PRODUCT INFORMATION PACKET

Model No: LM22830
Catalog No: LM22830
Speed Ratio Motors, TEFC, 5 HP, 3 Ph, 60 Hz, 230/460 V, 1750 RPM, 184TC Frame

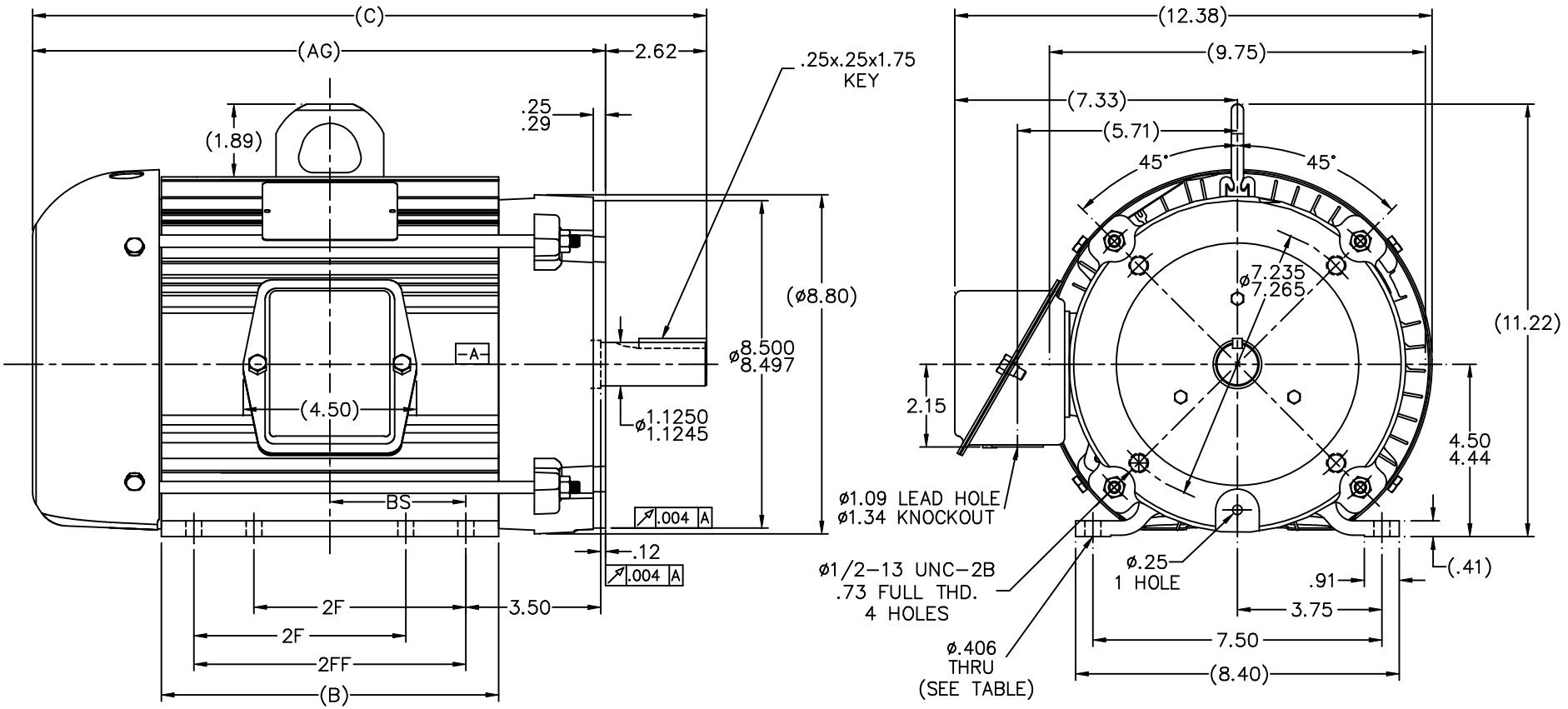
Nameplate Specifications

Output HP	5 Hp	Output KW	3.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	13.4/6.7 A	Speed	1750 rpm
Service Factor	1	Phase	3
Efficiency	87.5 %	Power Factor	79
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	L
Frame	184TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	207	Opp Drive End Bearing Size	205
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	2.46 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	16.83 in
Frame Length	8.20 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 4:1		
Connection Drawing	A-EE7308T-LN	Outline Drawing	B-SS601010LN-820

SS601010LN



NOTES:
1. CONDUIT BOX TO BE ROTATED IN 90° STEPS.
2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FR.	C	BS	B	2F	AG	2FF	FOOT HOLE
620	182T	14.83	2.25	6.20	---	12.21	4.50	4
720	184T	15.83	2.75	7.20	---	13.21	5.50	4
720	182/4T	15.83	2.75	7.20	4.50	13.21	5.50	8
820	182/4T	16.83	3.25	8.20	5.50	14.21	6.50	8
875	184T	17.49	3.53	8.75	5.50	14.87	7.06	8

NO.	REVISION	BY & DATE	CHK
10	CHANGED DASH 720 182/4T TO 184T AND DIMENSION 2FF FROM 4.50 TO 5.50 ECN 10328	JJB 05/25/2007	ML
9	-620, 720; 2F NOW 2FF DIM. (4 MTG HOLES) CN 33910	DRS 10-25-2005	ML
8	FIXED 2FF DIM. FOR -820 WAS 5.50 CN 32479	ERH 02-02-2004	ML
7	ADDED OLD DASHES TO TABLE CN 32479	ERH 12-10-2003	ML
6	REVISED PER CN 32479	ERH 12-01-2003	ML

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

RFP
DIST LB

Lincoln MOTORS

TITLE OUTLINE
180T FR. - TEFC - C'FACE

MAT'L.
FINISH
CAD FILE ss601010in

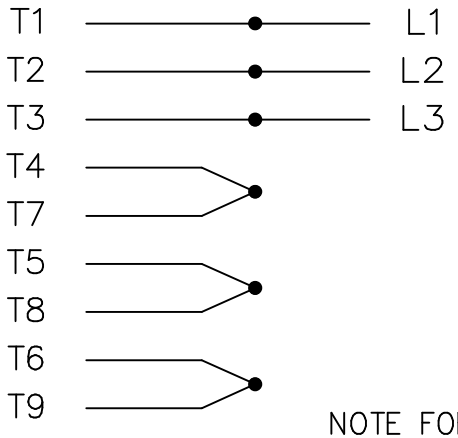
DRAWN	BJW	02/01/2000
CHK	ML	02/02/2000
APPD	GK	02/02/2000
SCALE		3=8
REF		
FMF		MU48444
PREV		

SIZE	DRAWING NO.	PAGE	OF	REV.
B	SS601010LN			10

EE7308T-LN

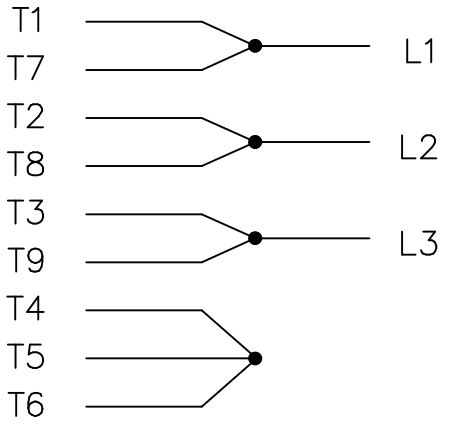
THREE PHASE
DUAL VOLTAGE MOTOR

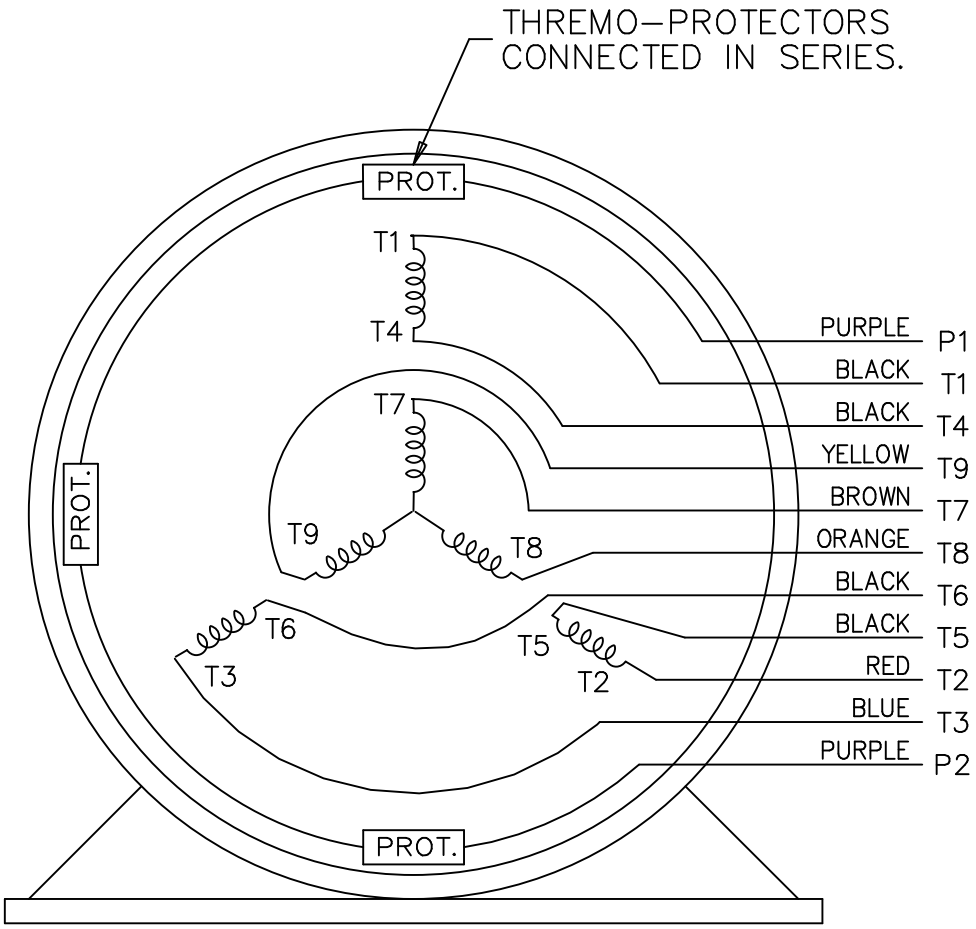
HIGH VOLTAGE



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE





VIEW OF TERMINAL END

NO.	REVISION	BY & DATE	CHK
2	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML
1	NEW DRAWING	BJK 07-18-2002	DRS

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

Lincoln MOTORS

TITLE CONNECTION DIAGRAM
3 PHASE – DUAL VOLTAGE MOTOR

MAT'L.

FINISH

CAD FILE ee7308t_ln

RFP

DIST LB

DRAWN BJK 07-16-2002
CHK DRS 07-18-2002
APPD GK 07-18-2002
SCALE 1=1
REF
FMF
PREV

SIZE	DRAWING NO.	PAGE	OF	REV.
A	EE7308T-LN			2

7/19/2007 9:24:35 AM -

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

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T-LN

OUTLINE: B-SS601010LN-820

CATALOG #: LM22830

WINDING #: K1844217 R8 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5	3.73	1800	1750	184TC	TEFC	L	INV

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	13.4/6.7	INVERTER ONLY	CONTINUOUS	F3	1.0	40

FULL LOAD EFF:	87.5	3/4 LOAD EFF:	88.5	1/2 LOAD EFF:	87.5	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	79	3/4 LOAD PF:	72	1/2 LOAD PF:	59	85.5	SQ CAGE INV DUTY

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
15 LB-FT	114 / 57	40 LB-FT 267 %	61 LB-FT 407 %	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.42 LB-FT^2	- LB-FT^2	- SEC.	-	115 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	GRAY - LINCOLN

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ALUMINUM
207	205						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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INVERTER TORQUE: CONSTANT 4:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

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

Data Sheet

Date: 1/29/2018

LEESON

LM22830

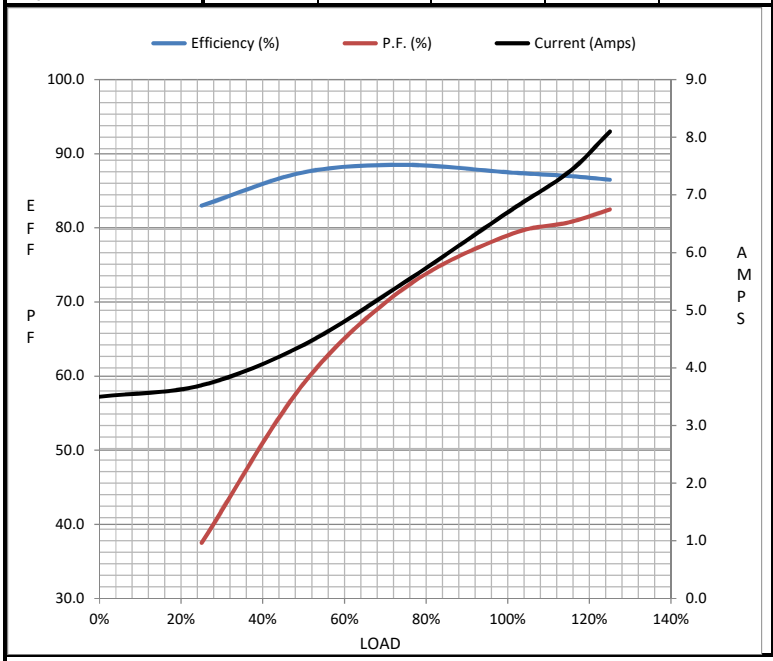
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.5	3.7	4.4	5.5	6.7	7.4	8.1	57.0	
Torque (ft-lb)	0.00	3.7	7.4	11.2	15.0	17.0	19.0	40.0	
RPM	1800	1790	1775	1765	1750	1,746	1740	0	
Efficiency (%)		83.0	87.5	88.5	87.5	87.0	86.5		
P.F. (%)	6.0	37.5	59.0	72.0	79.0	80.8	82.5	52.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1425	1750	1800
Current (Amps)	57.0	55.0	38.0	6.7	3.5
Torque (ft-lb)	40.0	40.0	61.0	15.0	0.00



Information Block

HP	5.0	
Sync. RPM	1800	
Frame	184	
Enclosure	TEFC	
Construction	TFL	
Voltage	230/460	V
Frequency	60	Hz
Design	B	
LR Code letter	L	
Service Factor	1.0	
Temp Rise @ FL	65	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.42	Lb-Ft²
Ref Wdg	K1844217 R8	
Sound Pressure @ 1M	62	dBA
VFD Rating	CONSTANT 4:1	
Outline Dwg	B-SS601010LN-820	
Conn. Diag	A-EE7308T-LN	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
1.6900	1.1680	3.2550	4.7910	77.6790

Speed -Torque Curve