

# PRODUCT INFORMATION PACKET



Model No: LM80090

Catalog No: LM80090

Fire Pump Motor, 60 & 50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 364T Frame,  
TEFC



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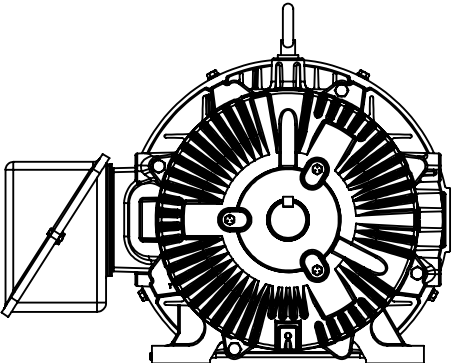
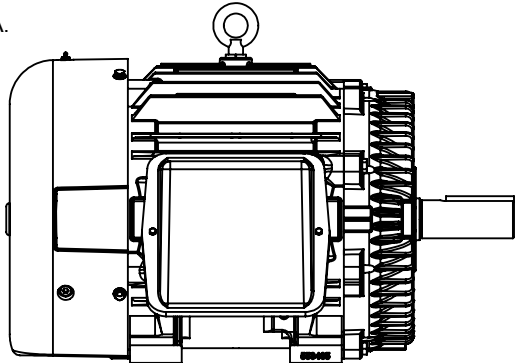
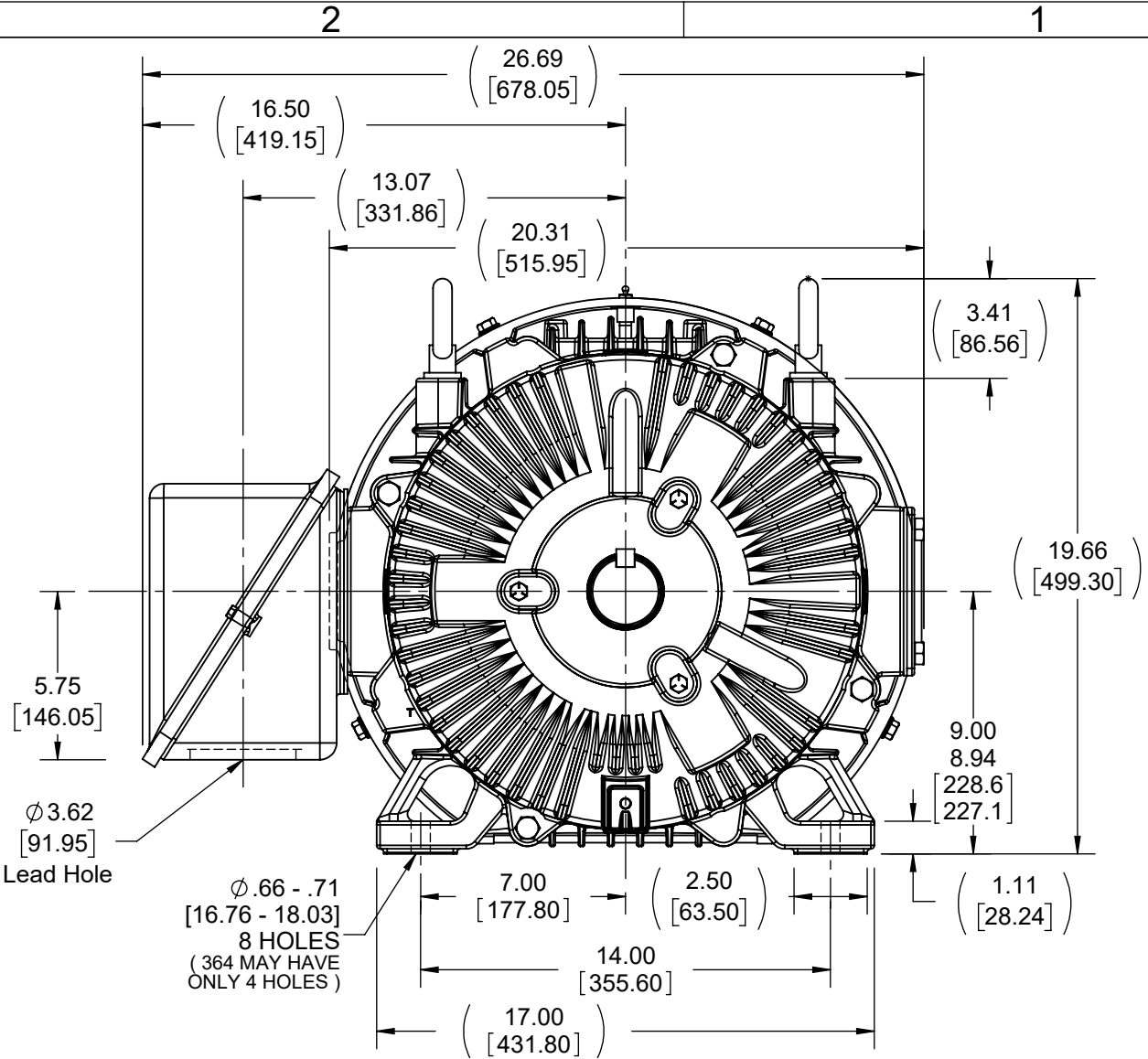


### Nameplate Specifications

Phase	3	Output HP	60 & 50 Hp
Output KW	45.0 & 37.0 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	364T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93.6 & 93 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	142/71 & 144/72 A	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6312
UL	No	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

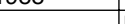
### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.102 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	31.50 in
Frame Length	13.50 in	Shaft Diameter	2.375 in
Shaft Extension	5.88 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308AA-LN	Outline Drawing	SS504688-1350



NOTE:

1. ALTERNATE FRAME DRAWING.
2. MODELS USING ALTERNATE FRAME 553485A.

NOTES: 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS							DRAWING REVISION E		REVISION BY MJ		REV DATE/© DATE 05/04/2022		TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE .X ±0.1 [±3] ±7° 30" .XX ±0.03 [±0.8] .XXX ±0.005 [±0.13] .XXXX ±0.0005 [±0.013]				DRAWN BY TLB		<div><div>Regal Rexnord</div><div>Regal Beloit America, Inc.</div></div>					
							REQUEST NUMBER CR-0007552		APPROVED BY VJ		DATE 05/04/2022						DATE 04-29-1998							
							REQUEST NUMBER DESCRIPTION OUTLINE DRAWING IS UPDATED WITH NEW FRAME.						REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45° CORNER FILLETS: R.02 [.5] MACHINED SURFACES: 200 INCH mm mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY						APPROVED BY ML		DESCRIPTION OUTLINE 360T FR. - TEFC - (STD.)			
																			DATE 04-29-1988					
DASH	FRAME	B	C	2F	2FF	BS	COPYRIGHT (PER REVISION DATE) REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.						THIRD ANGLE PROJECTION				SIZE B	DRAWING NUMBER SS504688			SHEET 1 OF 1			
1350	364T	13.25 [336.55]	31.52 [800.61]	11.25 [285.75]	- - -	5.62 [142.75]																		
1450	364/365T	14.25 [361.95]	32.52 [826.01]	11.25 [285.75]	12.25 [311.15]	2.38 [60.45]																		
4					3					2					1									

T12 \_\_\_\_\_  
 T1 \_\_\_\_\_  
 T6 \_\_\_\_\_ L1  
 T7 \_\_\_\_\_

T2 \_\_\_\_\_  
 T4 \_\_\_\_\_  
 T8 \_\_\_\_\_ L2  
 T10 \_\_\_\_\_

T3 \_\_\_\_\_  
 T5 \_\_\_\_\_  
 T9 \_\_\_\_\_ L3  
 T11 \_\_\_\_\_

LOW VOLTAGE

T12 \_\_\_\_\_ L1  
 T1 \_\_\_\_\_

T4 \_\_\_\_\_  
 T7 \_\_\_\_\_

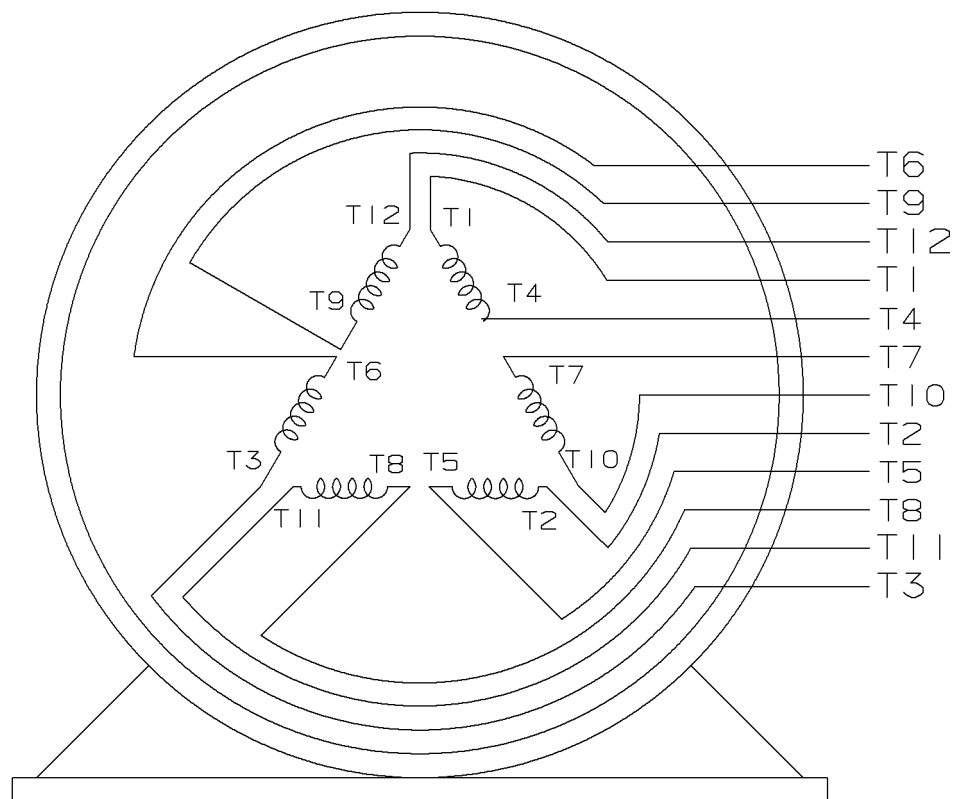
T2 \_\_\_\_\_ L2  
 T10 \_\_\_\_\_

T5 \_\_\_\_\_  
 T8 \_\_\_\_\_

T3 \_\_\_\_\_ L3  
 T11 \_\_\_\_\_

T6 \_\_\_\_\_  
 T9 \_\_\_\_\_

HIGH VOLTAGE



VIEW OF TERMINAL END

					✓ UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX±.02 XXX±.005 XXXX±.0005 ANGLES± 7°30"		
2	08-09-1999	RE-ISSUE, ADDED '-' TO PART NUMBER	BLR		MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED		DRAWN BY TRB 07-16-1999
1	06-18-1999	NEW DRAWING	TRB		FINISH		CHKD BY ML 06-18-1999
					MATERIAL		APPD BY GK 06-18-1999
REV	DATE	CHANGE	NAME	PART NAME 3 PHASE CONNECTION DIAGRAM 2/1 DELTA - 12 LEADS			DRWG NO A- EE7308AA-LN
				PURCHASED	CADD FILE NO.	EE7308AALN	

ERROR: undefined  
OFFENDING COMMAND: Pscrip  
  
STACK:



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

**CERTIFICATION DATA SHEET**

**CONN. DIAGRAM:** A-EE7308AA-LN

**OUTLINE:** B-SS504688LN-1350

**CATALOG #:** LM80090

**WINDING #:** T3644164 2

**MOUNTING:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
60&50	45.0&37.0	1800	1775&1475	364T	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	142/71&144/72	WYE START DELTA RUN	CONTINUOUS	F1	1.15/1.15	40

<b>FULL LOAD EFF:</b>	93.6&93	<b>3/4 LOAD EFF:</b>	93.6	<b>1/2 LOAD EFF:</b>	93	<b>GTD. EFF</b>		<b>ELEC. TYPE</b>
<b>FULL LOAD PF:</b>	84&85	<b>3/4 LOAD PF:</b>	82	<b>1/2 LOAD PF:</b>	74	92.4		SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
177 LB-FT	850 / 425	290 LB-FT 162 %	410 LB-FT 230 %	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
66 dBA	76 dBA	14.5 LB-FT^2	420 LB-FT^2	25 SEC.	2	825 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						
6314	6312	POLYREX EM	T	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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<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 NONE Hz

## Data Sheet

Date: 1/29/2018

LM80090



Data @ 460 V

## Motor Load Data

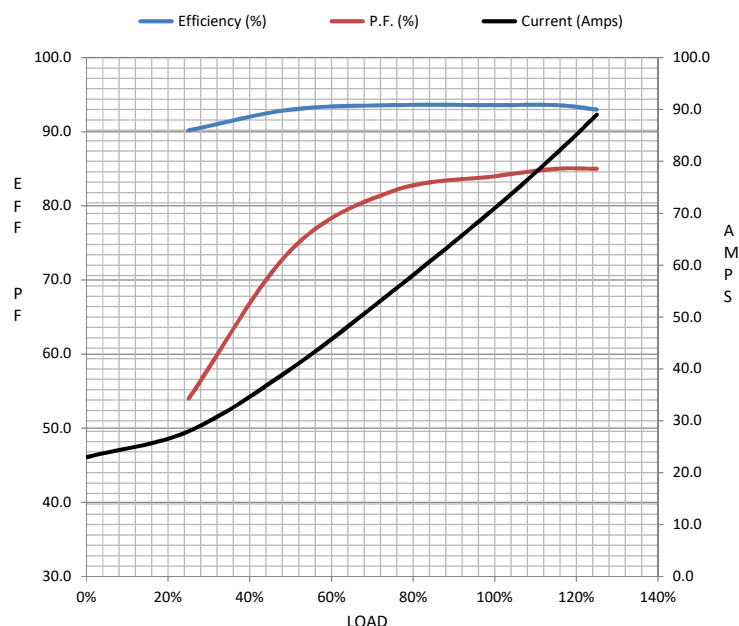
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	23.0	28.0	40.0	55.0	71.0	81.5	89.0	425	
Torque (ft-lb)	0.00	44.0	88.0	133	177	205	223	290	
RPM	1800	1795	1790	1782	1775	1.772	1768	0	
Efficiency (%)		90.2	93.0	93.6	93.6	93.6	93.0		
P.F. (%)	5.5	54.0	74.0	82.0	84.0	85.0	85.0	33.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1775	1800
Current (Amps)	425	400	225	71.0	23.0
Torque (ft-lb)	290	275	410	177	0.00

## Information Block

HP	60.0			
Sync. RPM	1800			
Frame	364			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380		V	
Frequency	60		Hz	
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75		° C	
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000		feet	
Rotor/Shaft wk²	14.5		Lb-Ft²	
Ref Wdg	T3644164 NONE			
Sound Pressure @ 1M	75		dBA	
VFD Rating	NONE			
Outline Dwg	B-SS504688LN-1350			
Conn. Diag	A-EE7308AA-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0760	0.0520	0.4210	0.5200	11.0450



## Speed - Torque Curve

