

PRODUCT INFORMATION PACKET



Model No: LM80107
Catalog No: LM80107
30 HP Fire Pump Motor, 3 phase, 3600 RPM, 200/400 V, 284TS Frame, ODP
Fire Pump Motors



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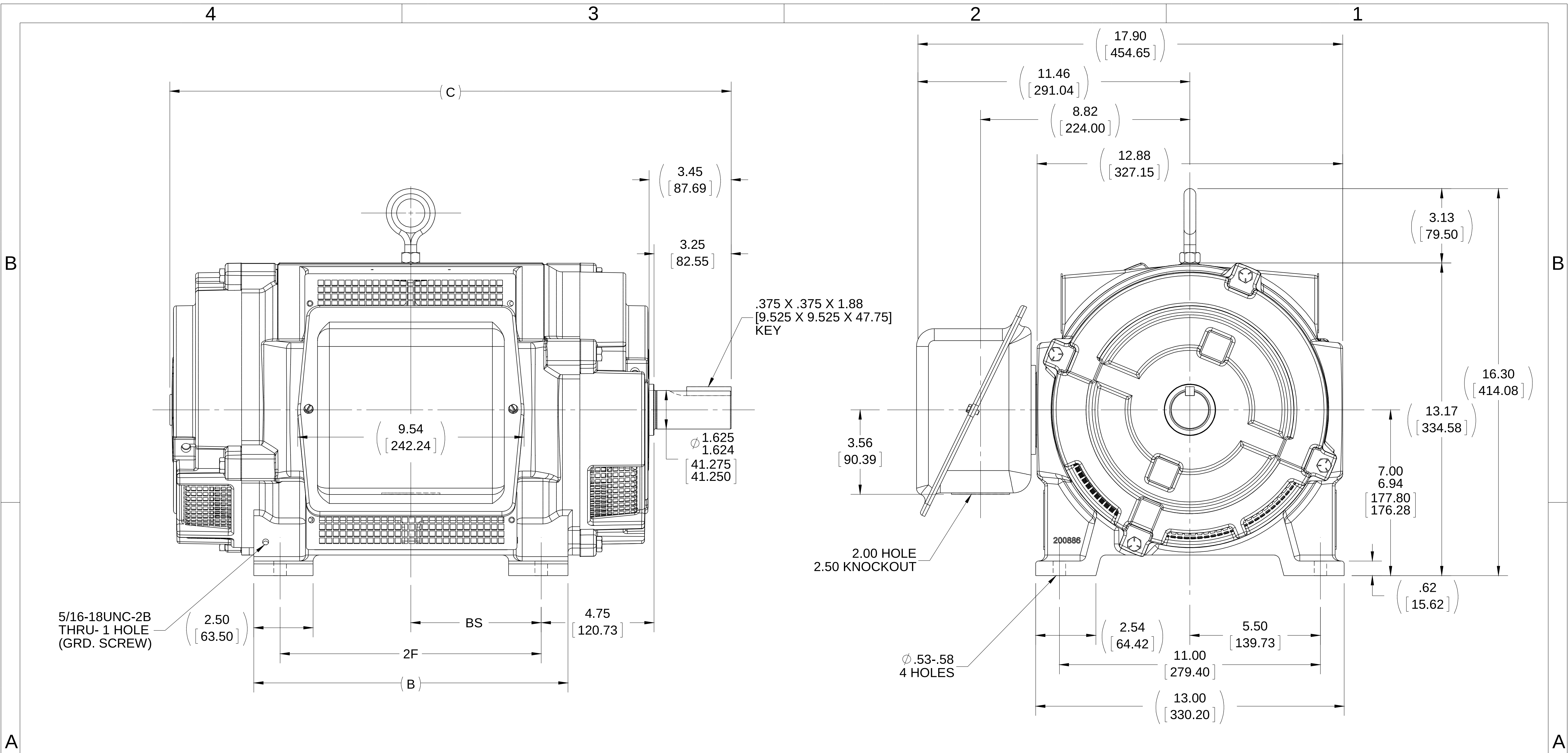
Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	200/400 V
Current	83.0/41.5 A	Speed	3530 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	85.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	284TS	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	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.364 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	22.14 in
Frame Length	12.75 in	Shaft Diameter	1.625 in
Shaft Extension	3.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS207996-1275	Connection Drawing	A-EE7358-LN

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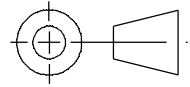


- NOTES:
- 1. CONDUIT BOX CAN BE MOUNTED IN 90° STEPS.
 - 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 - 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	BS
1275	284TS	11.75 [298.45]	22.14 [562.36]	9.50 [241.30]	4.75 [120.65]
1425	286TS	13.25 [336.55]	23.64 [600.46]	11.00 [279.40]	5.50 [139.70]

DRAWING REVISION D	REVISION BY JWO	DATE 05-08-2015
ECO ECO-0077402	APPROVED BY TV	DATE 05-08-2015
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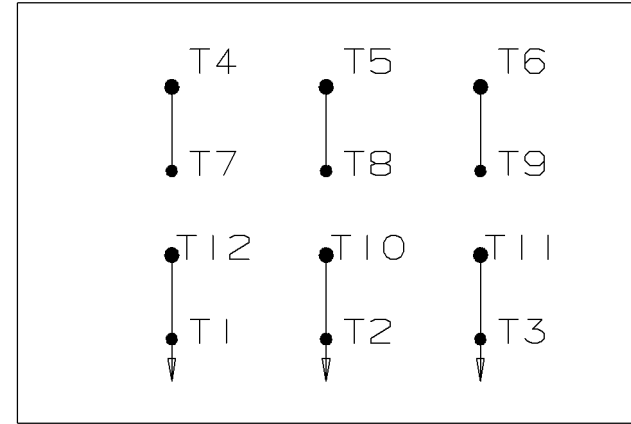
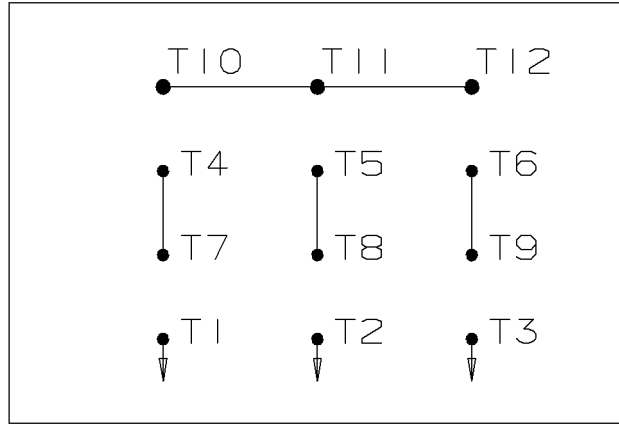
TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]			
CORNER FILLETS: .02 [.51]			
MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY JG	 Regal Beloit America, Inc.		
DATE 10/23/2012			
APPROVED BY MJS	DESCRIPTION OUTLINE 280TS FR. - BB - TS - DOUBLE END VENT		
DATE 10/23/2012			
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER SS207996	SHEET 1 OF 1

WYE START

HIGH VOLTAGE

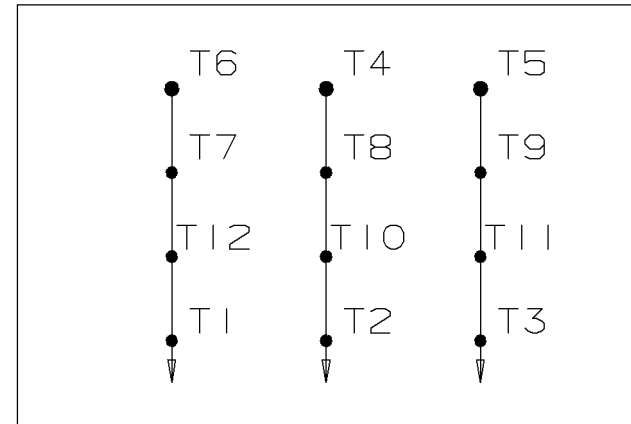
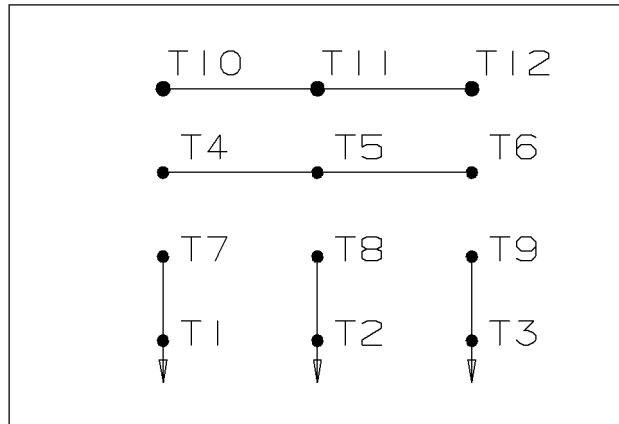
DELTA RUN



WYE START

LOW VOLTAGE

DELTA RUN



4/2 CKTY Δ

				✓ UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX±.02 XXX±.005 XXXX±.0005 ANGLES± 7°30"	
				MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED	DRAWN BY DRS 12-07-1999 CHKD BY ML 12-07-1999 APPD BY TB 12-07-1999
1	12-07-1999	NEW DRAWING	DRS	PART NAME CONNECTION DIAGRAM	
REV	DATE	CHANGE	NAME	DRWG NO A- EE7358-LN	
				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

CAT #: LM80107

OUTLINE: B-SS207996-1275

WINDING: K256294

NONE 4

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	3600	3530	284TS	DP	TDP	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	200/400	83/41.5	VVE START DELTA RUN	CONT	F	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	91.7	1/2 LD EFF	91.7	GTD EFF		ELECT. TYPE	
F.L. PF	85.5	3/4 LD PF	84.0	1/2 LD PF	76.5	89.5		SQ CAGE IND RUN	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
44.5 LB-FT	230	67.0 LB-FT 151%	110 LB-FT 247%	40

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
80 dBA	89 dBA		1.25 LB-FT²	20 LB-FT²	15 SEC.	2	325 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
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
0.162	0.114	0.615	0.584	18.455	0.150	ODE

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

DATE: 8/30/2018	BRAKE: NONE NONE	NONE
	FT-LB: NA	
	VOLTAGE: NONE	HZ:
	UL: NONE	

Data Sheet

Date: 8/30/2018

LM80107



Data @ 400 V

Motor Load Data

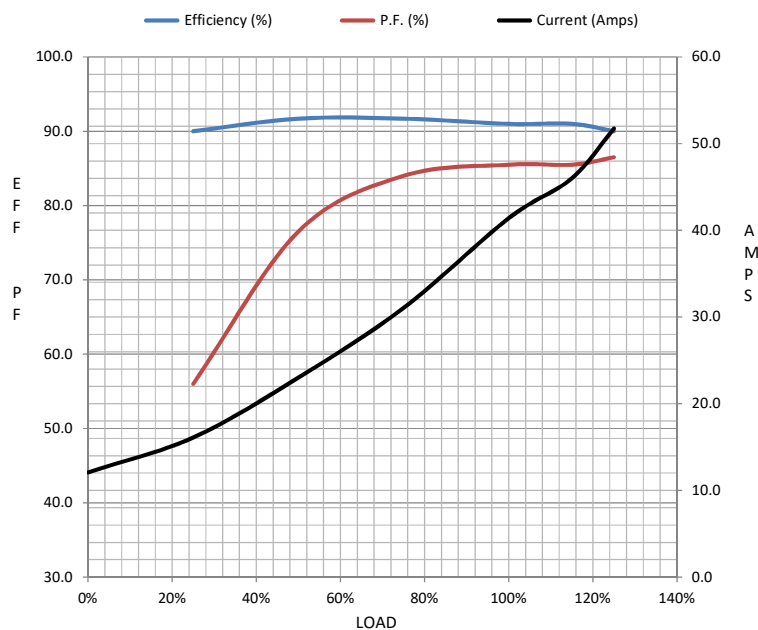
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.1	16.1	23.0	31.1	41.4	46.0	51.8	230	
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.5	50.0	56.0	67.0	
RPM	3600	3585	3570	3550	3530	3,520	3505	0	
Efficiency (%)		90.0	91.7	91.7	91.0	91.0	90.0		
P.F. (%)	11.0	56.0	76.5	84.0	85.5	85.5	86.5	38.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1930	3200	3530	3600
Current (Amps)	230	209	145	41.4	12.1
Torque (ft-lb)	67.0	72.0	110	44.5	0.00

Information Block

HP	30.0			
Sync. RPM	3600			
Frame	284			
Enclosure	DP			
Construction	TDP			
Voltage	200/400 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	1.25 Lb-Ft²			
Ref Wdg	K256294 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS207996-1275			
Conn. Diag	A-EE7358-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1620	0.1140	0.6150	0.5840	18.4550



Speed - Torque Curve

