

PRODUCT INFORMATION PACKET

Model No: LM21848

Catalog No: LM21848

Automotive Duty Motor, 15 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 284UC Frame, TEFC



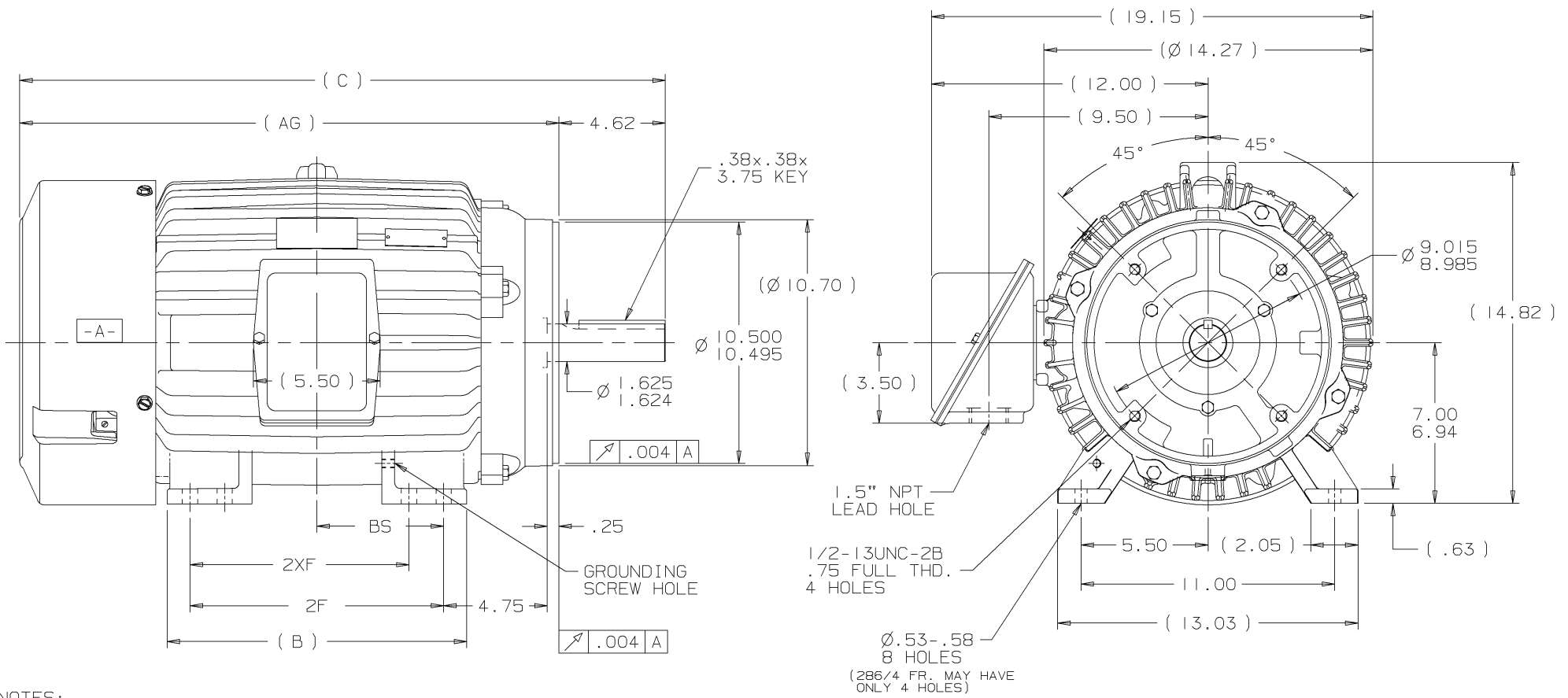
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Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	460 V
Current	18.0 A	Speed	1770 rpm
Service Factor	1	Phase	3
Efficiency	92.4 %	Power Factor	85
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	284UC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	65 °C
Drive End Bearing Size	311	Opp Drive End Bearing Size	210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		


Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	.629 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	U	Overall Length	26.52 in
Frame Length	12.75 in	Shaft Diameter	1.625 in
Shaft Extension	4.88 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS311145LN-1275	Connection Drawing	A-EE7300-LN



- 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. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

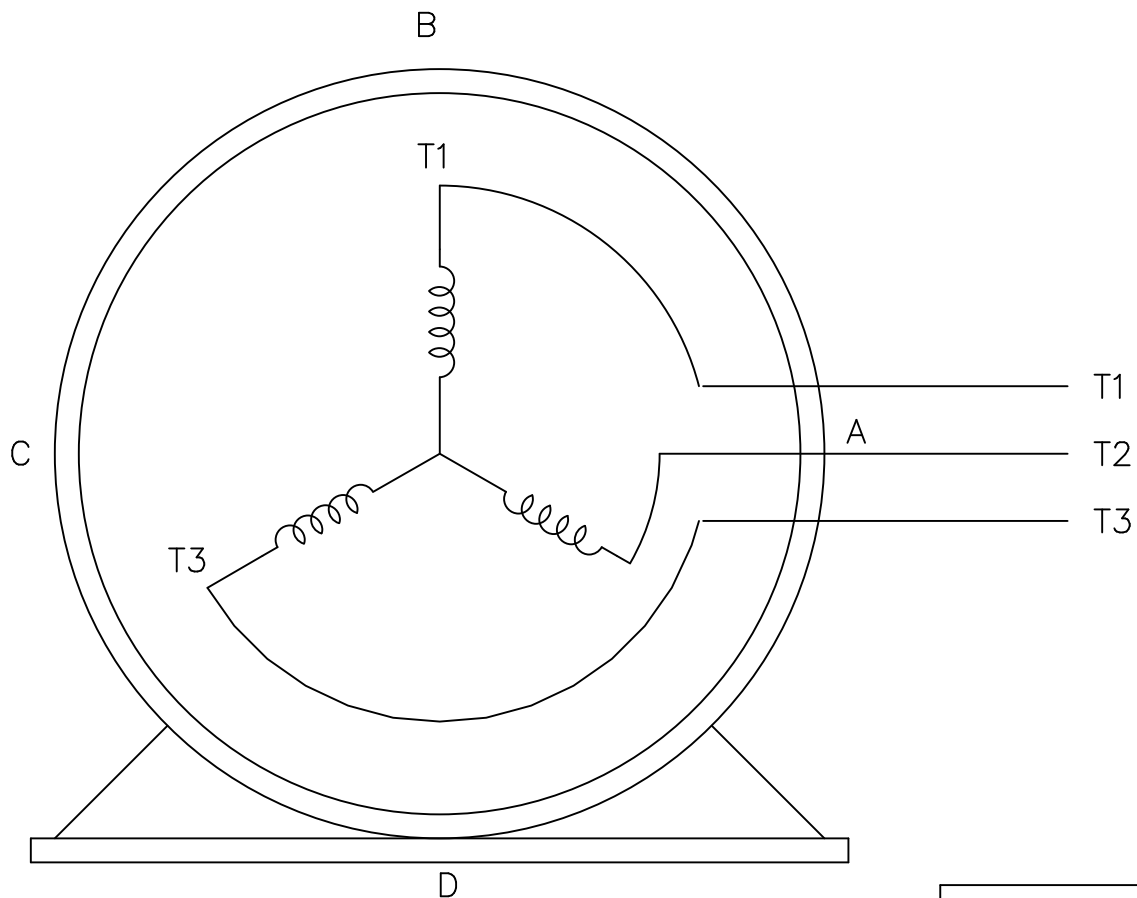
(B-SS311055)

								TOLERANCES UNLESS SPECIFIED				DRAWN DAH 08-06-2001	
								DEC. TOLERANCE				CHK ML 08-06-2001	
								.X ±.1		APPD BW 08-06-2001		SCALE .23 = 1	
3 REVISED 2XF DIM. LOCATION CN 27451 MSG 01-23-2002 ML .XX ±.03								TITLE OUTLINE		REF		PREV	
2 REVISED FOOT MOUNTING HOLE NOTE. CN 27451 NJS 01-10-2002 ML .XXX ±.005								280UC FR. - C'FACE - 11.00 LAM - TFPA		FNF			
1 NEW DRAWING MU38464 DAH 08-06-2001 ML .XXXX ±.0005								MAT'L.					
NO. REVISION								BY DATE		CHK ANG ±7'30"		FINISH	
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USE EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS IS AND ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT								PURCHASED		CAD FILE 55311145LN		SIZE B	
DASH FRAME B C AG 2F 2XF BS								DIST WA - LB - WP - LM - BR - BY		DRAWING NO. B SS311145LN		REV. 3	
1275	284UC	11.50	26.52	21.90	9.50		4.75						
1425	286UC	13.00	28.02	23.40	11.00	9.50	5.50						

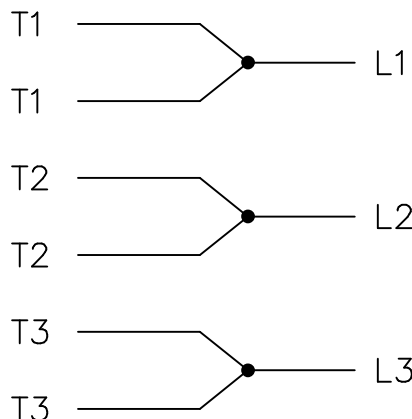
THREE PHASE – SINGLE VOLTAGE
MOTOR – CONDUIT BOX @ 'A'

EE7300-LN

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS




IF MOTOR HAS
6 LEADS



A-9806 DECAL

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

P.O. BOX 8003
 WAUSAU, WI 54401-8003
 PH. 715-675-3311



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7300-LN
 OUTLINE: B-SS311145LN-1275
 WINDING: K2564174

CAT #: LM21848

R1 7

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
15	11.2	1800	1770	284UC	TEFC	TFP	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	18	ACROSS THE LINE	CONT	F	1.15	65	3300

F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	92.4	GTD EFF	91.0	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	85.0	3/4 LD PF	82.0	1/2 LD PF	74.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
44.5 LB-FT	100	75.0 LB-FT 169%	110 LB-FT 247%	40

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
65 dBA	74 dBA	2.70 LB-FT²	0 LB-FT²	25 SEC.	0	475 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	GRAY - LINCOLN

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	U	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
311	210						

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
0.365	0.282	1.469	2.287	44.037	0.080	ODE

* N O T E S *	INVERTER TORQUE: NONE	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE	
	NONE	

DATE: 1/29/2018	BRAKE: NONE	
	NONE	
	NONE	
	NONE	
FT-LB: NA		
VOLTAGE: NONE		
UL: V-INS, CONST UL REC		

Data Sheet

Date: 1/29/2018

LM21848



Data @ 460 V

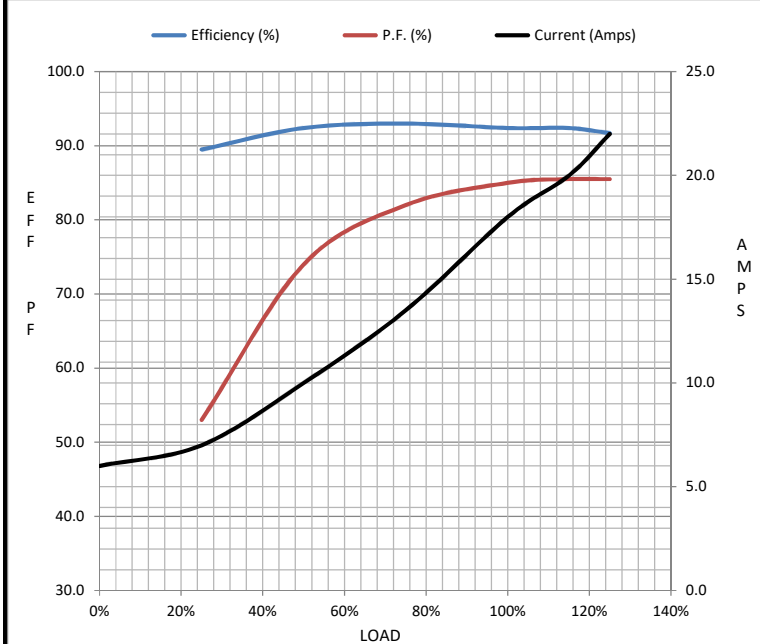
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.0	7.0	10.0	13.5	18.0	20.0	22.0	100
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.5	51.5	56.0	75.0
RPM	1800	1790	1785	1775	1770	1765	1760	0
Efficiency (%)		89.5	92.4	93.0	92.4	92.4	91.7	
P.F. (%)	6.0	53.0	74.0	82.0	85.0	85.5	85.5	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1640	1770	1800
Current (Amps)	100	90.0	65.0	18.0	6.0
Torque (ft-lb)	75.0	68.0	110	44.5	0.00

Information Block				
HP	15.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEFC			
Construction	TFP			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	2.70 Lb-Ft ²			
Ref Wdg	K2564174 R1			
Sound Pressure @ 1M	65 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS311145LN-1275			
Conn. Diag	A-EE7300-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3650	0.2820	1.4690	2.2870	44.0370



Speed - Torque Curve

