

# PRODUCT INFORMATION PACKET

Model No: LM21844

Catalog No: LM21844

Automotive Duty Motor, 5 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 254UC Frame, TEFC



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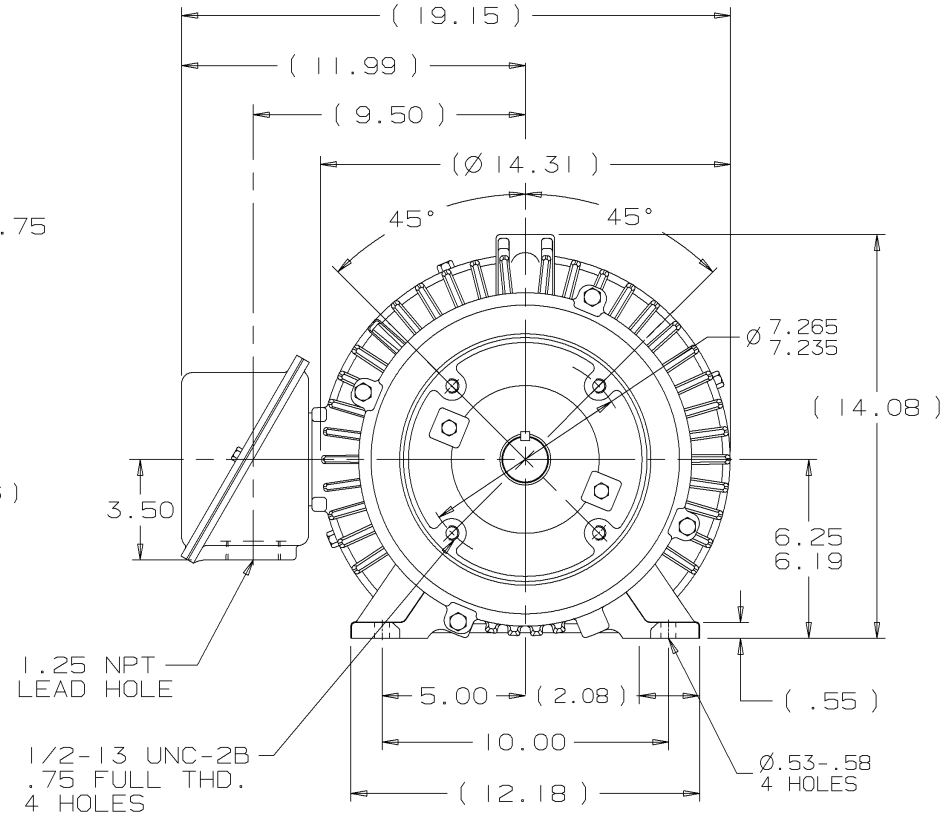
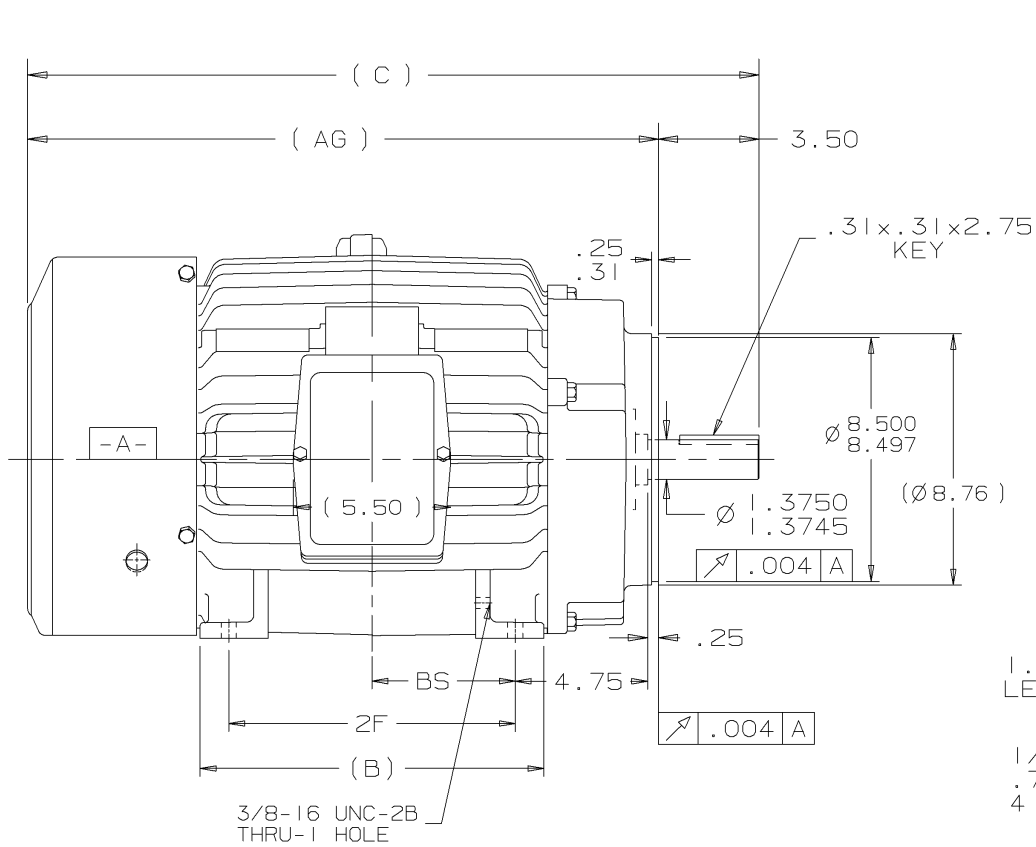
### Nameplate Specifications

Output HP	<b>5 Hp</b>	Output KW	<b>3.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>6.7 A</b>	Speed	<b>1175 rpm</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>90.2 %</b>	Power Factor	<b>76</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Frame	<b>254UC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>65 °C</b>
Drive End Bearing Size	<b>309</b>	Opp Drive End Bearing Size	<b>210</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.92 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>U</b>	Overall Length	<b>23.77 in</b>
Frame Length	<b>10.50 in</b>	Shaft Diameter	<b>1.375 in</b>
Shaft Extension	<b>3.75 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Connection Drawing	<b>A-EE7300-LN</b>	Outline Drawing	<b>B-SS203578LN-1050</b>

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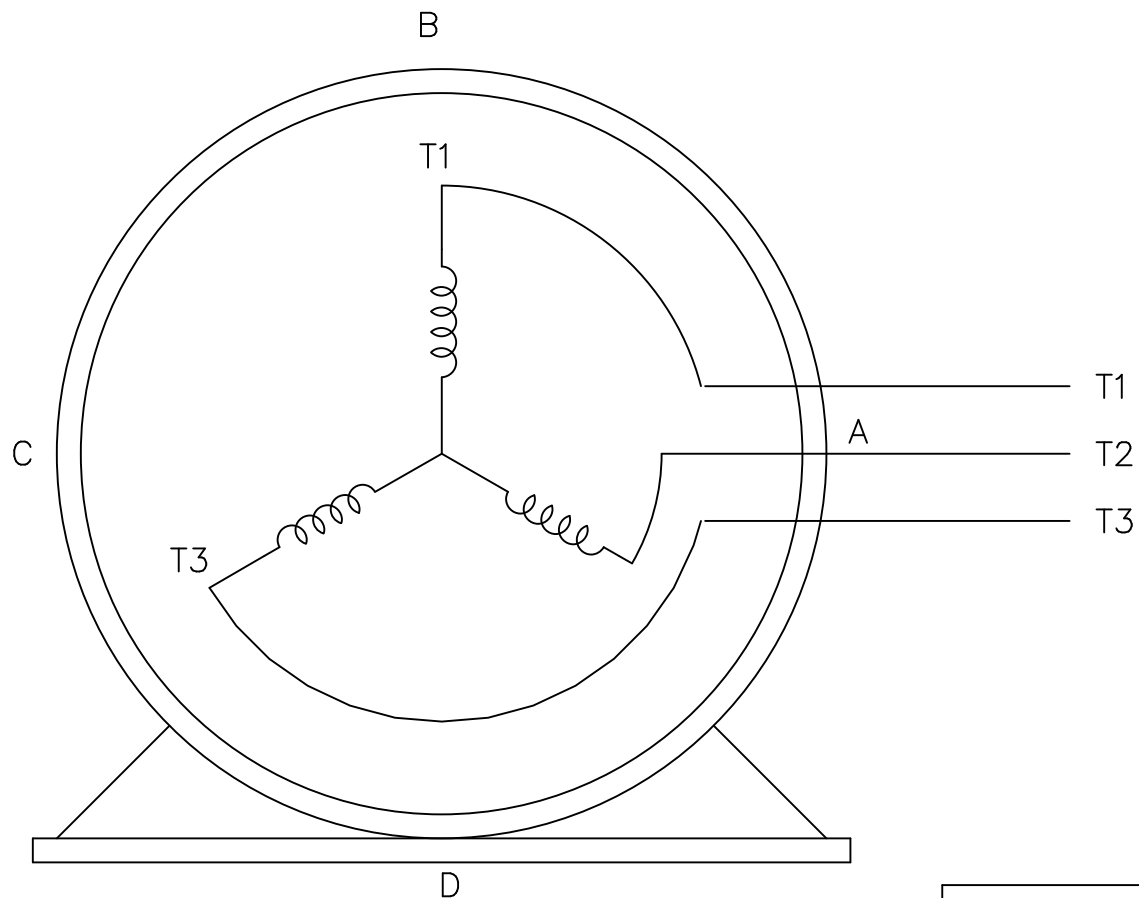
- NOTES:  
 1. BOX CAN BE ROTATED ON ITS AXIS.  
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	AG	2F	BS	REV	DATE	CHANGE	NAME	MATERIAL	FINISH	MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX±.03 XXX±.005 XXXX±.0005 ANGLES± 7'30"	APPD BY	CHKD BY	DRAWN BY	DATE
1050	254UC	10.25	23.77	20.27	8.25	4.12	2	08-25-2000	CORRECTED SHAFT EXT. LOCATION CN 29200-B11	TJB	200						BJW	07-27-2000
1225	256UC	12.00	25.52	22.02	10.00	5.00	1	07-31-2000	NEW DRAWING	BJW						ML	07-31-2000	
									MU31317	BJW						TB	07-31-2000	
											PART NAME OUTLINE - TEFC - TFNA			DRWG NO				
											250UC FRAME - BB - TS			B-SS203578LN				
											PURCHASED			CADD FILE NO. SS203578LN				

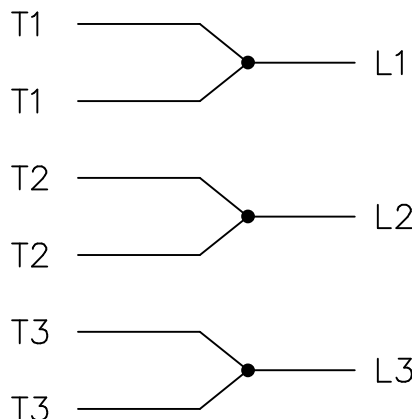
THREE PHASE – SINGLE VOLTAGE  
MOTOR – CONDUIT BOX @ 'A'

EE7300-LN

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS



IF MOTOR HAS  
6 LEADS




A-9806 DECAL

VIEW OF TERMINAL END

OPTIONAL CORD  
CONNECTION

L1 WHITE  
L2 RED  
L3 BLACK

				TOLERANCES UNLESS SPECIFIED			DRAWN BLR 08-13-1999			
				DEC.	INCHES		CHK ML 08-13-1999			
				.X	±.1		APPD GK 08-13-1999			
				.XX	±.02		SCALE 1=1			
2	ADDED OPTIONAL CORD CONNECTION PER MU47226	CTO 03-31-2004	PJB	.XXX	±.005	TITLE CONNECTION DIAGRAM SINGLE VOLT – 3Ø MOTOR	REF			
1	NEW DRAWING	CTO 08-13-1999		.XXXX	±.0005		MAT'L.	FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	PREV			
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			RFP	CAD FILE EE7300_LN		SIZE	DRAWING NO.	PAGE	OF	REV.
			DIST	WP		A	EE7300-LN			2



**CERTIFICATION DATA SHEET**

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

**CONN. DIAGRAM:** A-EE7300-LN

**OUTLINE:** B-SS203578LN-1050

**CATALOG # :** LM21844

**WINDING #:** 254671 1

**MOUNTING:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5	3.73	1200	1175	254UC	TEFC	H	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	460	6.7	ACROSS THE LINE	CONTINUOUS	F3	1.0	65

FULL LOAD EFF:	90.2	3/4 LOAD EFF:	90.2	1/2 LOAD EFF:	88.5	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	76	3/4 LOAD PF:	70	1/2 LOAD PF:	57	88.5	SQ CAGE IND RUN		

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.4 LB-FT	46	48 LB-FT 214 %	69.5 LB-FT 310 %	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	2.5 LB-FT^2	80 LB-FT^2	30 SEC.	2	350 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	U	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
309	210						

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

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

Data Sheet

Date: 1/18/2018

LM21844



Data @ **460 V**

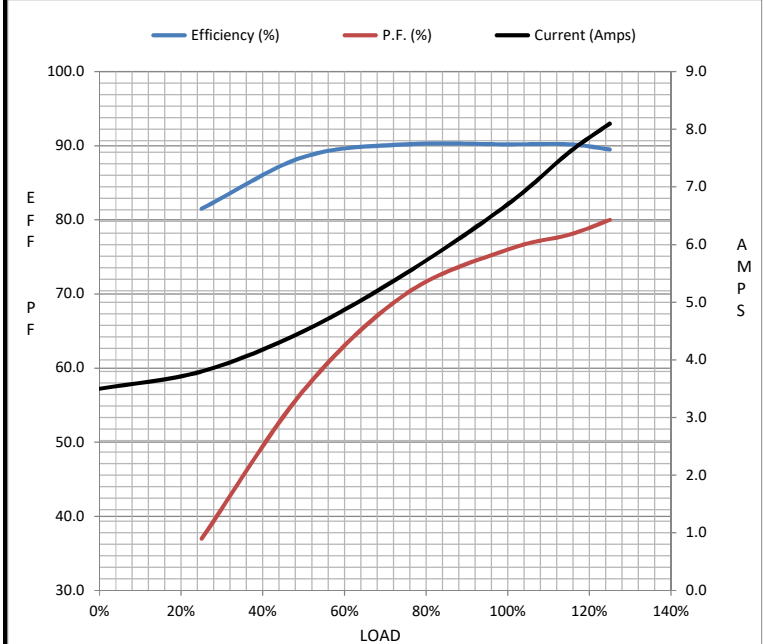
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	3.5	3.8	4.5	5.5	6.7	7.6	8.1	46.0
Torque (ft-lb)	0.00	5.5	11.0	16.8	22.4	25.8	28.0	48.0
RPM	1200	1195	1188	1182	1175	1,172	1168	0
Efficiency (%)		81.5	88.5	90.2	90.2	90.2	89.5	
P.F. (%)	7.0	37.0	57.0	70.0	76.0	78.0	80.0	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	550	1025	1175	1200
Current (Amps)	46.0	43.0	27.5	6.7	3.5
Torque (ft-lb)	48.0	42.0	69.5	22.4	0.00

Information Block				
HP	5.0			
Sync. RPM	1200			
Frame	254			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	35 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.50 Lb-Ft <sup>2</sup>			
Ref Wdg	254671 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS203578LN-1050			
Conn. Diag	A-EE7300-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.1280	0.8900	3.8780	3.8780	73.7100



Speed - Torque Curve

