

PRODUCT INFORMATION PACKET



Model No: 824537.00

Catalog No: 824537.00

Severe Duty Motor, 50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 326TV Frame, TEAO



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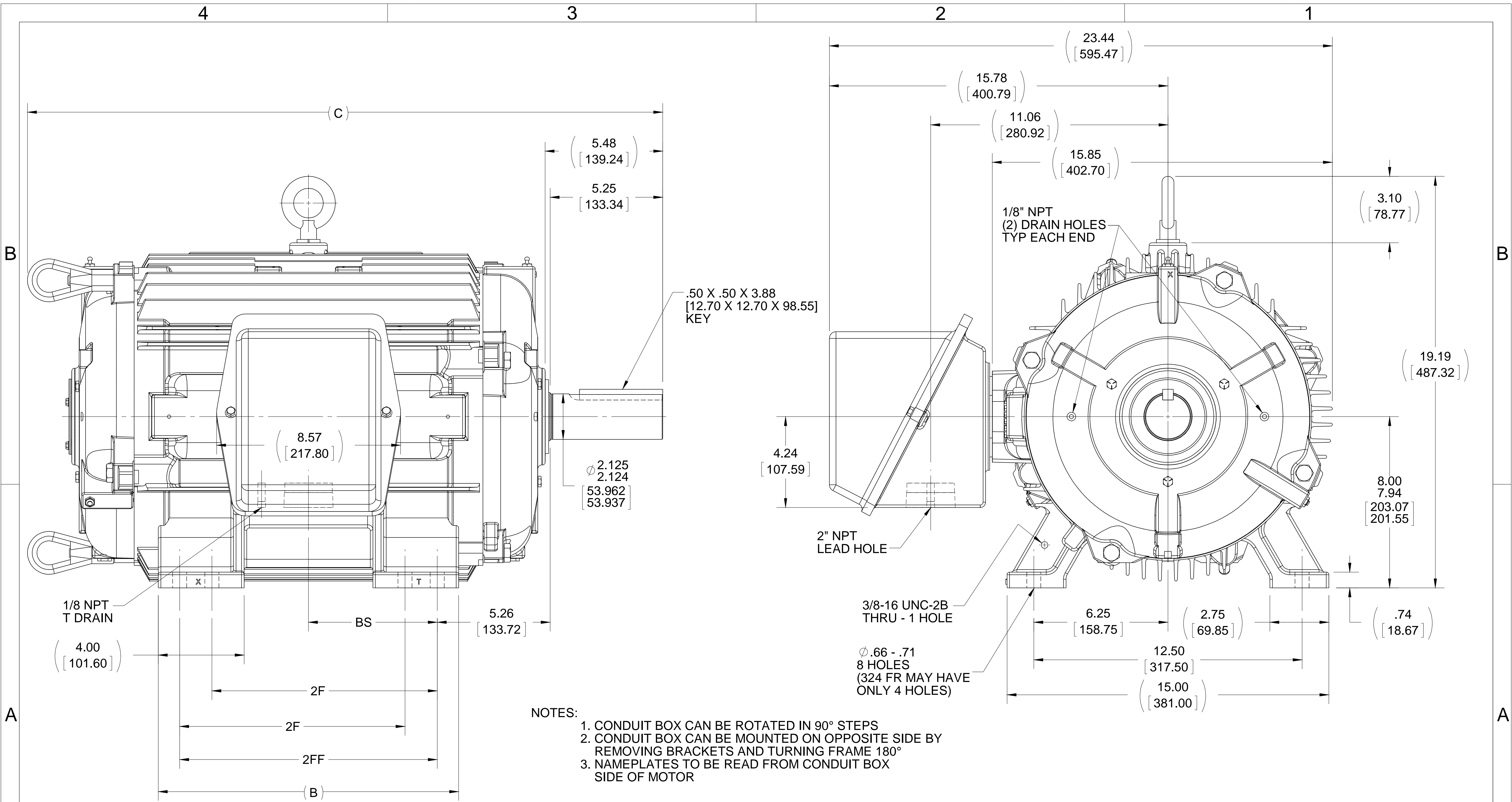


Nameplate Specifications

Output HP	50 Hp	Output KW	37.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	122.0/61.0 A	Speed	1765 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	326TV	Enclosure	Totally Enclosed Air Over
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.122 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal Or Up Or Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	29.60 in
Frame Length	16.25 in	Shaft Diameter	2.125 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	VARIABLE 10:1		
Outline Drawing	B-SS312692-1625	Connection Drawing	A-EE7308-LE



- 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

DASH	FRAME	B	C	2F	2FF	BS
1475	324T	14.00 [355.60]	28.10 [713.74]	10.50 [266.70]	-----	5.25 [133.35]
1625	324/325T	14.00 [355.60]	29.60 [751.84]	10.50 [266.70]	12.00 [304.80]	6.00 [152.40]

DRAWING REVISION A	REVISION BY W. JOERGER	DATE 03-27-2015
ECO ECO-0052212	APPROVED BY E. HEIL	DATE 03-27-2015
ECO DESCRIPTION RELEASED FOR PRODUCTION		
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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 W. JOERGER
DATE 03-27-2015
APPROVED BY E. HEIL
DATE 03-27-2015
REFERENCE
THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

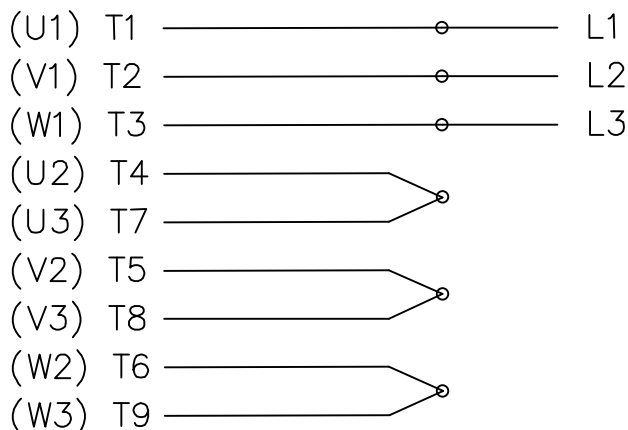
DESCRIPTION
OUTLINE
TFPA - CI C'BOX - 320T FR - TEFC - STD - LIFT LUGS

MATERIAL PROCESS/FINISH

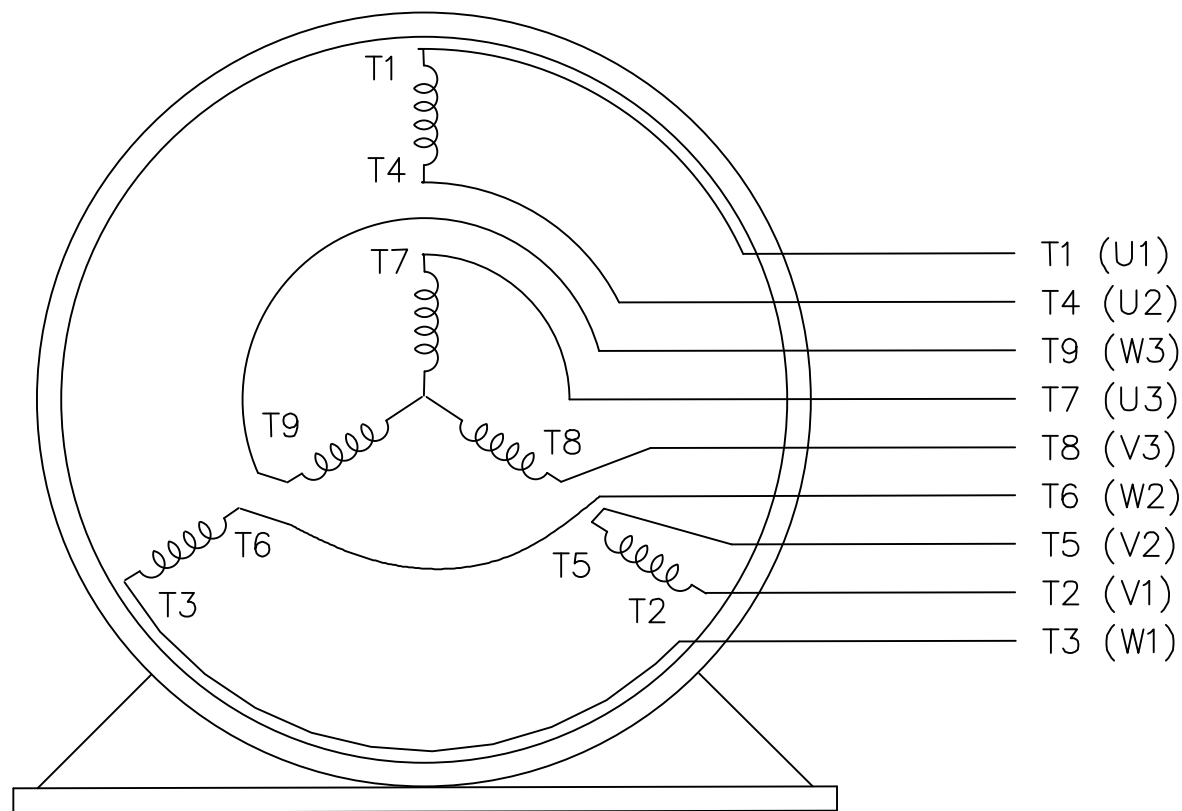
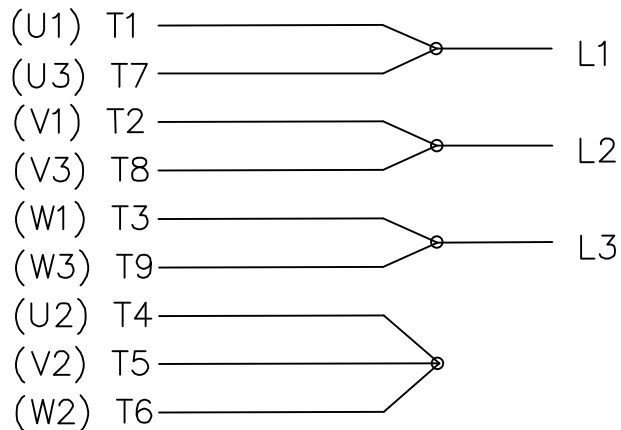
SIZE **B** DRAWING NUMBER **SS312692** SHEET 1 OF 1

THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE




- T1 (U1)
- T4 (U2)
- T9 (W3)
- T7 (U3)
- T8 (V3)
- T6 (W2)
- T5 (V2)
- T2 (V1)
- T3 (W1)

VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN HLB 04-29-2002	
				DEC.	INCHES		CHK	ML 05-03-2002
				.X	±.1		APPD	GK 05-03-2002
				.XX	±.01	TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR	SCALE	1=1
2	ADDED IEC NOTATIONS... (U1), (V1) ETC. (MU105786)	REP 01-11-2012	DR	.XXX	±.005		REF	
1	NEW DRAWING	HLB 05-03-2002	ML	.XXXX	±.0005	MAT'L.	FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±1/2'	FINISH	PREV	
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP		CAD FILE EE7308-LE	SIZE	DRAWING NO. PAGE OF
				DIST	LB-WP		A	EE7308-LE 2



CERTIFICATION DATA SHEET

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

CATALOG #: 824537.00

CONN. DIAGRAM: A-EE7308-LE

OUTLINE: B-SS312692-1625

WINDING #: K2864251 R2 2

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50	37.0	1800	1765	326TV	TEAO	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	122/61	LINE OR INVERTER	CONTINUOUS	F3	1.15	40

FULL LOAD EFF:	93	3/4 LOAD EFF:	93.6	1/2 LOAD EFF:	93	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	82	3/4 LOAD PF:	78	1/2 LOAD PF:	68	91.7	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
149 LB-FT	710 / 355	290 LB-FT 195 %	375 LB-FT 252 %	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	5.6 LB-FT^2	300 LB-FT^2	20 SEC.	2	650 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL OR UP OR DOWN	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

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
6312	6311						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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INVERTER TORQUE: VARIABLE 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: 1/24/2018

824537.00



Data @ 460 V

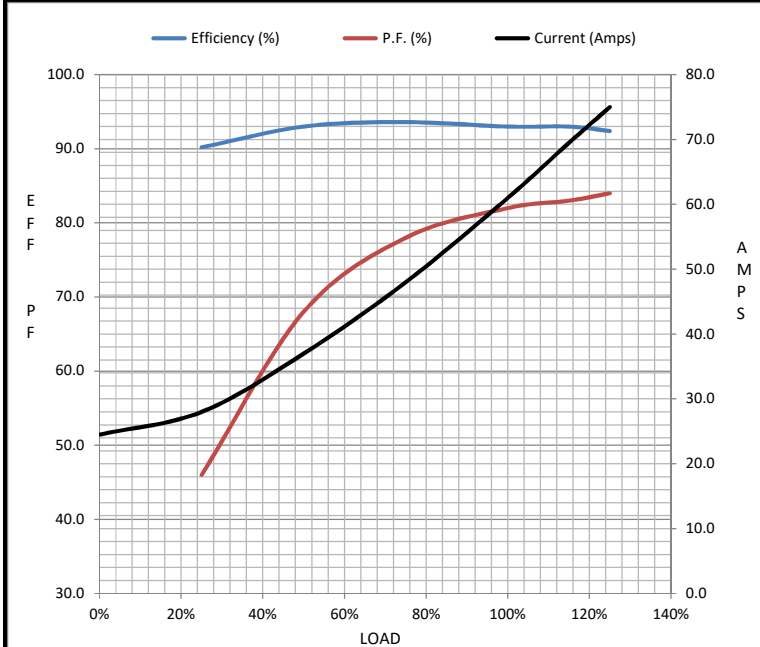
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	24.5	28.0	37.0	48.0	61.0	69.5	75.0	355
Torque (ft-lb)	0.00	36.8	73.5	111	149	172	187	290
RPM	1800	1792	1785	1775	1765	1.760	1755	0
Efficiency (%)		90.2	93.0	93.6	93.0	93.0	92.4	
P.F. (%)	4.5	46.0	68.0	78.0	82.0	83.0	84.0	38.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1765	1800
Current (Amps)	355	325	210	61.0	24.5
Torque (ft-lb)	290	210	375	149	0.00

Information Block				
HP	50.0			
Sync. RPM	1800			
Frame	326			
Enclosure	TEAO			
Construction	TTP			
Voltage	230/460 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 ²	5.6 Lb-Ft ²			
Ref Wdg	K2864251 R2			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	B-SS312692-1625			
Conn. Diag	A-EE7308-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0910	0.0910	0.4410	0.5550	10.5860



Speed - Torque Curve

