

PRODUCT INFORMATION PACKET



Model No: 825418.00

Catalog No: 825418.00

Explosion Proof Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM,
444T Frame, EPFC



Regal and Leeson are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E



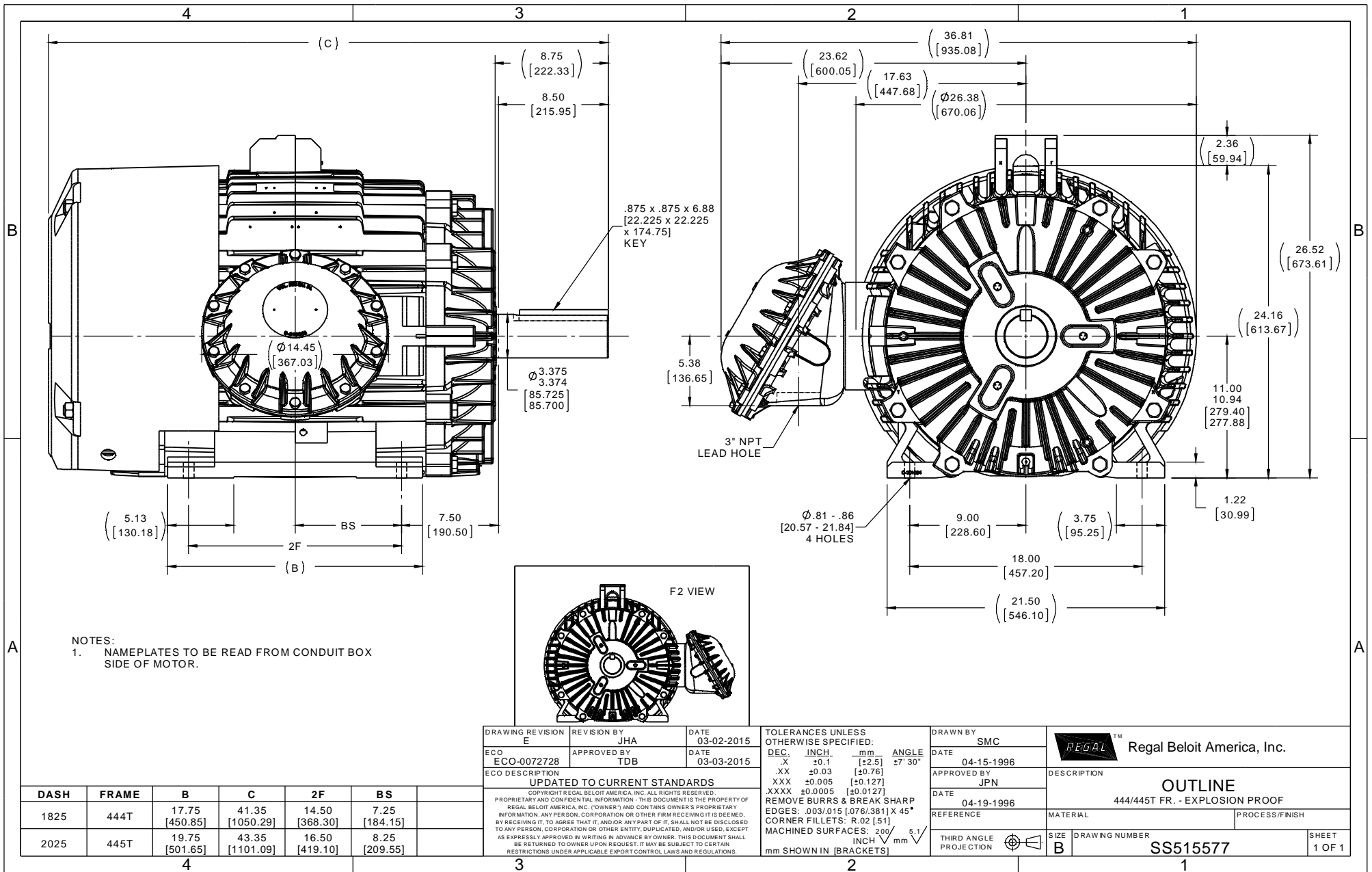


Nameplate Specifications

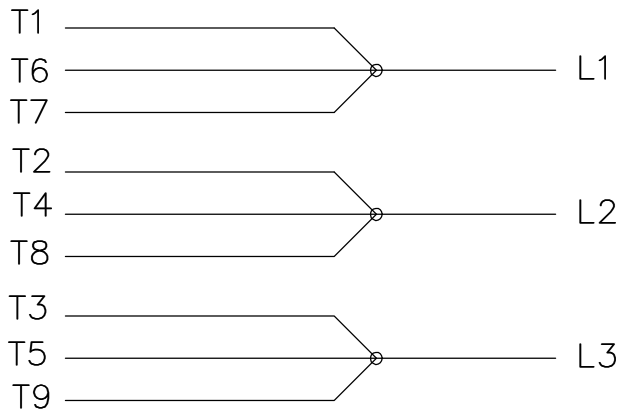
Phase	3	Output HP	100 & 75 Hp
Output KW	75.0 & 56.0 kW	Voltage	230/460 & 190/380 V
Speed	1188 & 990 rpm	Service Factor	1.15 & 1.15
Frame	444T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	95 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	248/124 & 230/115 A	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3C

Technical Specifications

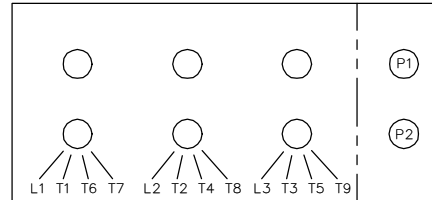
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.048 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	41.35 in
Frame Length	18.25 in	Shaft Diameter	3.375 in
Shaft Extension	8.5 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 2:1		
Outline Drawing	B-SS515577-1825	Connection Drawing	A-EE7308AD



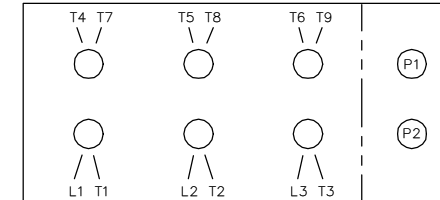
LOW VOLTAGE



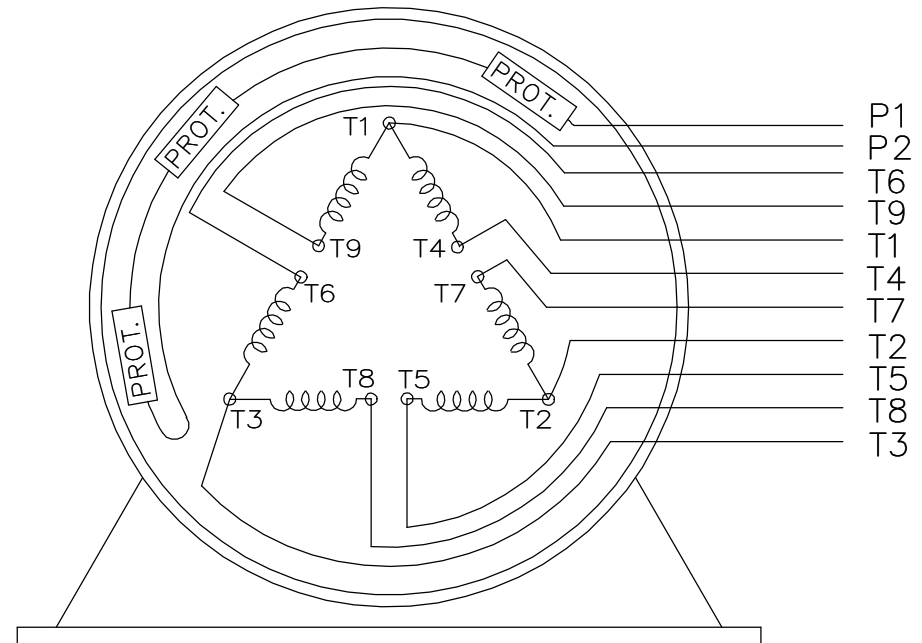
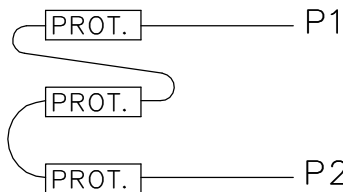
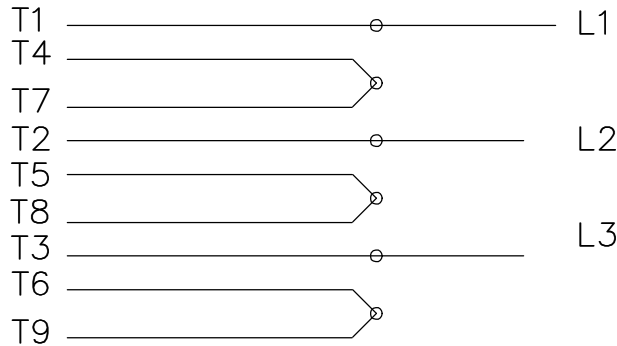
LOW VOLTAGE



HIGH VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

WHEN MORE THAN ONE PROT. IS USED; PROT. ARE CONNECTED IN SERIES

DRAWING REVISION L	REVISION BY JP	REV DATE/© DATE 06-21-2019	TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE .X ±0.1 [±3] ±7' 30" .XX ±0.02 [±0.5] .XXX ±0.005 [±0.13] .XXXX ±0.0005 [±0.013] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45° CORNER FILLETS: R.02 [.5] MACHINED SURFACES: 200/ 5.1 INCH mm	DRAWN BY MJD	Regal Beloit America, Inc.
ECO ECO-0168744	APPROVED BY MH	DATE 06-21-2019		DATE 12-19-1997	
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS			REMOVED	APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL
COPYRIGHT (PER REVISION DATE) 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.			THIRD ANGLE PROJECTION	DATE 01-07-1998	MATERIAL
			SIZE A	REFERENCE	PROCESS/FINISH

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



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308AD
 OUTLINE: B-SS515577-1825
 WINDING: T444689

CAT #: 825418.00

NONE 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1200	1188	444T	TEFC	TFN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	248/124&230/115	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	95.0	3/4 LD EFF	95.0	1/2 LD EFF	94.1	GTD EFF	ELECT. TYPE
F.L. PF	80.0	3/4 LD PF	75.0	1/2 LD PF	64.5	94.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
442 LB-FT	725	750 LB-FT 170%	1,100 LB-FT 249%	70

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
72 dBA	81 dBA	55.0 LB-FT²	1400 LB-FT²	25 SEC.	2	1850 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	DF CL I GR C&D CL II GF	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6318	6316						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (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
0.034	0.022	0.235	0.278	4.842	0.080	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 2:1 INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE					
	NONE					
	NONE PPR					

DATE: 1/29/2018	BRAKE: NONE					
	NONE					
	FT-LB: NA					
	VOLTAGE: NONE HZ:					
UL: V-INS, CONST UL REC						

Data Sheet

Date: 1/29/2018

825418.00



Data @ 460 V

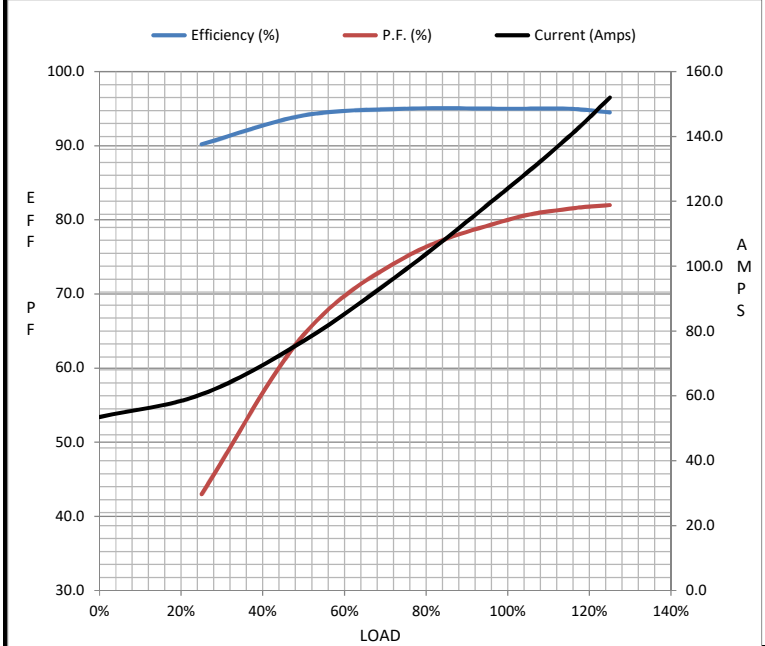
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	53.5	60.5	77.0	99.0	124	140	152	725
Torque (ft-lb)	0.00	110	220	331	442	509	554	750
RPM	1200	1198	1195	1192	1188	1,186	1184	0
Efficiency (%)		90.2	94.1	95.0	95.0	95.0	94.5	
P.F. (%)	4.0	43.0	64.5	75.0	80.0	81.5	82.0	28.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1188	1200
Current (Amps)	725	650	425	124	53.5
Torque (ft-lb)	750	600	1,100	442	0.00

Information Block				
HP	100.0			
Sync. RPM	1200			
Frame	444			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
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	55.0 Lb-Ft ²			
Ref Wdg	T444689 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS515577-1825			
Conn. Diag	A-EE7308AD			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0340	0.0220	0.2350	0.2780	4.8420



Speed - Torque Curve

