

PRODUCT INFORMATION PACKET

Model No: 445TSTGN16531

Catalog No: U084A

Explosion Proof Motor, 150 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 445TS Frame, EPFC



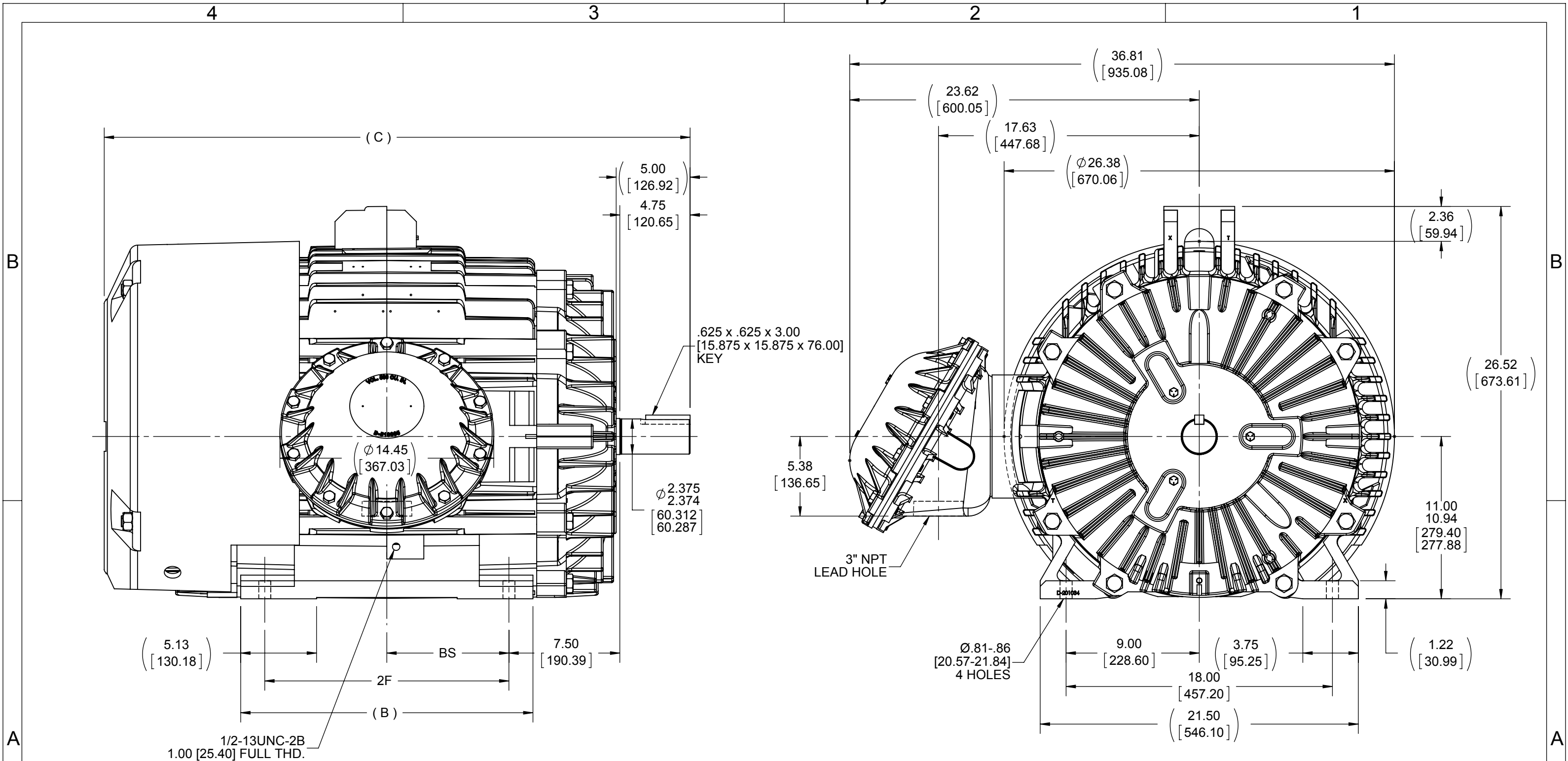
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Nameplate Specifications

Output HP	150 Hp	Output KW	112.0 kW
Frequency	60 Hz	Voltage	460 V
Current	172.0 A	Speed	1785 rpm
Service Factor	1.15	Phase	3
Efficiency	95.8 %	Power Factor	85
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	445TS	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0275 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	39.59 in
Frame Length	20.25 in	Shaft Diameter	2.375 in
Shaft Extension	5 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Connection Drawing	A-EE7300S	Outline Drawing	B-SS515918-2025



- NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 3. DIMENSION IN [] DESIGNATE MILLIMETERS.

DASH	FRAME	B	C	2F	BS
1825	444TS	17.75 [450.85]	37.59 [954.79]	14.50 [368.30]	7.25 [184.15]
2025	445TS	19.75 [501.65]	39.59 [1005.59]	16.50 [419.10]	8.25 [209.55]

DRAWING REVISION C	REVISION BY JJB	DATE 06-30-2014
ECO ECO-0054447	APPROVED BY TDB	DATE 06-30-2014
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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 [0.51]
 MACHINED SURFACES: 200 INCH/mm 5.1
 mm SHOWN IN [BRACKETS]

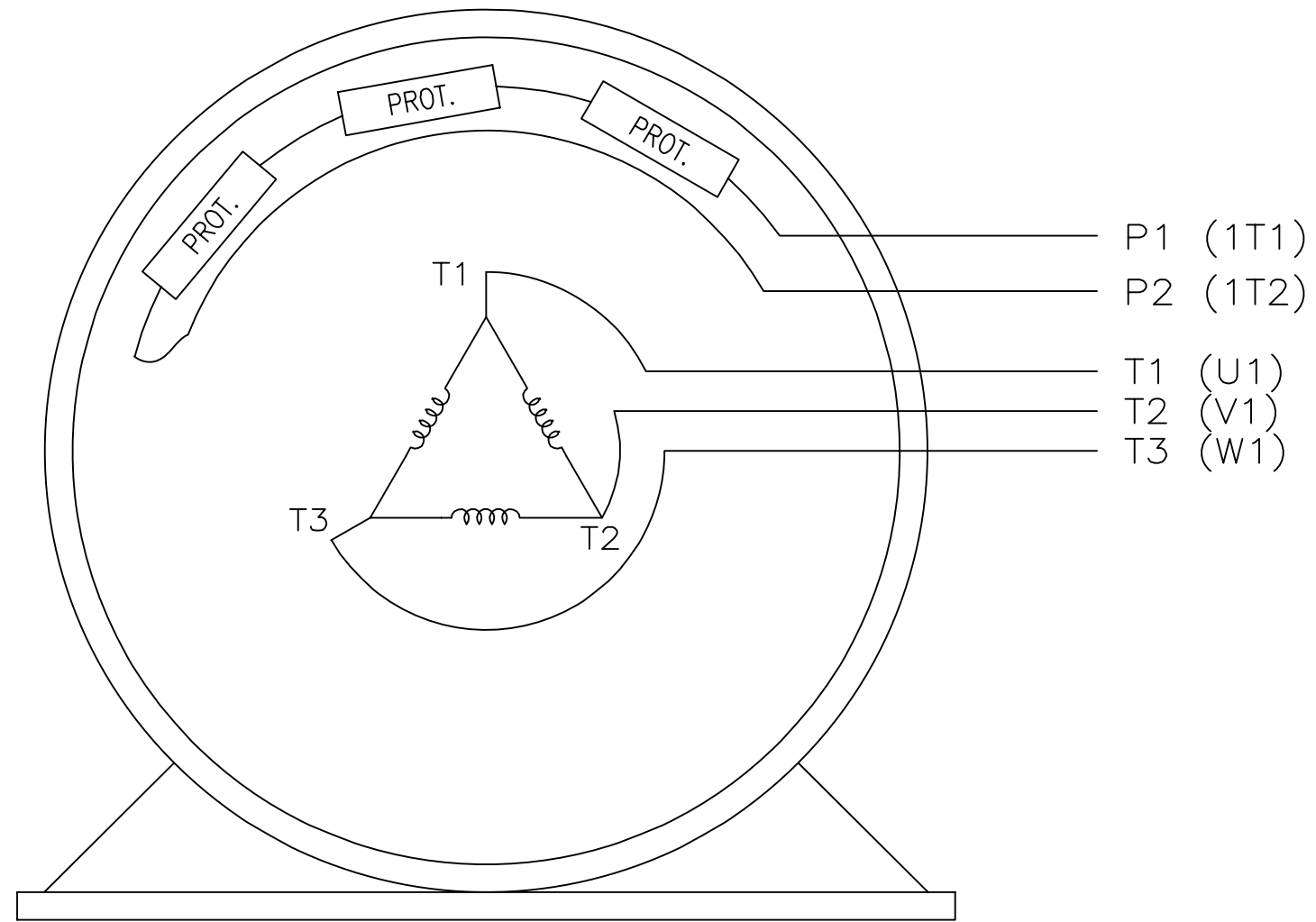
DRAWN BY MH
DATE 01-15-1997
APPROVED BY JL
DATE 02-06-1997
REFERENCE
THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 444/445TS FR. - EXP PR - STD. - TEFC - TGN	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS515918
SHEET 1 OF 1	

EE7300S

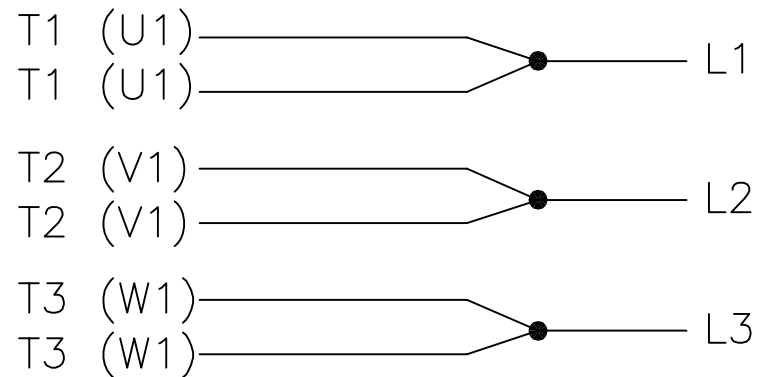
THREE PHASE – SINGLE VOLTAGE MOTOR

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS




VIEW OF TERMINAL END

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



A-9806 DECAL

NO.	REVISION	BY & DATE	CHK	TOLERANCES UNLESS SPECIFIED		REGAL-BELOIT CORPORATION	DRAWN KL 12-15-1999
				DEC.	INCHES		
F	UPDATED TITLE BLOCK	HV 02-27-2014	EWB	.X	± -	 REGAL-BELOIT CORPORATION TITLE CONNECTION DIAGRAM – EXTERNAL SINGLE VOLTAGE 3Ø MOTOR MAT'L. FINISH	CHK DJK 12-15-1999
3	REMOVED "N.C." FROM PROT.'S MU61770	JJB 08-02-2010		.XX	± -		APPD DJK 12-15-1999
2	ADDED IEC MARKINGS MU61770	KL 09-16-2004	EAB	.XXX	± -		SCALE 1=1
1	NEW DRAWING	KL 12-16-1999		.XXXX	± -		REF
				ANG	± -		FMF
			RFP			CAD FILE ee7300s	PREV
			DIST WA-LB-SB			SIZE A	DRAWING NO. EE7300S
							PAGE OF REV. F

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CERTIFICATION DATA SHEET

Model#: 445TSTGN16531 AA **WINDING#:** T4454127 NONE 1
CONN. DIAGRAM: A-EE7300S **ASSEMBLY:** F1 ONLY
OUTLINE: B-SS515918-2025

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150&125	112&93	1800	1785&1485	445TS	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	172&170	LINE OR INVERTER	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF:	3/4 LOAD EFF:	1/2 LOAD EFF:	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
95.8&95.8	96.2	95.4			
FULL LOAD PF: 85&86	3/4 LOAD PF: 82	1/2 LOAD PF: 74	95.4	SQ CAGE INV RATED	60

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
441 LB-FT	1085	800 LB-FT 181	1150 LB-FT 261	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	47 LB-FT^2	1000 LB-FT^2	25 SEC.	2	2050 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6313						

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

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

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DATE: 06/21/2017 05:36:59 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 29-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



445TSTGN16531

Submittal

Data @ 460 V

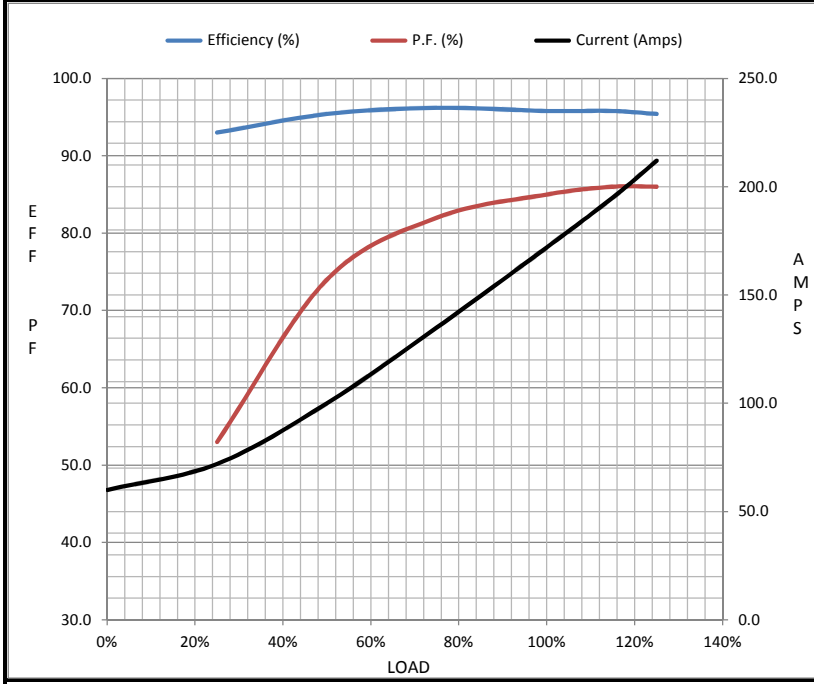
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	60.0	72.0	100	135	172	195	212	1,085
Torque (ft-lb)	0.00	110	220	330	441	508	553	800
RPM	1800	1796	1792	1790	1785	1,782	1780	0
Efficiency (%)		93.0	95.4	96.2	95.8	95.8	95.4	
P.F. (%)	4.5	53.0	74.0	82.0	85.0	86.0	86.0	28.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	1,085	950	600	172	60.0
Torque (ft-lb)	800	775	1,150	441	0.00

Information Block				
HP	150.0			
Sync. RPM	1800			
Frame	445			
Enclosure	TEFC			
Construction	TFN			
Voltage	460#380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	47.0 Lb-Ft ²			
Ref Wdg	T4454127 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS515918-2025			
Conn. Diag	A-EE7300S			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0210	0.0120	0.1680	0.1590	4.4090



Speed - Torque Curve

