

PRODUCT INFORMATION PACKET



Model No: 117852.00

Catalog No: 117852.00

Explosion Proof Motor, 0.50 & 0.50 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 1800 & 1500 RPM,
56C Frame, EPNV



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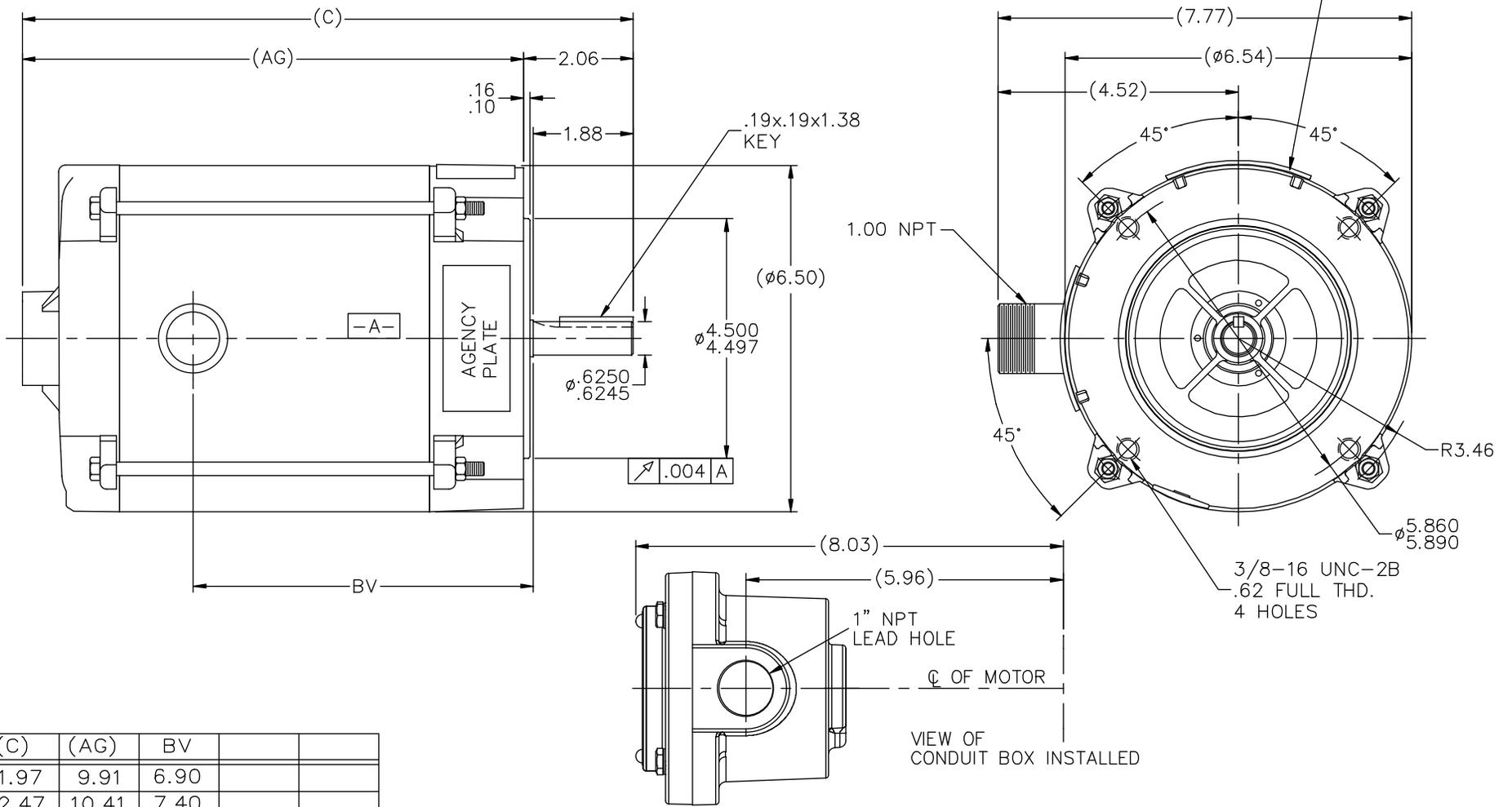


Nameplate Specifications

Phase	3	Output HP	0.50 & 0.50 Hp
Output KW	0.37 & 0.37 kW	Voltage	208-230/460 & 190/380 V
Speed	1725 & 1425 rpm	Service Factor	1.0 & 1.0
Frame	56C	Enclosure	Explosion Proof Non Ventilated
Thermal Protection	Thermostat	Efficiency	80 & 78.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	1.8-1.6/.8 & 1.8/.91 A	Power Factor	72
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	L
Drive End Bearing Size	6203	Opp Drive End Bearing Size	6203
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	36.24 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	12.47 in
Frame Length	6.81 in	Shaft Diameter	0.625 in
Shaft Extension	1.88 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 2:1		
Outline Drawing	B-104197LE-681	Connection Drawing	A-EE7308T-LE

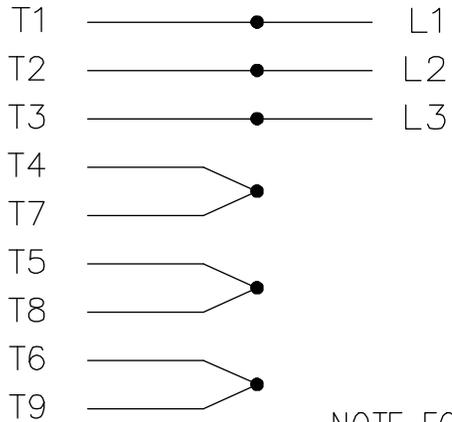


DASH	(C)	(AG)	BV
631	11.97	9.91	6.90
681	12.47	10.41	7.40
731	12.97	10.91	7.90
781	13.47	11.41	8.40
831	13.97	11.91	8.90
881	14.47	12.41	9.40
931	14.97	12.91	9.90
981	15.47	13.41	10.40

				TOLERANCES UNLESS SPECIFIED		LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN RJW 06-22-2007	
				DEC.	INCHES			CHK	ML 06-22-2007
				.X	±.1			APPD	GK 06-22-2007
				.XX	±.03	TITLE OUTLINE - 'C' FACE		SCALE	17=32
02	COND. BOX INSTALLED VIEW UPDATED PER ECR-0044571	UD	10/15/13	ST	.XXX	±.005	56 FR. - EXP. PR.	REF	
01	UPDATED AS PER ECN #21581	NB	8/26/2011	PN	.XXXX	±.0005	MAT'L.	FMF	
REVISION				CHK	ANG	±7'30"	FINISH	PREV	
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				RFP	06-22-2007	CAD FILE	104197LE	SIZE	DRAWING NO. PAGE OF REV.
				DIST	WP			B	104197LE 02

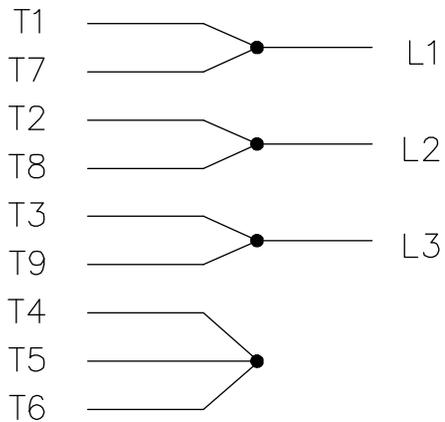
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

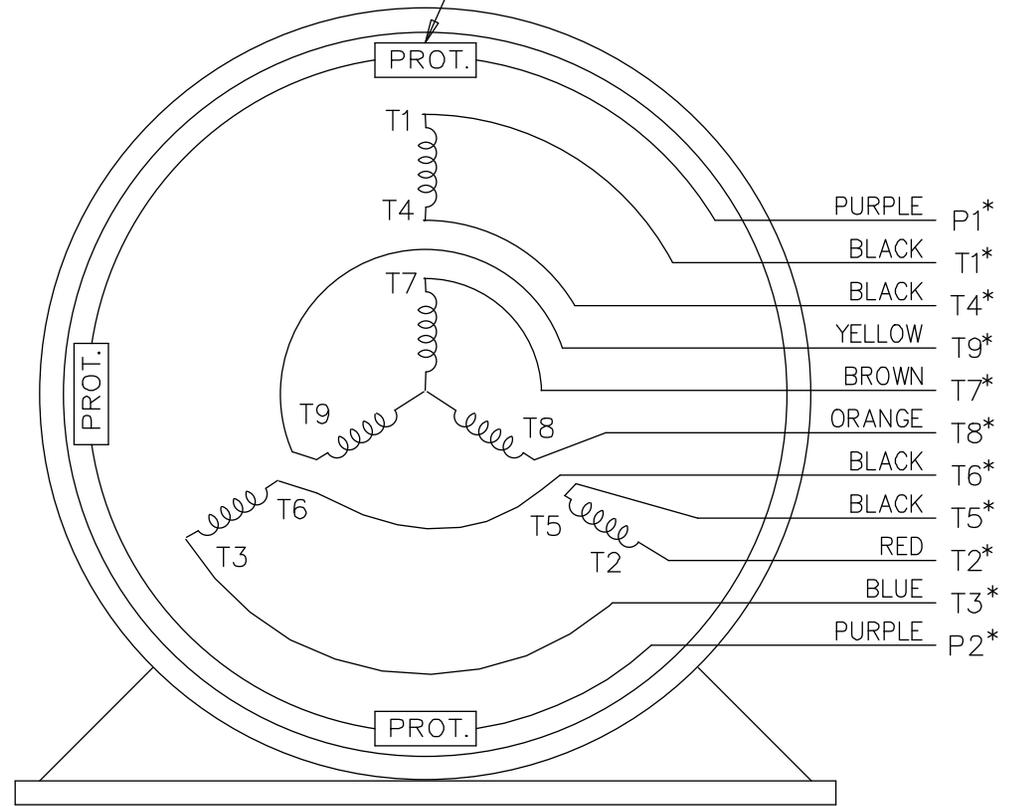


NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1

LOW VOLTAGE



THREMO-PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

* USE LEADS AS PER PLANT STANDARD IRRWSPECTIVE OF THEIR COLOUR.

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWING NO.	PAGE	OF	REV.
					DEC.	INCHES					
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD	DEC.	INCHES						
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML	.X	±.1						
03	RE-ISSUE	NJS 04-21-2004	JET	.XX	±.02						
02	REDRAWN	TAT 04-20-2004	ML	.XXX	±.005						
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML	.XXXX	±.0005						
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							DIST LB-WP-LE				



ELECTRIC MOTORS
GEARMOTORS
AND DRIVES

TITLE CONNECTION DIAGRAM
3 PHASE - DUAL VOLTAGE MOTOR

DRAWN TJB 05-07-2002
 CHK ML 05-08-2002
 APPD TB 05-08-2002
 SCALE 1=1
 REF
 FMF
 PREV



1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: A-EE7308T-LE
OUTLINE: B-104197LE-681
WINDING #: ZT471 R16 3 A

CUSTOMER PO#:
CATALOG #:
CUSTOMER PART #:
MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1/2&1/2	0.37&0.37	1800	1725&1425	56C	EPNV	L	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	1.8-1.6/.8&1.8/.91	LINE OR INVERTER	CONTINUOUS	B3	1.0/1.0	40

FULL LOAD EFF:	80&78,5	3/4 LOAD EFF:	78,6	1/2 LOAD EFF:	75,6	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	72&79	3/4 LOAD PF:	62,8	1/2 LOAD PF:	52,3	77	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1.52 LB-FT	11.2 / 5.6	4.6 LB-FT 303 %	5.8 LB-FT 382 %	-

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
60 dBA	70 dBA	0.056 LB-FT^2	0 LB-FT^2	15 SEC.	0	30 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	FALSE	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C	FALSE	NONE	BLUE (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	STANDARD 56	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6203	6203						

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 2:1
INV. HP SPEED RANGE: NONE
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: 1/30/2018

117852.00



Data @ 460 V

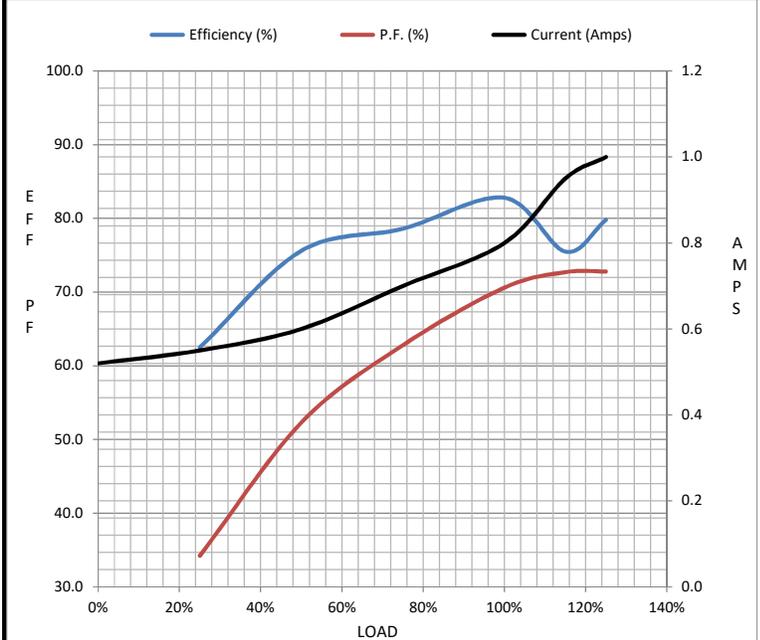
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.52	0.55	0.60	0.70	0.80	0.95	1.00	5.6
Torque (ft-lb)	0.00	0.37	0.75	1.10	1.52	1.70	1.90	4.6
RPM	1800	1785	1775	1760	1725	1.720	1715	0
Efficiency (%)		62.5	75.6	78.6	82.8	75.5	79.8	
P.F. (%)	12.1	34.2	52.3	62.8	70.6	72.7	72.8	69.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	800	1330	1725	1800
Current (Amps)	5.6	5.0	3.5	0.80	0.52
Torque (ft-lb)	4.6	4.2	5.8	1.52	0.00

Information Block				
HP	0.5			
Sync. RPM	1800			
Frame	56			
Enclosure	EPNV			
Construction	TTR			
Voltage	208-230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	L			
Service Factor	1.15			
Temp Rise @ FL	50 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.06 Lb-Ft ²			
Ref Wdg	ZT471 R16			
Sound Pressure @ 1M	60 dBA			
VFD Rating	NONE			
Outline Dwg	B-104197LE-681			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
20.3770	15.0410	24.2370	17.9360	518.2190



Speed - Torque Curve

