

PRODUCT INFORMATION PACKET



Model No: LM21378
Catalog No: LM21378
Automotive Duty Motor, 1 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 182U Frame, TENV



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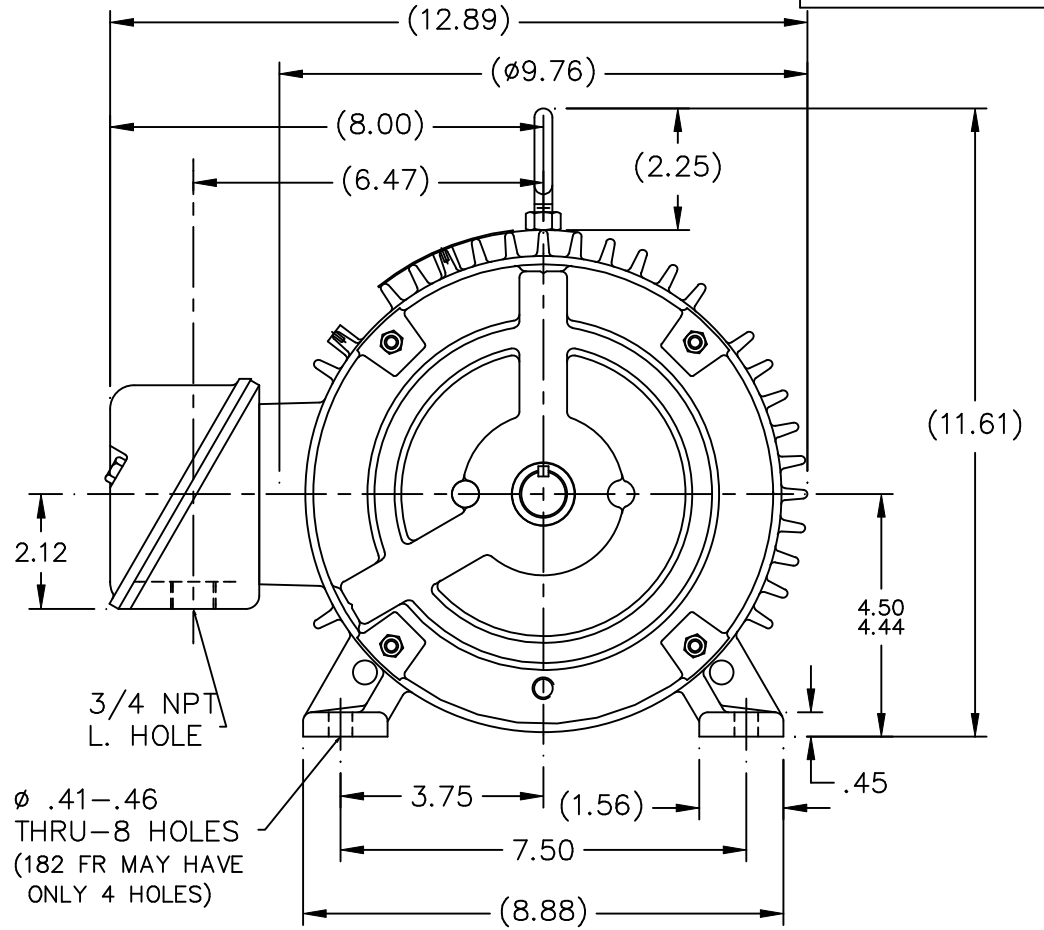
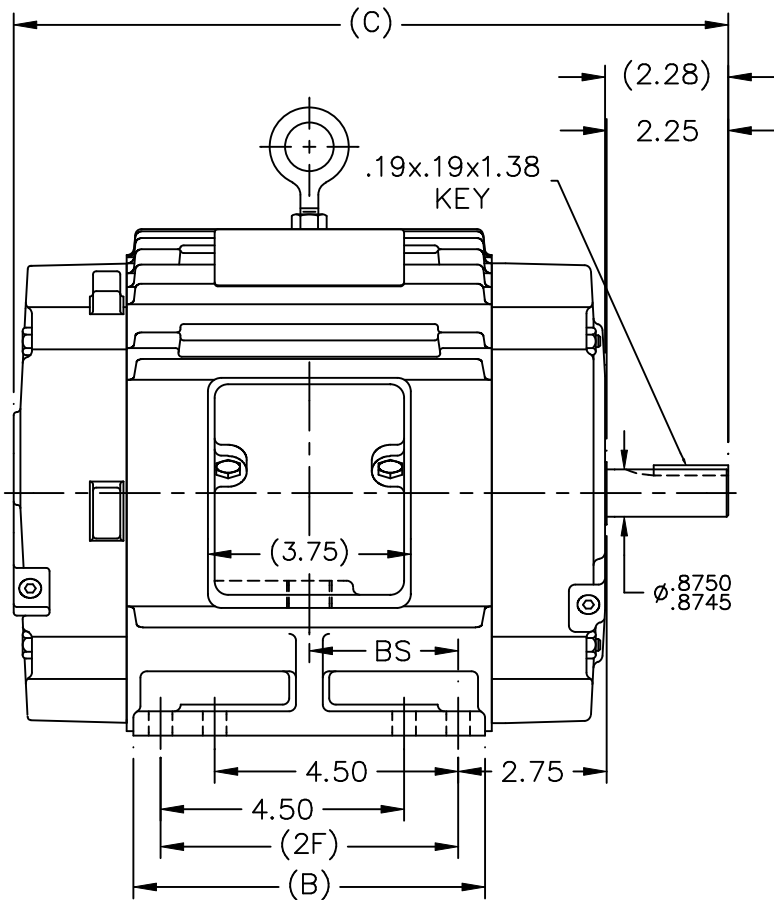
Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	460 V
Current	1.5 A	Speed	1770 rpm
Service Factor	1	Phase	3
Efficiency	87.5 %	Power Factor	75
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	L
Frame	182U	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	No Protection	Ambient Temperature	65 °C
Drive End Bearing Size	206	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 Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	13.4 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	12.21 in
Frame Length	5.75 in	Shaft Diameter	0.875 in
Shaft Extension	2.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7300-LN	Outline Drawing	A-SS68737LN-575

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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

DASH	FR.	C	B	2F	BS	MOUNTING
575	182U	12.21	5.50	4.50	2.25	F1 ONLY
675	182U	13.21	6.50	5.50	2.75	F1 ONLY
675	184U	13.21	6.50	5.50	2.75	F1 OR F2

NO.	REVISION	BY & DATE
3	REV'D TO SHOW STUDS ON D.E. OF MOTOR.CN29200-805	NJS 08-25-2000
2	REVISED OUTLINE TO HAVE C'BOX FROM:	MSG 08-04-2000
2	A-SS68726LN CN 29200-179	
1	NEW DRAWING MU31620	BJW 06-26-2000

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

TITLE OUTLINE - TENV	
180U FR. - 140FR. EXT. - CAST C'BOX	
MAT'L.	FINISH



DRAWN	BJW	06-26-2000
CHK	ML	06-26-2000
APPD	TB	06-26-2000
SCALE	9=32	
REF		
FMF		
PREV		

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RFP	CAD FILE SS68737LN	SIZE	DRAWING NO.	PAGE	OF	REV.
DIST	LB	A	SS68737LN			3

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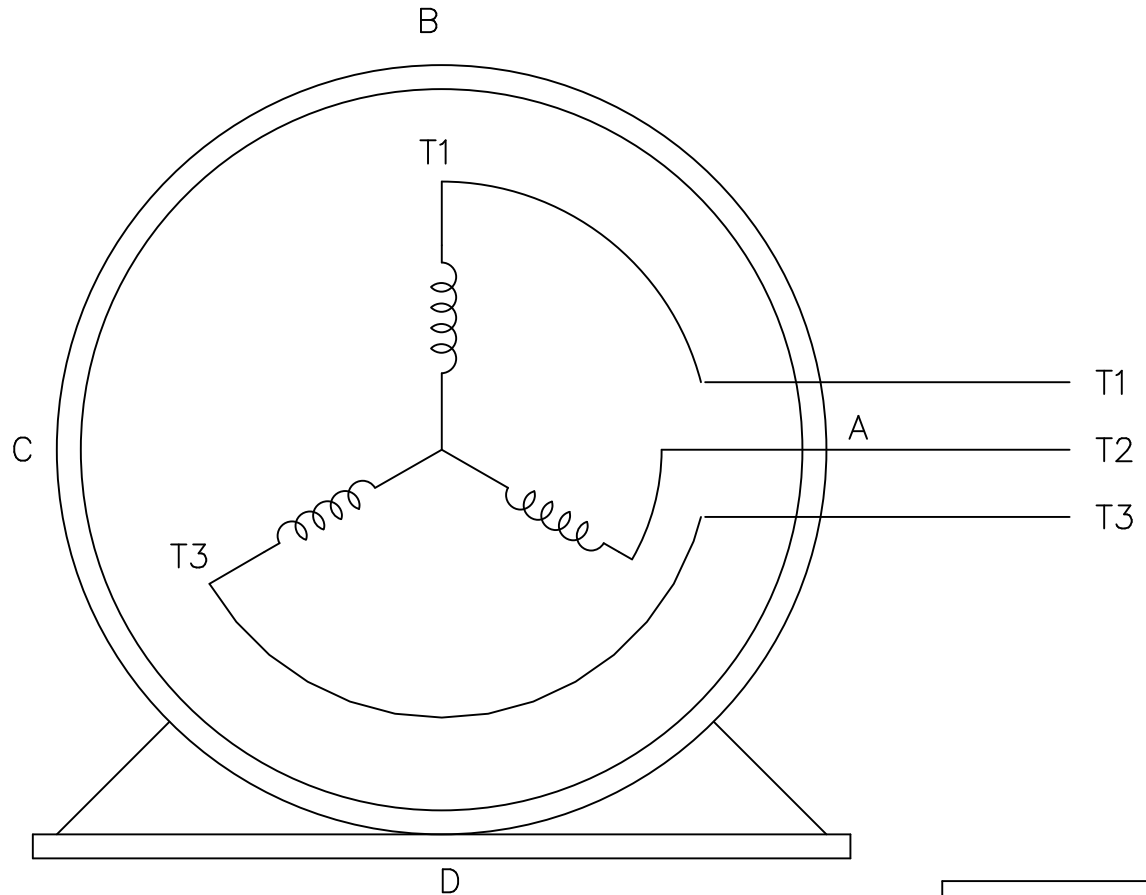
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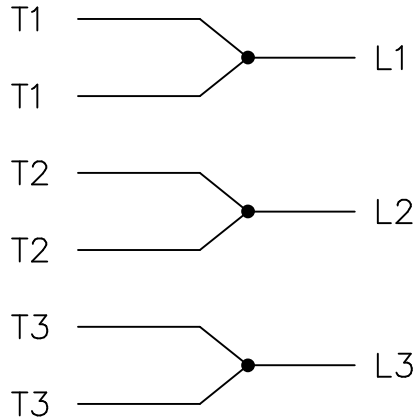
THREE PHASE – SINGLE VOLTAGE
MOTOR – CONDUIT BOX @ 'A'

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				
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				DIST WP			A	EE7300-LN			2



CERTIFICATION DATA SHEET

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

CONN. DIAGRAM: A-EE7300-LN

CATALOG #: LM21378

OUTLINE: A-SS68737LN-575

WINDING #: K1824131 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1	0.75	1800	1770	182U	TENV	L	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	460	1.5	ACROSS THE LINE	CONTINUOUS	F3	1.0	65

FULL LOAD EFF:	87.5	3/4 LOAD EFF:	86.5	1/2 LOAD EFF:	84	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	75	3/4 LOAD PF:	67	1/2 LOAD PF:	55	85.5	SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	12.5	7 LB-FT 233 %	12.5 LB-FT 417 %	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.22 LB-FT^2	0 LB-FT^2	30 SEC.	0	55 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	GRAY - LINCOLN

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	U	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
206	205						

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

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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 V NONE Hz

Data Sheet

Date: 1/29/2018

LM21378



Data @ **460 V**

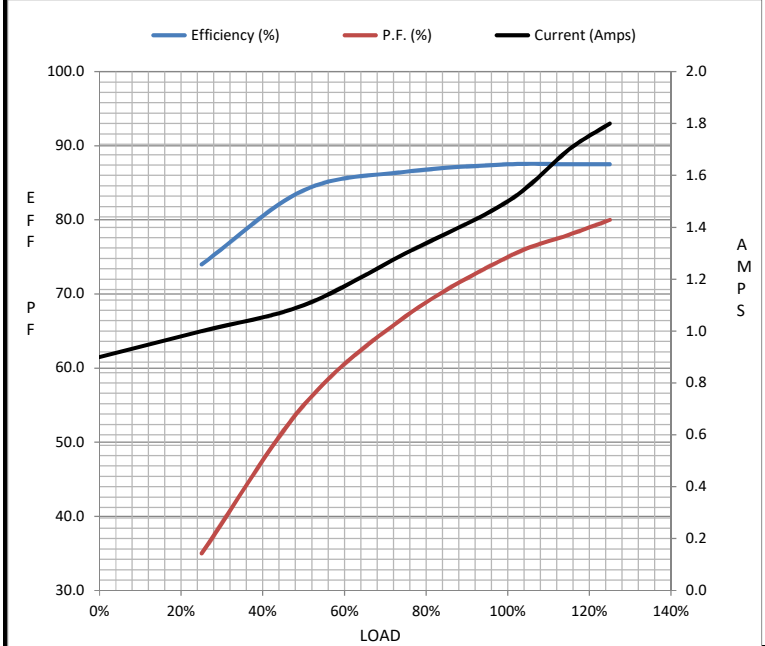
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.90	1.00	1.10	1.30	1.50	1.70	1.80	12.5
Torque (ft-lb)	0.00	0.75	1.50	2.20	3.0	3.4	3.7	7.0
RPM	1800	1792	1785	1780	1770	1.765	1762	0
Efficiency (%)		74.0	84.0	86.5	87.5	87.5	87.5	
P.F. (%)	8.0	35.0	55.0	67.0	75.0	78.0	80.0	51.0

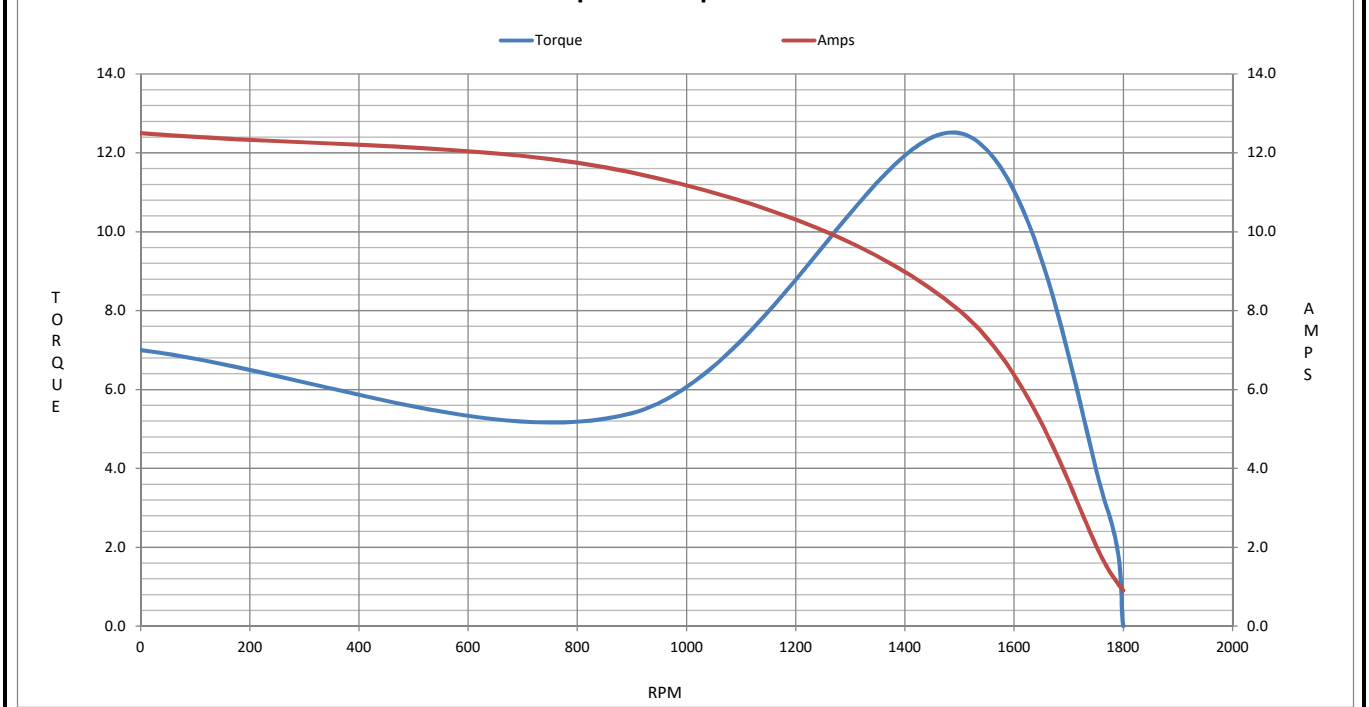
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1500	1770	1800
Current (Amps)	12.5	11.5	8.0	1.50	0.90
Torque (ft-lb)	7.0	5.4	12.5	3.0	0.00

Information Block				
HP	1.0			
Sync. RPM	1800			
Frame	182			
Enclosure	TENV			
Construction	TTS			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	L			
Service Factor	1.15			
Temp Rise @ FL	40 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.22 Lb-Ft ²			
Ref Wdg	K1824131 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	A-SS68737LN-575			
Conn. Diag	A-EE7300-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
7.8950	3.5220	13.8310	18.7720	325.1800



Speed - Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : LM21378

(Model No. may contain prefix and/or suffix characters)

Catalog No : LM21378

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22