

PRODUCT INFORMATION PACKET



Model No: LM21843

Catalog No: LM21843

Automotive Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 254UC Frame, TEFC



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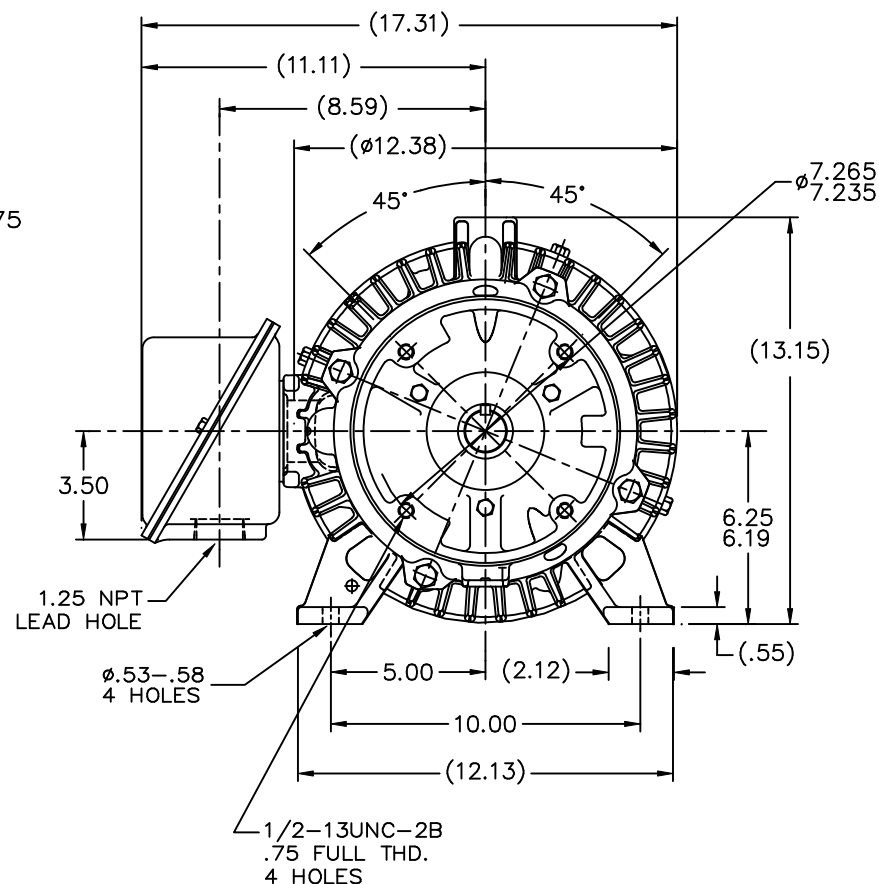


Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	460 V
Current	9.6 A	Speed	1770 rpm
Service Factor	1	Phase	3
Efficiency	91.7 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	254UC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	65 °C
Drive End Bearing Size	309	Opp Drive End Bearing Size	207
UL	No	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	1.17 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	23.89 in
Frame Length	11.75 in	Shaft Diameter	1.375 in
Shaft Extension	3.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS203586LN-1175	Connection Drawing	A-EE7300-LN



NOTES:

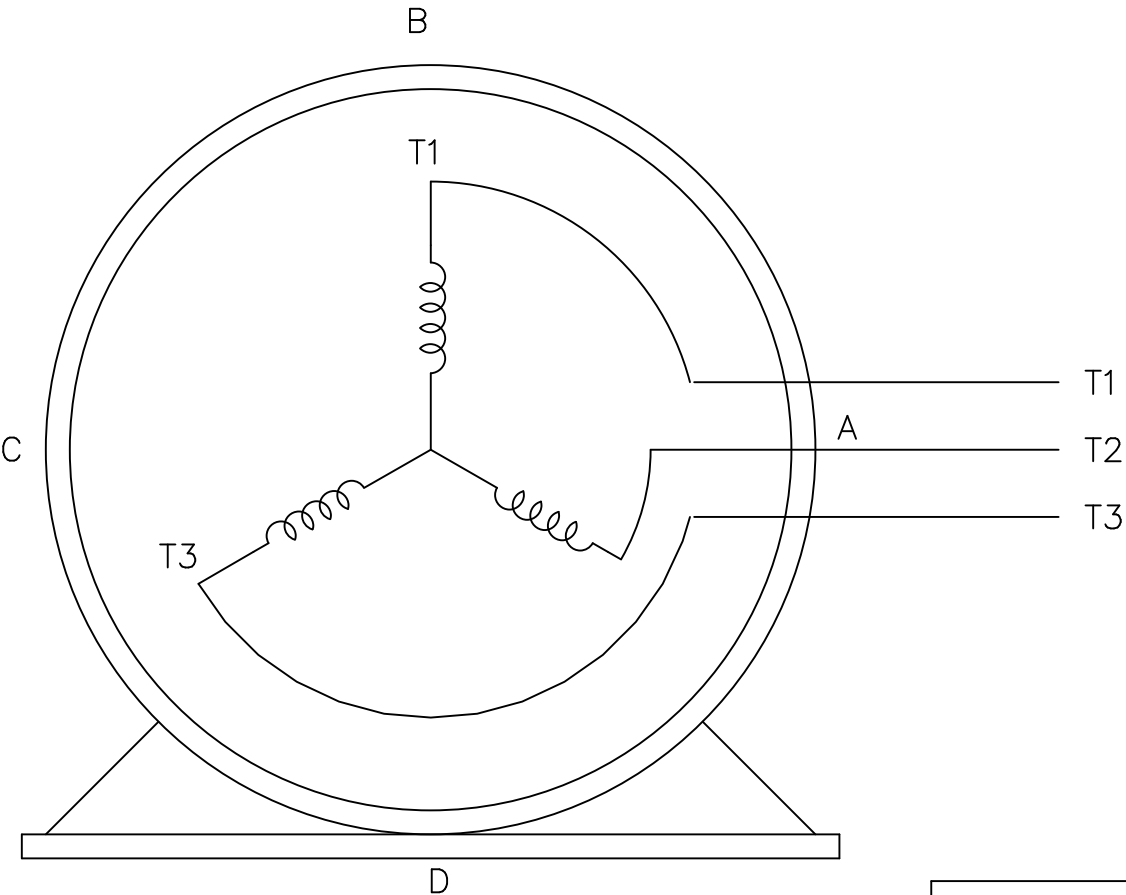
1. C.BOX CAN BE ROTATED IN 90° STEPS
2. C.BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

											TOLERANCES UNLESS SPECIFIED DEC. INCHES X ±.1 3 CHANGED TO LINCOLN TITLE BLOCK JMS 02/07/2005 .XX ±.03 2 CHG., KEY LENGTH F-2.50 T-2.75 CN29100-4187 RWR 08-09-2004 ML .XXX ±.005 1 NEW DRAWING MU32889 BJW 08-23-2000 ML .XXXX ±.0005 MATL NO. REVISION BY & DATE CHK ANG ±730" FINISH THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR INVENTION. THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT RFP CAD FILE ss203586in DIST LB B SIZE B DRAWING NO. SS203586LN PAGE 1 OF 1 REV 3	
DASH	FRAME	B	C	2F	BS	AG						 DRAWN BJW 8/22/00 CHK ML 8/23/00 APPD TB 8/23/00 SCALE 1=4 REF FIMF PREV
1175	254U	10.25	23.89	8.25	4.12	20.39						
1350	256U	12.00	25.64	10.00	5.00	22.14						

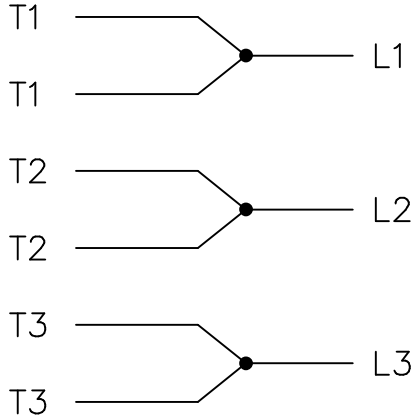
THREE PHASE – SINGLE VOLTAGE
MOTOR – CONDUIT BOX @ 'A'

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		
1	NEW DRAWING	CTO 08-13-1999		.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 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 A	DRAWING NO. EE7300-LN
			DIST	WP				PAGE 2 OF 2
						REV. 2		



CERTIFICATION DATA SHEET

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

CONN. DIAGRAM: A-EE7300-LN
OUTLINE: B-SS203586LN-1175
WINDING #: K2134158 R12 7

CATALOG : LM21843
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.60	1800	1770	254UC	TEFC	H	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	460	9.6	ACROSS THE LINE	CONTINUOUS	F3	1.0	65

FULL LOAD EFF:	91.7	3/4 LOAD EFF:	91	1/2 LOAD EFF:	90.2	GTD. EFF		ELEC. TYPE
FULL LOAD PF:	80	3/4 LOAD PF:	74	1/2 LOAD PF:	63	90.2		SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	63.5	52 LB-FT 233 %	72 LB-FT 323 %	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.85 LB-FT^2	75 LB-FT^2	25 SEC.	2	225 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						
309	207	POLYREX EM	U	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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
NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/31/2018

LM21843



Data @ 460 V

Motor Load Data

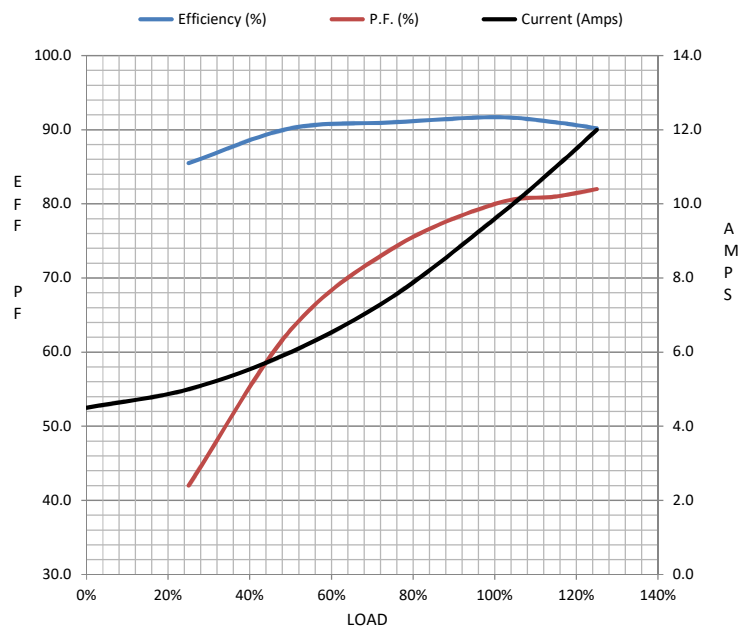
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.5	5.0	6.0	7.5	9.6	11.0	12.0	63.5	
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.3	25.5	28.0	52.0	
RPM	1800	1790	1785	1775	1770	1,765	1760	0	
Efficiency (%)		85.5	90.2	91.0	91.7	91.0	90.2		
P.F. (%)	5.5	42.0	63.0	74.0	80.0	81.0	82.0	45.0	

Motor Speed Data

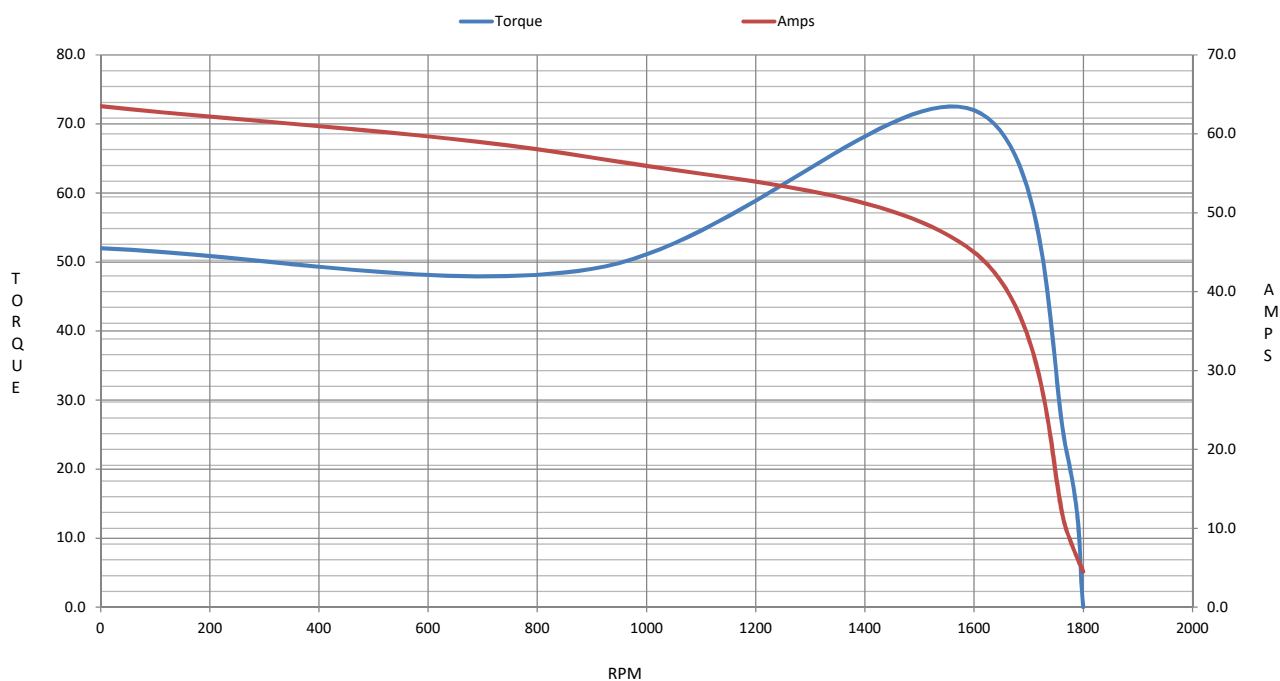
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1770	1800
Current (Amps)	63.5	57.0	45.0	9.6	4.5
Torque (ft-lb)	52.0	49.0	72.0	22.3	0.00

Information Block

HP	7.5			
Sync. RPM	1800			
Frame	254			
Enclosure	TEFC			
Construction	TFP			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.85 Lb-Ft²			
Ref Wdg	K2134158 R12			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS203586LN-1175			
Conn. Diag	A-EE7300-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.5970	0.4540	2.3440	3.5000	52.1640



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 : LM21843

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

Catalog No : LM21843

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