

# PRODUCT INFORMATION PACKET

Model No: LM17079

Catalog No: LM17079

Special Voltage Motor, 20 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 256T Frame, TEFC



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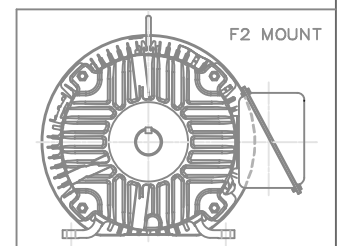
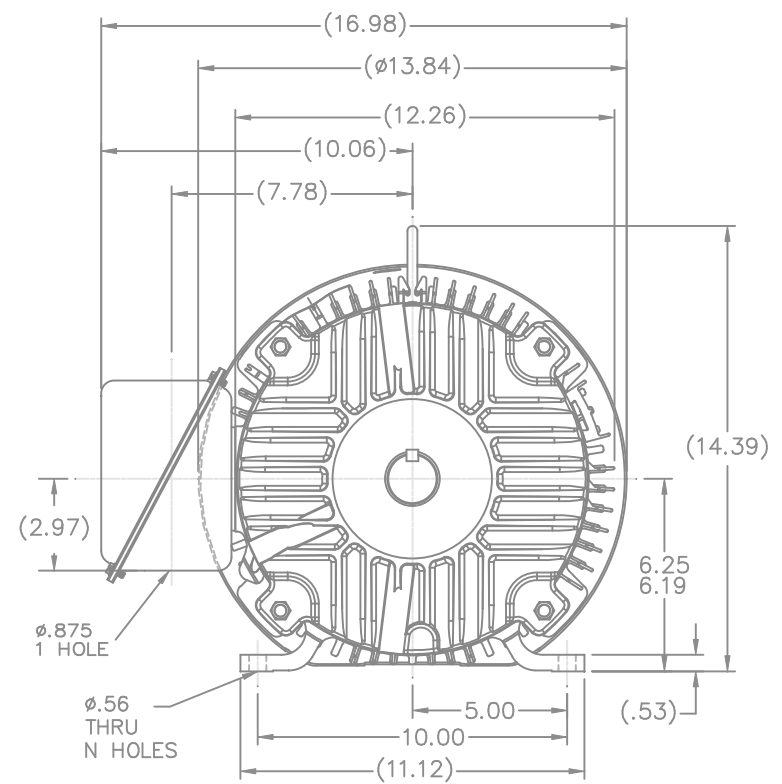
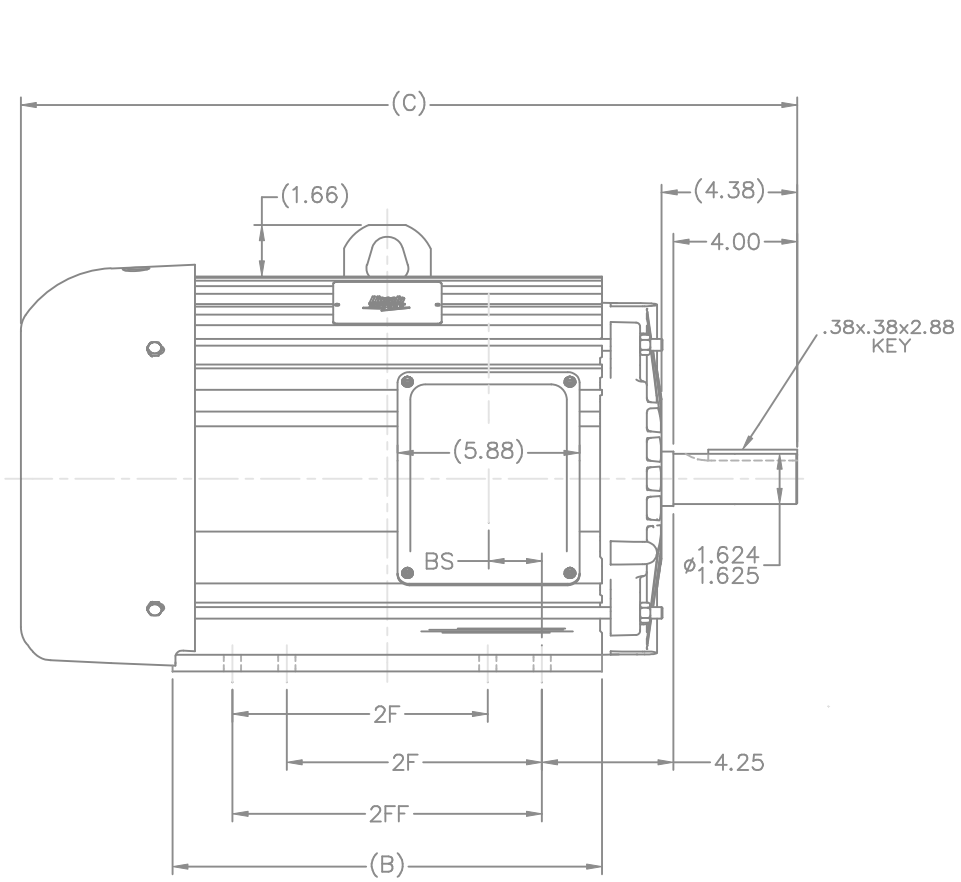
## Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	575 V
Current	19.3 A	Speed	1775 rpm
Service Factor	1.25	Phase	3
Efficiency	93 %	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	256T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

## Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.474 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	25.15 in
Frame Length	13.75 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS321100LN-1375	Connection Drawing	EE7300-LN

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

DASH	FR.	C	B	BS	2F	2FF	N
1200	254T	23.40	12.13	1.73	8.25		4
1375	254/6T	25.15	13.88	1.73	8.25	10.00	8

NO.		REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	PREV
3	B DIM 12.13 WAS 12.00, AND 13.88 WAS 13.75	MJK	05/18/2004					
2	25.15 WAS 25.65, 23.40 WAS 23.90 CN 32681	MJK	05/04/2004					
1	(4.38) WAS (4.37), ø1.624/1.625 WAS ø1.624/1.624 CN 32681	MJK	04/29/2004					
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		SS321100LN		SIZE
DIST LB		B		DRAWING NO.		PAGE		OF
						SS321100LN		REV.
								3




DRAWN	MJK	03-29-2004
CHK	ML	03-29-2004
APPD	JPL	03-29-2004
SCALE	1=4	
REF		
FMF		
PREV		

EE7300-LN

The diagram illustrates three parallel merge operations. Each operation consists of two input lines on the left and one output line on the right. The inputs are labeled T1, T2, and T3, and the outputs are labeled L1, L2, and L3. The lines for each operation are connected by a small black dot, representing a merge point.

VIEW OF TERMINAL END

L1	<u>WHITE</u>
L2	<u>RED</u>
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 A	DRAWING NO. EE7300-LN	PAGE OF 2	REV.
				DIST WP						



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-SS321100LN-1375  
WINDING: K2564164

CAT #: LM17079

R26 3

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1800	1775	256T	TEFC	TFY	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	19.3	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	81.0	1/2 LD PF	72.0	92.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
59.2 LB-FT	110	104 LB-FT 176%	146 LB-FT 247%	65

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
65 dBA	74 dBA	3.2 LB-FT²	125 LB-FT²	25 SEC.	2	425 LB.

### \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	GRAY - LINCOLN

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM
6309 6208						

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
0.417	0.324	1.546	2.33	44.375	0.150	ODE

* N O T E S *		INVERTER TORQUE: VARIABLE 10:1 INV. HP SPEED RANGE: NONE  ENCODER: NONE NONE NONE
		NONE PPR

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

## Data Sheet

Date: 1/29/2018

LM17079



Data @ 575 V

## Motor Load Data

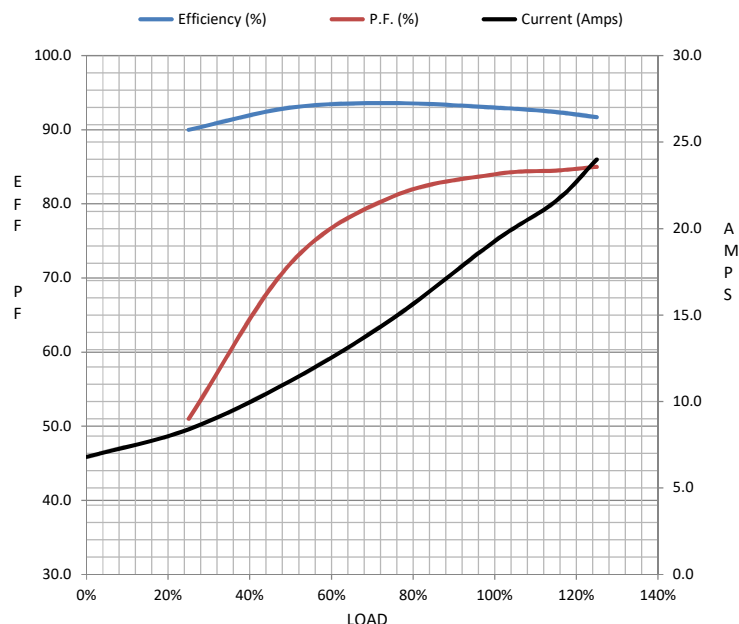
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	6.8	8.4	11.2	14.8	19.3	21.6	24.0	110	
Torque (ft-lb)	0.00	14.5	29.5	44.5	59.2	68.0	74.5	104	
RPM	1800	1795	1785	1780	1775	1770	1760	0	
Efficiency (%)		90.0	93.0	93.6	93.0	92.4	91.7		
P.F. (%)	8.5	51.0	72.0	81.0	84.0	84.5	85.0	40.0	

## Motor Speed Data

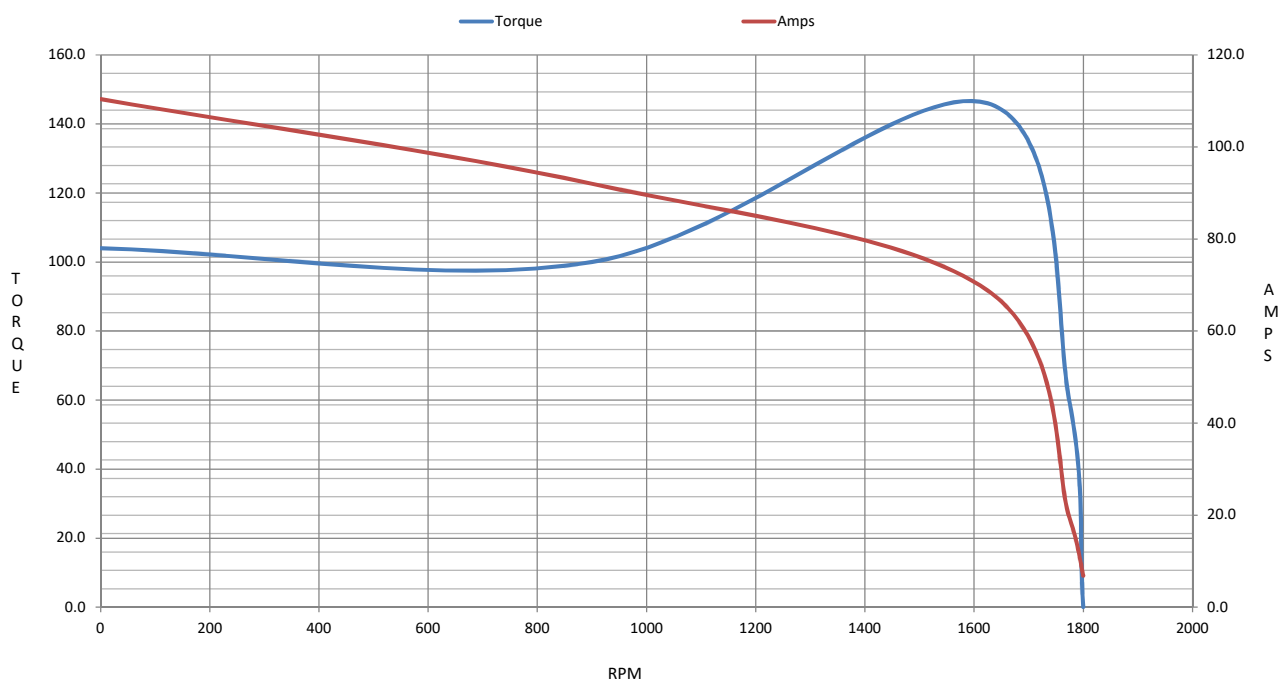
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1775	1800
Current (Amps)	110	92.0	68.8	19.3	6.8
Torque (ft-lb)	104	100	146	59.2	0.00

## Information Block

HP	20.0			
Sync. RPM	1800			
Frame	256			
Enclosure	TEFC			
Construction	TFY			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk²	3.2 Lb-Ft²			
Ref Wdg	K2564164 R26			
Sound Pressure @ 1M	65 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	B-SS321100LN-1375			
Conn. Diag	A-EE7300-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4170	0.3240	1.5460	2.3300	44.3750



## 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 : LM17079

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

Catalog No : LM17079

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**