

PRODUCT INFORMATION PACKET



Model No: LM80170
Catalog No: LM80170

Fire Pump Motor, 300 & 250 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM, 447T Frame, DP



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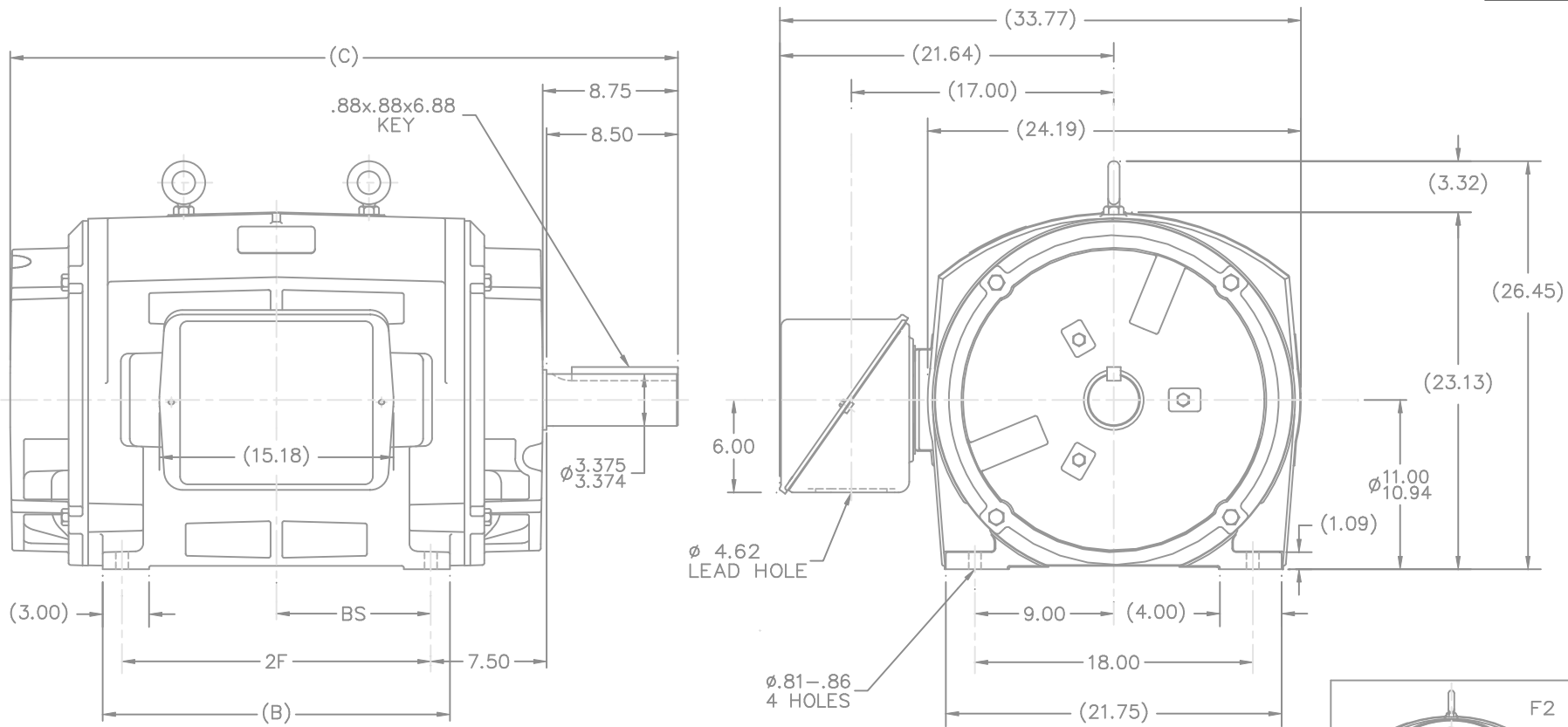


Nameplate Specifications

Phase	3	Output HP	300 & 250 Hp
Output KW	224.0 & 187.0 kW	Voltage	460 & 380 V
Speed	1780 & 1482 rpm	Service Factor	1.15 & 1.15
Frame	447T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95.4 & 95 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	345 & 345 A	Power Factor	85.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6314
UL	No	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

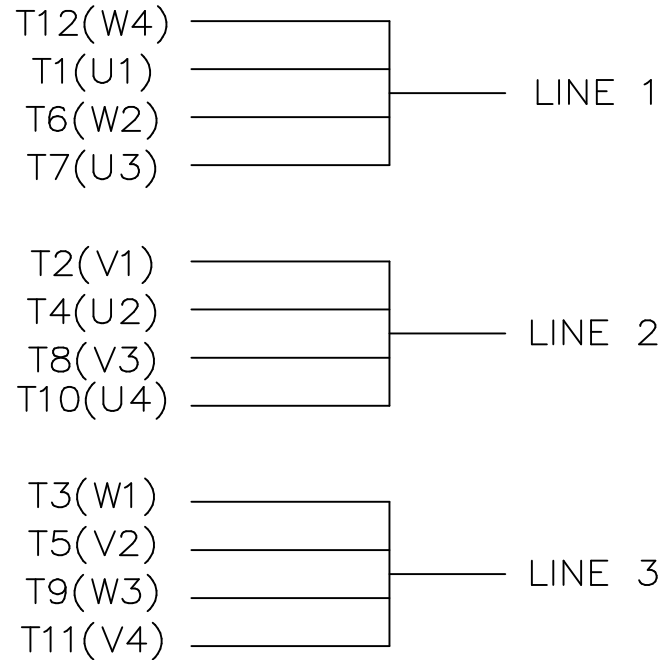
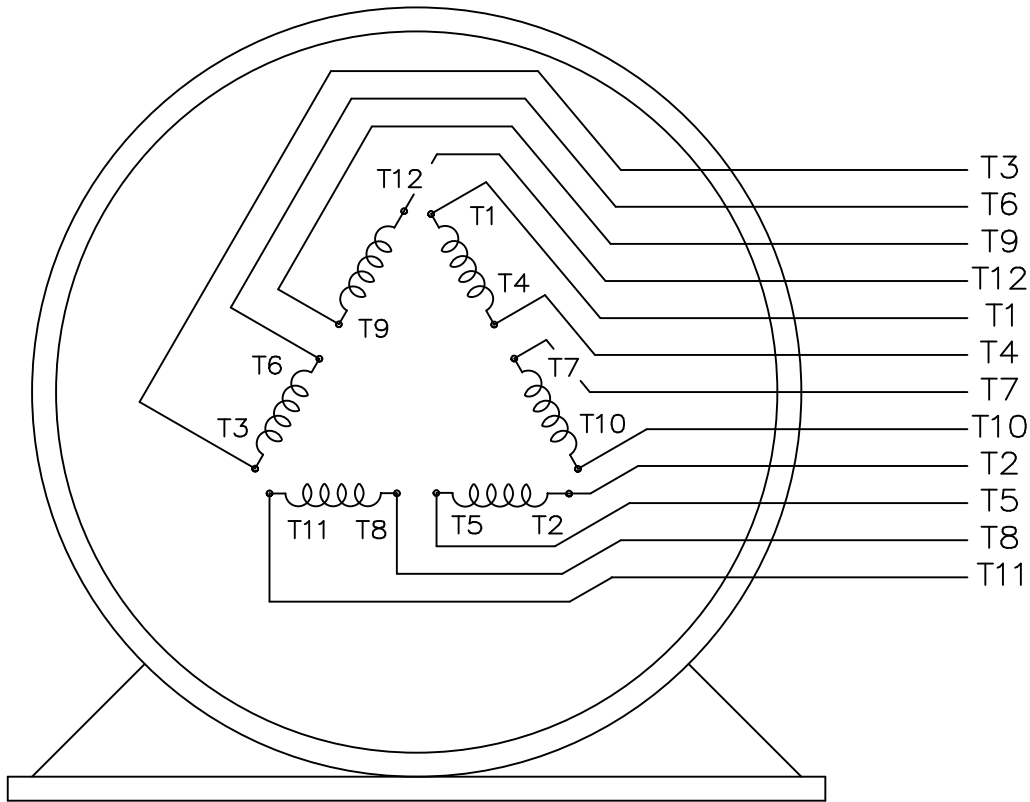
Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.0161 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	43.25 in
Frame Length	24.38 in	Shaft Diameter	3.375 in
Shaft Extension	8.5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS514252LN-2438	Connection Drawing	A-EE7300BH-LN




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

2438	447T	43.25	---	22.50	20.00	---	---	10.00
2938	449T	48.25	---	27.50	25.00	---	---	12.50
DASH	FRAME	C	AG	B	2F	2FF	2FFF	BS

		TOLERANCES UNLESS SPECIFIED		Lincoln MOTOR		DRAWN DRS 11-20-2002	
		DEC.	INCHES			CHK	ML 11-20-2002
		.X	±.1			APPD	GK 11-20-2002
		.XX	±.03	TITLE OUTLINE - DR.PR. 447-449T FR.		SCALE	1=7
		.XXX	±.005			REF	
		.XXXX	±.0005	MAT'L		FMF	
		CHK	ANG ±7'30"	FINISH		PREV	
1 NEW DRAWING		DRS 11-20-2002		RFP		CAD FILE SS514252LN	
NO. REVISION		BY & DATE		RFP		SIZE	DRAWING NO. PAGE OF REV.
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				DIST WA-SB		B	SS514252LN 1



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		
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				DIST	WA-SB		A	EE7300BH-LN 2	2



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

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7300BH-LN
OUTLINE: B-SS514252LN-2438
WINDING #: T447421 1

CATALOG : LM80170

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
300&250	224&187	1800	1780&1482	447T	DP	F	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	460&380	345&345	PWS & YDRUN	CONTINUOUS	F1	1.15/1.15	40

FULL LOAD EFF:	95.4&95	3/4 LOAD EFF:	95.8	1/2 LOAD EFF:	95.4	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	85.5&86	3/4 LOAD PF:	84	1/2 LOAD PF:	78	94.5		SQ CAGE IND RUN	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
885 LB-FT	2000	1250 LB-FT 140 %	2000 LB-FT 226 %	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	55 LB-FT^2	1000 LB-FT^2	15 SEC.	1	2000 LBS.

*** SUPPLEMENTAL INFORMATION ***

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6318	6314						

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

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12 LEADS
FIRE PUMP MOTOR

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

Data Sheet

Date: 1/23/2018

LM80170



Data @ 460 V

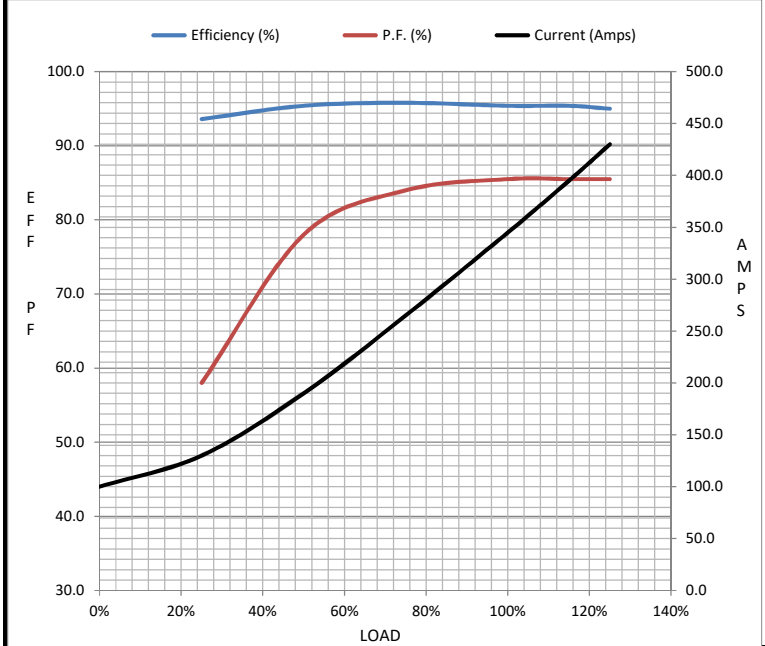
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	100	130	190	265	345	395	430	2,000
Torque (ft-lb)	0.00	219	440	661	885	1,018	1,108	1,130
RPM	1800	1795	1790	1785	1780	1,778	1,775	0
Efficiency (%)		93.6	95.4	95.8	95.4	95.4	95.0	
P.F. (%)	5.0	58.0	78.0	84.0	85.5	85.5	85.5	26.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1780	1800
Current (Amps)	2,000	1,900	1,300	345	100
Torque (ft-lb)	1,130	1,000	2,000	885	0.00

Information Block				
HP	300.0			
Sync. RPM	1800			
Frame	447			
Enclosure	DP			
Construction	TDN			
Voltage	460#380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	50 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	55.0 Lb-Ft ²			
Ref Wdg	T447421 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS514252LN-2438			
Conn. Diag	A-EE7300BH-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0100	0.0080	0.0980	0.0980	2.5760



Speed - Torque Curve

