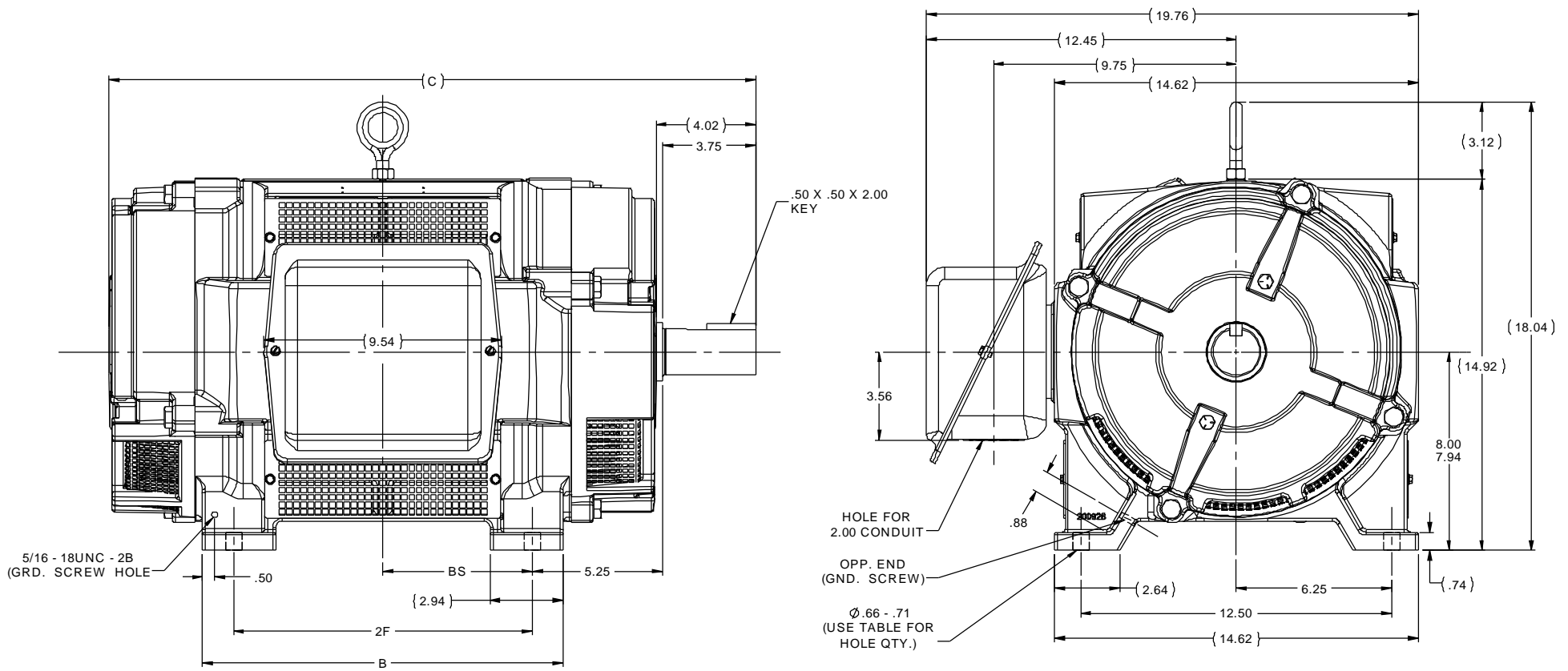


**Nameplate Specifications**

Output HP	<b>50 Hp</b>	Output KW	<b>37.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>200/400 V</b>
Current	<b>135.0/67.5 A</b>	Speed	<b>3555 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>92.4 %</b>	Power Factor	<b>86.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>324TS</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6312</b>	Opp Drive End Bearing Size	<b>6311</b>
UL	<b>No</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>12</b>
Number of Speeds	<b>1</b>		

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start Low Volt Only &amp; Wye Start Delta Run</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.19 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>TS</b>	Overall Length	<b>24.50 in</b>
Frame Length	<b>13.63 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>3.75 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Connection Drawing	<b>A-EE7358-LN</b>	Outline Drawing	<b>B-SS312558LN-1362</b>



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. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

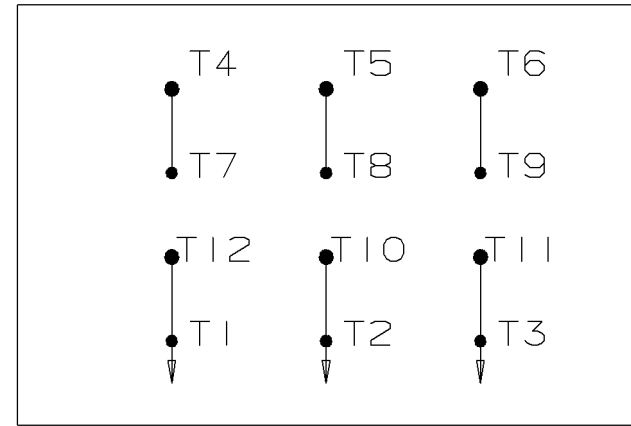
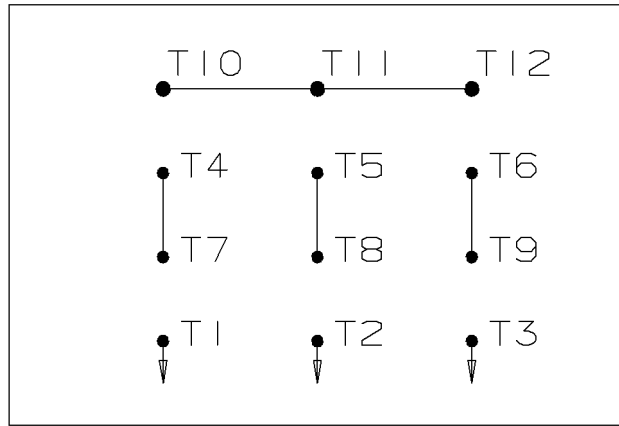
DASH	FRAME	B	C	AG	2F	2FF	BS	FOOT HOLE QTY.
1362	324TS	13.00	24.50	--	10.50	--	5.25	4
1512	326TS	14.50	26.00	--	12.00	--	6.00	4

		TOLERANCES UNLESS SPECIFIED				DRAWN TV 10-02-2013	
		DEC INCHES				CHK TXW 10-02-2013	
		X ±.1		APPR TB 10-02-2013			
		XX ±.03		TITLE OUTLINE - DR.PR. - CAST IRON		SCALE 1:4	
		XXX ±.005		320TS FR. - BB - TS - D.E.V.		REF SS200079LN	
		XXXX ±.0005		MAT'L		FMF MU98668	
		CHK LANG ±7°30'		FINISH		PAGE OF	
NO		REVISION		BY & DATE		RFP 10-02-2013	
THIRD ANGLE PROJECTION				PREV		SIZE B	
		NETWORK FILE NAME SS312558LN		DRAWING NO SS312558LN		REV	

WYE START

HIGH VOLTAGE

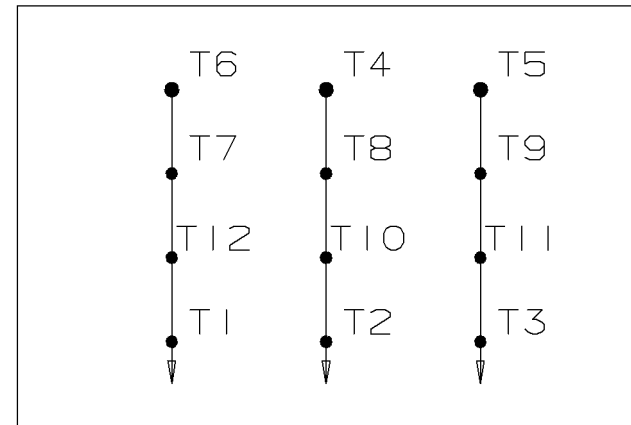
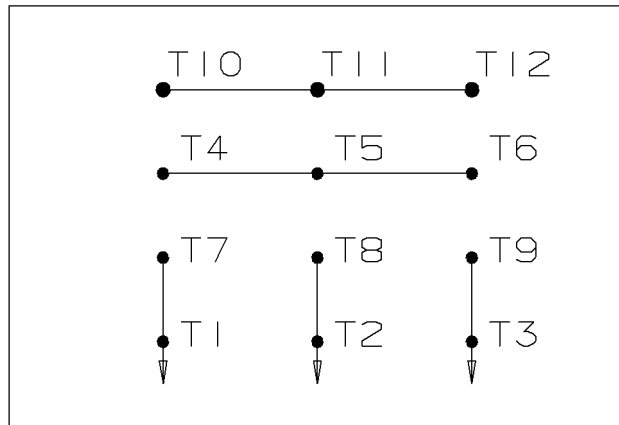
DELTA RUN



WYE START

LOW VOLTAGE

DELTA RUN



4/2 CKTY Δ

					<input checked="" type="checkbox"/> UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± .02    XXX± .005    XXXX± .0005    ANGLES± 7'30"		
						MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED FINISH MATERIAL	DRAWN BY DRS CHKD BY ML APPD BY TB
1	12-07-1999	NEW DRAWING	DRS	PART NAME CONNECTION DIAGRAM			DRWG NO A-EE7358-LN
REV	DATE	CHANGE	NAME	PURCHASED			CADD FILE NO. EE7358-LN



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7358-LN  
OUTLINE: B-SS312558LN-1362  
WINDING: K286294

CAT #: LM80117

NONE 3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
50	37	3600	3555	324TS	DP	TDP	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	200/400	135/67.5	PWS(LV ONLY) & YDRU	CONT	F	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	92.4	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE
F.L. PF	86.5	3/4 LD PF	84.0	1/2 LD PF	77.0	91.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
74.0 LB-FT	403	100 LB-FT 135%	190 LB-FT 257%	35

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
82 dBA	91 dBA		2.70 LB-FT²	34 LB-FT²	15 SEC.	2	375 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						
6312	6311						

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
0.082	0.05	0.39	0.29	11.94	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					

DATE: 8/30/2018

BRAKE: NONE  
NONE  
NONE  
FT-LB: NA  
VOLTAGE: NONE  
HZ:  
UL: NONE

Data Sheet

Date: 8/30/2018

LM80117



Data @ **400 V**

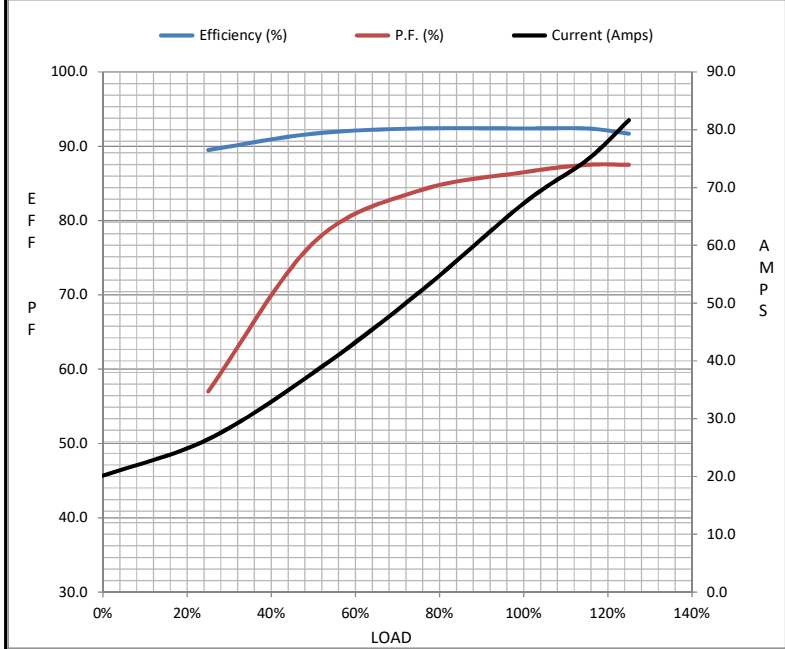
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	20.1	26.5	38.0	51.8	67.3	74.8	81.7	403
Torque (ft-lb)	0.00	18.5	36.5	55.5	74.0	85.5	93.0	100
RPM	3600	3590	3575	3565	3555	3,540	3535	0
Efficiency (%)		89.5	91.7	92.4	92.4	92.4	91.7	
P.F. (%)	6.5	57.0	77.0	84.0	86.5	87.5	87.5	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3330	3555	3600
Current (Amps)	403	345	259	67.3	20.1
Torque (ft-lb)	100	88.0	190	74.0	0.00

Information Block				
HP	50.0			
Sync. RPM	3600			
Frame	324			
Enclosure	DP			
Construction	TDP			
Voltage	200/400 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	35 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.70 Lb-Ft <sup>2</sup>			
Ref Wdg	K286294 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS312558LN-1362			
Conn. Diag	A-EE7358-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0820	0.0500	0.3900	0.2900	11.9400



Speed - Torque Curve

