

PRODUCT INFORMATION PACKET



Model No: LM13813

Catalog No: LM13813

General Purpose Motor, 50 & 40 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
326T Frame, DP



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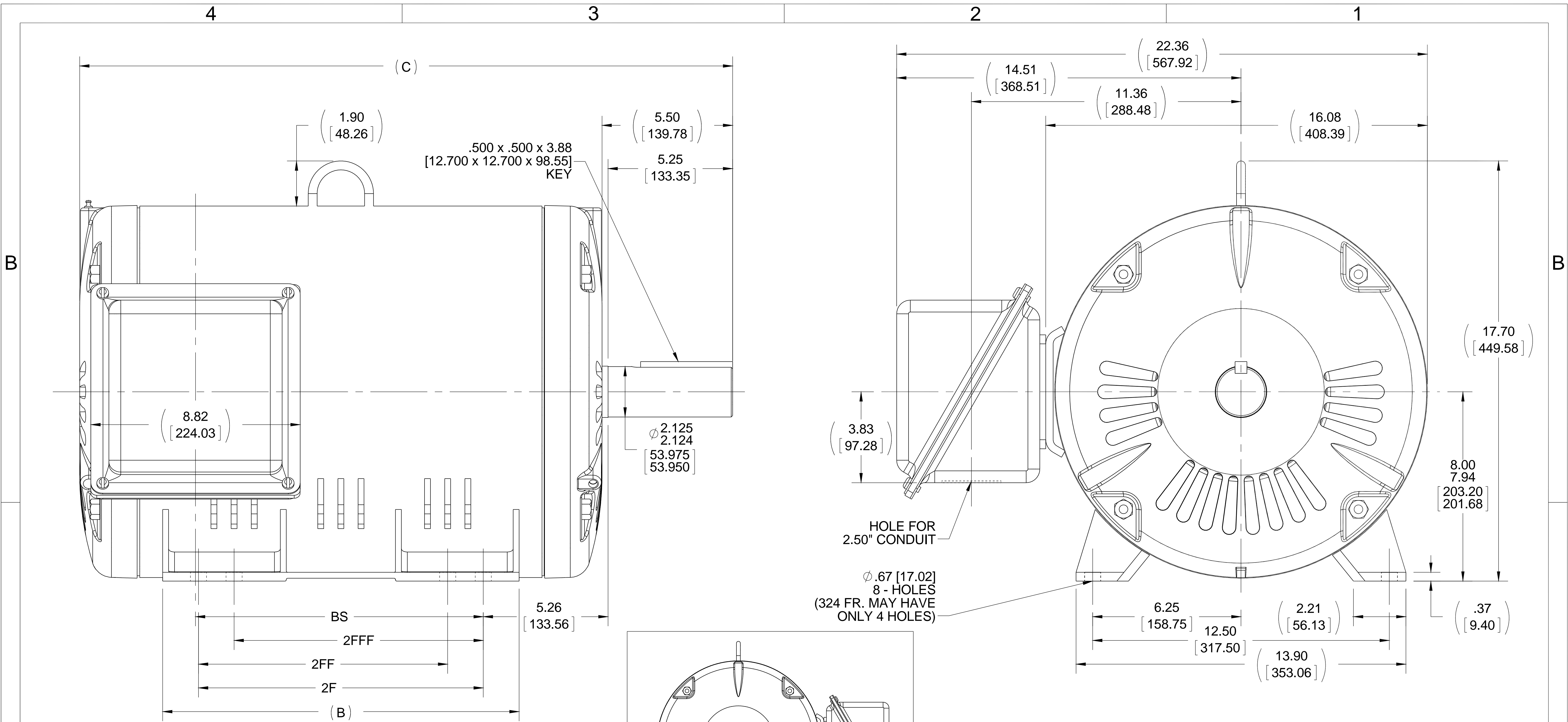


Nameplate Specifications

Phase	3	Output HP	50 & 40 Hp
Output KW	37.0 & 30.0 kW	Voltage	230/460 & 190/380 V
Speed	1782 & 1483 rpm	Service Factor	1.25 & 1.15
Frame	326T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.5 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	131/65.5 & 127/63.5 A	Power Factor	75.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	311	Opp Drive End Bearing Size	309
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.105 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	27.32 in
Frame Length	16.57 in	Shaft Diameter	2.125 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308AA-LN	Outline Drawing	XG2D1SS1-1657



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

DASH	FRAME	B	C	2F	2FF	2FFF	BS
1507	324T	13.52 [343.41]	26.01 [660.65]	10.50 [266.70]	---	---	10.63 [270.00]
1657	326T	15.02 [381.51]	27.51 [698.75]	12.00 [304.80]	10.50 [266.70]	10.50 [266.70]	12.13 [308.10]

DRAWING REVISION E	REVISION BY T. VUE	DATE 09-22-2016
ECO ECO-0109505	APPROVED BY T. BROWN	DATE 09-22-2016
ECO DESCRIPTION MU124402 / NMR-0106907		
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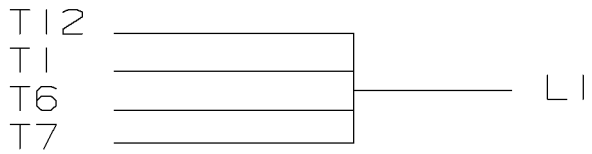
TOLERANCES UNLESS OTHERWISE SPECIFIED:

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]	

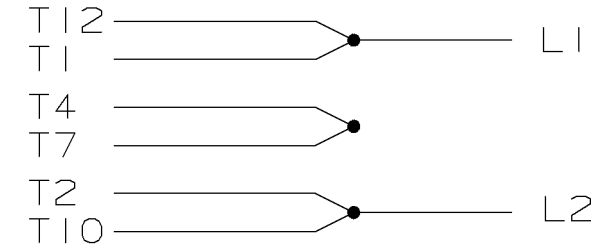
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]
 CORNER FILLETS: .02 [.51]
 MACHINED SURFACES: 200 INCH/mm 5.1
 mm SHOWN IN [BRACKETS]

DRAWN BY TJB
DATE 08-09-2001
APPROVED BY HNH
DATE 08-29-2001
REFERENCE
THIRD ANGLE PROJECTION

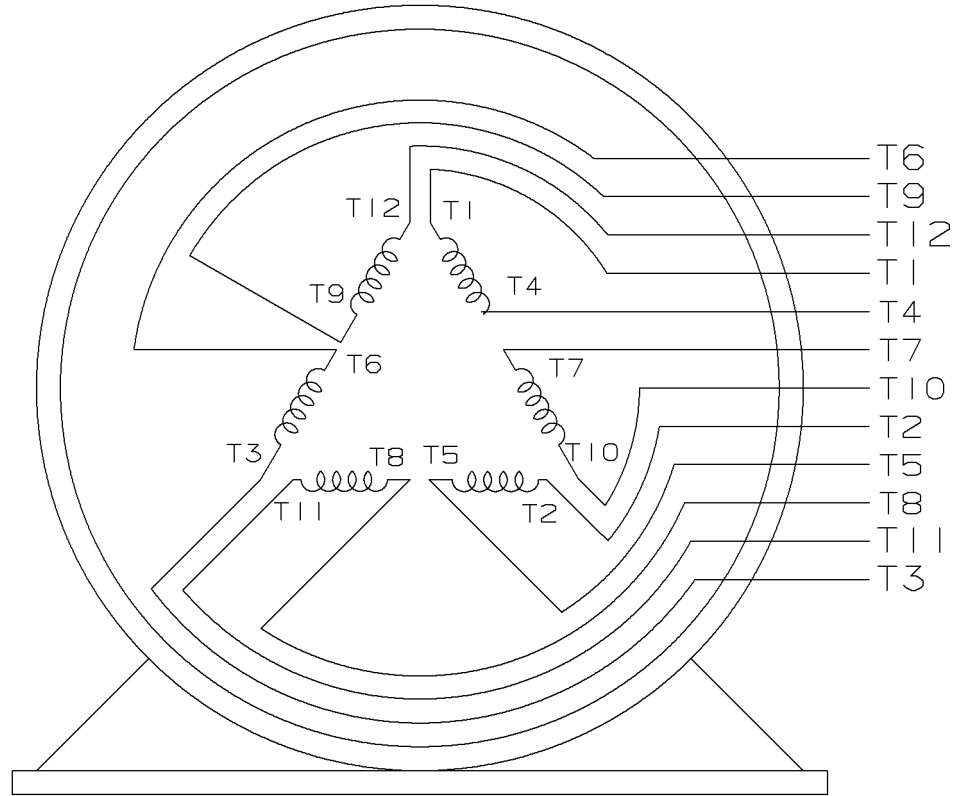
REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 320T FR. - ODP - UE	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER XG2D1SS1
SHEET 1 OF 1	



LOW VOLTAGE



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: XG2D1SS1-1657

CATALOG : LM13813

WINDING #: L3264035 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50&40	37.0&30.0	1800	1782&1483	326T	DP	F	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	131/65.5&127/63.5	WYE START DELTA RUN	CONTINUOUS	F1	1.25/1.15	40

FULL LOAD EFF:	94.5&94.5	3/4 LOAD EFF:	94.5	1/2 LOAD EFF:	94.1	GTD. EFF		ELEC. TYPE
FULL LOAD PF:	75.5&75.5	3/4 LOAD PF:	70.5	1/2 LOAD PF:	60	93.6		SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
147 LB-FT	650 / 325	300 LB-FT 204 %	325 LB-FT 221 %	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	9 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
311	309						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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INVERTER TORQUE:	NONE
INV. HP SPEED RANGE:	NONE
ENCODER:	NONE NONE NONE NONE NONE PPR
BRAKE:	NONE NONE NONE P/N NONE NONE NONE FT-LB V NONE Hz

Data Sheet

Date: 1/31/2018

LM13813



Data @ **460 V**

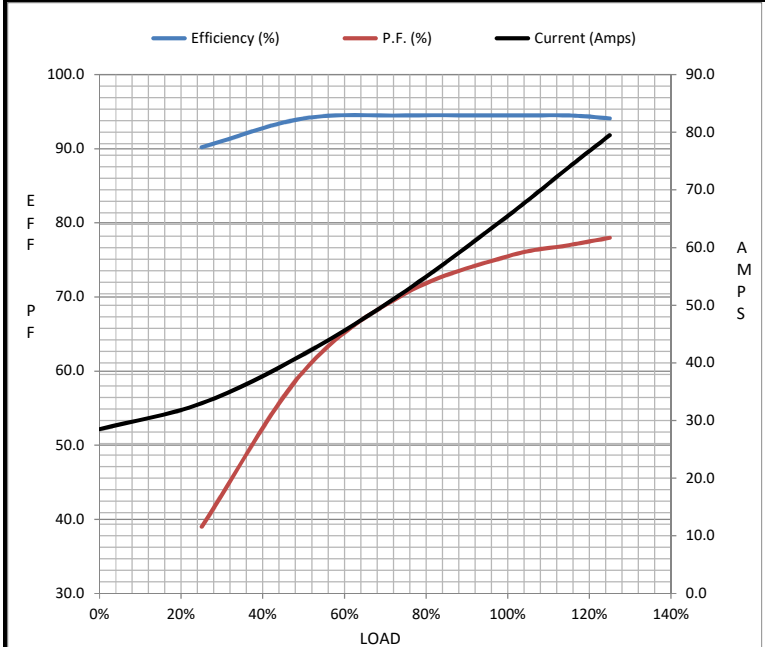
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	28.5	33.0	41.5	52.5	65.5	74.0	79.5	325
Torque (ft-lb)	0.00	36.5	73.5	110	147	170	185	300
RPM	1800	1795	1792	1787	1782	1.780	1777	0
Efficiency (%)		90.2	94.1	94.5	94.5	94.5	94.1	
P.F. (%)	3.5	39.0	60.0	70.5	75.5	77.0	78.0	34.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1782	1800
Current (Amps)	325	290	210	65.5	28.5
Torque (ft-lb)	300	275	325	147	0.00

Information Block				
HP	50.0			
Sync. RPM	1800			
Frame	326			
Enclosure	DP			
Construction	TDR			
Voltage	230/460#190/380 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	9.0 Lb-Ft ²			
Ref Wdg	L3264035 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	NONE			
Outline Dwg	XG2D1SS1-1657			
Conn. Diag	A-EE7308AA-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0740	0.0450	0.4200	0.7430	9.1850



Speed - Torque Curve

