

PRODUCT INFORMATION PACKET



Model No: LM80109
Catalog No: LM80109
30 HP Fire Pump Motor, 3 phase, 1800 RPM, 200/400 V, 286T Frame, ODP
Fire Pump Motors



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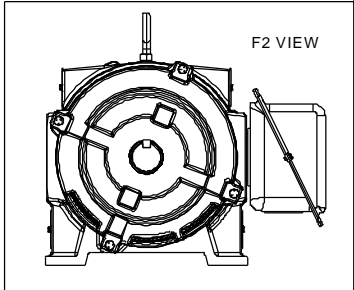
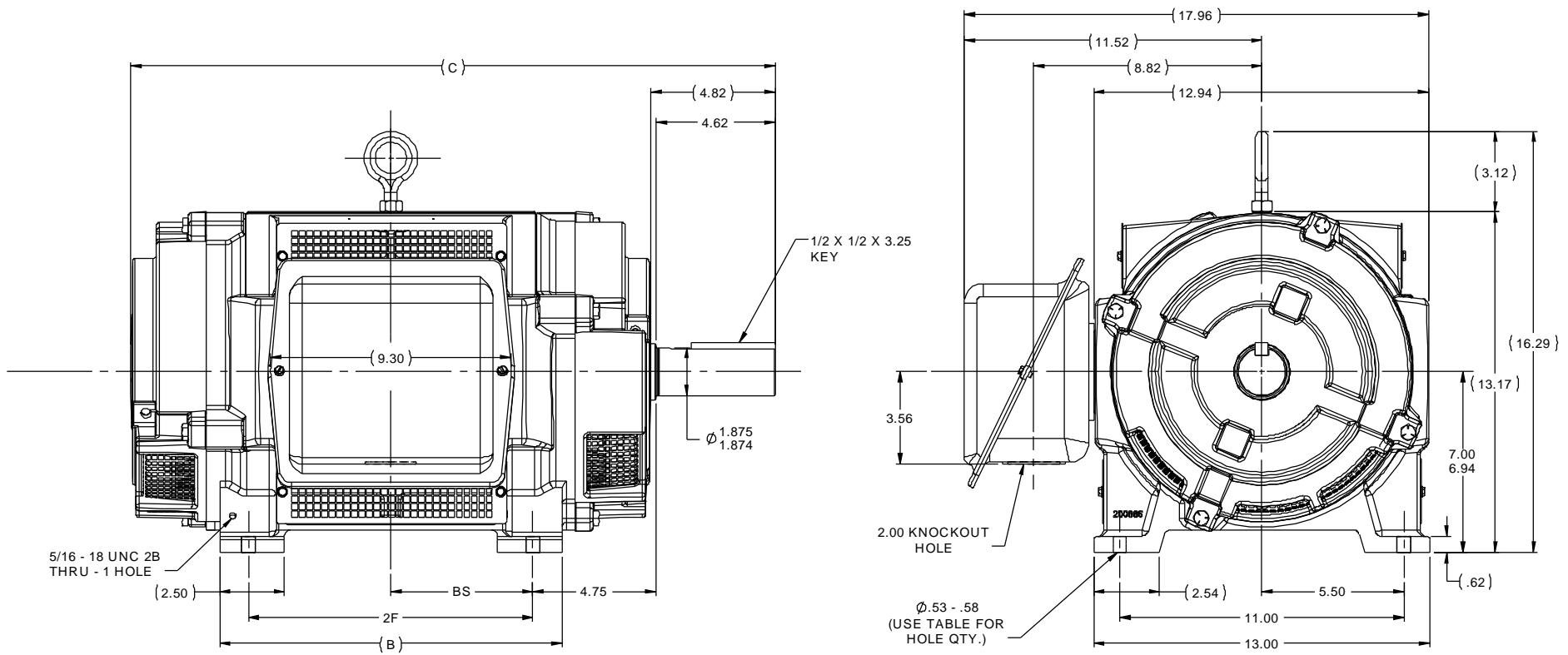


Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	200/400 V
Current	83.0/41.5 A	Speed	1765 rpm
Service Factor	1.15	Phase	3
Efficiency	92.4 %	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	286T	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	No	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.335 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	24.99 in
Frame Length	14.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS207662LN-1425	Connection Drawing	A-EE7358-LN



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

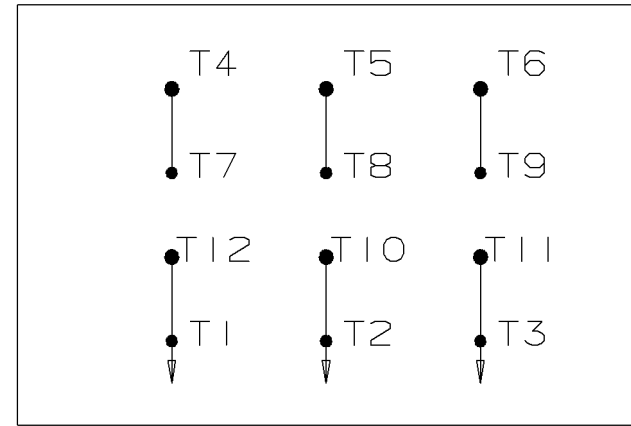
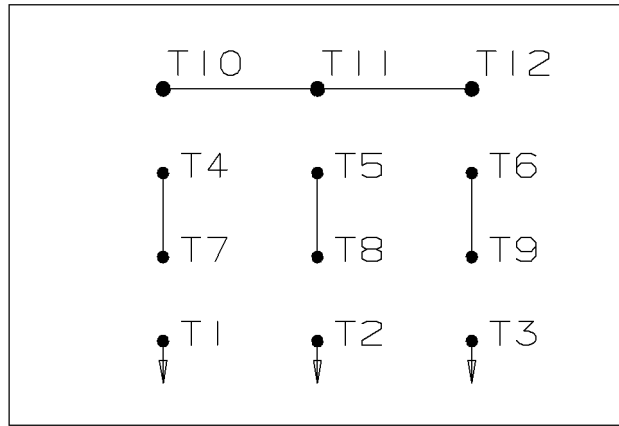
DASH	FRAME	B	C	AG	2F	2FF	BS	FOOT HOLE QTY.
1275	284T	11.75	23.49	--	9.50	--	4.75	4
1425	286T	13.25	24.99	--	11.00	--	5.50	4

		TOLERANCES UNLESS SPECIFIED			DRAWN TV 09-30-2013
		DEC	INCHES		CHK JTD 10-01-2013
		X	±.1		APPR TB 10-02-2013
		XX	±.03	TITLE OUTLINE - DR. PR. - CAST IRON	SCALE 1:4
		XXX	±.005	280T FR. - BB - TS - DBL. END VENT.	REF SS207662
		XXXX	±.0005	MATL	FMF MU98662
		CHK	ANG ±7'30"	FINISH	PAGE OF
NO		REVISION	BY & DATE	RFP 10-02-2013	PREV
THIRD ANGLE PROJECTION				NETWORK FILE NAME SS207662LN	SIZE B
				DRAWING NO SS207662LN	REV

WYE START

HIGH VOLTAGE

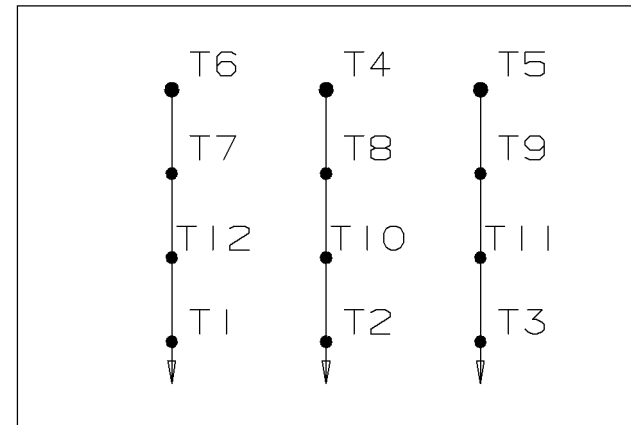
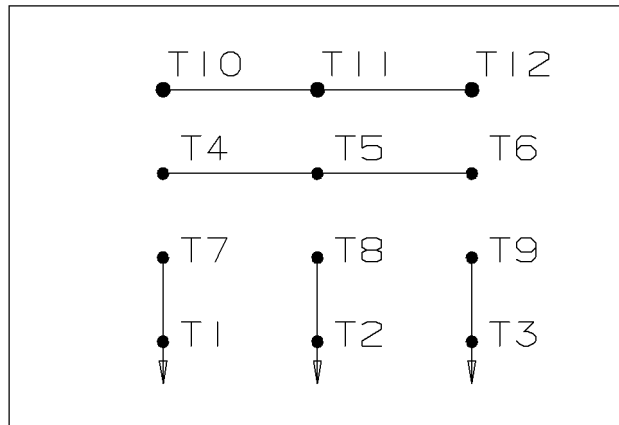
DELTA RUN



WYE START

LOW VOLTAGE

DELTA RUN



4/2 CKTY Δ

					<input checked="" type="checkbox"/> UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± .02 XXX± .005 XXXX± .0005 ANGLES± 7'30"		
						MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED FINISH MATERIAL	DRAWN BY DRS CHKD BY ML APPD BY TB
1	12-07-1999	NEW DRAWING	DRS	PART NAME CONNECTION DIAGRAM			DRWG NO A-EE7358-LN
REV	DATE	CHANGE	NAME	PURCHASED			CADD FILE NO. EE7358-LN



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7358-LN
OUTLINE: B-SS207662LN-1425
WINDING: K2564217

CAT #: LM80109

NONE 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	1800	1765	286T	DP	TDP	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	200/400	83/41.5	PWS(LV ONLY) & YDRU	CONT	F	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	92.4	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	82.0	1/2 LD PF	74.0	91.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
89.0 LB-FT	219	160 LB-FT 180%	220 LB-FT 247%	45

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
72 dBA	81 dBA		3.3 LB-FT²	0 LB-FT²	20 SEC.	0	400 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	RODENT	WATTSAVER

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6311	6210						

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
0.151	0.101	0.553	0.722	14.878	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE					
	ENCODER: NONE NONE NONE					
	BRAKE: NONE NONE					
	FT-LB: NA VOLTAGE: NONE					
	UL: NONE					

DATE: 8/30/2018

BRAKE: NONE
NONE

FT-LB: NA
VOLTAGE: NONE

UL: NONE

Data Sheet

Date: 8/30/2018

LM80109



Data @ **400 V**

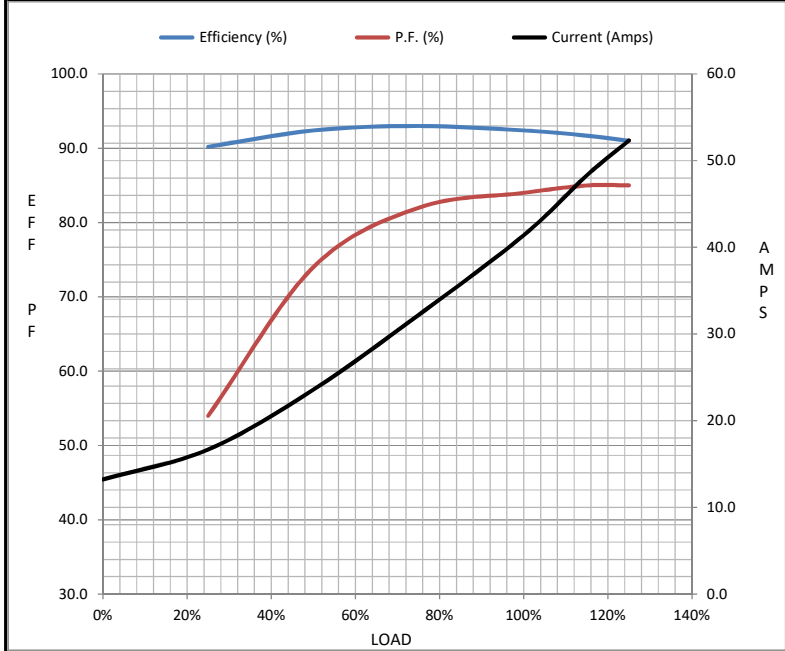
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	13.2	16.7	23.6	32.2	41.4	48.3	52.3	219
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	103	112	160
RPM	1800	1792	1780	1772	1765	1,760	1750	0
Efficiency (%)		90.2	92.4	93.0	92.4	91.7	91.0	
P.F. (%)	5.5	54.0	74.0	82.0	84.0	85.0	85.0	40.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1765	1800
Current (Amps)	219	196	144	41.4	13.2
Torque (ft-lb)	160	132	220	89.0	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	DP			
Construction	TDP			
Voltage	200/400 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	3.3 Lb-Ft ²			
Ref Wdg	K2564217 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS207662LN-1425			
Conn. Diag	A-EE7358-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1510	0.1010	0.5530	0.7220	14.8780



Speed - Torque Curve

