

PRODUCT INFORMATION PACKET



Model No: 116190.00

Catalog No: 116190.00

Explosion Proof Motor, 0.50 HP, 3 Ph, 60 Hz, 208-230/460 V, 1800 RPM, 56C Frame, EPFC



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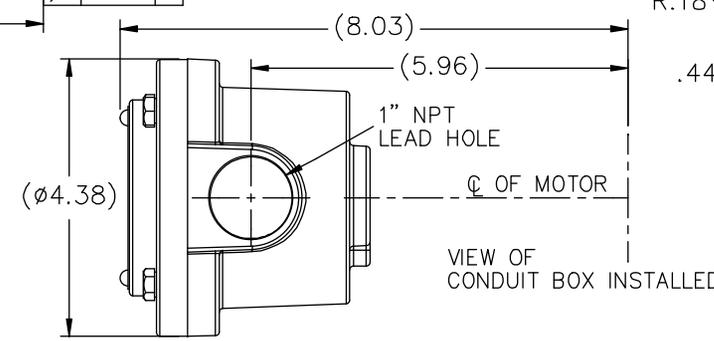
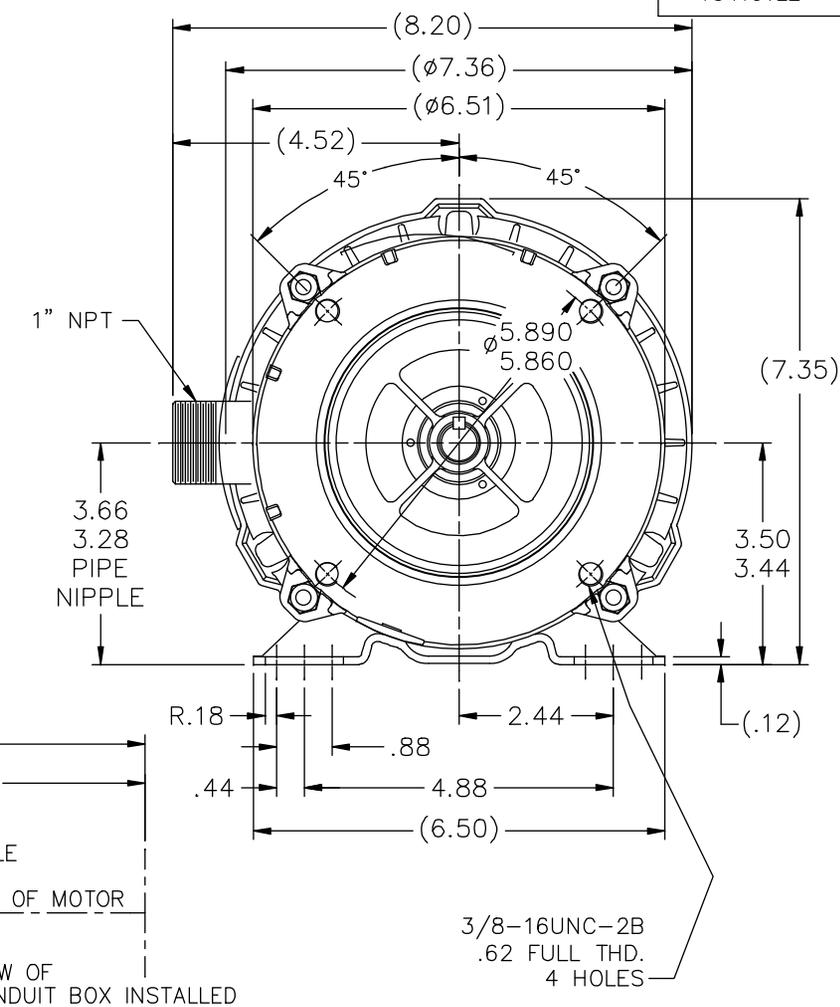
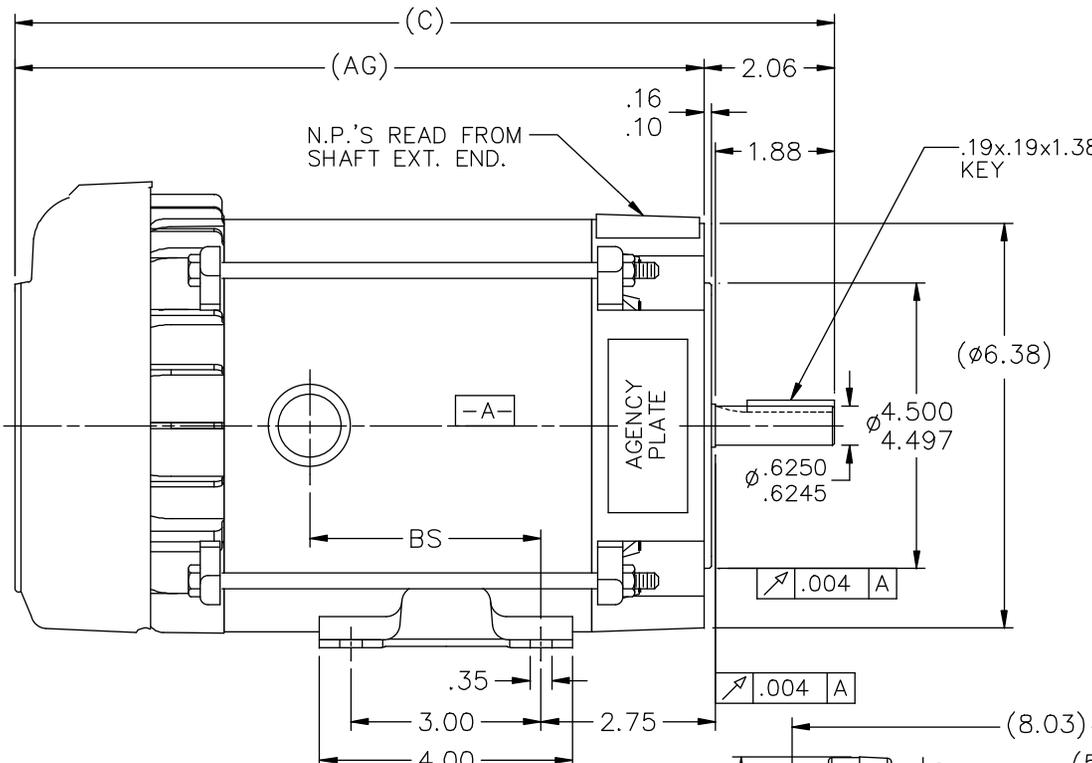


Nameplate Specifications

Output HP	0.50 Hp	Output KW	0.37 kW
Frequency	60 Hz	Voltage	208-230/460 V
Current	2.3-2.4/1.2 A	Speed	1725 rpm
Service Factor	1	Phase	3
Efficiency	68 %	Power Factor	61.1
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	M
Frame	56C	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6203	Opp Drive End Bearing Size	6203
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	40 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	13.44 in
Frame Length	6.31 in	Shaft Diameter	0.625 in
Shaft Extension	1.88 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Connection Drawing	EE7308T-LE	Outline Drawing	104191LE-631

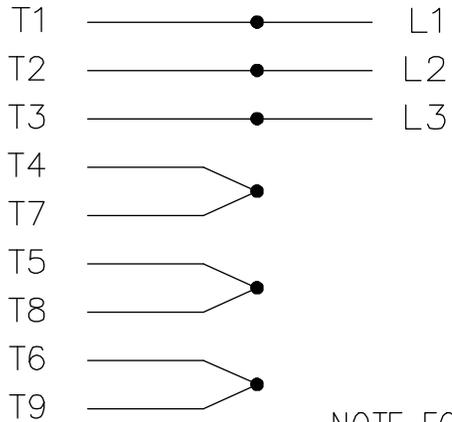


DASH	(C)	(AG)	BS		
631	13.44	11.38	4.15		
681	13.94	11.88	4.65		
731	14.44	12.38	5.15		
781	14.94	12.88	5.65		
831	15.44	13.38	6.15		
881	15.94	13.88	6.65		
931	16.44	14.38	7.15		
981	16.94	14.88	7.65		

		TOLERANCES UNLESS SPECIFIED		LEESON		ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN HLB 05-29-2002		
		DEC.	INCHES					CHK	ML 05-31-2002	
		.X	±.1					APPD	SAS 05-31-2002	
3	COND. BOX INSTALLED VIEW UPDATED PER ECR-0044571	UD	10/15/13	ST	.XX	±.03	TITLE	SCALE	1=2	
2	REVISED C'BOX PER CN 40784A	JJB	02/26/2007	ML	.XXX	±.005	OUTLINE - 'C' FACE	REF		
1	NEW DRAWING	HLB	05-31-2002		.XXXX	±.0005	56 FR. - EXP. PR.	FMF		
NO.	REVISION	BY & DATE	CHK	ANG	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	CAD FILE 104191LE		SIZE	DRAWING NO.	PAGE OF	REV.
				DIST	WP	B	104191LE	3	3	

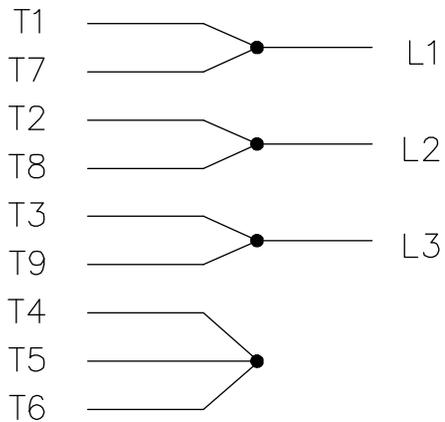
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

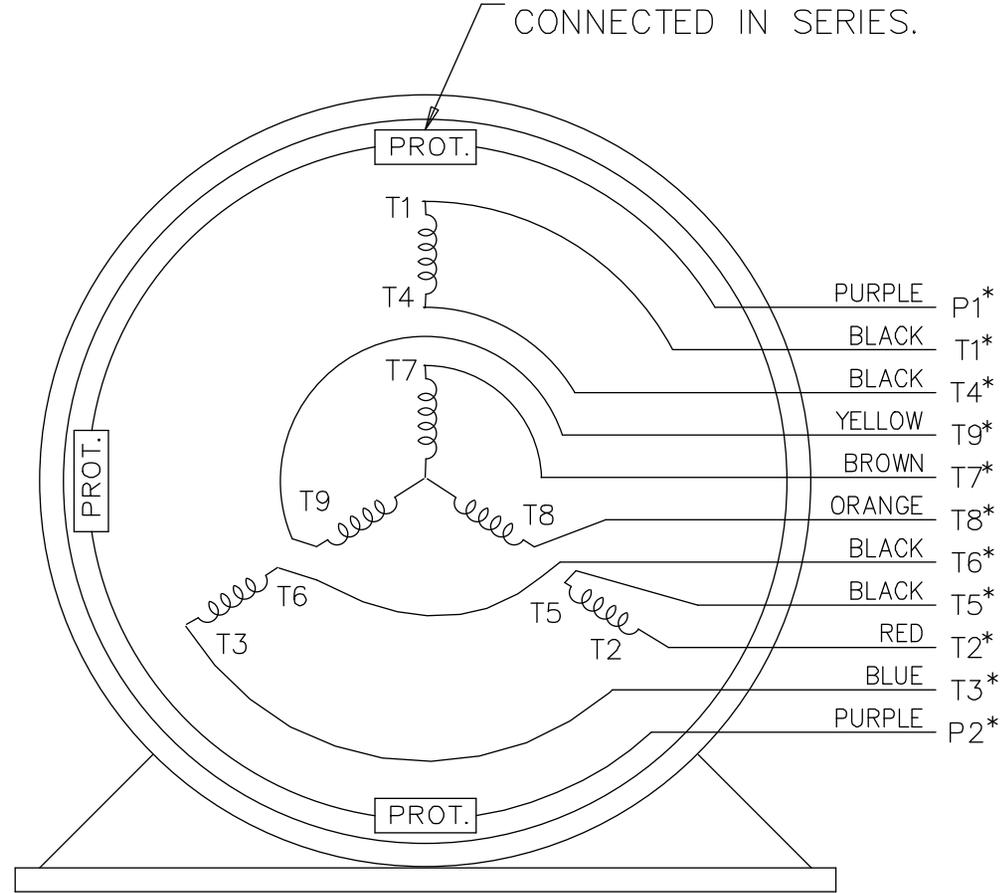


NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1

LOW VOLTAGE



THREMO-PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

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

				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN TJB 05-07-2002		
NO.	REVISION	BY & DATE	CHK	ANG	±		SCALE	1=1	
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD	DEC.	INCHES	TITLE CONNECTION DIAGRAM 3 PHASE - DUAL VOLTAGE MOTOR	CHK	ML 05-08-2002	
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML	.X	±.1		APPD	TB 05-08-2002	
03	RE-ISSUE	NJS 04-21-2004	JET	.XX	±.02		REF		
02	REDRAWN	TAT 04-20-2004	ML	.XXX	±.005		FMF		
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML	.XXXX	±.0005		PREV		
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		DIST	LB-WP-LE			A	EE7308T-LE		05



CERTIFICATION DATA SHEET

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

CATALOG #: 116190.00

CONN. DIAGRAM: EE7308T-LE

OUTLINE: 104191LE-631

WINDING #: ZT408 R8 3

MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

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

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	208-230/460	2.3-2.4/1.2	LINE OR INVERTER	CONTINUOUS	F3	1.0	40

FULL LOAD EFF:	68	3/4 LOAD EFF:	65.5	1/2 LOAD EFF:	63.5	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	61.1	3/4 LOAD PF:	48.5	1/2 LOAD PF:	38	64	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1.5 LB-FT	14 / 7	6.2 LB-FT 413 %	7.2 LB-FT 480 %	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.05 LB-FT^2	3 LB-FT^2	15 SEC.	2	25 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	EXP PROOF CL I GR C&D CL II GR F&G T3C	FALSE	NONE	BLUE - LEESON (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	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 10:1
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: 1/23/2018

116190.00



Data @ 460 V

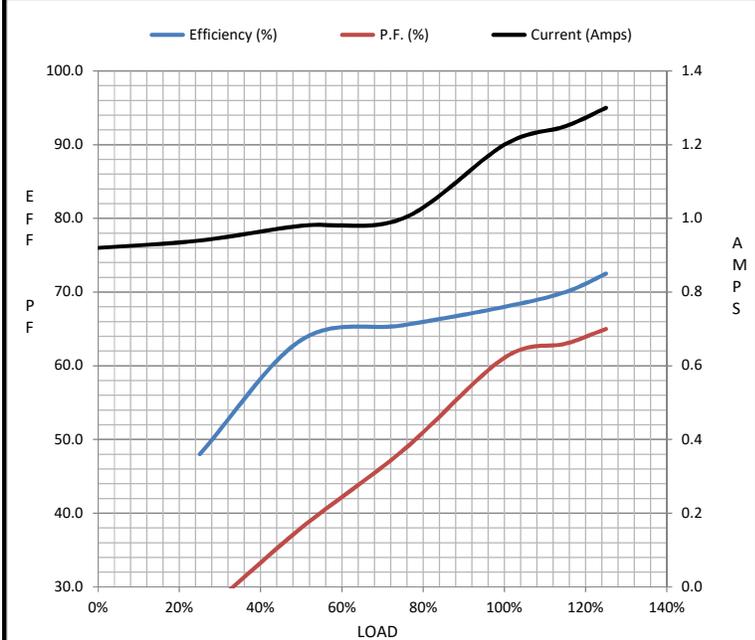
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.92	0.94	0.98	1.00	1.20	1.25	1.30	7.0
Torque (ft-lb)	0.00	0.37	0.74	1.10	1.50	1.80	2.00	6.2
RPM	1800	1785	1775	1750	1725	1.722	1720	0
Efficiency (%)		48.0	63.5	65.5	68.0	70.0	72.5	
P.F. (%)	14.0	26.0	38.0	48.5	61.1	63.0	65.0	82.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	500	1150	1725	1800
Current (Amps)	7.0	6.5	4.8	1.20	0.92
Torque (ft-lb)	6.2	6.2	7.2	1.50	0.00

Information Block				
HP	0.5			
Sync. RPM	1800			
Frame	56			
Enclosure	EPFC			
Construction	TFR			
Voltage	208-230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	M			
Service Factor	1.15			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.05 Lb-Ft ²			
Ref Wdg	ZT408 R8			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	104191LE-631			
Conn. Diag	EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed - Torque Curve

