

PRODUCT INFORMATION PACKET



Model No: LM80083
Catalog No: LM80083

Fire Pump Motor, 450 & 350 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM, 5011L Frame, TEFC



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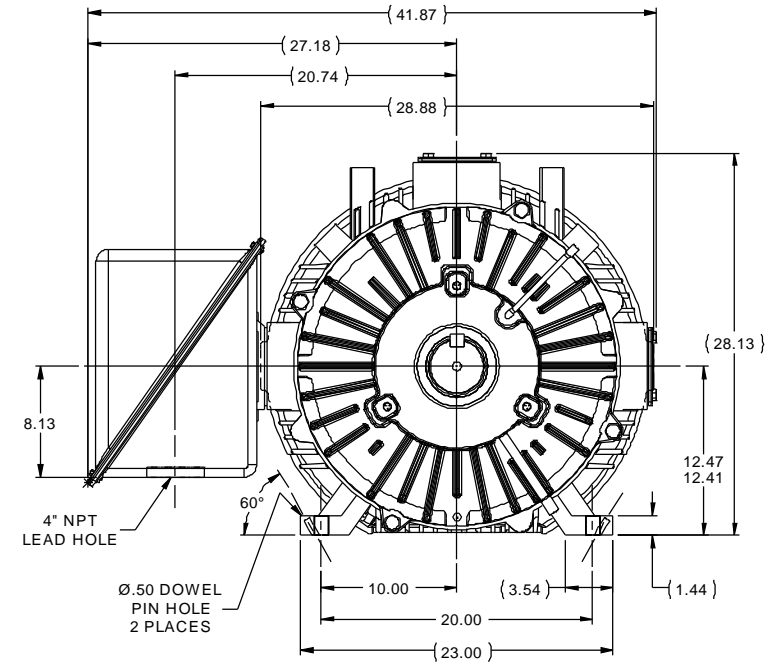
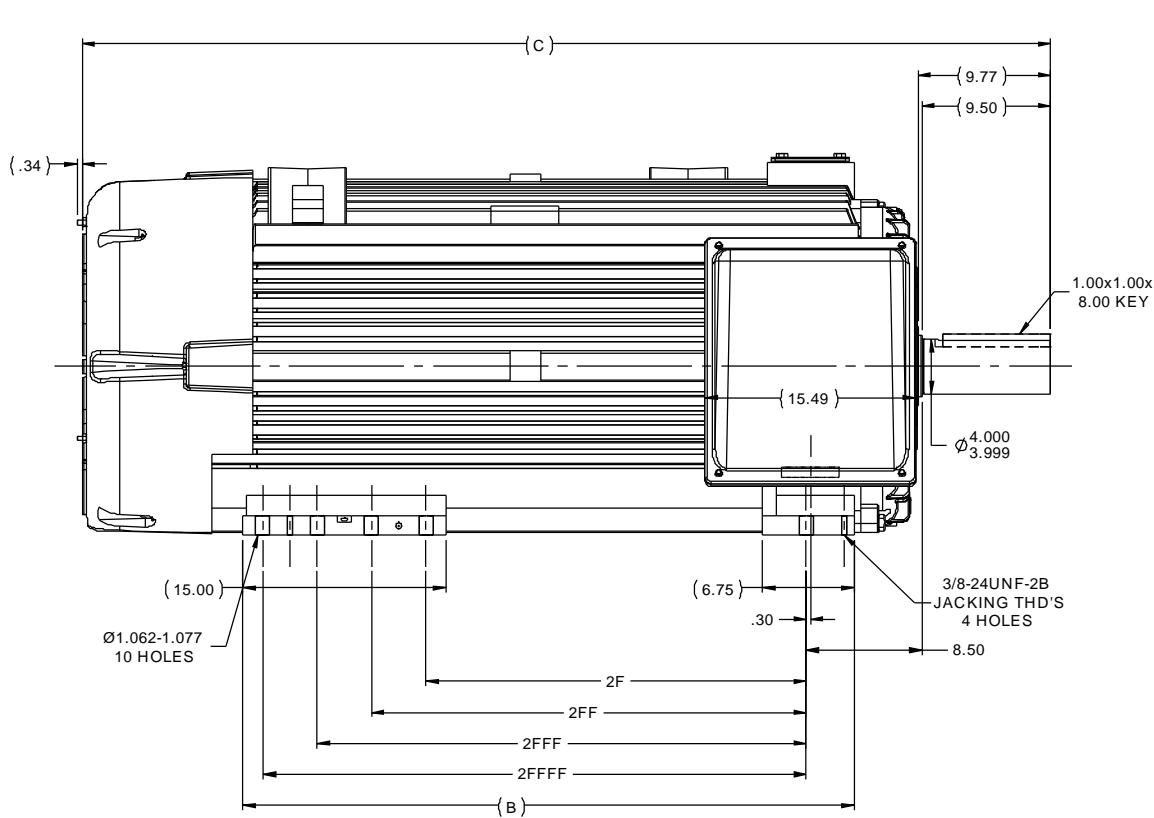


Nameplate Specifications

Phase	3	Output HP	450 & 350 Hp
Output KW	340.0 & 260.0 kW	Voltage	460 & 380 V
Speed	1788 & 1488 rpm	Service Factor	1.15 & 1.15
Frame	5011L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	96.2 & 95.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	495 & 475 A	Power Factor	88
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Drive End Bearing Size	6324	Opp Drive End Bearing Size	6318
UL	No	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

Technical Specifications

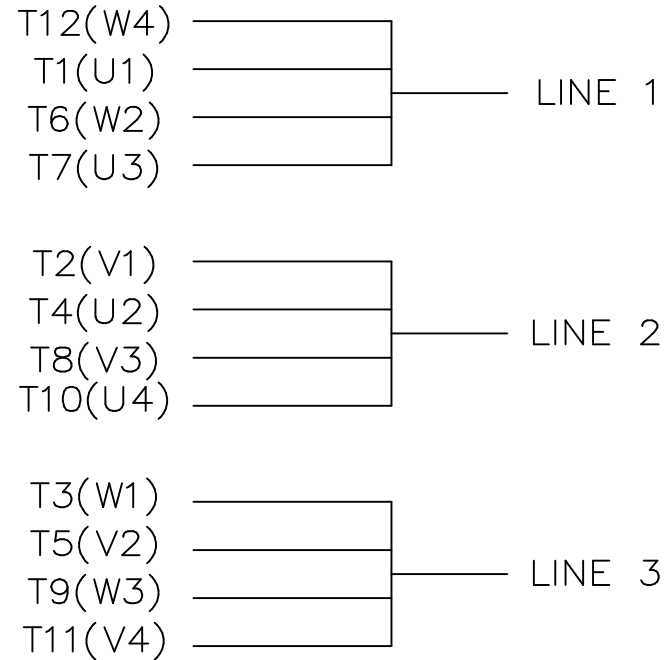
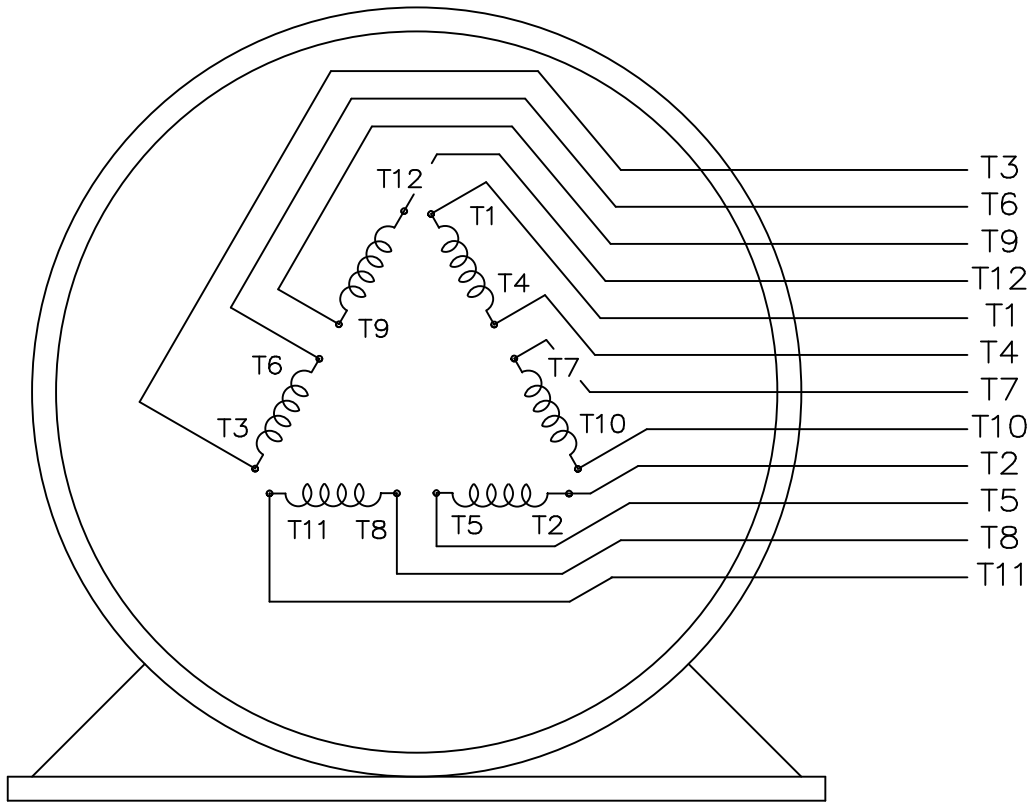
Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.005 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	L	Overall Length	71.30 in
Frame Length	49.50 in	Shaft Diameter	4.000 in
Shaft Extension	9.77 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7300BH-LN	Outline Drawing	B-SS518525LN-4950




- NOTE:
 1. MAIN CONDUIT BOX CAN BE ROTATED IN 90 ° STEPS.
 2. NAMEPLATES TO BE READ FROM MAIN CONDUIT BOX SIDE OF THE MOTOR.
 3. MOTOR WEIGHT (MAXIMUM) = 5,500 LBS.

DASH	FRAME	B	C	2F	2FF	2FFF	2FFFF
4950	5009L	45.05	71.30	28.00	---	---	---
4950	5010L	45.05	71.30	---	32.00	---	---
4950	5011L	45.05	71.30	---	---	36.00	---
4950	5012L	45.05	71.30	---	---	---	40.00

4 DRAWN IN SOLIDWORKS		TDB 08-26-2013	DEC	TOLERANCES UNLESS SPECIFIED INCHES		DRAWN DRS 06-11-2001
3	ADD .50 MATERIAL TO C'BOX MTG. AREA CN 37629	MSG 02-26-2004	ML	xx ±.03		TITLE OUTLINE - TEFC - F1/F2/F3 MT.
2	REVISED BORDER - 4" NPT WAS 3.5" NPT MU40776	KL 03-09-2002	JES	xxx ±.005	5009-12L FR. - CAST CONDUIT BOX	APPR DMT 06-11-2001
1	NEW DRAWING CN 30924	DRS 06-11-2001	xxxx	±.0005	MAT'L	SCALE 7:64
NO	REVISION	BY & DATE	CHK	ANG ±7'30"	FINISH	REF
THIRD ANGLE PROJECTION		RFP	PREV	NETWORK FILE NAME SS518525LN	SIZE B	DRAWING NO SS518525LN
						PAGE OF
						REV 4



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED			DRAWN KL 04-23-2002		
				DEC.	INCHES		CHK DJK 04-24-2002		
				.X	±.1		APPD EAB 04-24-2002		
				.XX	±.01		SCALE 1=1		
2	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	OML	.XXX	±.005	TITLE CONNECTION DIAGRAM - EXTERNAL 12 LEAD - SINGLE VOLTAGE		
1	NEW DRAWING	MU41562	KL 04-12-02		.XXXX	±.0005	MAT'L.		
NO.	REVISION		BY & DATE	CHK	ANG	±1/2"	FINISH		
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	CAD FILE ee7300bh_ln		SIZE	DRAWING NO. PAGE OF	REV.
				DIST	WA-SB		A	EE7300BH-LN 2	2



CERTIFICATION DATA SHEET

**2100 WASHINGTON ST.
GRAFTON, WI
PH. 262-277-8810**

CONN. DIAGRAM: A-EE7300BH-LN

OUTLINE: B-SS518525LN-4950

CATALOG #: LM80083

WINDING #: T511463 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
450&350	340&260	1800	1788&1488	5011L	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	460&380	495&475	PWS & YDRUN	CONTINUOUS	H1	1.15/1.15	40

FULL LOAD EFF:	96.2&95.4	3/4 LOAD EFF:	96.2	1/2 LOAD EFF:	95.8	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	88&88	3/4 LOAD PF:	86	1/2 LOAD PF:	81	95.4		SQ CAGE IND RUN	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1324 LB-FT	3200	2100 LB-FT 158 %	3300 LB-FT 248 %	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
88 dBA	98 dBA	218 LB-FT^2	- LB-FT^2	25 SEC.	1	5425 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	RED (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	L	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6324	6318						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/18/2018

LM80083



Data @ **460 V**

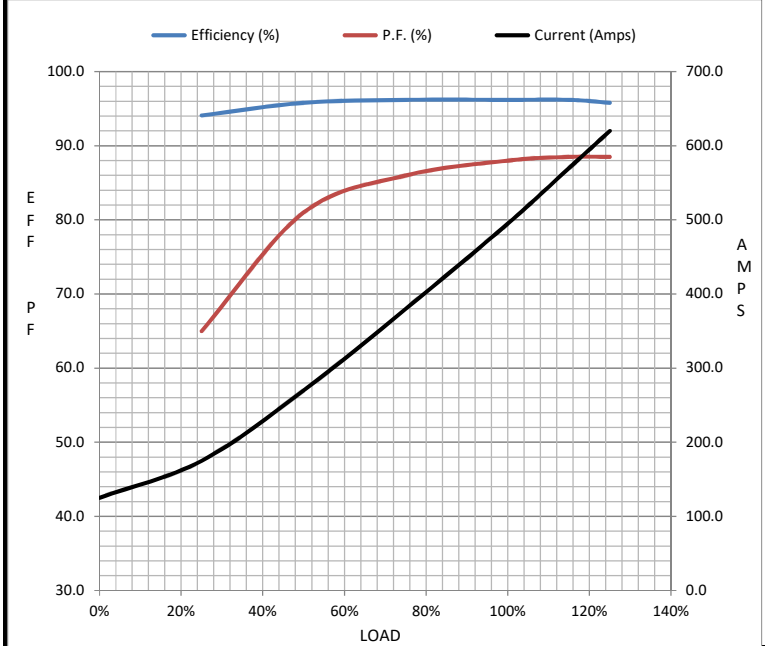
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	125	175	270	380	495	570	620	3,200
Torque (ft-lb)	0.00	329	660	990	1,324	1,525	1,658	2,100
RPM	1800	1796	1792	1790	1788	1,786	1784	0
Efficiency (%)		94.1	95.8	96.2	96.2	96.2	95.8	
P.F. (%)	5.5	65.0	81.0	86.0	88.0	88.5	88.5	25.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1788	1800
Current (Amps)	3,200	2,900	1,800	495	125
Torque (ft-lb)	2,100	1,900	3,300	1,324	0.00

Information Block				
HP	450.0			
Sync. RPM	1800			
Frame	5011			
Enclosure	TEFC			
Construction	TFN			
Voltage	460#380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	218 Lb-Ft ²			
Ref Wdg	T511463 NONE			
Sound Pressure @ 1M	88 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS518525LN-4950			
Conn. Diag	A-EE7300BH-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0050	0.0040	0.0440	0.0840	2.1120



Speed - Torque Curve

