

PRODUCT INFORMATION PACKET



Model No: LM80192
Catalog No: LM80192
100 HP Fire Pump Motor, 3 phase, 1800 RPM, 230/460 V, 405TS Frame, TEFC
Fire Pump Motors



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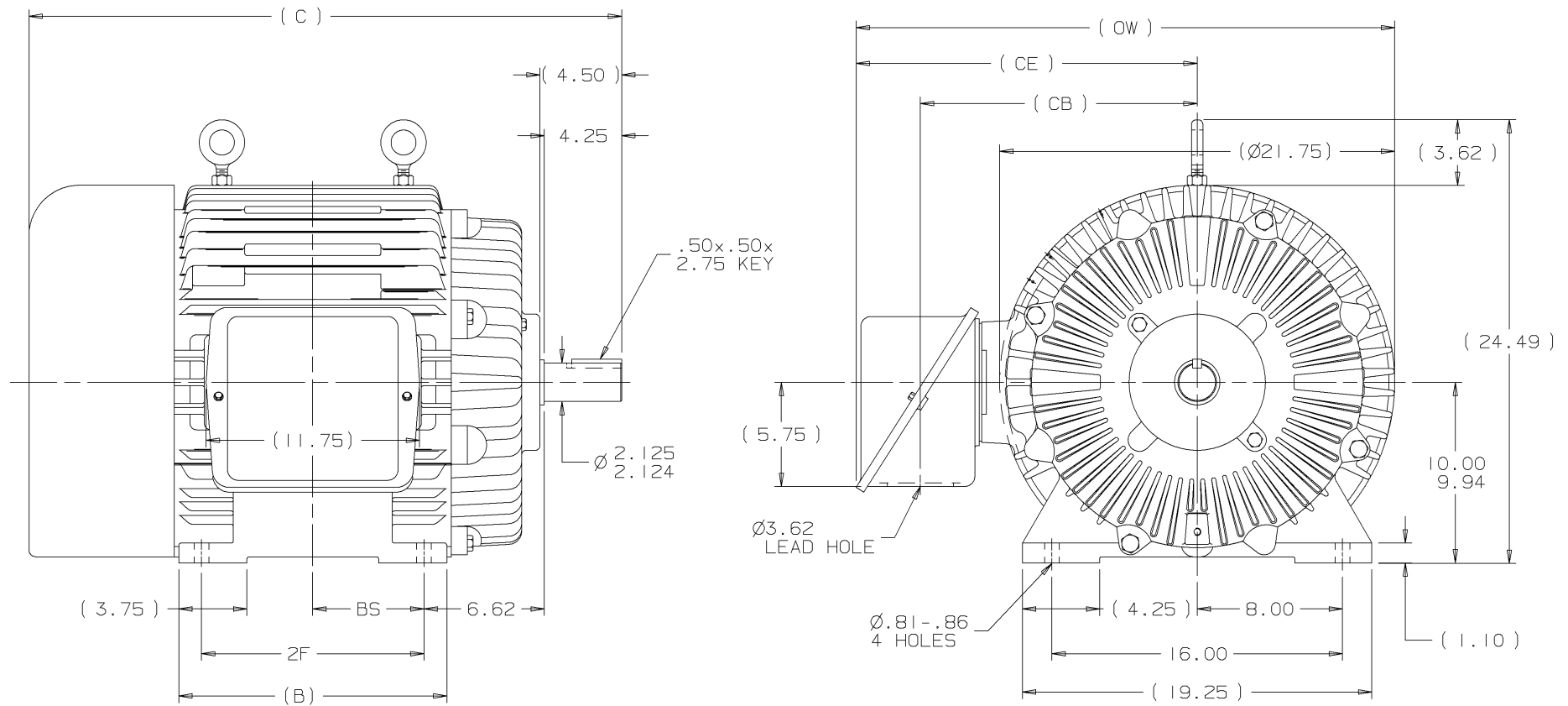
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	224.0/112.0 A	Speed	1780 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	405TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
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	.058 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	34.12 in
Frame Length	16.77 in	Shaft Diameter	2.125 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS504698LN-1675	Connection Drawing	A-EE7308AA-LN

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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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

CONDUIT BOX DIMENSIONS

FRAME	CB	CE	OW	
404	15.24	18.78	29.66	
405	16.24	19.78	30.66	

(B-SS504699)

DASH	FRAME	B	C	2F	BS
1525	404TS	14.75	32.62	12.25	6.12
1675	405TS	16.25	34.12	13.75	6.88

				TOLERANCES UNLESS SPECIFIED		Lincoln MOTOR		DRAWN KL 02-21-2002	
				DEC.	TOLERANCE			CHK DJK 02-21-2002	APPD JES 02-21-2002
				.X	±.1	TITLE OUTLINE 400TS FR. - TEFC - STD.		SCALE	
				.XX	±.03			REF	
				.XXX	±.005			FMF	
				.XXXX	±.0005			PREV	
NO.	NEW DRAWING MU40666	KL	02-21-2002	CHK	ANG ± 7'30"	✓ SURFACE ROUGHNESS UNLESS SPECIFIED		MATERIAL 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				PURCHASED		CAD FILE SS504698LN		SHOP BOOK	
				DIST WA - 06 - 07 - 08 - 09 - 10				SIZE B	
								DRAWING NO. SS504698LN	
								REV.	

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:



1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-277-8810

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308AA-LN

CAT #: LM80192

OUTLINE: B-SS504698LN-1675

WINDING: T4054168

NONE 2

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1800	1780	405TS	TEFC	TFS	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	224/112	VVE START DELTA RUN	CONT	F	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	94.5	1/2 LD EFF	94.1	GTD EFF		ELECT. TYPE	
F.L. PF	88.0	3/4 LD PF	87.0	1/2 LD PF	82.0	93.0		SQ CAGE IND RUN	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
295 LB-FT	705	450 LB-FT 153%	700 LB-FT 237%	80	

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA		27.0 LB-FT²	555 LB-FT²	25 SEC.	2	1400 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	WATTSaver

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313 6313						

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
0.043	0.027	0.298	0.273	9.5	0.150	ODE

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

DATE: 9/3/2018	BRAKE: NONE NONE	NONE
	FT-LB: NA	
	VOLTAGE: NONE	HZ:
	UL: NONE	

Data Sheet

Date: 9/3/2018

LM80192



Data @ 460 V

Motor Load Data

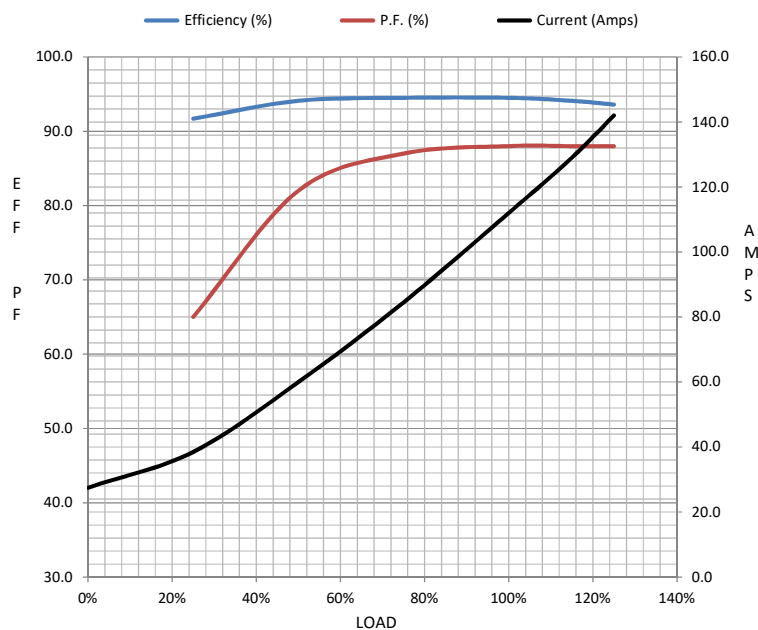
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	27.5	38.5	60.0	84.5	112	129	142	705	
Torque (ft-lb)	0.00	73.5	147	221	295	340	370	450	
RPM	1800	1795	1790	1785	1780	1,775	1772	0	
Efficiency (%)		91.7	94.1	94.5	94.5	94.1	93.6		
P.F. (%)	6.0	65.0	82.0	87.0	88.0	88.0	88.0	28.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1780	1800
Current (Amps)	705	625	400	112	27.5
Torque (ft-lb)	450	400	700	295	0.00

Information Block

HP	100.0			
Sync. RPM	1800			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460	V		
Frequency	60	Hz		
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	80	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	27.0	Lb-Ft²		
Ref Wdg	T4054168	NONE		
Sound Pressure @ 1M	75	dBA		
VFD Rating	NONE			
Outline Dwg	B-SS504698LN-1675			
Conn. Diag	A-EE7308AA-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0430	0.0270	0.2980	0.2730	9.5000



Speed - Torque Curve

