PRODUCT INFORMATION PACKET

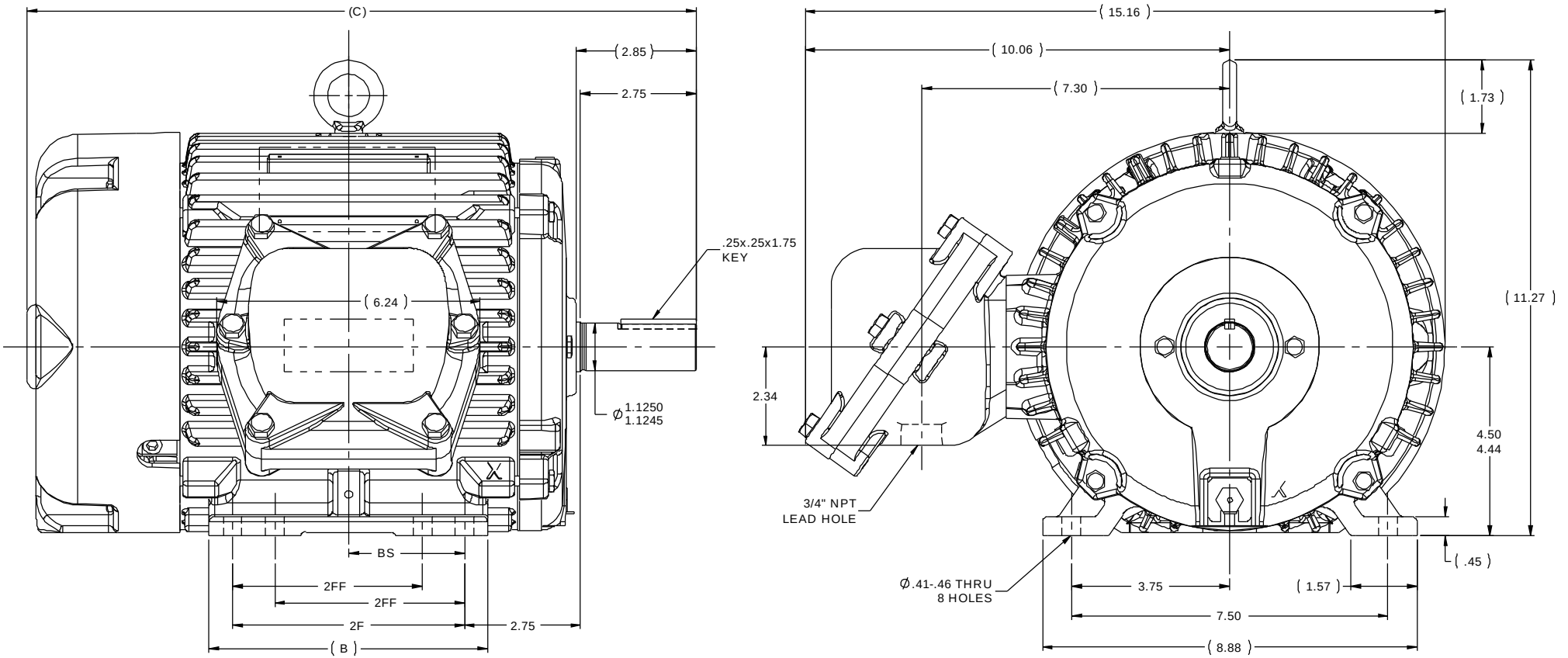
Model No: 825087.00
Catalog No: 825087.00
Explosion Proof Motor, 5 & 3 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 1800 & 1500 RPM, 184T Frame, EPFC

Nameplate Specifications

Phase	3	Output HP	5 & 3 Hp
Output KW	3.7 & 2.2 kW	Voltage	208-230/460 & 190/380 V
Speed	1755 & 1465 rpm	Service Factor	1.15 & 1.15
Frame	184T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	90.2 & 90.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	13.8-12.4/6.2 & 9.6/4.8 A	Power Factor	83.5
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	J
Drive End Bearing Size	206	Opp Drive End Bearing Size	206
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	2.62 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	17.87 in
Frame Length	10.00 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1 Only
Inverter Load	CONSTANT 10:1		
Connection Drawing	A-EE7308T-LE	Outline Drawing	035660LE-1000



NOTES:
1. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
2. CONDUIT BOX CAN ROTATED IN 90° STEPS.
3. CONDUIT BOX CAN MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORIGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ. TITLED "MOTORS AND GENERATORS REBUILT FOR USE IN HAZARDOUS LOCATIONS."

1000	184	17.87	8.61	7.50	5.50	3.75
800	182/184	15.87	6.61	5.50	4.50	2.75
DASH	FRAME	C	B	2F	2FF	BS

NO	REVISION	BY & DATE	CHK
01	FRAME & BS DIM. 1000DSH WAS 182/184 & 2.75 RESP.	PVR 7/11/2012	AK

TOLERANCES UNLESS SPECIFIED
DEC INCHES
.X ±.1
.XX ±.03
.XXX ±.005
.XXXX ±.0005
ANG ±7'30"

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE OUTLINE - EPFC
180 FR.
MAT'L
FINISH
RFP
CAD FILE 035660LE
DIST WA - NLV

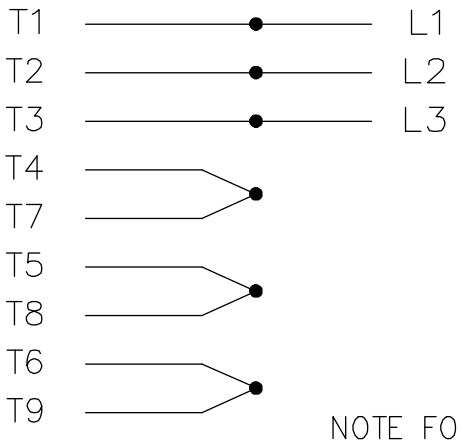
DRAWN ST 8-25-2009
CHK VV 8-25-2009
APPR
SCALE 7:16
REF 035660.00
FMF
PREV

SIZE B
DRAWING NO 035660LE
REV 01

EE7308T-LE

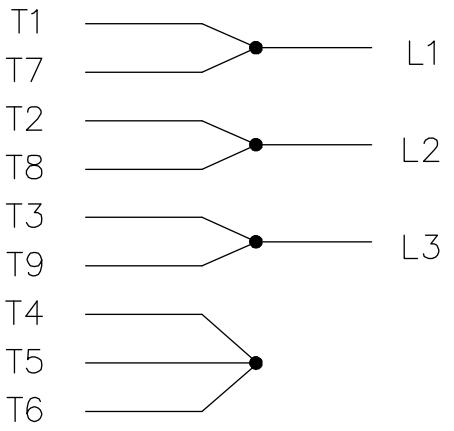
THREE PHASE
DUAL VOLTAGE MOTOR

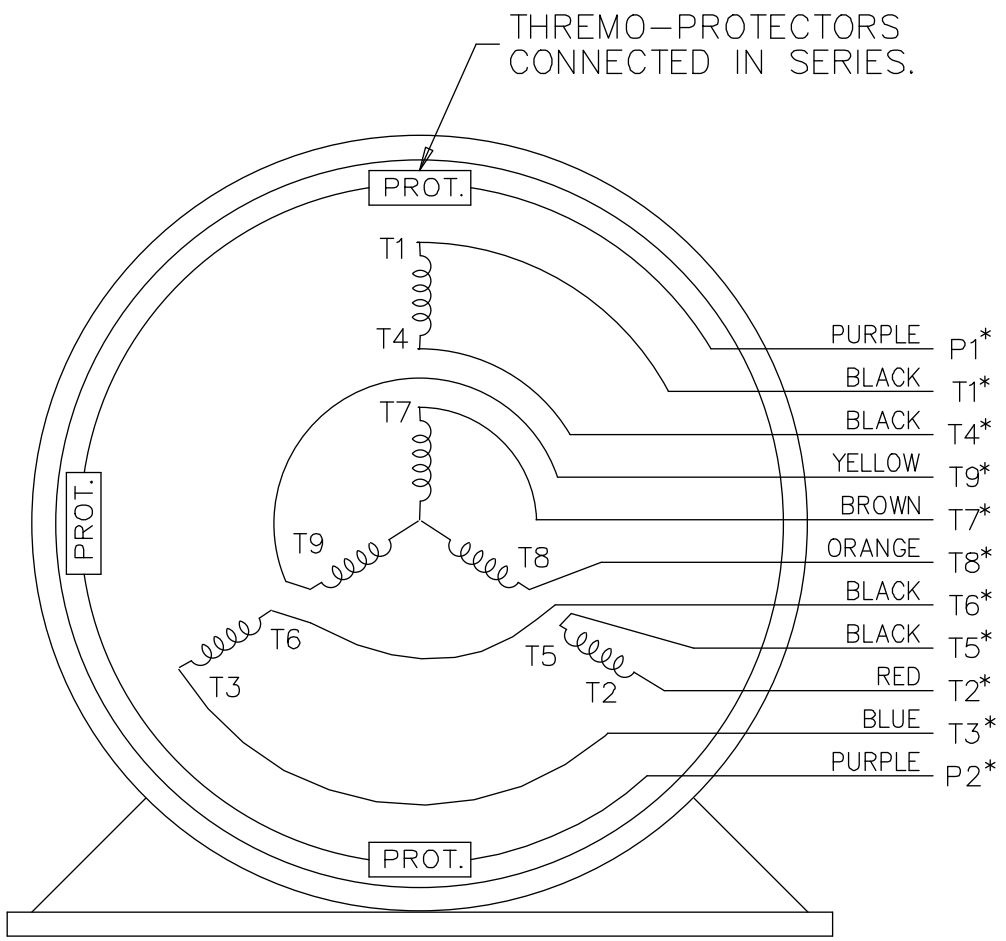
HIGH VOLTAGE



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





VIEW OF TERMINAL END

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

NO.	REVISION	BY & DATE	CHK
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML
03	RE-ISSUE	NJS 04-21-2004	JET
02	REDRAWN	TAT 04-20-2004	ML
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE CONNECTION DIAGRAM
3 PHASE – DUAL VOLTAGE MOTOR

MAT'L.

FINISH

RFP

CAD FILE EE7308T_LE

DIST LB-WP-LE

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

SIZE	DRAWING NO. PAGE OF	REV.
A	EE7308T-LE	05

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

CERTIFICATION DATA SHEET

CATALOG #: 825087.00

CONN. DIAGRAM: A-EE7308T-LE

OUTLINE: 035660LE-1000

MOUNTING: F1 ONLY

WINDING #: K1844215 1

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5&3	3.70&2.24	1800	1755&1465	184T	EPFC	J	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	13.8-12.4/6.2&9.6/4.8	LINE OR INVERTER	CONTINUOUS	B3	1.15/1.15	40

FULL LOAD EFF:	90.2&90.2	3/4 LOAD EFF:	90.2	1/2 LOAD EFF:	90.2	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	83.5&79	3/4 LOAD PF:	78.5	1/2 LOAD PF:	70	89.5	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
15 LB-FT	92 / 46	34.5 LB-FT 230 %	45 LB-FT 300 %	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.5 LB-FT^2	50 LB-FT^2	25 SEC.	2	130 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR C&D CL II GR F&G T3B	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)	CAST IRON
206	206						

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

*

NOTE

INVERTER TORQUE: CONSTANT 10:1
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: 1/22/2018

825087.00

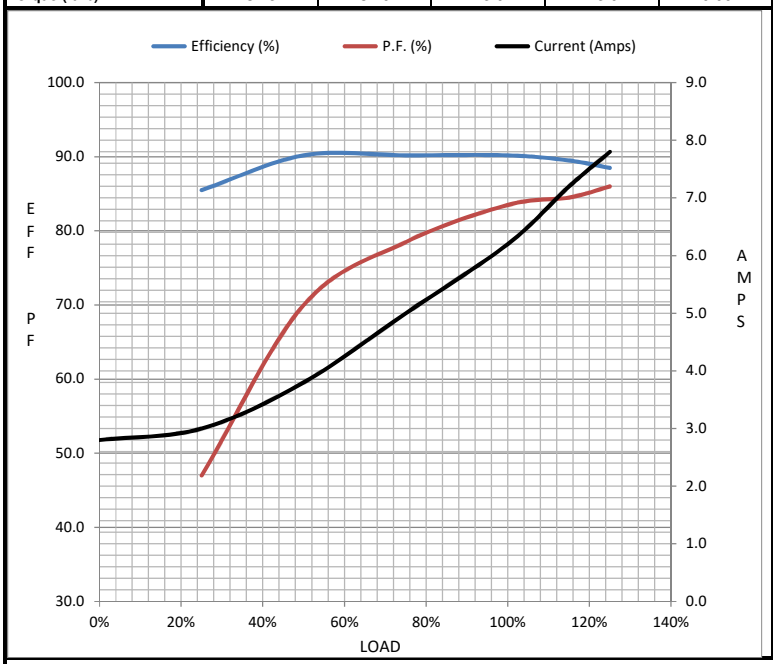
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.80	3.0	3.8	5.0	6.2	7.2	7.8	46.0	
Torque (ft-lb)	0.00	3.7	7.4	11.5	15.0	17.5	19.0	34.5	
RPM	1800	1790	1780	1765	1755	1,745	1740	0	
Efficiency (%)		85.5	90.2	90.2	90.2	89.5	88.5		
P.F. (%)	6.5	47.0	70.0	78.5	83.5	84.5	86.0	48.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1755	1800
Current (Amps)	46.0	41.0	25.0	6.2	2.80
Torque (ft-lb)	34.5	31.0	45.0	15.0	0.00



Information Block

HP	5.0	
Sync. RPM	1800	
Frame	184	
Enclosure	TEFC	
Construction	TFN	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	J	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.50	Lb-Ft²
Ref Wdg	K1844215 NONE	
Sound Pressure @ 1M	62	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	035660LE-1000	
Conn. Diag	A-EE7308T-LE	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
1.5080	1.1280	3.6910	5.6930	104.3280

Speed -Torque Curve