PRODUCT INFORMATION PACKET

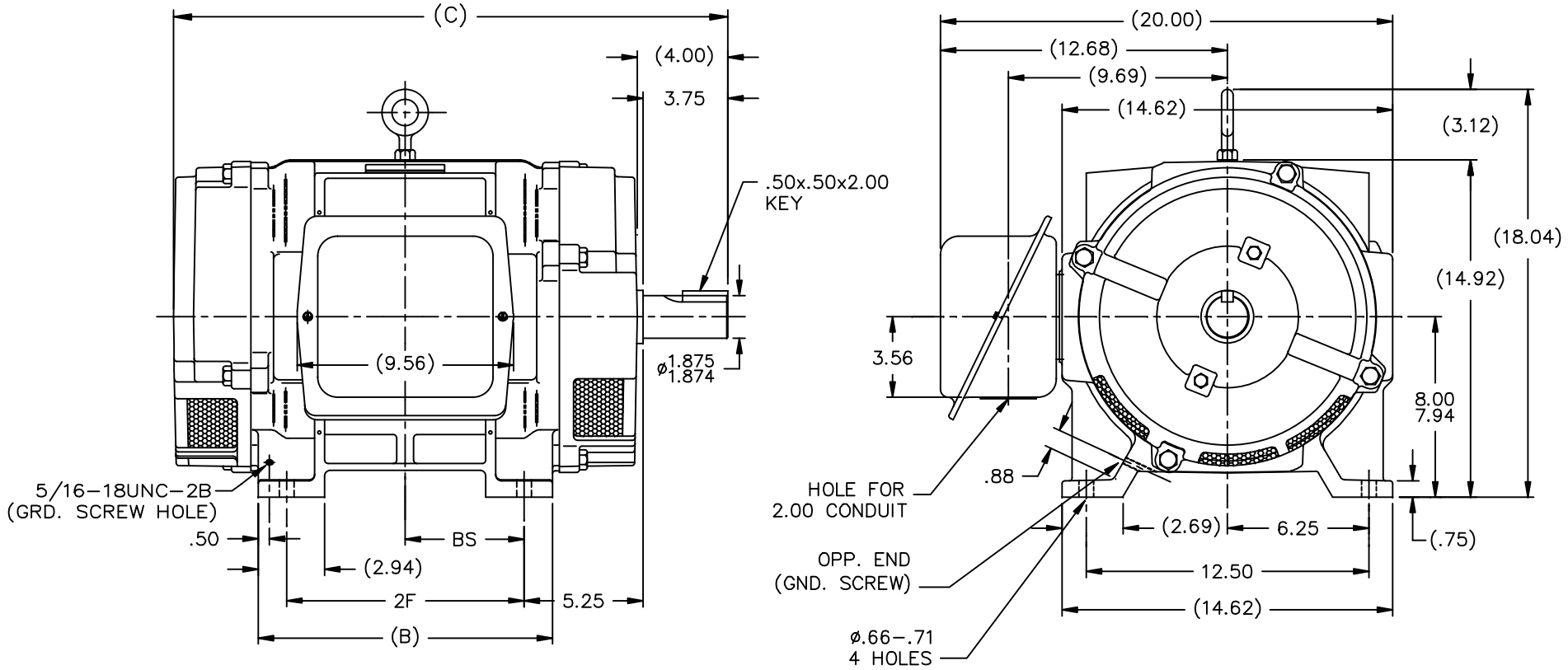
Model No: LM80118
Catalog No: LM80118
Fire Pump Motor, 50 & 40 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 324TS Frame, DP

Nameplate Specifications

Phase	3	Output HP	50 & 40 Hp
Output KW	37.0 & 30.0 kW	Voltage	230/460 & 190/380 V
Speed	3555 & 2960 rpm	Service Factor	1.15 & 1.15
Frame	324TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	92.4 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	117/58.5 & 113/56.5 A	Power Factor	86.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	No	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.19 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	24.50 in
Frame Length	13.62 in	Shaft Diameter	1.875 in
Shaft Extension	3.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS200079LN-1362	Connection Drawing	A-EE7358-LN



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	2F	BS	
1362	324TS	13.00	24.50	10.50	5.25	
1512	326TS	14.50	26.00	12.00	6.00	

NO.	REVISION	BY & DATE	CHK
2	ADDED SCREENS (MU106892)	REP 02-29-2012	DR
1	NEW DRAWING		

TOLERANCES UNLESS SPECIFIED
DEC. INCHES
.X ±.1
.XX ±.03
.XXX ±.005
.XXXX ±.0005
ANG ±7'30"

Lincoln MOTORS

TITLE OUTLINE –DR.PR. –CAST IRON 320TS FR. –BB –TS –D.E.V.
MAT'L.
FINISH
CAD FILE ss200079
RFP
DIST LB

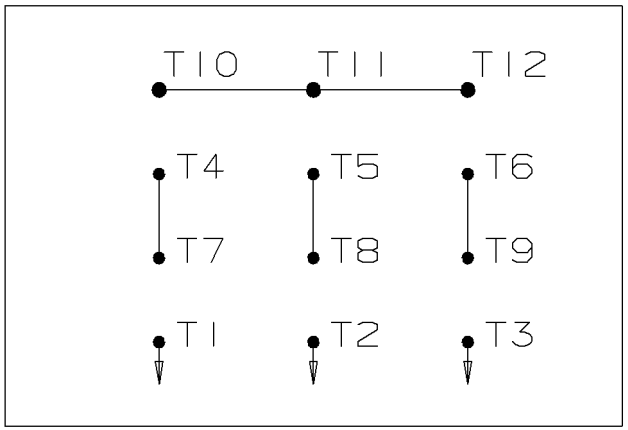
DRAWN CTO 10-17-2000
CHK
APPD
SCALE 1=4.5
REF
FMF
PREV

SIZE B | DRAWING NO. SS200079LN | PAGE 1 OF 1 | REV. 2

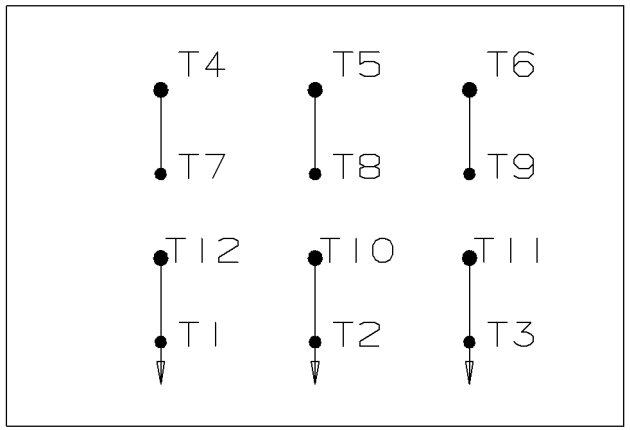
A- EE7358-LN

HIGH VOLTAGE

WYE START

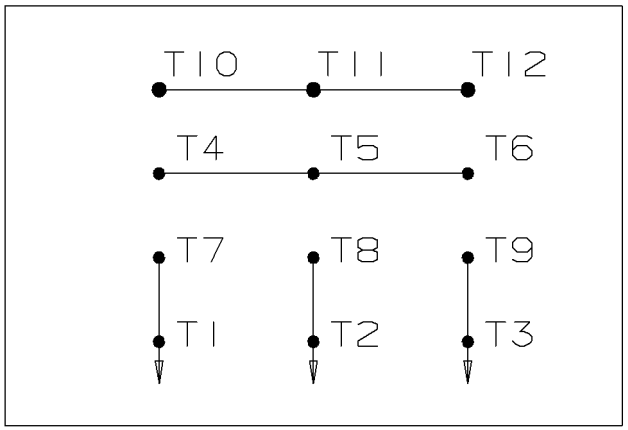


DELTA RUN

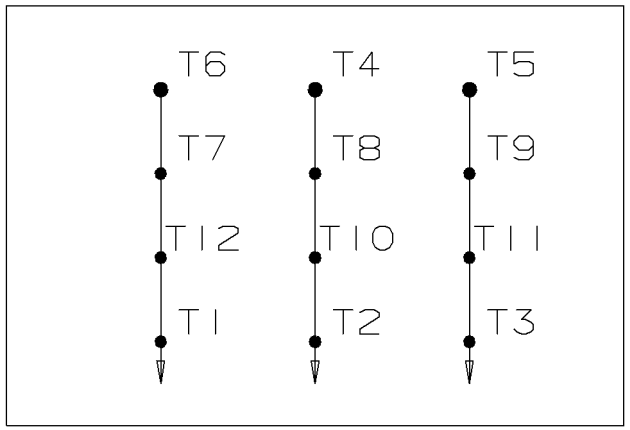


LOW VOLTAGE

WYE START



DELTA RUN



4/2 CKTY △

1	12-07-1999	NEW DRAWING	DRS
REV	DATE	CHANGE	NAME

Lincoln MOTORS

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	12-07-1999
CHKD BY	ML	12-07-1999
APPD BY	TB	12-07-1999

PART NAME CONNECTION DIAGRAM

DRWG NO A- EE7358-LN

PURCHASED | CADD FILE NO. EE7358-LN

9/4/2007 11:27:42 PM -

LEESON

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

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7358-LN

OUTLINE: B-SS200079LN-1362

CATALOG #: LM80118

WINDING #: K286294 11

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50&40	37.0&30.0	3600	3555&2960	324TS	DP	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	117/58.5&113/56.5	WYE START DELTA RUN	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	92.4&91.7	**3/4 LOAD EFF:**	92.4	**1/2 LOAD EFF:**	91.7	**GTD. EFF**	**ELEC. TYPE**
FULL LOAD PF:	86.5&87	**3/4 LOAD PF:**	84	**1/2 LOAD PF:**	77	91	SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 **LB-FT**	700 / 350	100 **LB-FT** 135 %	190 **LB-FT** 257 %	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
82 **dBA**	92 **dBA**	2.7 **LB-FT^2**	34 **LB-FT^2**	15 **SEC.**	2	375 **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
6312	6311						

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

NOTES

*

*

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: 1/24/2018

LEESON

LM80118

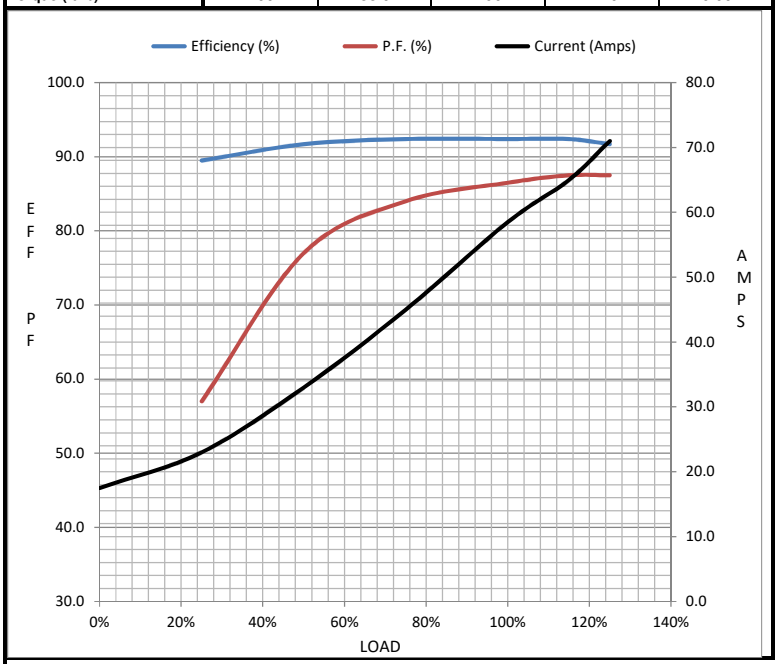
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	17.5	23.0	33.0	45.0	58.5	65.0	71.0	350	
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)	350	300	225	58.5	17.5
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	230/460#190/380	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 wk²	2.70	Lb-Ft²
Ref Wdg	K286294 NONE	
Sound Pressure @ 1M	82	dBA
VFD Rating	NONE	
Outline Dwg	B-SS200079LN-1362	
Conn. Diag	A-EE7358-LN	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1080	0.0660	0.5150	0.3840	15.7900

Speed -Torque Curve