

PRODUCT INFORMATION PACKET



Model No: 824534.00
Catalog No: 824534.00
25 HP Severe Duty Motor, 3 phase, 1800 RPM, 230/460 V, 284TV Frame, TEAO
Severe Duty Motors



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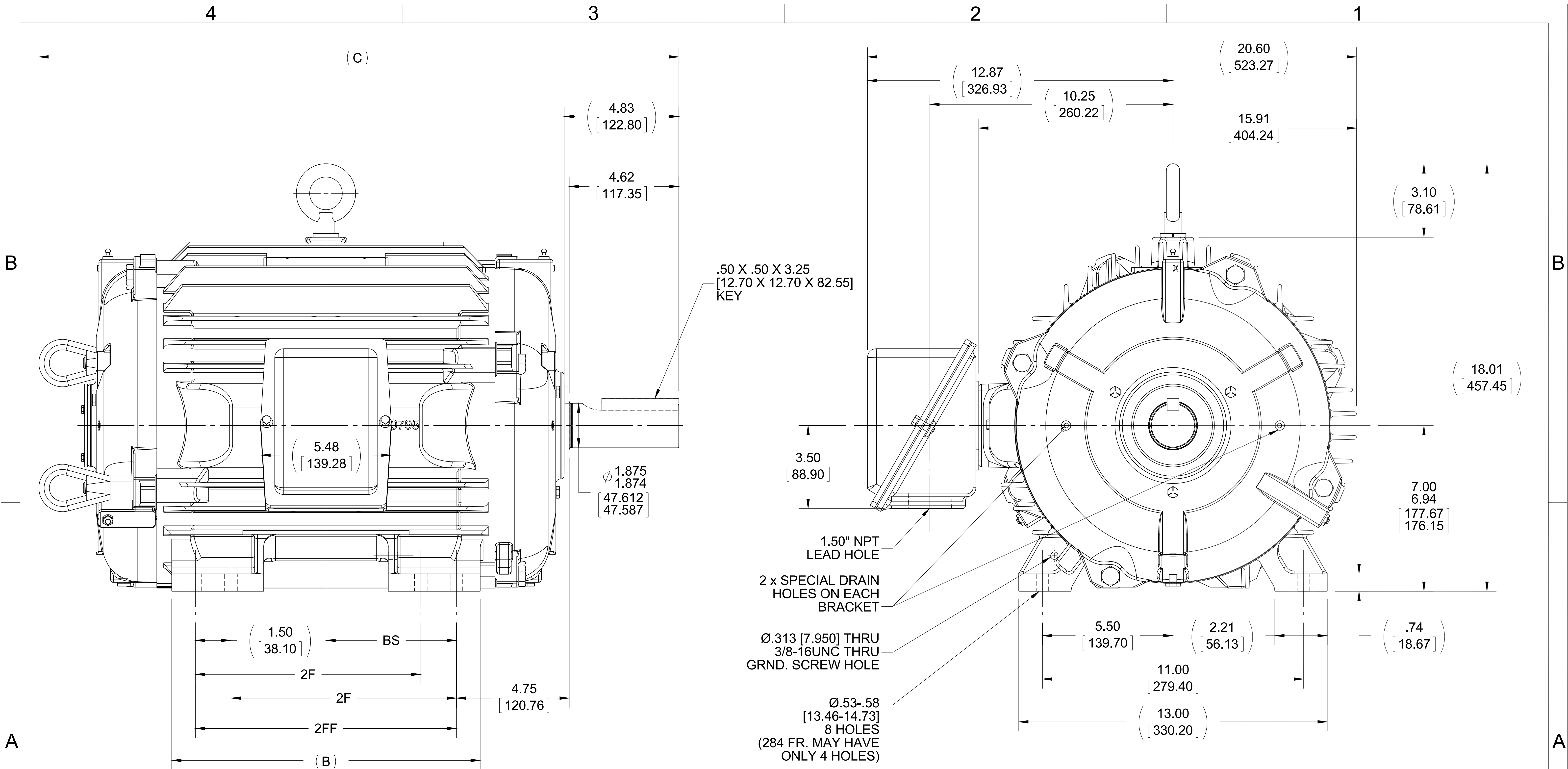
Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	63.0/31.5 A	Speed	1772 rpm
Service Factor	1.15	Phase	3
Efficiency	92.4 %	Power Factor	81.6
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284TV	Enclosure	Totally Enclosed Air Over
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
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	.26 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	26.97 in
Frame Length	14.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS312689-1425	Connection Drawing	A-EE7308-LE

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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. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	BS	2F	2FF
1275	284T	12.50 [317.50]	25.47 [646.94]	4.75 [120.65]	---	9.50 [241.30]
1425	284/286T	13.00 [330.20]	26.97 [685.04]	5.50 [139.70]	9.50 [241.30]	11.00 [279.40]

DRAWING REVISION B	REVISION BY JWO	DATE 07-27-2015
ECO ECO-0081645	APPROVED BY TB	DATE 07-27-2015
ECO DESCRIPTION NMR-0084175, MU120012		
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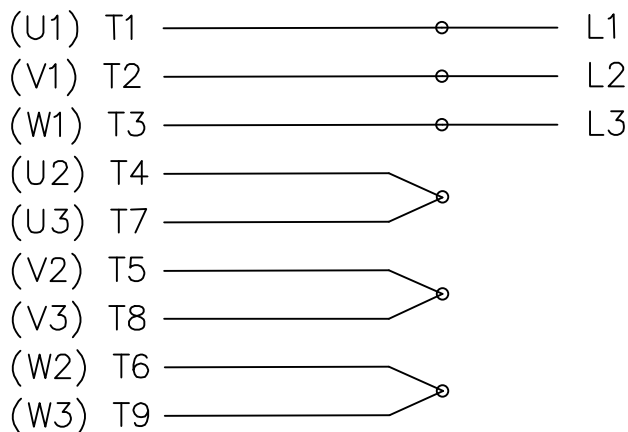
TOLERANCES UNLESS OTHERWISE SPECIFIED:
 DEC. INCH mm ANGLE
 .X ±0.1 [±2.5] ±7° 30"
 .XX ±0.03 [±0.76]
 XXX ±0.005 [±0.127]
 XXXX ±0.0005 [±0.0127]
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]
 CORNER FILLETS: .02 [.51]
 MACHINED SURFACES: 200 INCH 5.1 mm
 mm SHOWN IN [BRACKETS]

DRAWN BY W. JOERGER
DATE 03-27-2015
APPROVED BY E. HEIL
DATE 03-27-2015
REFERENCE
THIRD ANGLE PROJECTION

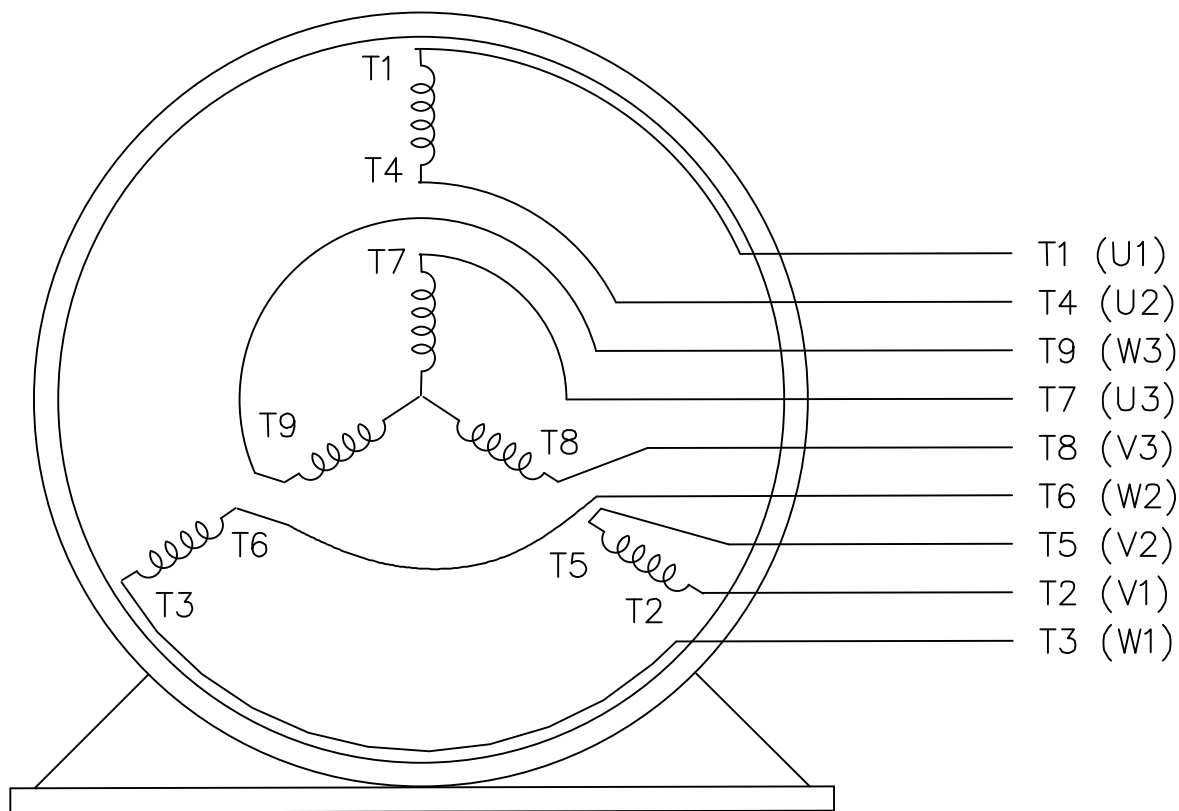
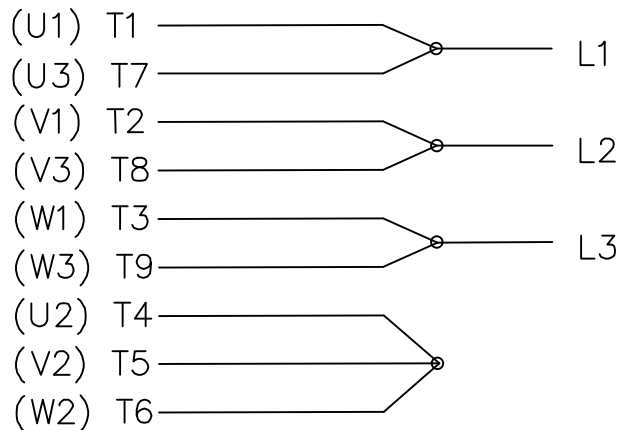
REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 280T FR - TEAO / TENV - BB - STD - 12.50" LAM	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS312689
SHEET 1 OF 1	

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		SCALE 1=1		
2	ADDED IEC NOTATIONS... (U1), (V1) ETC. (MU105786)	REP 01-11-2012	DR	.XXX	±.005	TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR		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	REV.
				DIST	LB-WP	A	EE7308-LE	2	



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

CATALOG #: 824534.00

CONN. DIAGRAM: A-EE7308-LE

OUTLINE: B-SS312689-1425

MOUNTING: F1/F2 CAPABLE

WINDING #: K2844124 R5 1

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1772	284TV	TEAO	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	63/31.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40

FULL LOAD EFF:	92.4	3/4 LOAD EFF:	91.7	1/2 LOAD EFF:	90.2	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	81.6	3/4 LOAD PF:	77.5	1/2 LOAD PF:	68	91		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	364 / 182	135 LB-FT 182 %	205 LB-FT 277 %	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	4.2 LB-FT^2	150 LB-FT^2	20 SEC.	2	460 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 6311	BALL 6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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

*
N
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E

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: 1/22/2018

824534.00



Data @ **460 V**

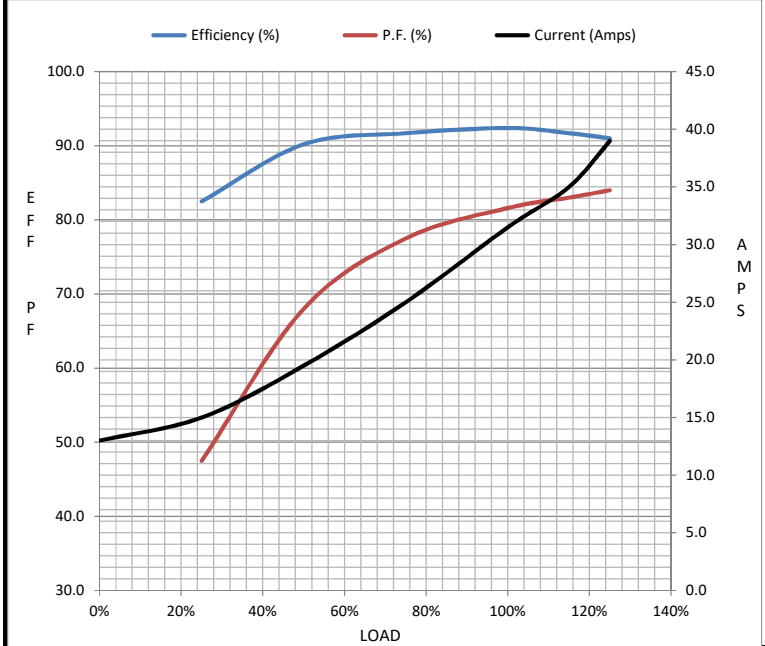
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	13.0	15.0	19.5	25.0	31.5	35.0	39.0	182
Torque (ft-lb)	0.00	18.5	38.0	55.5	74.0	85.5	92.5	135
RPM	1800	1792	1786	1780	1772	1.768	1765	0
Efficiency (%)		82.5	90.2	91.7	92.4	91.7	91.0	
P.F. (%)	8.5	47.5	68.0	77.5	81.6	83.0	84.0	37.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1665	1772	1800
Current (Amps)	182	165	110	31.5	13.0
Torque (ft-lb)	135	120	205	74.0	0.00

Information Block				
HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEAO			
Construction	TTN			
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	4.2 Lb-Ft ²			
Ref Wdg	K2844124 R5			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	B-SS312689-1425			
Conn. Diag	A-EE7308-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1710	0.1430	0.8540	1.0510	20.1100



Speed - Torque Curve

