PRODUCT INFORMATION PACKET

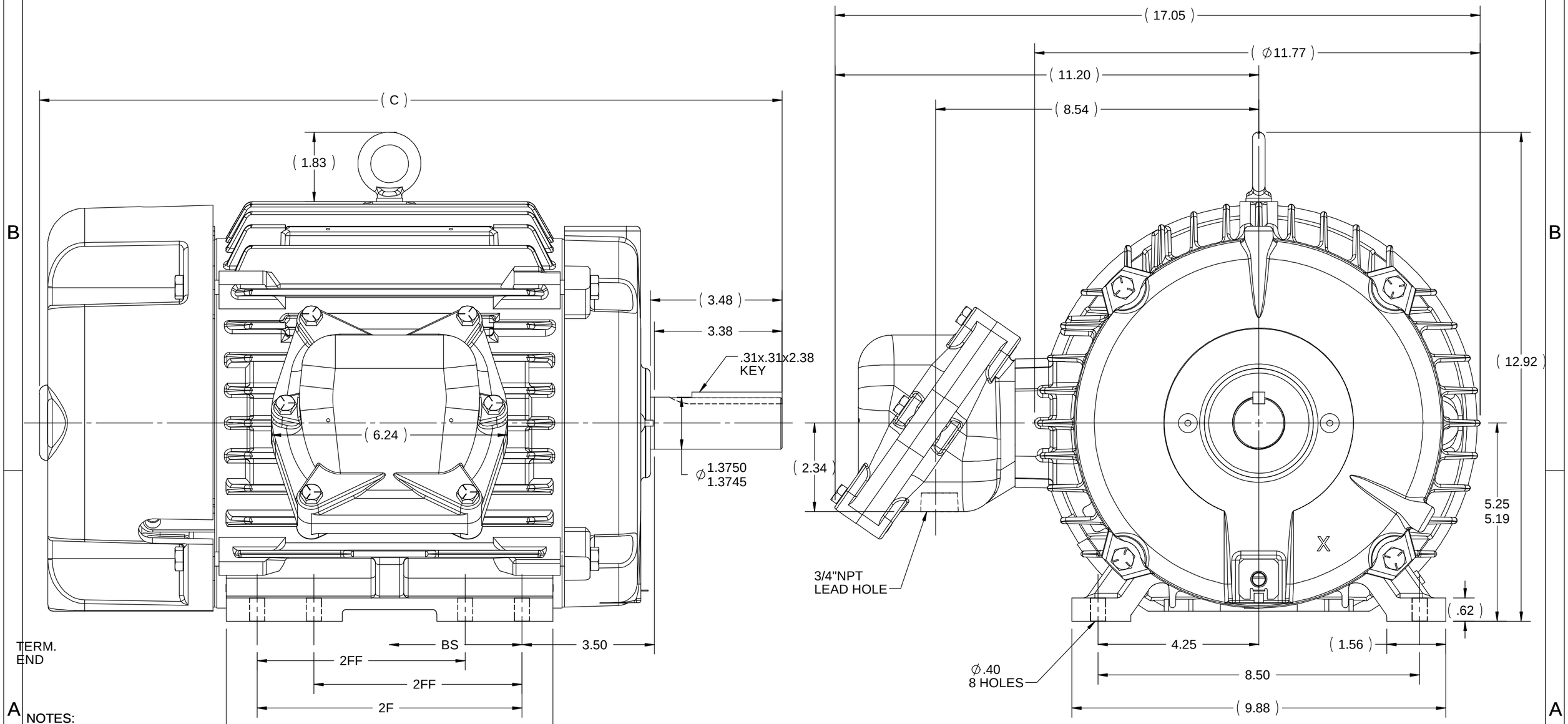
Model No: 825090.00
Catalog No: 825090.00
Explosion Proof Motor, 10 & 7.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 215T Frame, EPFC

Nameplate Specifications

Phase	3	Output HP	10 & 7.50 Hp
Output KW	7.5 & 5.6 kW	Voltage	230/460 & 190/380 V
Speed	3535 & 2950 rpm	Service Factor	1.15 & 1.15
Frame	215T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	91.7 & 92 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	23.6/11.8 & 21/10.5 A	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	307	Opp Drive End Bearing Size	208
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	2	Rotation	Reversible
Resistance Main	.8 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	22.63 in
Frame Length	12.12 in	Shaft Diameter	1.375 in
Shaft Extension	3.38 in	Assembly/Box Mounting	F1 Only
Inverter Load	CONSTANT 10:1		
Connection Drawing	A-EE7308T-LE	Outline Drawing	037660LE-1212



NOTES:

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

DASH	FRAME	C	B	2F	2FF	BS
1212	215	22.63	11.76	10	7	5
912	213/215	19.63	8.63	7	5.5	3.5

DRAWING REVISION	REVISION BY	DATE
D	MVG	11/01/2017
ECO	APPROVED BY	DATE
ECO-0133986	ST	11/01/2017

ECO DESCRIPTION
REMOVED 213 IN DASH # 1212

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 [.076/.381] X 45 °
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 / INCH 5.1 / mm
mm SHOWN IN [BRACKETS]

DRAWN BY	AK
DATE	10/28/2009
APPROVED BY	SK
DATE	10/28/2009
REFERENCE	SS84370
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
210 FR.EPFC

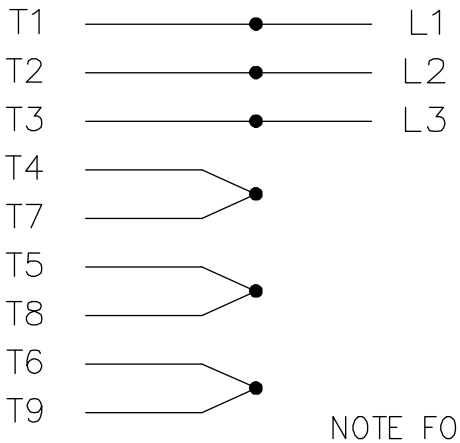
MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
B	037660LE	1 OF 1

EE7308T-LE

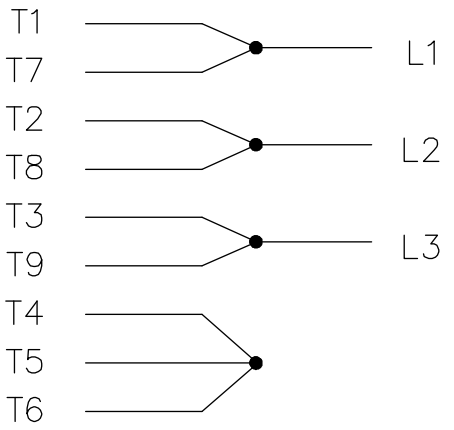
THREE PHASE DUAL VOLTAGE MOTOR

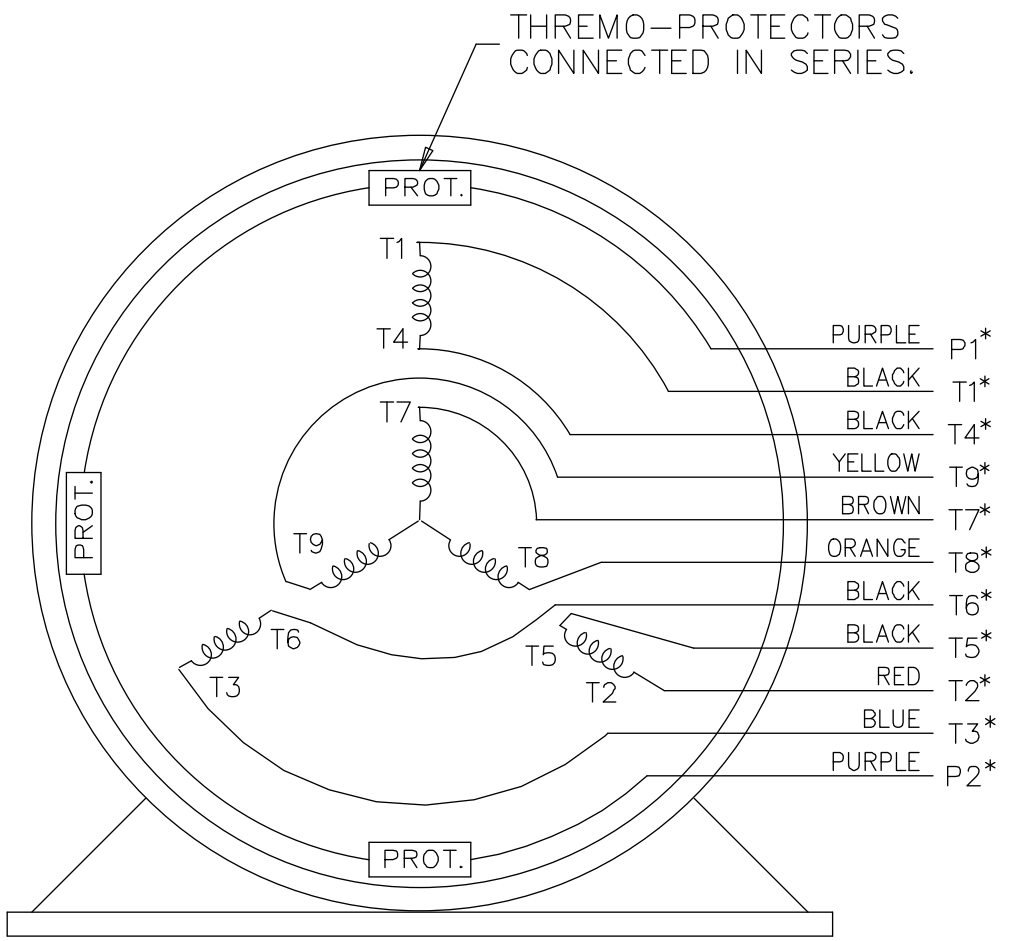
HIGH VOLTAGE



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

LEESON

CERTIFICATION DATA SHEET

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

CATALOG #: 825090.00

CONN. DIAGRAM: A-EE7308T-LE

OUTLINE: 037660LE-1212

MOUNTING: F1 ONLY

WINDING #: K215295 6

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10&7 1/2	7.50&5.60	3600	3535&2950	215T	EPFC	H	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	23.6/11.8&21/10.5	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	91.7&92	3/4 LOAD EFF:	92.4	1/2 LOAD EFF:	91.7	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	87&88.5	3/4 LOAD PF:	86	1/2 LOAD PF:	78.5	91	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
14.9 LB-FT	160 / 80	30 LB-FT 201 %	46 LB-FT 309 %	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.68 LB-FT^2	18 LB-FT^2	15 SEC.	2	230 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	1045 HOT ROLLED (C-204)	CAST IRON
307	208						

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

*

N

O

T

E

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

8/6/2018

Data Sheet

Date: 1/22/2018

LEESON

825090.00

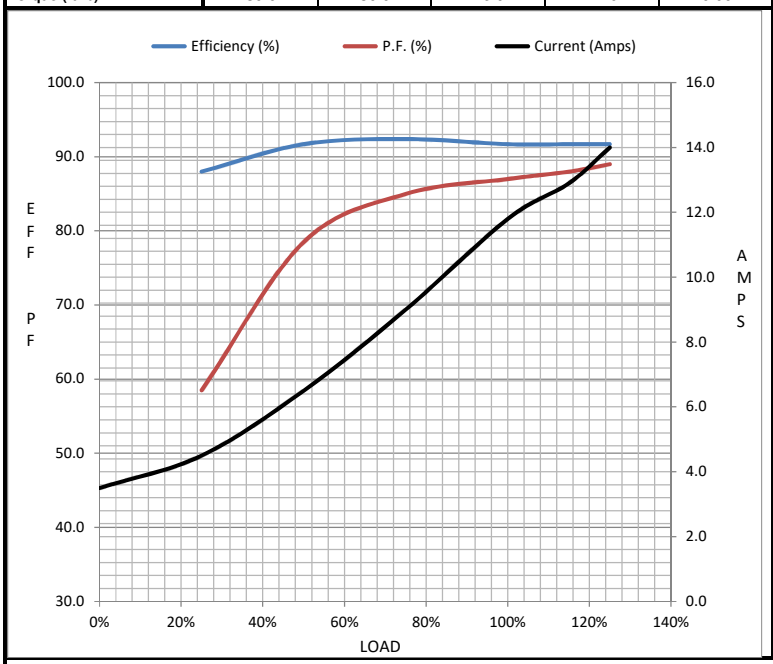
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.5	4.5	6.5	9.0	11.8	12.9	14.0	80.0	
Torque (ft-lb)	0.00	3.5	7.5	11.0	14.9	16.7	18.5	30.0	
RPM	3600	3585	3570	3555	3535	3,531	3525	0	
Efficiency (%)		88.0	91.7	92.4	91.7	91.7	91.7		
P.F. (%)	8.5	58.5	78.5	85.0	87.0	88.0	89.0	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	2000	3175	3535	3600
Current (Amps)	80.0	76.0	50.0	11.8	3.5
Torque (ft-lb)	30.0	30.0	46.0	14.9	0.00



Information Block

HP	10.0	
Sync. RPM	3600	
Frame	215	
Enclosure	TEFC	
Construction	TFN	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	H	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.68	Lb-Ft²
Ref Wdg	K215295 C	
Sound Pressure @ 1M	72	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	037660LE-1212	
Conn. Diag	A-EE7308T-LE	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.5230	0.3980	1.8060	2.0620	72.1360

Speed -Torque Curve