PRODUCT INFORMATION PACKET

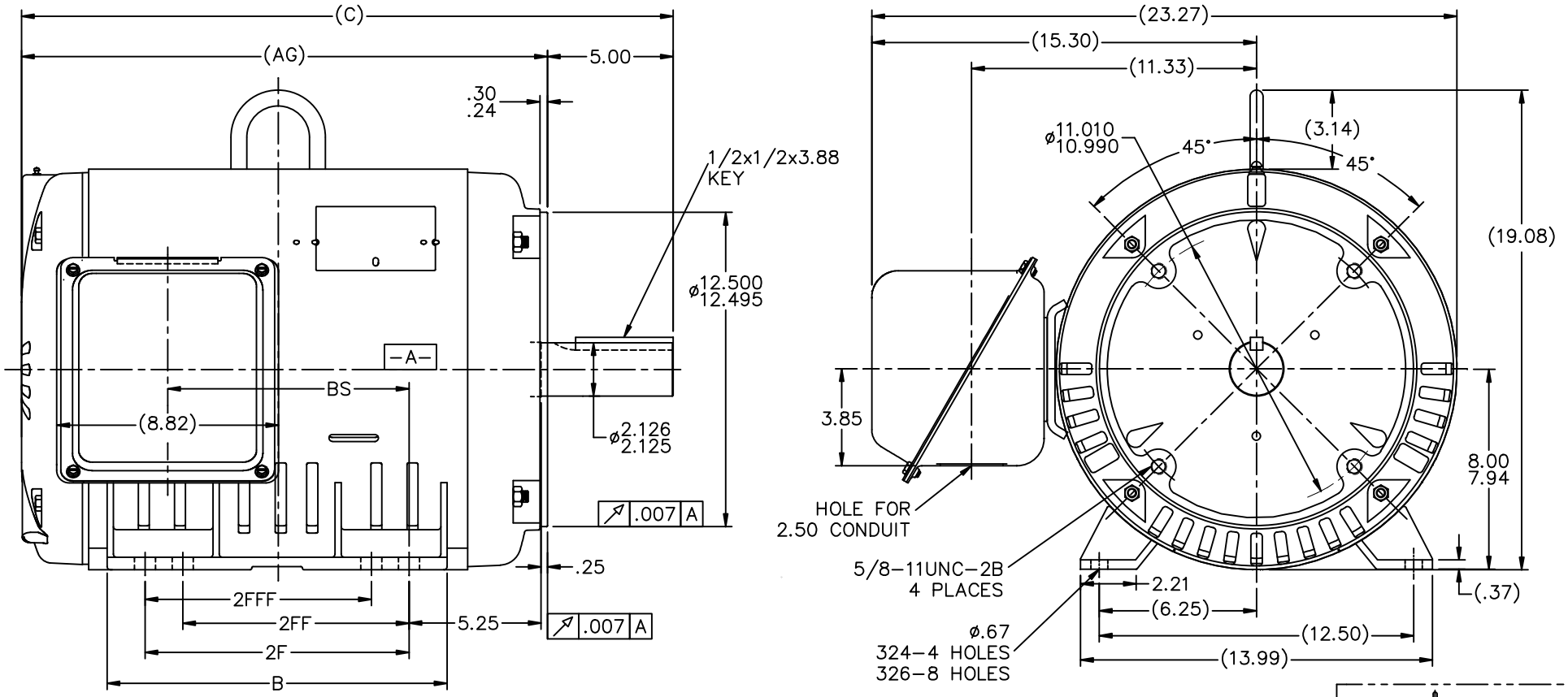
Model No: LM13837
Catalog No: LM13837
General Purpose Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 380-415 V, 1800 & 1500 RPM, 324TC Frame, DP

Nameplate Specifications

Phase	3	Output HP	40 & 30 Hp
Output KW	30.0 & 22.4 kW	Voltage	230/460 & 380-415 V
Speed	1782 & 1485 rpm	Service Factor	1.25 & 1.0
Frame	324TC	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.1 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	103/51.5 & 47.5-46.5 A	Power Factor	77
Duty	Continuous	Insulation Class	F
Design Code	BC	KVA Code	F
Drive End Bearing Size	311	Opp Drive End Bearing Size	309
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.142 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	25.91 in
Frame Length	15.07 in	Shaft Diameter	2.125 in
Shaft Extension	5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308AA-LN	Outline Drawing	XG2D1SC1-1507



NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	AG	BS	B	2F	2FF	2FFF
1507	324TC	25.91	20.91	9.65	13.52	10.50		
1657	326TC	27.41	22.41	11.15	15.02	12.00	10.50	10.50

NO.	REVISION	BY & DATE	CHK
4	REVISED KEY LENGTH FROM 2.00 TO 3.88 MU95871	JJB 7/1/2010	DD
3	REVISE 'BS' DIM. PER CUSTOMER ISAAC#08–3146	RWR 07–11–2008	MG
2	CHANGED CAD FILE NAME TO MATCH PART & REISSUED	CTO 10–14–2004	TB
1	REV. PART # TO MATCH B.O.M. & REISSUED	CTO 04–08–2004	TB

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

Lincoln MOTORS

TITLE OUTLINE NEMA MOTORS
320TC ODP UE

MAT'L.

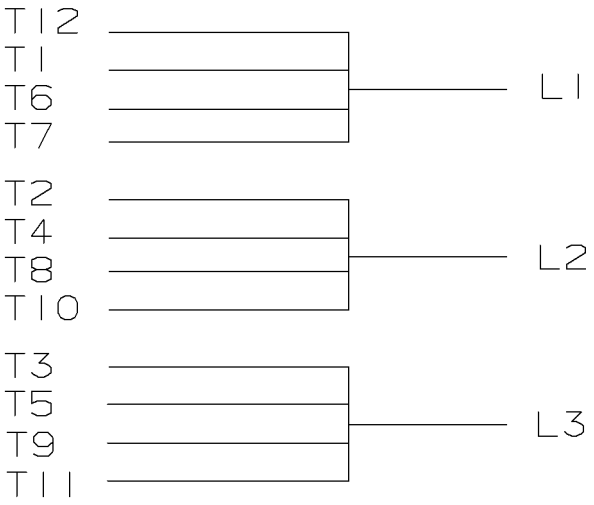
FINISH

DRAWN ERH 03–15–2004
CHK ML 03–16–2004
APPD TB 03–16–2004
SCALE 1=4
REF
FMF MU 50186
PREV

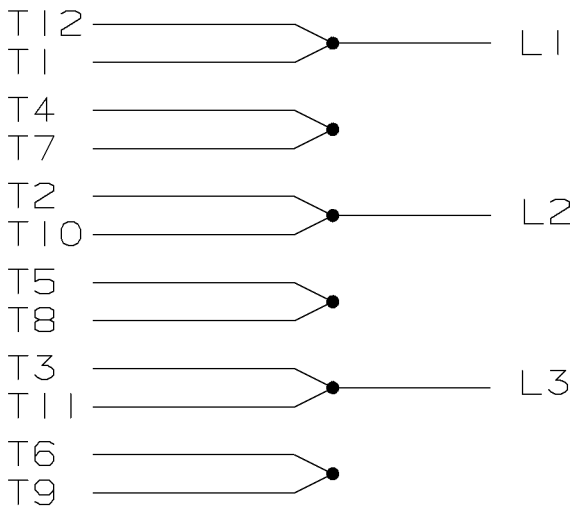
RFP 03–16–2004
DIST BY
CAD FILE xg2d1sc1

SIZE	DRAWING NO.	PAGE OF	REV.
B	XG2D1SC1		4

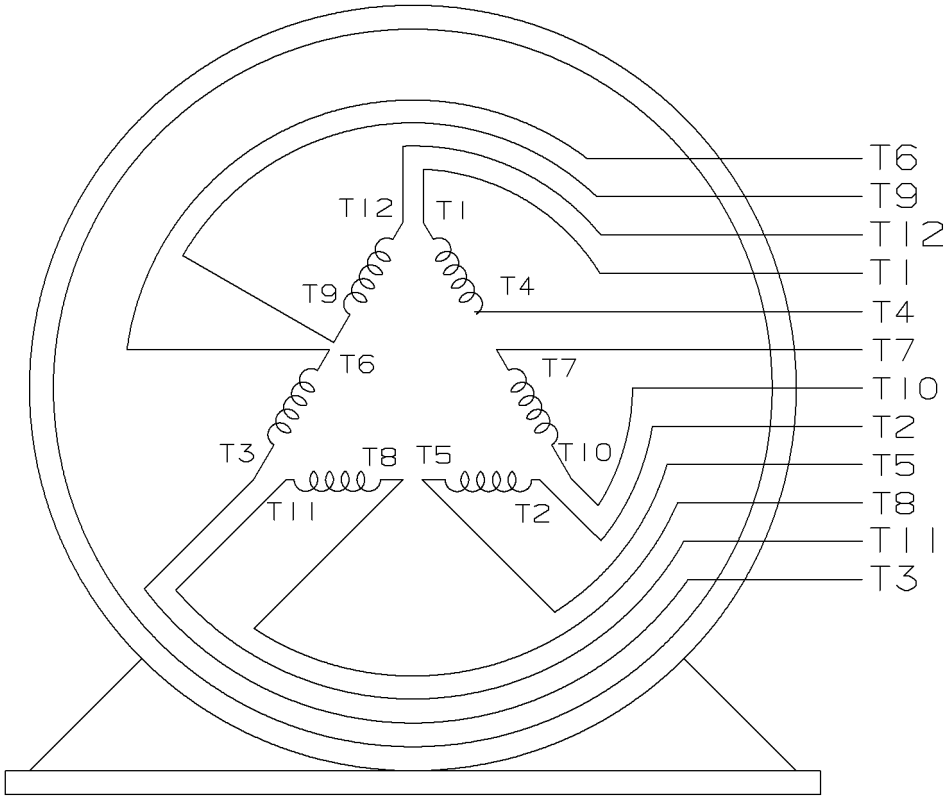
A- EE7308AA-LN



LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

REV	DATE	CHANGE	NAME
2	08-09-1999	RE-ISSUE, ADDED '-' TO PART NUMBER	BLR
1	06-18-1999	NEW DRAWING	TRB

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	TRB	07-16-1999
CHKD BY	ML	06-18-1999
APPD BY	GK	06-18-1999

PART NAME 3 PHASE CONNECTION DIAGRAM 2/1 DELTA - 12 LEADS

DRWG NO A- EE7308AA-LN

PURCHASED | CADD FILE NO. EE7308AALN

8/25/2007 12:50:38 PM -

```
ERROR: undefined
OFFENDING COMMAND: Pscrip

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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308AA-LN **CAT #:** LM13837
OUTLINE: XG2D1SC1-1507
WINDING: L3244031 NONE 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1800	1782	324TC	DP	TDR	F	BC

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#380-415	103/51.5&47.5-46.5	WYE START DELTA RUN	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	ELECT. TYPE
F.L. PF	77.0	3/4 LD PF	72.5	1/2 LD PF	63.0	93.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
118 LB-FT	265	225 LB-FT 191%	250 LB-FT 212%	30	

PRESSURE @ 3	SOUND POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	0.00 LB-FT²	0 LB-FT²	0 SEC.	0	0 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	WATTSAVER

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 311	BALL 309	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL

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
0.092	0.057	0.574	0.929	12.408	0.150	ODE

*
NOTES
*

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**
UL: V-INS, CONST UL REC

DATE: 9/10/2018

Data Sheet

Date: 9/10/2018

LEESON

LM13837

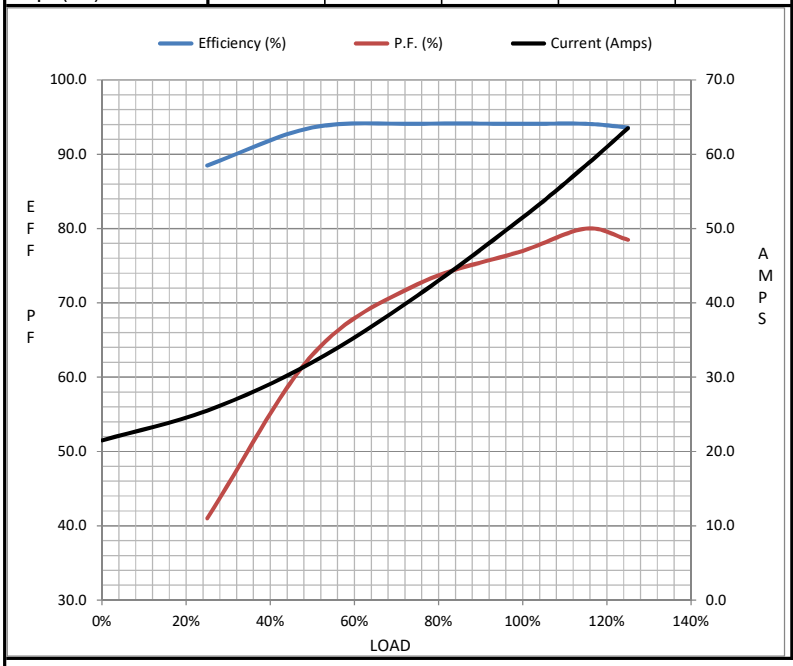
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	21.5	25.5	32.0	41.0	51.5	58.5	63.5	265	
Torque (ft-lb)	0.00	29.5	58.5	88.0	118	136	148	225	
RPM	1800	1795	1792	1788	1782	1,780	1778	0	
Efficiency (%)		88.5	93.6	94.1	94.1	94.1	93.6		
P.F. (%)	4.0	41.0	63.0	72.5	77.0	80.0	78.5	36.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1782	1800
Current (Amps)	265	240	175	51.5	21.5
Torque (ft-lb)	225	200	250	118	0.00



Information Block

HP	40.0	
Sync. RPM	1800	
Frame	324	
Enclosure	DP	
Construction	TDR	
Voltage	230/460#380-415	V
Frequency	60	Hz
Design	B	
LR Code letter	F	
Service Factor	1.15	
Temp Rise @ FL	30	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.00	Lb-Ft²
Ref Wdg	L3244031 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	NONE	
Outline Dwg	XG2D1SC1-1507	
Conn. Diag	A-EE7308AA-LN	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0920	0.0570	0.5740	0.9290	12.4080

Speed -Torque Curve