

# PRODUCT INFORMATION PACKET



Model No: 824585.00  
Catalog No: 824585.00  
25 HP Definite Purpose HVAC HVAC/R Motor, 3 phase, 1200 RPM, 460 V, 324T Frame, TEAO  
Definite Purpose Motors



Regal and Leeson are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2021 Regal Rexnord Corporation, All Rights Reserved. MC017097E





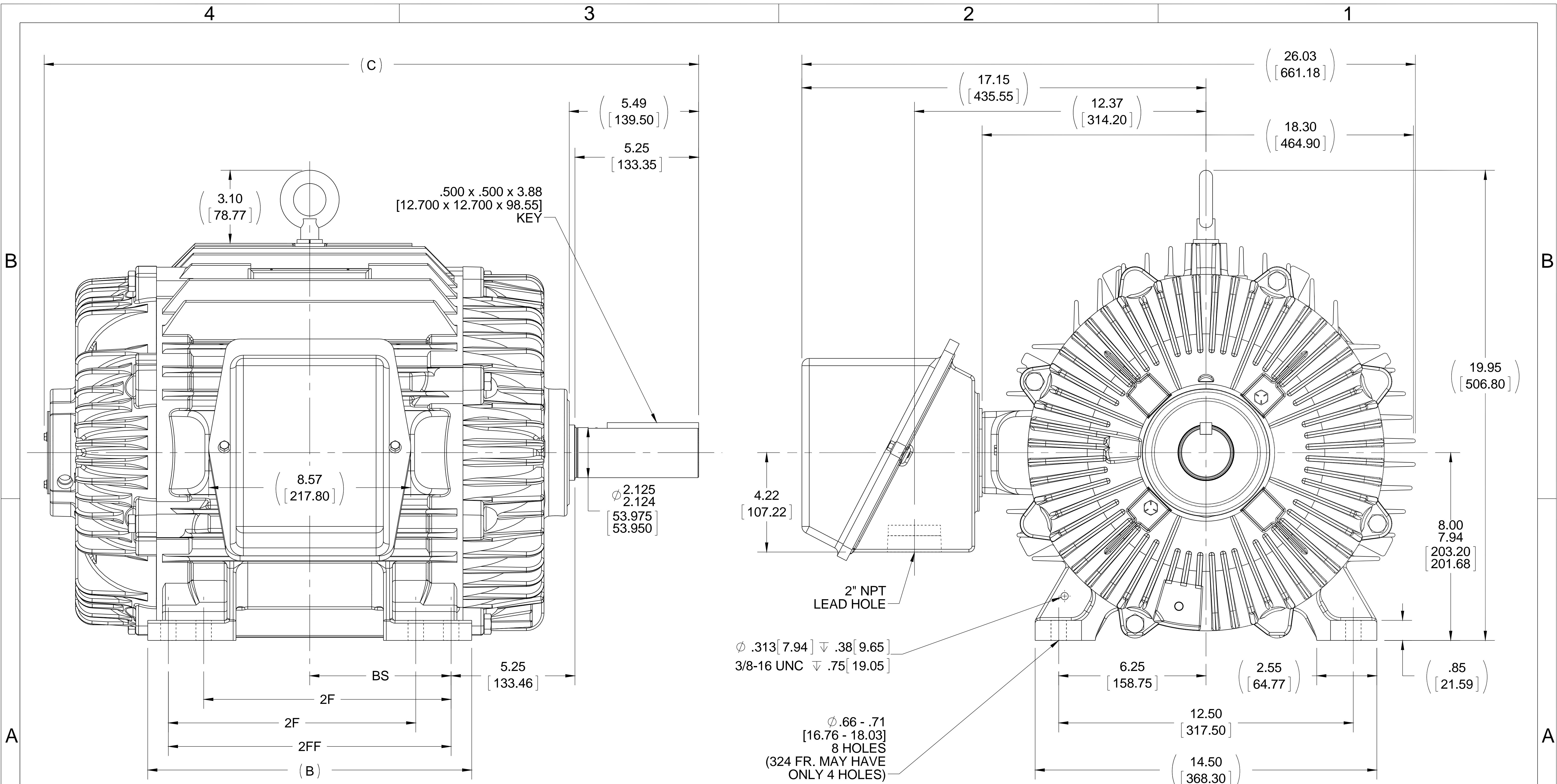
**Nameplate Specifications**

Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>32.5 A</b>	Speed	<b>1182 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93 %</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>324T</b>	Enclosure	<b>Totally Enclosed Air Over</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>90 °C</b>
Drive End Bearing Size	<b>6312</b>	Opp Drive End Bearing Size	<b>6311</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>		

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.255 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball / Heat Stabilized</b>
Opp Drive End Bearing	<b>Ball / Heat Stabilized</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>27.77 in</b>
Frame Length	<b>13.00 in</b>	Shaft Diameter	<b>2.125 in</b>
Shaft Extension	<b>5.25 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>VARIABLE 20:1</b>		
Outline Drawing	<b>B-SS301011-1300</b>	Connection Drawing	<b>A-EE7300T-LE</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:10/07/2021



- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
1150	324T	13.00 [330.20]	26.27 [667.26]	---	10.50 [266.70]	5.25 [133.35]
1300	324T/ 326T	13.75 [349.25]	27.77 [705.36]	10.50 [266.70]	12.00 [304.80]	6.00 [152.40]

DRAWING REVISION F	REVISION BY J. OTTO	DATE 06-27-2016
ECO ECO-0102388	APPROVED BY T. VUE	DATE 06-28-2016
ECO DESCRIPTION NMR-0106886, MU123088		
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>		

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 [0.076/.381] X 45°  
 CORNER FILLETS: R.02 [51]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm SHOWN IN [BRACKETS]

DRAWN BY CAV
DATE 08-29-2000
APPROVED BY DD
DATE 08-30-2000
REFERENCE
THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
**OUTLINE**  
320T FR. - TEAO - TENV - 14.25 LAM.

MATERIAL PROCESS/FINISH

SIZE **B** DRAWING NUMBER **SS301011** SHEET 1 OF 1

THREE PHASE - SINGLE VOLTAGE MOTOR  
CONDUIT BOX @ 'A'

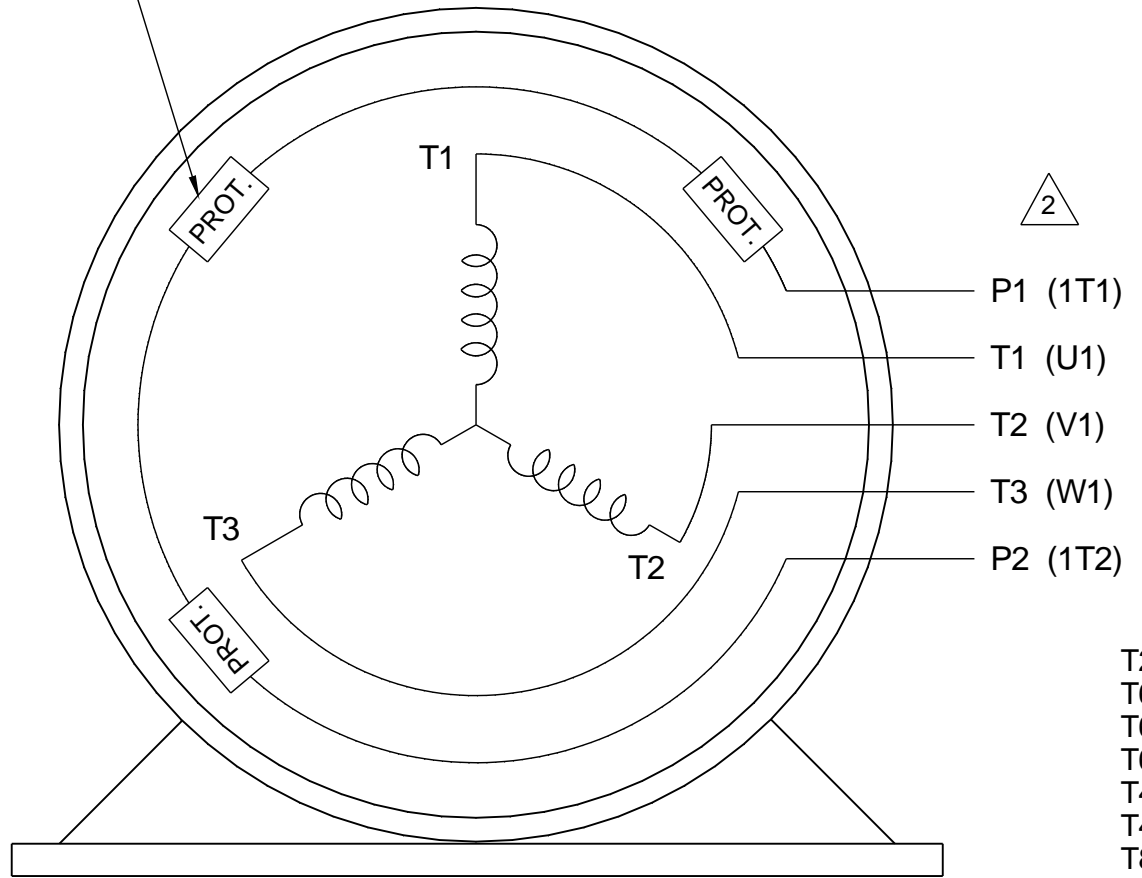
3 THERMO - PROTECTORS  
CONNECTED IN SERIES

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS

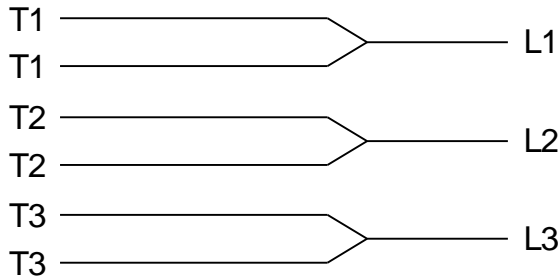
**NOTE FOR FACTORY USE ONLY:**

TO SURGE TEST:

FOR 3 LEAD COMMON CONNECT:  
CONNECT P1 TO T1, THEN P2 TO L1  
FOR 6 LEAD COMMON CONNECT:  
CONNECT P1 TO BOTH T1  
THEN P2 TO L1



IF MOTOR HAS MULTIPLE T'S PER LEAD  
CONNECT TOGETHER LIKE T'S

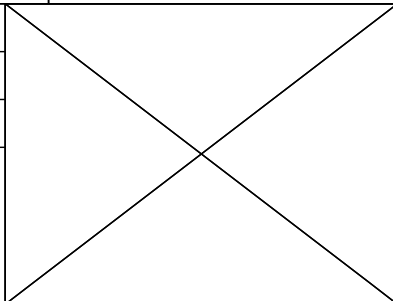


A-9806 DECAL

- T2BM
- T6AW
- T6AL
- T6Z
- T4EG
- T4BF
- T8A
- T6H
- T6A
- T4AX
- T4A
- T2A
- T2F

VIEW OF TERMINAL END

DRAWING REVISION E	REVISION BY MSG	DATE 10-19-2016
ECO ECO-0111093	APPROVED BY TB	DATE 10-19-2016
ECO DESCRIPTION REDRAWN - REVISED TEXT		
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ('OWNER') AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>		



DRAWN BY NJS
DATE 05-15-2002
APPROVED BY ML
DATE 05-20-2002
REFERENCE
THIRD ANGLE PROJECTION



ELECTRIC MOTORS  
GEARMOTORS  
AND DRIVES

DESCRIPTION <b>CONNECTION DIAGRAM</b>	
3 PHASE - SINGLE VOLT - MOTOR WITH PROTECTORS	
MATERIAL	PROCESS/FINISH
SIZE A	DRAWING NUMBER EE7300T-LE
SHEET 1 OF 1	

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



DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7300T-LE  
 OUTLINE: B-SS301011-1300  
 WINDING: 324691

CAT #: 824585.00

NONE 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1200	1182	324T	TEAO	TTN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	32.5	LINE OR INVERTER	CONT	H	1.15	90	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE
F.L. PF	78.0	3/4 LD PF	73.0	1/2 LD PF	62.0	92.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
112 LB-FT	182	165 LB-FT 147%	270 LB-FT 241%	0

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
999 dBA	1008 dBA	8.4 LB-FT²	425 LB-FT²	20 SEC.	2	625 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	UM SEVERE	NONE	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
6312	6311	DC 44M	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS CLH (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.176	0.136	1.046	1.305	18.115	0.080	ODE

* N O T E S *	INVERTER TORQUE: VARIABLE 20:1 INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE					
	NONE					
	NONE PPR					

DATE: 1/24/2018	BRAKE: NONE					
	NONE					
	NONE					
FT-LB: NA						
VOLTAGE: NONE						
HZ:						
UL: Y-(LEESON UL REC)						

Data Sheet

Date: 1/24/2018

824585.00



Data @ **460 V**

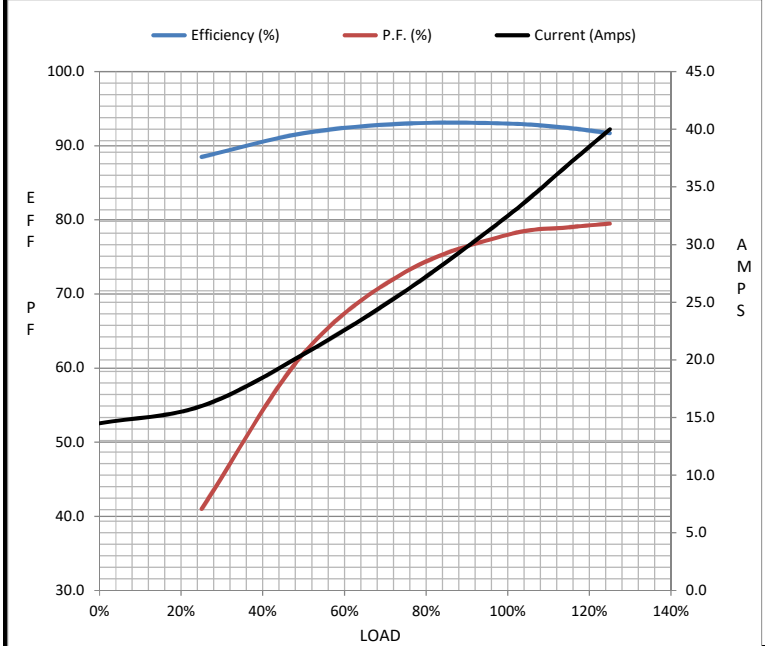
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	14.5	16.0	20.5	26.0	32.5	37.0	40.0	182
Torque (ft-lb)	0.00	27.5	55.0	83.5	112	128	140	165
RPM	1200	1195	1190	1188	1182	1,178	1175	0
Efficiency (%)		88.5	91.7	93.0	93.0	92.4	91.7	
P.F. (%)	4.5	41.0	62.0	73.0	78.0	79.0	79.5	28.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1100	1182	1200
Current (Amps)	182	168	110	32.5	14.5
Torque (ft-lb)	165	190	270	112	0.00

Information Block				
HP	25.0			
Sync. RPM	1200			
Frame	324			
Enclosure	TEAO			
Construction	TTN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	0 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	8.4 Lb-Ft <sup>2</sup>			
Ref Wdg	324691 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 20:1			
Outline Dwg	B-SS301011-1300			
Conn. Diag	A-EE7300T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1760	0.1360	1.0460	1.3050	18.1150



Speed - Torque Curve

