PRODUCT INFORMATION PACKET

Model No: LM80166
Catalog No: LM80166
Fire Pump Motor, 300 & 250 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 3600 & 3000 RPM, 447TS 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	3568 & 2968 rpm	Service Factor	1.15 & 1.15
Frame	447TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	332 & 335 A	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6314	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	2	Rotation	Reversible
Resistance Main	.018 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	39.50 in
Frame Length	24.38 in	Shaft Diameter	2.375 in
Shaft Extension	4.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS514335LN-2438	Connection Drawing	A-EE7300BH-LN

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(C)

(5.00)

4.75

.62x.62x
3.00 KEY

(15.18)

ø2.375
2.374

(3.00)

BS

2F

7.50

(B)

(33.51)

(21.38)

(16.25)

(24.19)

(3.46)

(26.45)

6.00

11.00
10.94

ø4.62
LEAD HOLE

ø.81−.86
4 HOLES

9.00

(4.00)

(1.09)

18.00

(21.75)
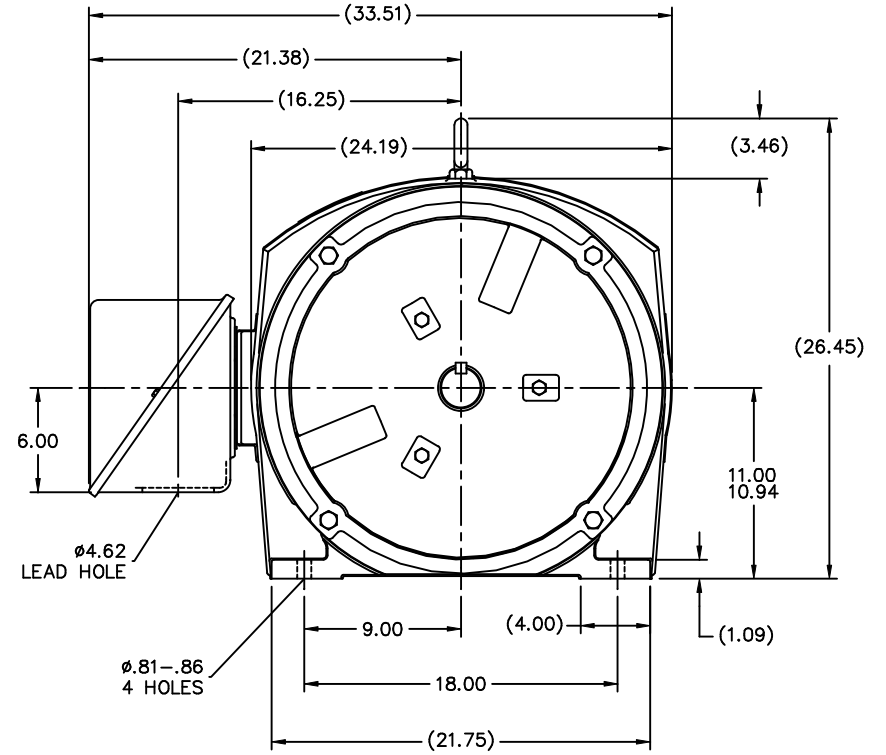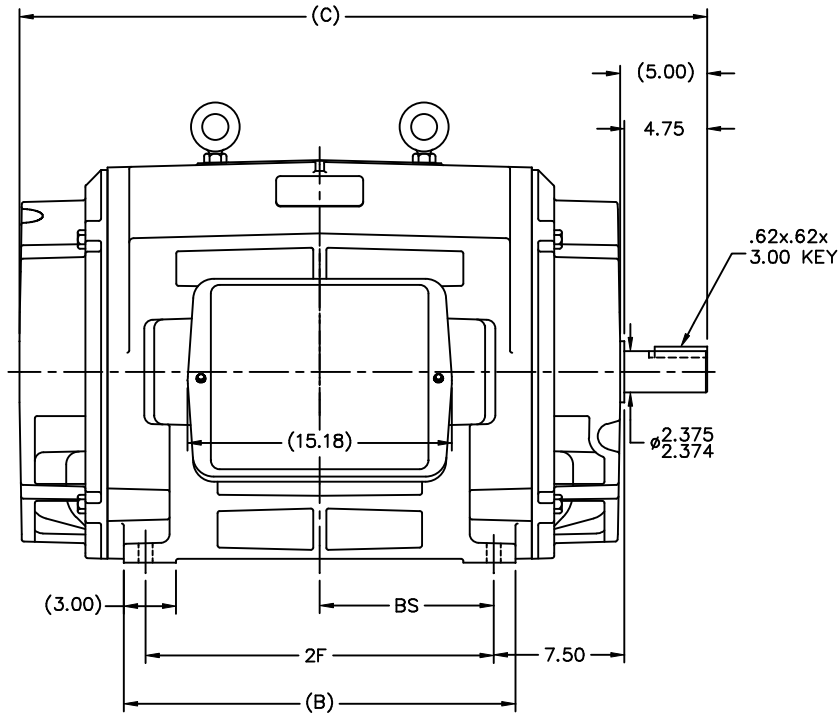
NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY
   REMOVING BRACKETS AND TURNING FRAME 180°.
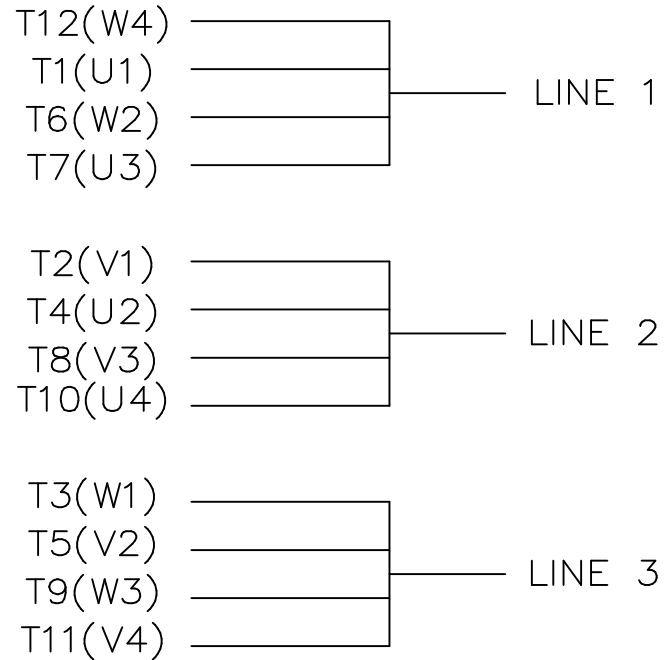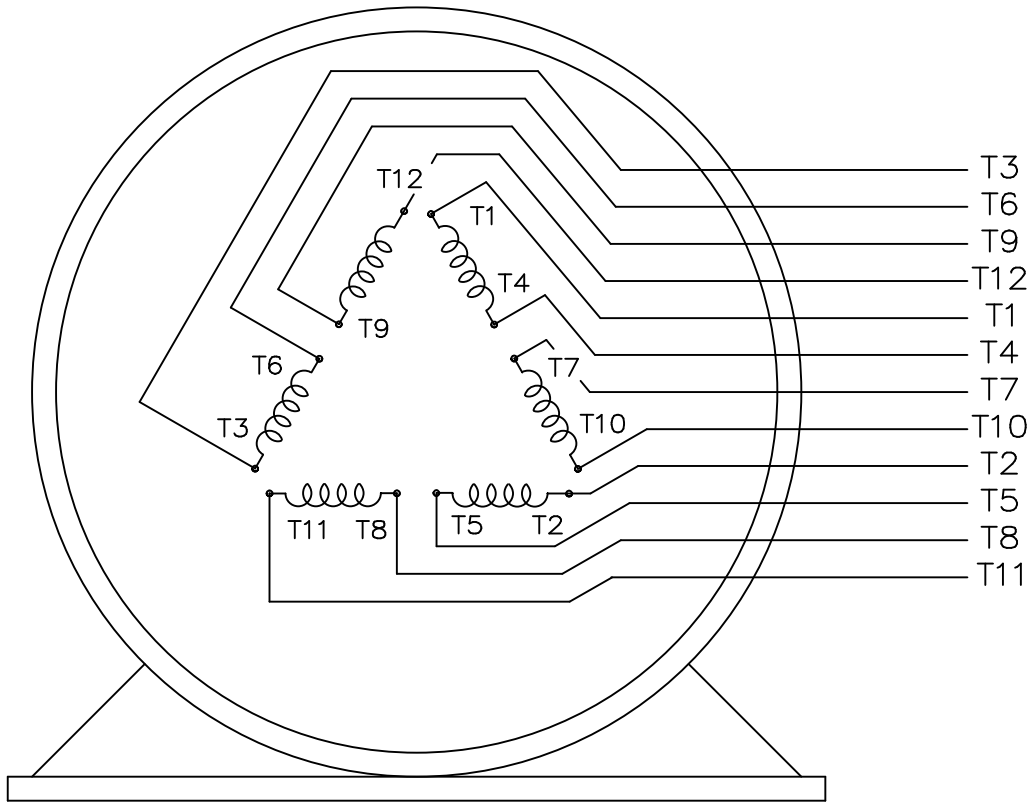3. NAMEPLATES TO BE READ FROM CONDUIT BOX
   SIDE OF MOTOR

(B−SS514570)

DASH	FRAME	B	C	2F	BS
2438	447TS	22.50	39.50	20.00	10.00
2938	449TS	27.50	44.50	25.00	12.50

	TOLERANCES UNLESS SPECIFIED				
		DEC.	INCHES		
		.X	±.1		
		.XX	±.03	TITLE OUTLINE − STD.	
2	SHAFT TOL. WAS 2.376/2.375 KL 05−23−2005	.XXX	±.005	447/9TS FR. − DR.PR.	
1	NEW DRAWING DRS 02−10−2003 ML	.XXXX	±.0005	MAT'L.	
NO.	REVISION BY & DATE CHK	ANG	±7'30"	FINISH	

DRAWN DRS 02−10−2003
CHK ML 02−10−2003
APPD GK 02−10−2003
SCALE 9=64
REF
MAT'L. FMF
PREV

Lincoln MOTORS

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RFP
DIST WA
CAD FILE SS514335LN

SIZE B

DRAWING NO. SS514335LN
PAGE OF
REV. 2

```
ERROR: undefined
OFFENDING COMMAND: ex

STACK:

{--begin-- Pscript_Win_Data --begin-- }
-dictionary-
```

T3
T6
T9
T12
T1
T4
T7
T10
T2
T5
T8
T11

T12
T1
T9
T6
T3
T4
T7
T10
T11 T8
T5 T2

VIEW OF TERMINAL END

T12(W4)
T1(U1)
T6(W2)
T7(U3)
LINE 1

T2(V1)
T4(U2)
T8(V3)
T10(U4)
LINE 2

T3(W1)
T5(V2)
T9(W3)
T11(V4)
LINE 3

NO.	REVISION	BY & DATE	CHK	ANG				
				TOLERANCES UNLESS SPECIFIED			DRAWN KL 04-23-2002	
			DEC.	INCHES			CHK DJK 04-24-2002	
			.X	±.1			APPD EAB 04-24-2002	
			.XX	±.01	TITLE	CONNECTION DIAGRAM – EXTERNAL 12 LEAD – SINGLE VOLTAGE	SCALE 1=1	
2	ADDED IEC TERMINAL MARKINGS CN 41429	JJB 05/24/200ML		.XXX	±.005			REF	
1	NEW DRAWING MU41562	KL 04-12-02		.XXXX	±.0005	MAT'L.		FMF
NO.	REVISION	BY & DATE	CHK	ANG	±1/2°	FINISH		PREV

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RFP
CAD FILE   ee7300bh_ln
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SIZE A
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EE7300BH-LN
REV. 2

Lincoln MOTORS

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CERTIFICATION DATA SHEET

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

CONN. DIAGRAM: A-EE7300BH-LN

OUTLINE: B-SS514335LN-2438

CATALOG #: LM80166

WINDING #: T447230   1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
300&250	224&187	3600	3568&2968	447TS	DP	F	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	460&380	332&335	PWS & YDRUN	CONTINUOUS	F1	1.15/1.15	40

FULL LOAD EFF:	95&94.5	3/4 LOAD EFF:	95.4	1/2 LOAD EFF:	95	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	88&89	3/4 LOAD PF:	86	1/2 LOAD PF:	79	94.1	SQ CAGE IND RUN

F.L. TORQUE		LOCKED ROTOR AMPS	L.R. TORQUE			B.D. TORQUE			F.L. RISE°C
442	LB-FT	1800	500	LB-FT	113 %	1000	LB-FT	225 %	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
85 dBA	95 dBA	30 LB-FT^2	138 LB-FT^2	10 SEC.	1	1900 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	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6314	6314						

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

*
N
O
T
E
S
*

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE   NONE
NONE   NONE   PPR

BRAKE: NONE   NONE
NONE   P/N NONE
NONE   NONE
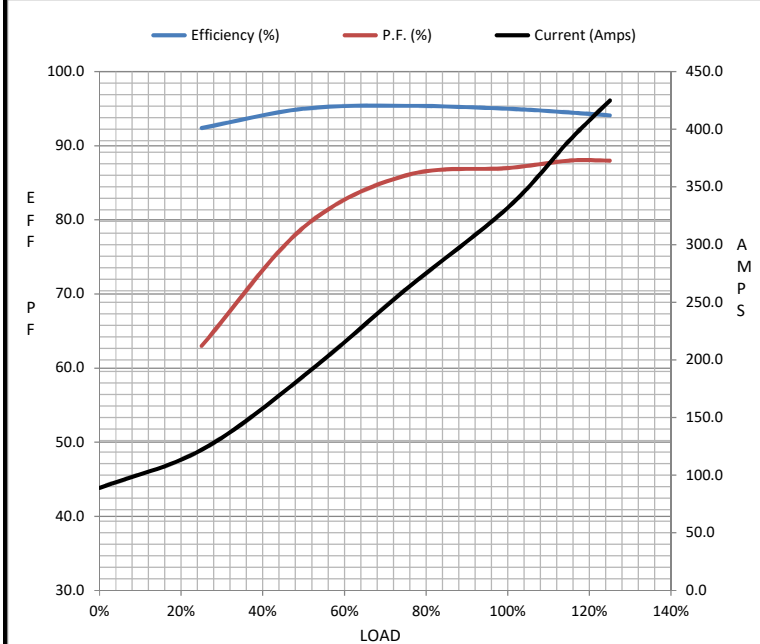NONE   FT-LB   NONE   V   NONE   Hz

Data Sheet

Date:	1/29/2018		**LM80166**

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Data @ **460** **V**

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	89.0	122	186	261	332	390	425	1,800	
Torque (ft-lb)	0.00	110	220	331	442	509	554	500	
RPM	3600	3592	3585	3575	3565	3,560	3555	0	
Efficiency (%)		92.4	95.0	95.4	95.0	94.5	94.1		
P.F. (%)	5.5	63.0	79.0	86.0	87.0	88.0	88.0	22.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	
Speed (RPM)	0	1800	3475	3565	3600	**Information Block**
Current (Amps)	1,800	1,750	1,200	332	89.0	
Torque (ft-lb)	500	400	1,000	442	0.00	

Information Block		
HP	300.0	
Sync. RPM	3600	
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	55	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	30.0	Lb-Ft²
Ref Wdg	T447230 NONE	
Sound Pressure @ 1M	85	dBA
VFD Rating	NONE	
Outline Dwg	B-SS514335LN-2438	
Conn. Diag	A-EE7300BH-LN	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0130	0.0070	0.1150	0.0550	2.9610

Legend: Efficiency (%) — P.F. (%) — Current (Amps)

Speed -Torque Curve

Legend: Torque — Amps