PRODUCT INFORMATION PACKET

Model No: 121917.00
Catalog No: 121917.00
Explosion Proof Motor, 2 & 1.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 145T Frame, EPFC

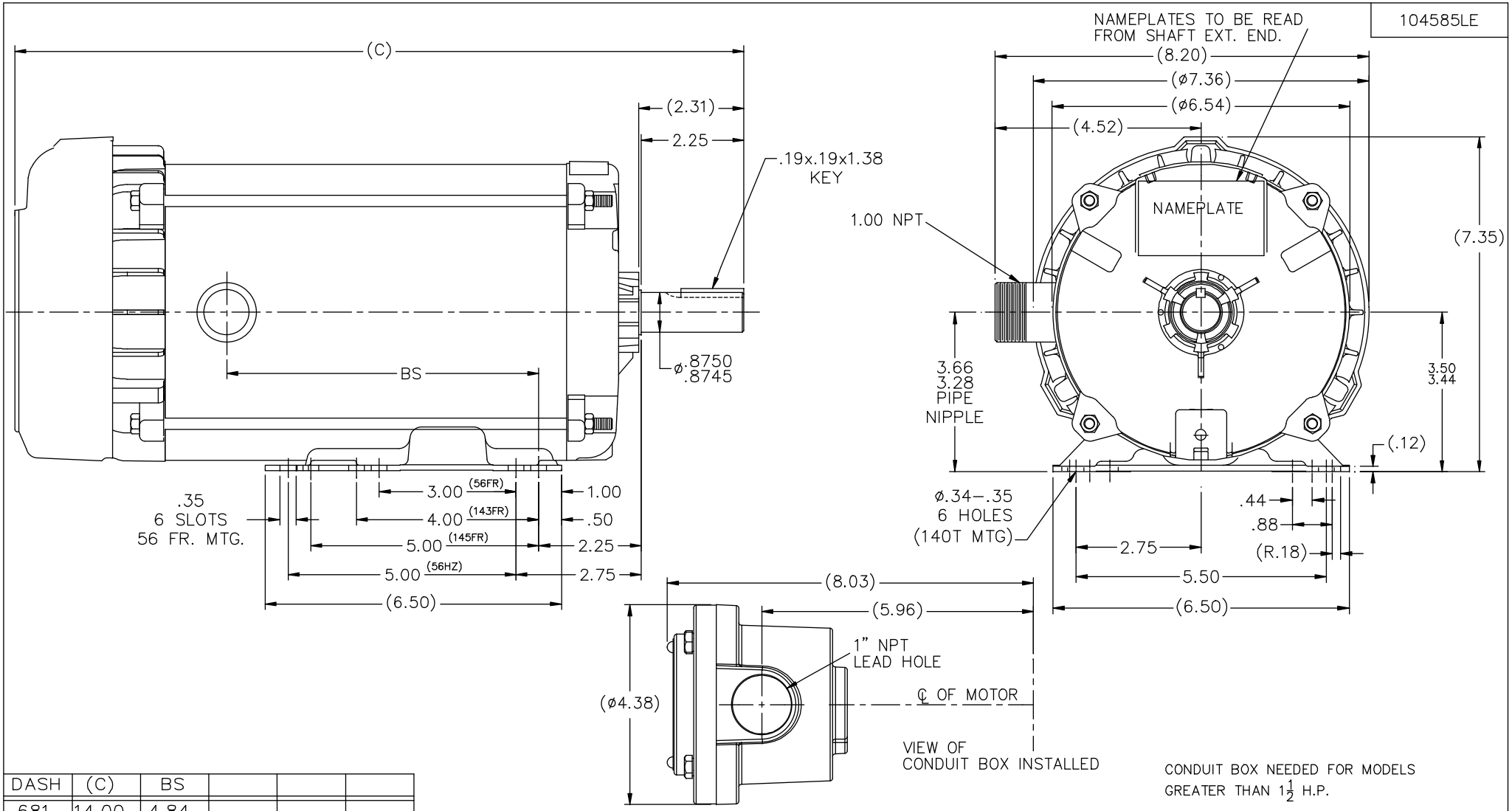
Nameplate Specifications

Phase	3	Output HP	2 & 1.50 Hp
Output KW	1.5 & 1.1 kW	Voltage	230/460 & 190/380 V
Speed	1760 & 1460 rpm	Service Factor	1.0 & 1.0
Frame	145T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Automatic	Efficiency	86.5 & 85.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	6/3 & 5.8/2.9 A	Power Factor	71
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	N
Drive End Bearing Size	205	Opp Drive End Bearing Size	203
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 Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Mounting	Rigid Base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Rolled Steel	Shaft Type	T
Overall Length	16.50 in	Frame Length	9.31 in
Shaft Diameter	0.875 in	Shaft Extension	2.25 in
Assembly/Box Mounting	F1 ONLY		
Connection Drawing	EE7335-LE	Outline Drawing	104585LE-931

104585LE



CONDUIT BOX NEEDED FOR MODELS GREATER THAN $1\frac{1}{2}$ H.P.

DASH	(C)	BS			
681	14.00	4.84			
731	14.50	5.34			
781	15.00	5.84			
831	15.50	6.34			
881	16.00	6.84	SHOWN		
931	16.50	7.34			
981	17.00	7.84			

NO.	REVISION	BY & DATE	CHK
1	COND. BOX INSTALLED VIEW UPDATED PER ECR-0044571	UD 10/17/13	ST

TOLERANCES UNLESS SPECIFIED

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

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE OUTLINE
140 FR. – EXP. PR. – TEFC – 1ø & 3ø

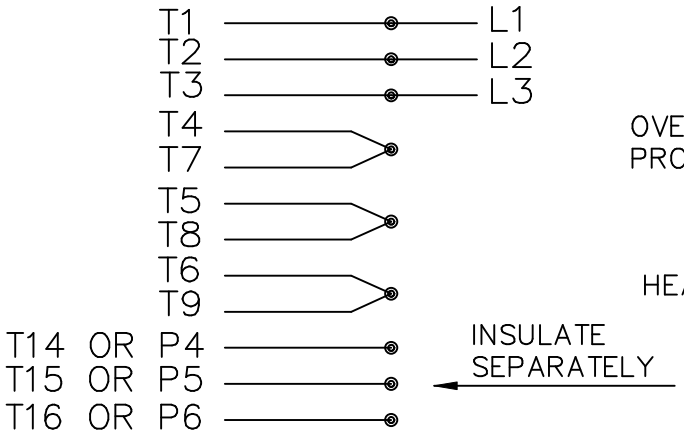
MAT'L.
FINISH
CAD FILE 104585LE
RFP 06–22–2007
DIST WP

DRAWN RJW 06–22–2007
CHK ML 06–22–2007
APPD GK 06–22–2007
SCALE 1=2
REF
FMF
PREV

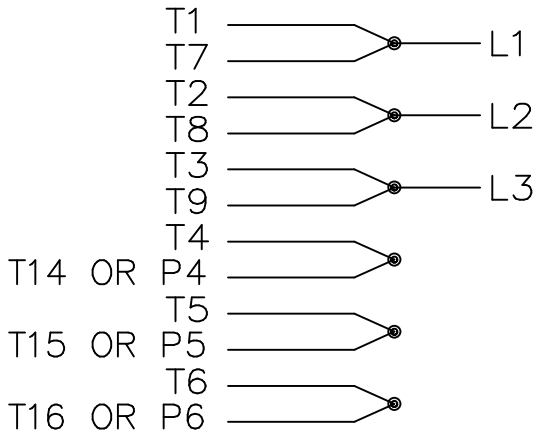
SIZE B | DRAWING NO. 104585LE | PAGE OF | REV. 1

EE7335-LE

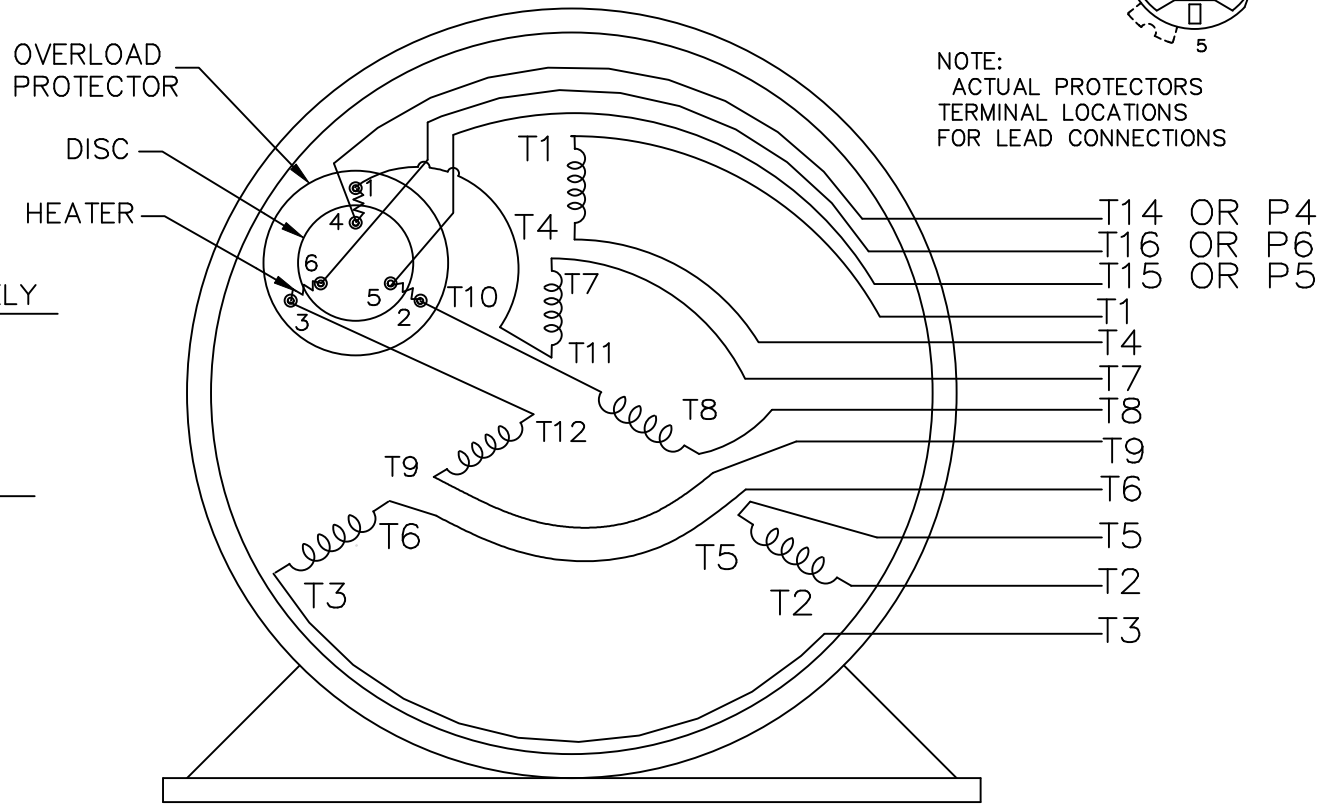
HIGH VOLTAGE CONNECTIONS

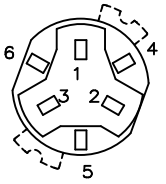


LOW VOLTAGE CONNECTIONS



THREE PHASE – DUAL VOLTAGE MOTOR WITH OVERLOAD PROTECTOR





NOTE:
ACTUAL PROTECTORS TERMINAL LOCATIONS FOR LEAD CONNECTIONS

VIEW OF TERMINAL END

T2K
T4D
T6AN

NO.	REVISION	BY & DATE	CHK

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	± –
.XX	± –
.XXX	± –
.XXXX	± –
ANG	± –

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE CONNECTION DIAGRAM
3Ø– DUAL VOLTAGE W/OVERLOAD PROTECTOR

MAT'L.
FINISH
CAD FILE EE7335_LE

RFP 04–20–2005
DIST WP

DRAWN	NJS 04–20–2005
CHK	ML 04–20–2005
APPD	MJS 04–20–2005
SCALE	
REF	
FMF	
PREV	

SIZE A | DRAWING NO. EE7335–LE | PAGE OF | REV.

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P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7335-LE **CAT #:** 121917.00
OUTLINE: 104585LE-931
WINDING: ZT4255 FR 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
2	1.5	1800	1760	145T	TEFC	TFR	N	A

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	6/3&5.8/2.9	ACROSS THE LINE	CONT	B	1.15	40	3300

F.L. EFF	86.5	**3/4 LD EFF**	86.5	**1/2 LD EFF**	85.5	**GTD EFF**	**ELECT. TYPE**
F.L. PF	71.0	**3/4 LD PF**	62.0	**1/2 LD PF**	49.0	84.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
6.0 **LB-FT**	30.5	24.5 **LB-FT** 408%	33.2 **LB-FT** 553%	45	

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 **dBA**	71 **dBA**	0.14 **LB-FT²**	12 **LB-FT²**	15 **SEC.**	2	65 **LB.**

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	DF CL I GR C&D CL II GF	NO	NONE	JE - LEESON (ENAM

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 205	BALL 203	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	AUTOMATIC	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
3.962	3.01	5.751	5.936	160.346	0.150	ODE

*
NOTES
*

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**
UL: Y-(LEESON UL REC)

DATE: 1/31/2018

Data Sheet

Date: 1/31/2018

121917.00

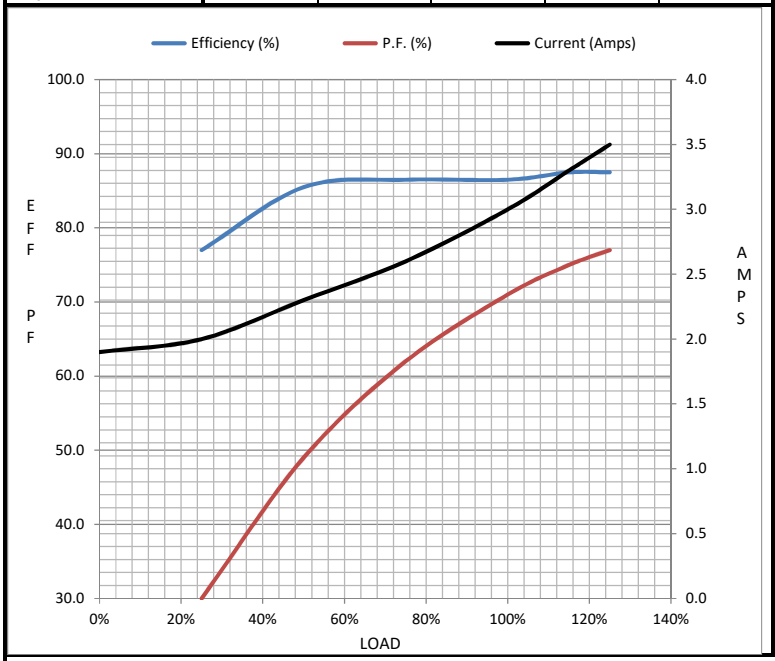
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.90	2.00	2.30	2.60	3.0	3.3	3.5	30.5	
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.9	7.5	24.5	
RPM	1800	1790	1780	1770	1760	1,755	1750	0	
Efficiency (%)		77.0	85.5	86.5	86.5	87.5	87.5		
P.F. (%)	7.0	30.0	49.0	62.0	71.0	75.0	77.0	71.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	115	1200	1760	1800
Current (Amps)	30.5	29.5	19.5	3.0	1.90
Torque (ft-lb)	24.5	23.7	33.2	6.0	0.00



Information Block

HP	2.0	
Sync. RPM	1800	
Frame	145	
Enclosure	TEFC	
Construction	TFR	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	A	
LR Code letter	N	
Service Factor	1.15	
Temp Rise @ FL	45	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.14	Lb-Ft²
Ref Wdg	ZT4255 FR	
Sound Pressure @ 1M	62	dBA
VFD Rating	NONE	
Outline Dwg	104585LE-931	
Conn. Diag	EE7335-LE	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
3.9620	3.0100	5.7510	5.9360	160.3460

Speed -Torque Curve