

# PRODUCT INFORMATION PACKET



Model No: LM80098  
Catalog No: LM80098

Fire Pump Motor, 150 & 100 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM, 445T Frame, TEFC



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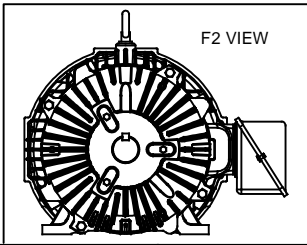
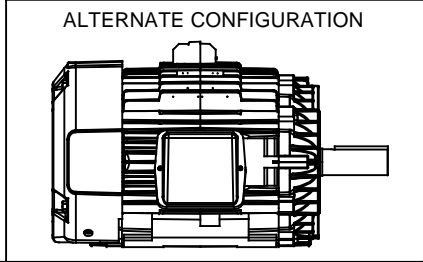
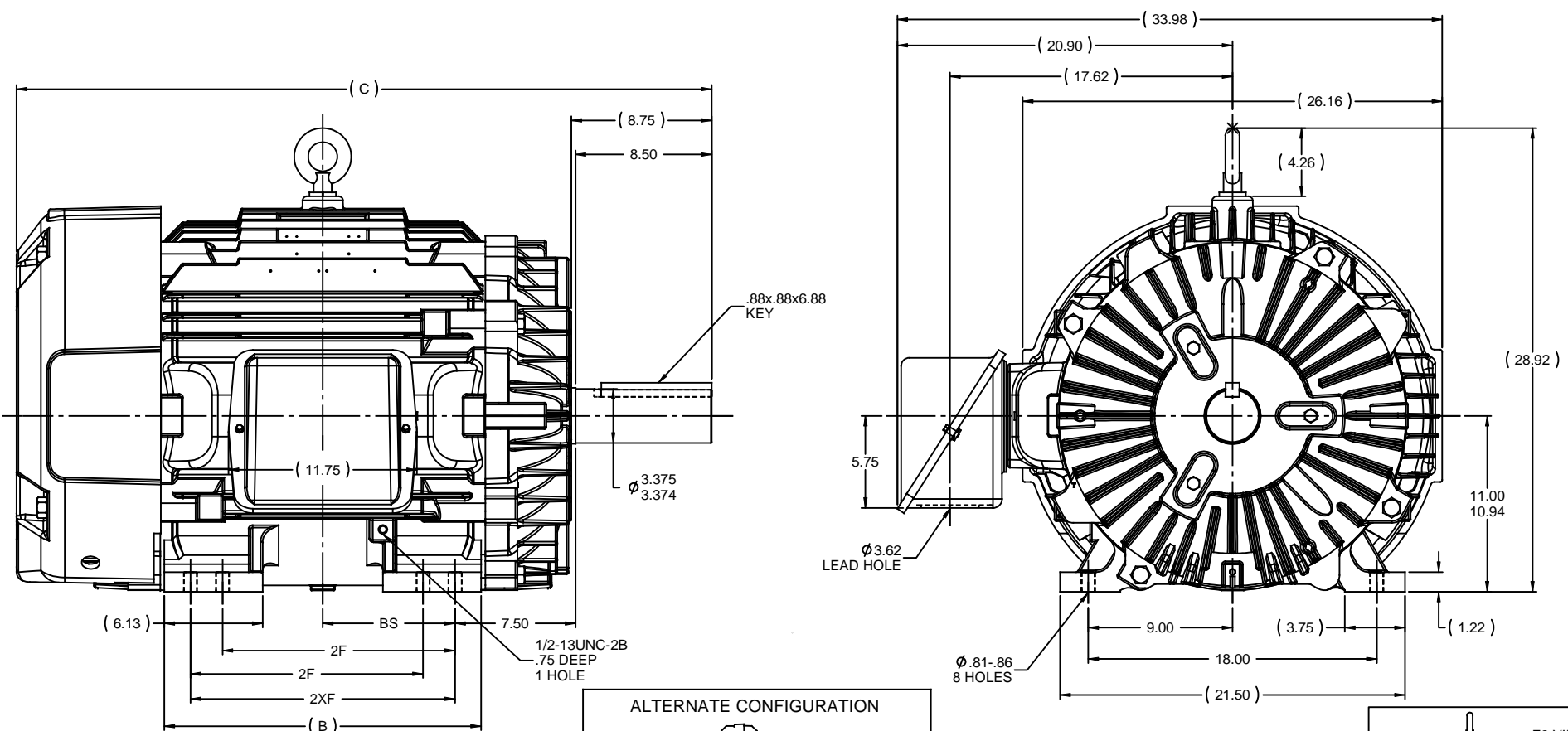


### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>150 &amp; 100 Hp</b>
Output KW	<b>112.0 &amp; 75.0 kW</b>	Voltage	<b>460 &amp; 380 V</b>
Speed	<b>1785 &amp; 1488 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>445T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>95 &amp; 94.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>170 &amp; 140 A</b>	Power Factor	<b>86.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6318</b>	Opp Drive End Bearing Size	<b>6316</b>
UL	<b>No</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>Part Wdg Start &amp; Wye Start Delta Run</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.027 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>T</b>	Overall Length	<b>43.35 in</b>
Frame Length	<b>20.25 in</b>	Shaft Diameter	<b>3.375 in</b>
Shaft Extension	<b>8.5 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Connection Drawing	<b>A-EE7300BH-LN</b>	Outline Drawing	<b>B-SS513898LN-2025</b>

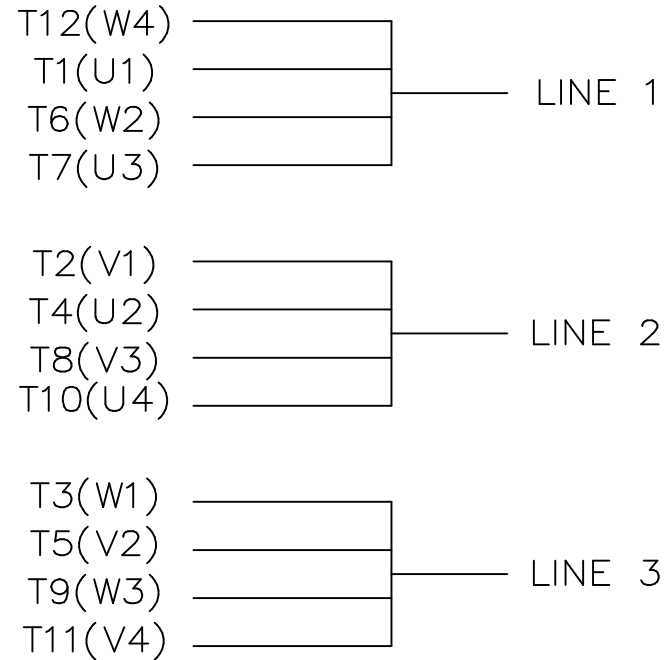
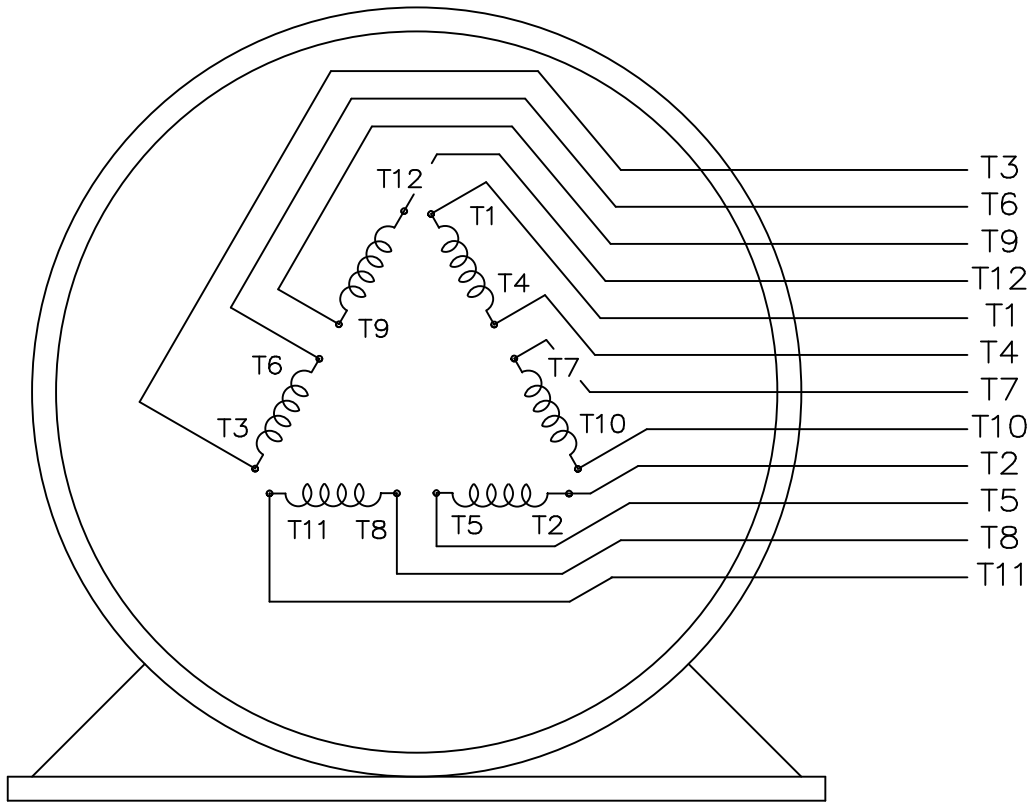


- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°  
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.


DASH	FRAME	B	C	BS	2F	2XF
1825	444T	17.75	41.35	7.25	14.50	---
2025	444/445T	19.75	43.35	8.25	14.50	16.50

3		UPDATED FRAME, ADDED ALTERNATE CONFIGURATION.	JJB 1/5/2010	ML	XXX ±.005	TITLE OUTLINE - TEFC	444-445T FR. - STD	SCALE 5:32
2		CHG. FAN GUARD & CHG. C-DIM. PER CN39335	RWR 01-22-2007	ML	XXX ±.005			REF
1		NEW DRAWING MU35793	KL 02-05-2001	ML	XXX ±.0005	MATL	FMF	
NO		REVISION	BY & DATE	CHK	ANG ±7'30"	FINISH	PAGE OF	
		THIRD ANGLE PROJECTION		RFP		PREV	SIZE	DRAWING NO
				NETWORK FILE NAME	SS513898LN		B	SS513898LN
								REV 3





VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED			DRAWN KL 04-23-2002		
				DEC.	INCHES		CHK DJK 04-24-2002		
				.X	±.1		APPD EAB 04-24-2002		
				.XX	±.01		SCALE 1=1		
2	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	OML	.XXX	±.005	TITLE CONNECTION DIAGRAM - EXTERNAL 12 LEAD - SINGLE VOLTAGE		
1	NEW DRAWING	MU41562	KL 04-12-02		.XXXX	±.0005	MAT'L.		
NO.	REVISION		BY & DATE	CHK	ANG	±1/2"	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 ee7300bh_ln		SIZE	DRAWING NO. PAGE OF	REV.
				DIST	WA-SB		A	EE7300BH-LN 2	2



**CERTIFICATION DATA SHEET**

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

**CONN. DIAGRAM:** A-EE7300BH-LN

**OUTLINE:** B-SS513898LN-2025

**WINDING #:** T4454205 1

**CATALOG #:** LM80098

**MOUNTING:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150&100	112&75.0	1800	1785&1488	445T	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	460&380	170&140	PWS & YDRUN	CONTINUOUS	F1	1.15/1.15	40

<b>FULL LOAD EFF:</b>	95&94.5	<b>3/4 LOAD EFF:</b>	95	<b>1/2 LOAD EFF:</b>	93.6	<b>GTD. EFF</b>		<b>ELEC. TYPE</b>
<b>FULL LOAD PF:</b>	86.5&85	<b>3/4 LOAD PF:</b>	85	<b>1/2 LOAD PF:</b>	78	94.1		SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
441 LB-FT	1075	650 LB-FT 146 %	1000 LB-FT 226 %	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	51 LB-FT^2	1000 LB-FT^2	25 SEC.	2	2150 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	RED (ENAMEL)

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)	CAST IRON
6318	6316						

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
	NONE FT-LB NONE V NO BRAKE Hz

Data Sheet

Date: 1/22/2018

LM80098



Data @ **460 V**

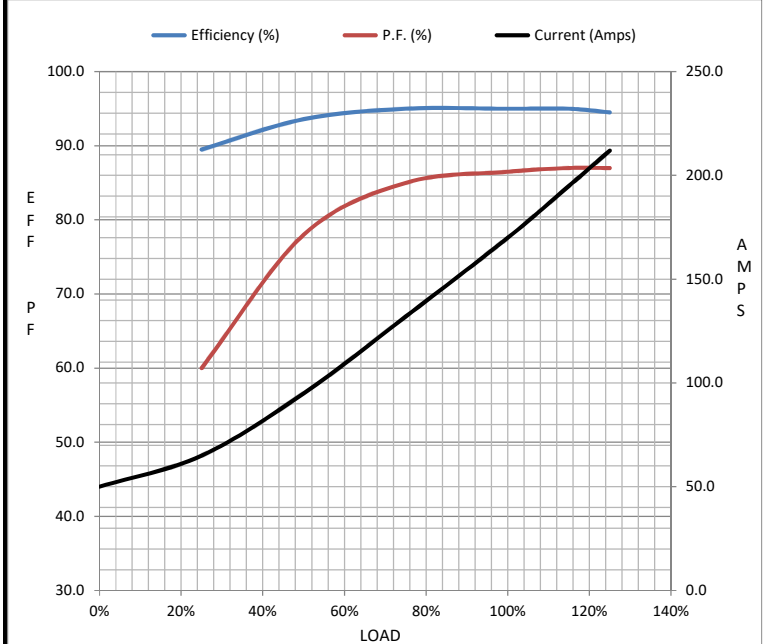
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	50.0	65.0	95.0	132	170	195	212	1,075
Torque (ft-lb)	0.00	110	220	330	441	508	553	650
RPM	1800	1795	1792	1788	1785	1,782	1780	0
Efficiency (%)		89.5	93.6	95.0	95.0	95.0	94.5	
P.F. (%)	7.0	60.0	78.0	85.0	86.5	87.0	87.0	26.0

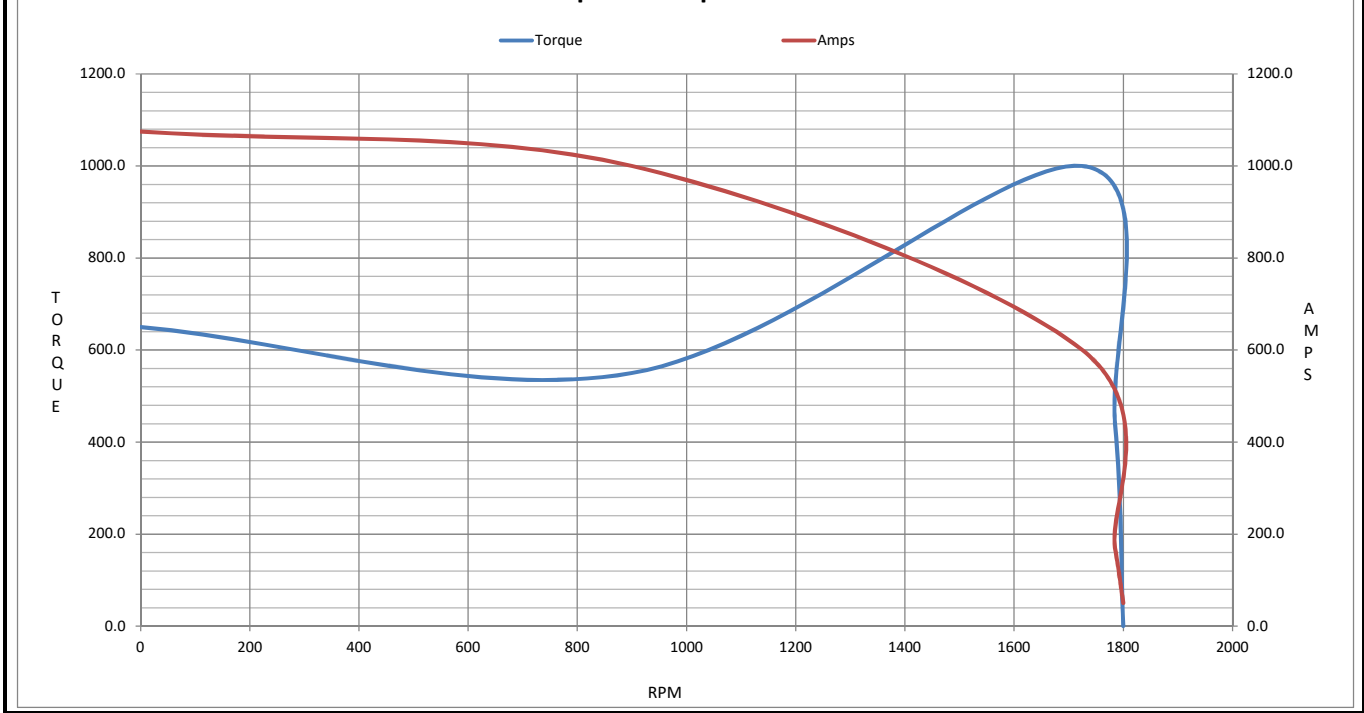
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	1,075	1,000	600	170	50.0
Torque (ft-lb)	650	550	1,000	441	0.00

Information Block				
HP	150.0			
Sync. RPM	1800			
Frame	445			
Enclosure	TEFC			
Construction	TFN			
Voltage	460#380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	51.0 Lb-Ft <sup>2</sup>			
Ref Wdg	T4454205 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS513898LN-2025			
Conn. Diag	A-EE7300BH-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0210	0.0120	0.1690	0.1570	4.3850



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 : LM80098

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

Catalog No : LM80098

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 12/29/2022

**CE 22**