

PRODUCT INFORMATION PACKET

Model No: LM21227

Catalog No: LM21227

Speed Ratio Motors, TEFC, 100 HP, 3 Ph, 60 Hz, 230/460 V, 1785 RPM, 405T Frame



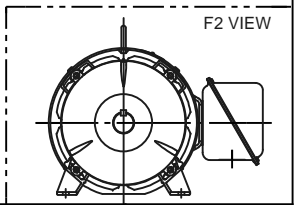
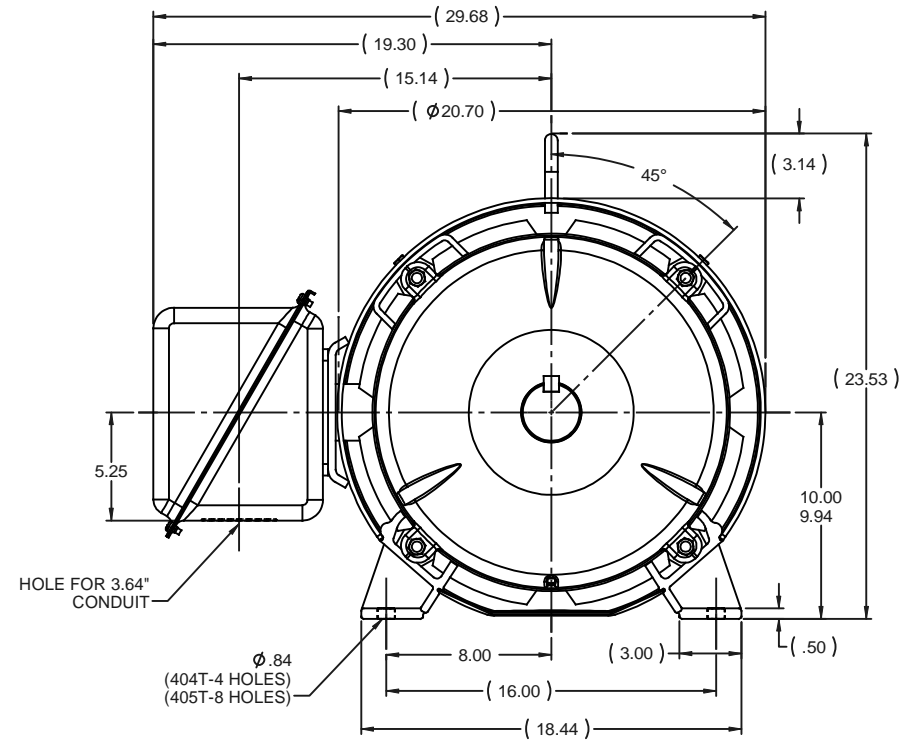
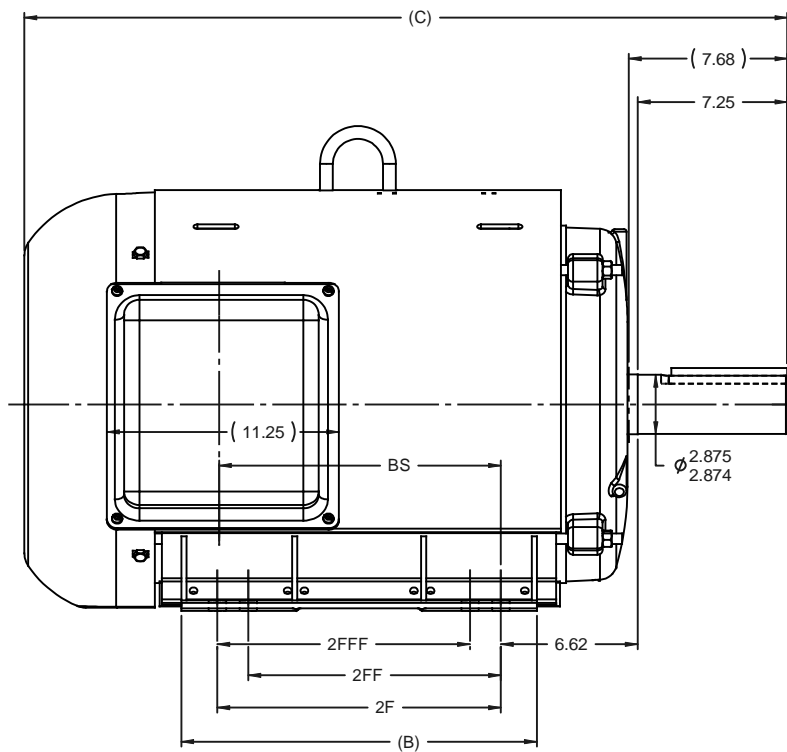
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Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	240.0/120.0 A	Speed	1785 rpm
Service Factor	1	Phase	3
Efficiency	94.5 %	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	G
Frame	405T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	315	Opp Drive End Bearing Size	313
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.055 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	38.40 in
Frame Length	19.46 in	Shaft Diameter	2.875 in
Shaft Extension	7.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308BZ-LN	Outline Drawing	XJ2F1SS1-1946



NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

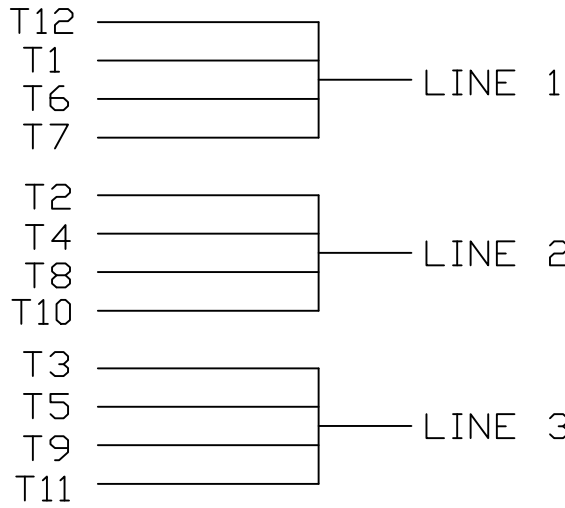
DASH	FRAME	B	C	2F	2FF	2FFF	BS
1796	404T	15.75	36.90	12.25	--	--	12.17
1946	405T	17.25	38.40	13.75	12.25	12.25	13.67

REVISION				BY & DATE	CHK	ANG	±7'30"	FINISH	SCALE	PAGE	OF
3	REVISED DIM. TO DESIGN STANDARDS CN29200-2395	NJS	06-05-2002	ML	xx	±.03	TITLE	OUTLINE	1:6	3	3
2	DASH 1796 WAS 405T CN34267	TJB	10-19-2001	xxx	±.005	TITLE	400T FR. - TEFC - UE1	REF	B-XJ2F1SS1ME		
1	NEW DRAWING CN34267	MSG	09-24-2001	xxxx	±.0005	MATL		FMF	MU74245		
NO											

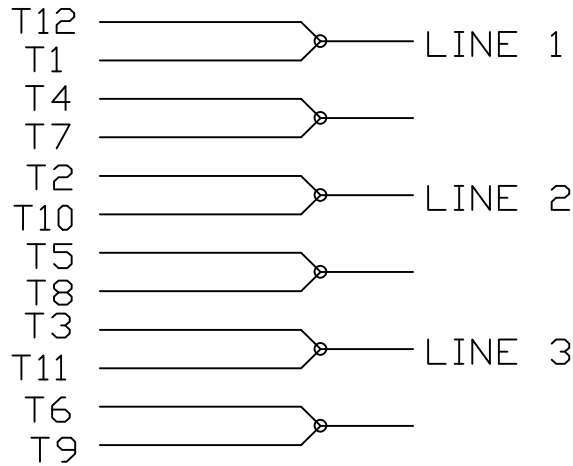


TOLERANCES UNLESS SPECIFIED		DRAWN MSG 09-19-2001	
DEC	INCHES	CHK	ML 09-19-2001
x	±.1	APPR	HNH 09-19-2001
RFP 09-19-2001		PREV	
NETWORK FILE NAME 202211		SIZE	DRAWING NO
		B	XJ2F1SS1
		REV	3

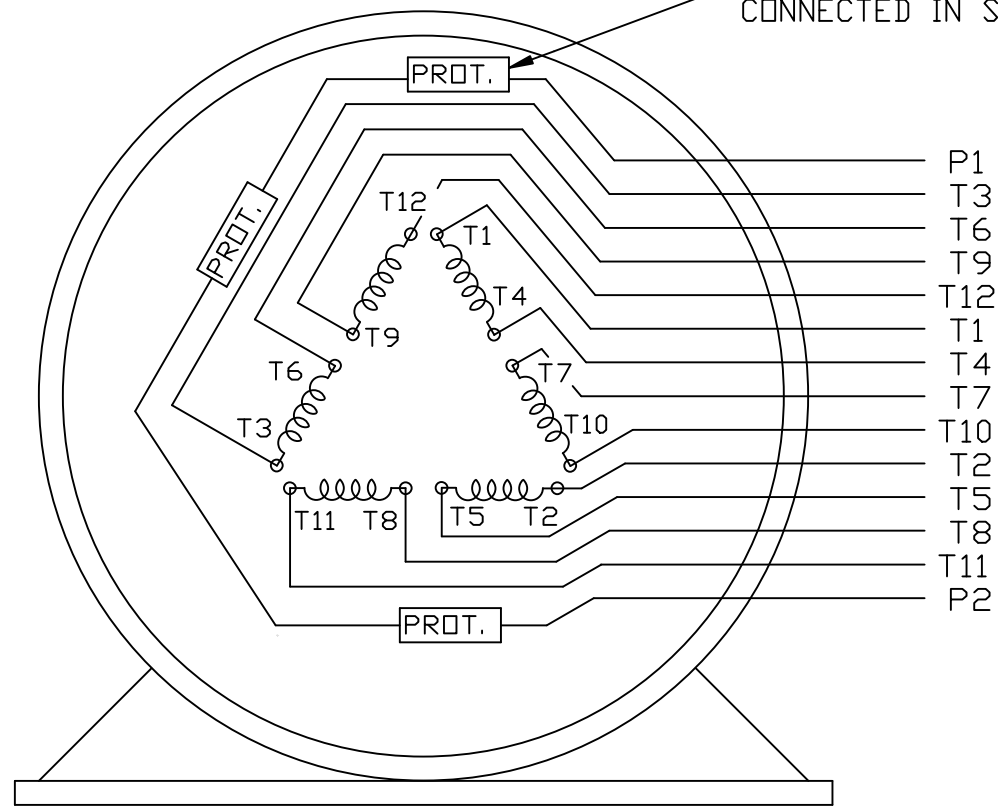
LOW VOLTAGE



HIGH VOLTAGE



THERMO - PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

					✓ UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± XXX± XXXX± ANGLES±					
2	08/17/2011	REMOVED NOTE '12 LEADS SINGLE VOLTAGE'	MU103768		RFH	MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED		DRAWN BY KL	12-11-2000	
						FINISH		CHKD BY DJK	12-11-2000	
						MATERIAL		APPD BY DJK	12-11-2000	
1	12-11-2000	NEW DRAWING	MU34925	KL	PART NAME EXTERNAL CONNECTION DIAGRAM 3 PHASE - 2/1 DELTA - 12 LEADS				DRWG NO A- EE7308BZ-LN	
REV	DATE	CHANGE		NAME				PURCHASED	CADD FILE NO.	EE7308BZ-LN



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

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308BZ-LN

CATALOG #: LM21227

OUTLINE: XJ2F1SS1-1946

WINDING #: C4054030 R1 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100	75.0	1800	1785	405T	TEFC	G	INV

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	240/120	INVERTER ONLY	CONTINUOUS	F4	1.0	40

FULL LOAD EFF:	94.5	3/4 LOAD EFF:	94.5	1/2 LOAD EFF:	93	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	83	3/4 LOAD PF:	77	1/2 LOAD PF:	68	93.6		SQ CAGE INV DUTY	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
294 LB-FT	1450 / 725	575 LB-FT 196 %	650 LB-FT 220 %	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	23 LB-FT^2	- LB-FT^2	- SEC.	-	- 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	GRAY - LINCOLN

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)	ROLLED STEEL
315	313						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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INVERTER TORQUE: CONSTANT 4:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/29/2018

LM21227



Data @ 460 V

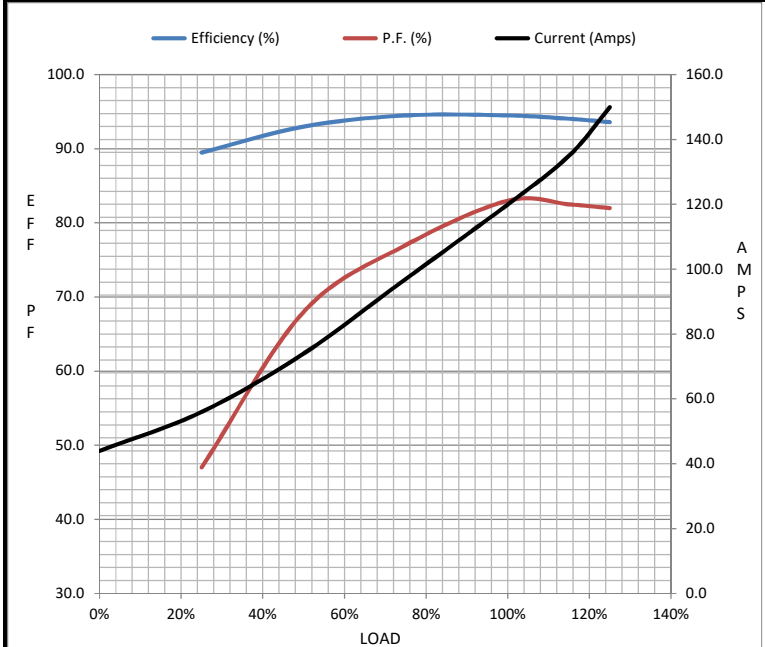
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	44.0	56.0	74.0	97.0	120	135	150	725
Torque (ft-lb)	0.00	73.0	147	220	294	331	368	575
RPM	1800	1796	1792	1788	1785	1.783	1780	0
Efficiency (%)		89.5	93.0	94.5	94.5	94.1	93.6	
P.F. (%)	5.0	47.0	68.0	77.0	83.0	82.5	82.0	35.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1715	1785	1800
Current (Amps)	725	650	390	120	44.0
Torque (ft-lb)	575	500	650	294	0.00

Information Block				
HP	100.0			
Sync. RPM	1800			
Frame	405			
Enclosure	TEFC			
Construction	TFR			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.0			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	23.0 Lb-Ft ²			
Ref Wdg	C4054030 R1			
Sound Pressure @ 1M	999 dBA			
VFD Rating	CONSTANT 4:1			
Outline Dwg	XJ2F1SS1-1946			
Conn. Diag	A-EE7308BZ-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0400	0.0200	0.2410	0.2580	5.1260



Speed - Torque Curve

