

# PRODUCT INFORMATION PACKET



Model No: 824581.00  
Catalog No: 824581.00  
15 HP Definite Purpose HVAC HVAC/R Motor, 3 phase, 1800 RPM, 460 V, 254T Frame, TEAO  
Definite Purpose Motors



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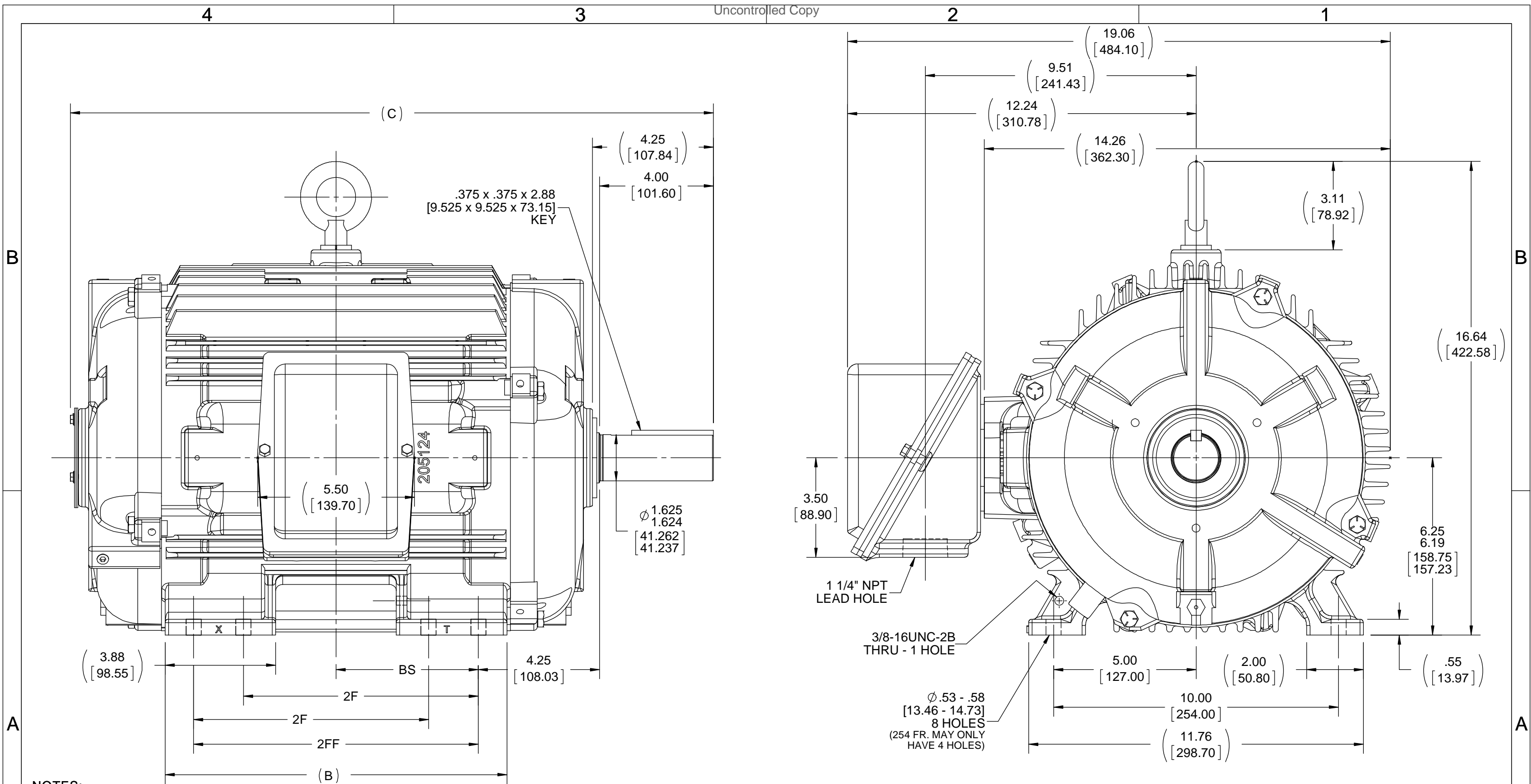
### Nameplate Specifications

Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>18.2 A</b>	Speed	<b>1770 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>92.4 %</b>	Power Factor	<b>83</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>254T</b>	Enclosure	<b>Totally Enclosed Air Over</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>90 °C</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6210</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>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.6 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>20.83 in</b>
Frame Length	<b>10.50 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>4 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>VARIABLE 20:1</b>		
Connection Drawing	<b>A-EE7300T-LE</b>	Outline Drawing	<b>B-SS203092-1050</b>

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- NOTES:**
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
  2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
  3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
  4. DIMENSIONS IN [ ] ARE IN MILLIMETERS.

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	20.83 [529.08]	8.25 [209.55]	---	4.12 [104.65]
1225	254/256T	12.00 [304.80]	22.58 [573.53]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION D	REVISION BY JJB	DATE 09-20-2017
ECO ECO-0130892	APPROVED BY DJK	DATE 09-20-2017
ECO DESCRIPTION <b>UPDATED FRAME</b>		
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**TOLERANCES UNLESS OTHERWISE SPECIFIED:**

DEC.	INCH	mm	ANGLE
.X	$\pm 0.1$	[ $\pm 2.5$ ]	$\pm 7' 30''$
.XX	$\pm 0.03$	[ $\pm 0.76$ ]	
.XXX	$\pm 0.005$	[ $\pm 0.127$ ]	
.XXXX	$\pm 0.0005$	[ $\pm 0.0127$ ]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH/mm 5.1 mm SHOWN IN [BRACKETS]

DRAWN BY BLR
DATE 04-26-1996
APPROVED BY BW
DATE 04-24-1996
REFERENCE
THIRD ANGLE PROJECTION

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 250T FR. - TENV - BB - STD	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>SS203092</b>
	SHEET 1 OF 1

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

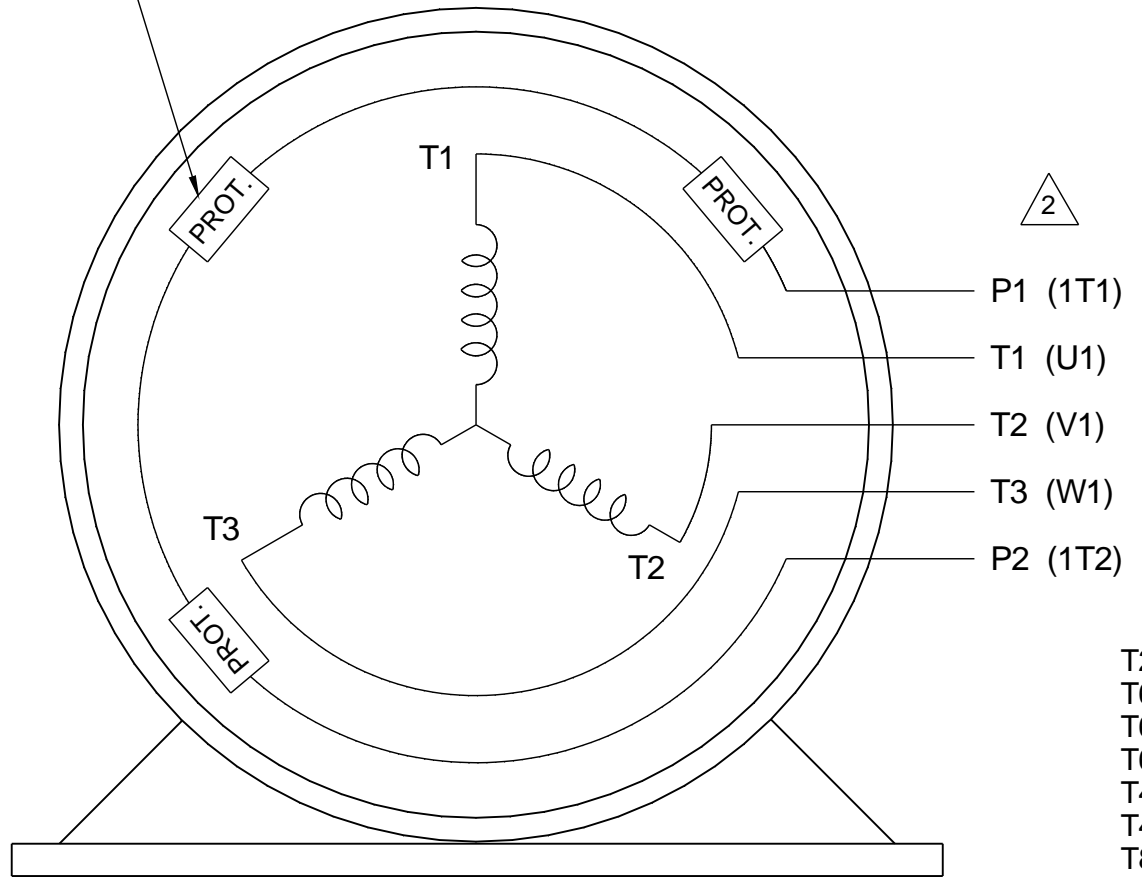
3 THERMO - PROTECTORS  
CONNECTED IN SERIES

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS

**NOTE FOR FACTORY USE ONLY:**

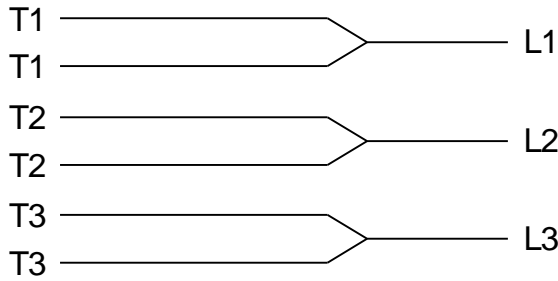
TO SURGE TEST:

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



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

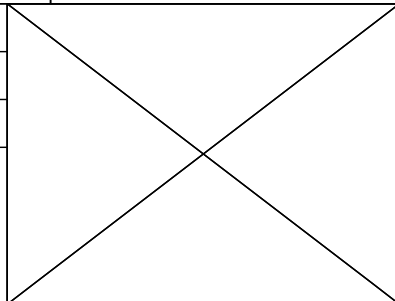
IF MOTOR HAS MULTIPLE T'S PER LEAD  
CONNECT TOGETHER LIKE T'S



A-9806 DECAL

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		
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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-SS203092-1050  
WINDING: K2544168

CAT #: 824581.00

NONE 2

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
15	11.2	1800	1770	254T	TEAO	TTN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	18.2	LINE OR INVERTER	CONT	H	1.15	90	3300

F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	93.0	GTD EFF	91.7	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	83.0	3/4 LD PF	78.5	1/2 LD PF	69.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
44.5 LB-FT	116	95.0 LB-FT 213%	118 LB-FT 265%	0

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
999 dBA	1008 dBA	2.50 LB-FT²	0 LB-FT²	25 SEC.	0	325 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						
6309	6210	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
0.397	0.255	1.323	1.947	36.061	0.080	ODE

* N O T E S *	INVERTER TORQUE: VARIABLE 20:1 INV. HP SPEED RANGE: NONE	
	ENCODER: NONE NONE NONE	
	NONE PPR	
	BRAKE: NONE NONE NONE	
	FT-LB: NA VOLTAGE: NONE HZ:	

DATE: 1/22/2018

UL: Y-(LEESON UL REC)

Data Sheet

Date: 1/22/2018

824581.00



Data @ 460 V

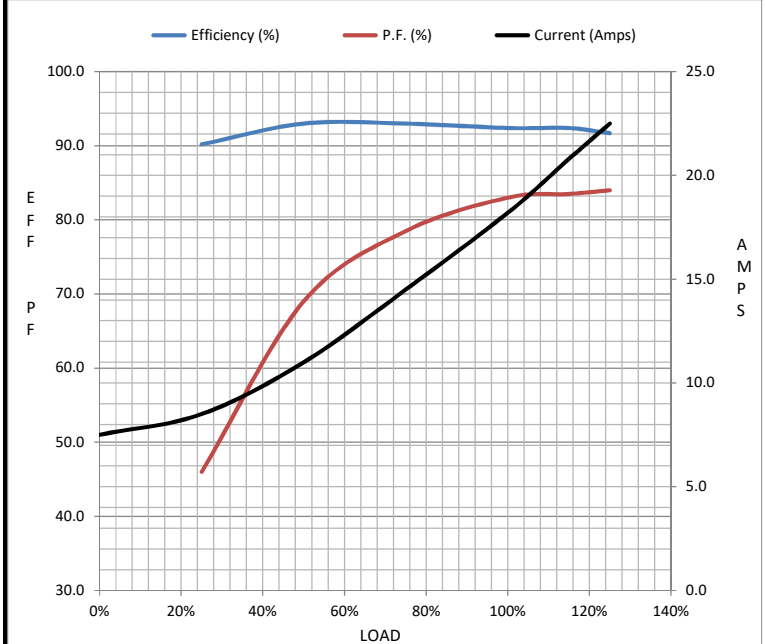
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	7.5	8.5	11.0	14.5	18.2	20.8	22.5	116
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.5	51.5	56.0	95.0
RPM	1800	1792	1785	1775	1770	1.762	1758	0
Efficiency (%)		90.2	93.0	93.0	92.4	92.4	91.7	
P.F. (%)	4.5	46.0	69.0	78.5	83.0	83.5	84.0	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1625	1770	1800
Current (Amps)	116	100	69.0	18.2	7.5
Torque (ft-lb)	95.0	75.0	118	44.5	0.00

Information Block				
HP	15.0			
Sync. RPM	1800			
Frame	254			
Enclosure	TEAO			
Construction	TTN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
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>	2.50 Lb-Ft <sup>2</sup>			
Ref Wdg	K2544168 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 20:1			
Outline Dwg	B-SS203092-1050			
Conn. Diag	A-EE7300T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3970	0.2550	1.3230	1.9470	36.0610



Speed - Torque Curve

