

PRODUCT INFORMATION PACKET

Model No: 445THFN8036
Catalog No: Y577
150,1800,TEFC,445T,3/60/460
2000:1 With Encoder Provision



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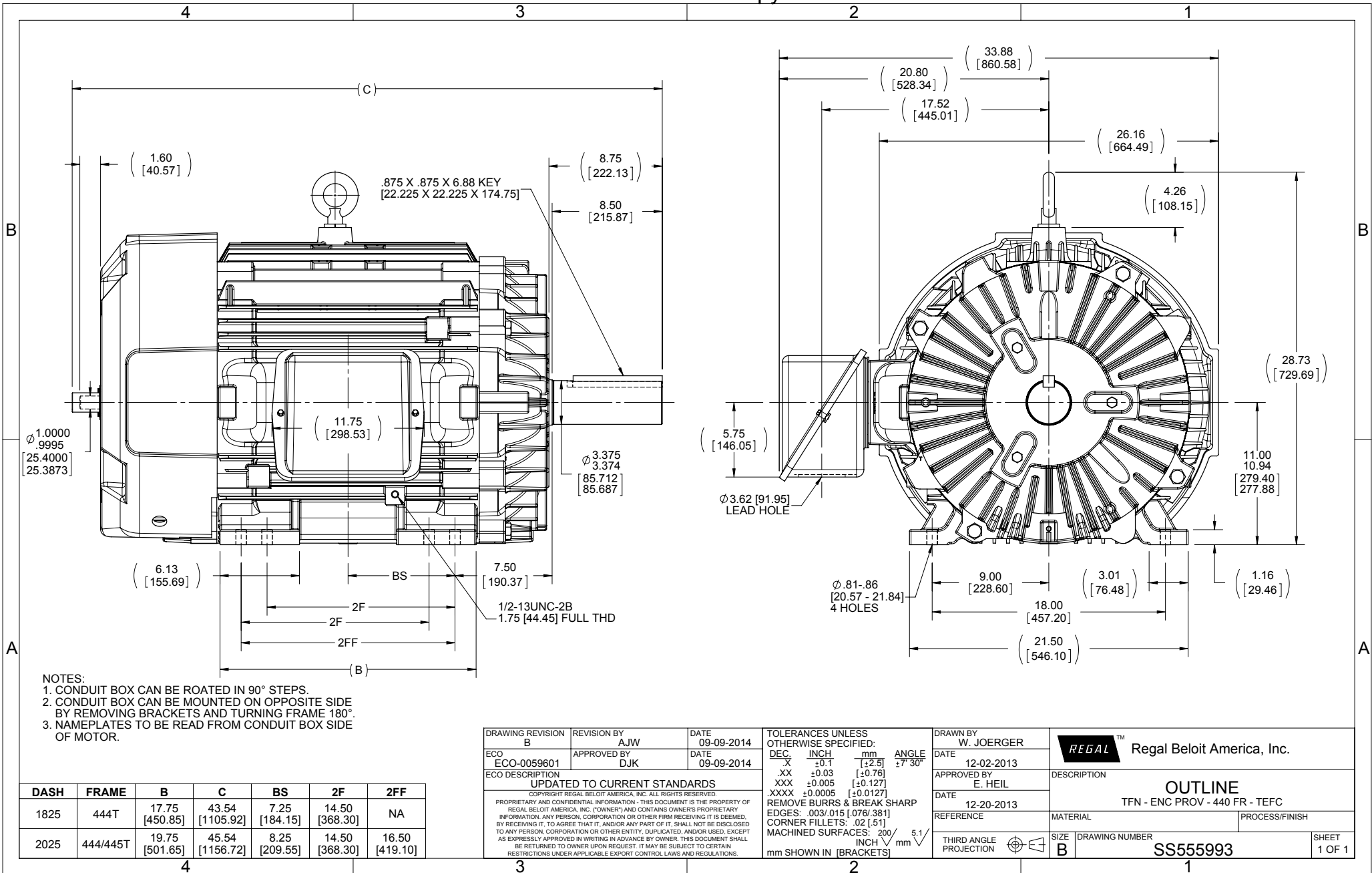
Nameplate Specifications

Output HP	150 Hp	Output KW	112 kW
Frequency	60 Hz	Voltage	460 V
Current	170 A	Speed	1790 rpm
Service Factor	1	Phase	3
Efficiency	94.5 %	Duty	CONTINUOUS
Insulation Class	H	Design Code	INV
KVA Code	J	Frame	445T
Enclosure	TEFC	Overload Protector	NOT
Ambient Temperature	40 °C	Drive End Bearing Size	6318
Opp Drive End Bearing Size	6316	UL	Recognized
CSA	Y	CE	Y
IP Code	43		

Technical Specifications

Electrical Type	SQ CAGE INV DUTY	Starting Method	INVERTER ONLY
Poles	4	Rotation	REV
Mounting	RIGID	Motor Orientation	HORIZONTAL
Drive End Bearing	BALL	Opp Drive End Bearing	BALL
Frame Material	CAST IRON	Shaft Type	T
Overall Length	45.54 in	Frame Length	20.25 in
Shaft Diameter	3.38 in	Shaft Extension	8.75 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	B-SS555993-2025	Connection Diagram	A-EE7300T

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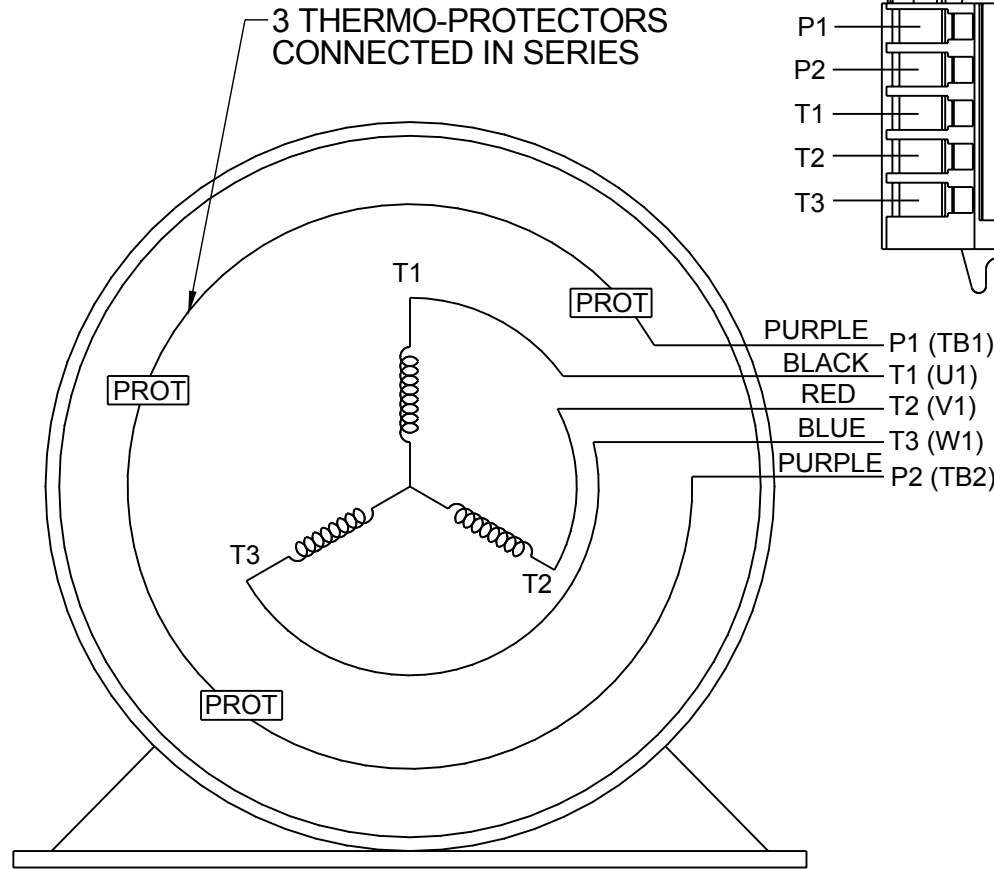
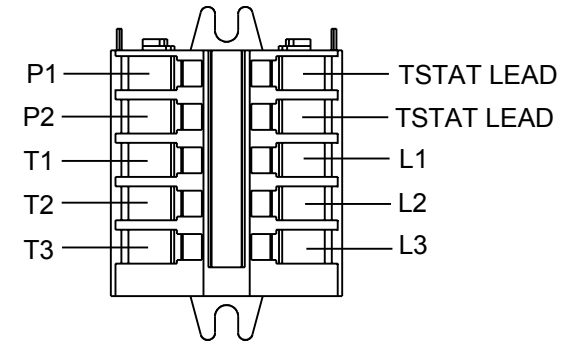


**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS**

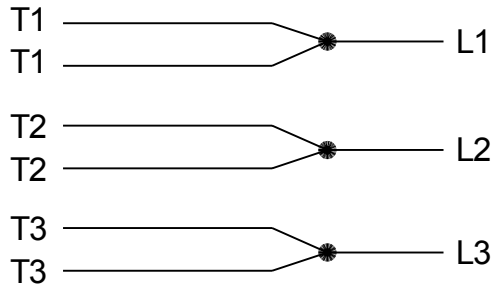
**NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1**

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

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



A-9806 DECAL

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

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-04-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994	MATERIAL	
REFERENCE	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300T
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 445THFN8036 BG **WINDING#:** T4454118 R5 5
CONN. DIAGRAM: A-EE7300T **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS555993-2025

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150	112	1800	1790	445T	TEFC	J	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	170	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300

FULL LOAD EFF: 94.5	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 87.5	3/4 LOAD PF: 84.5	1/2 LOAD PF: 77	93.6	SQ CAGE INV DUTY	57

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
440 LB-FT	1500	700 LB-FT 159	1475 LB-FT 335	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
85 dBA	95 dBA	55 LB-FT^2	- LB-FT^2	- SEC.	-	2250 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.015876	0.00945	0.154035	0.11151	4.4226

RM	ZREF	XR	TD	TD0
241.92	1.89	7.4	0.0535	1.25

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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

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 2000:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE

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NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 04:44:53 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



445THFN8036

Submittal

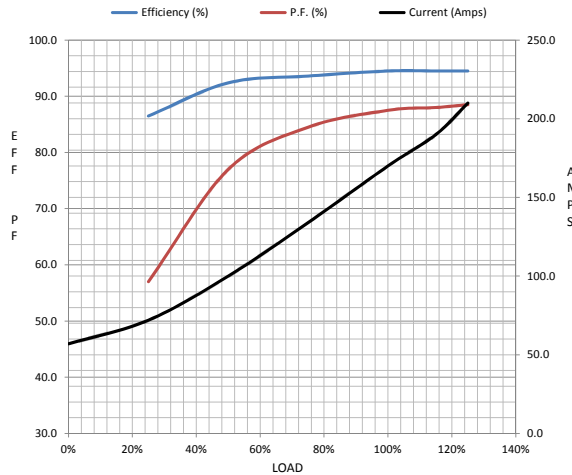
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	57.0	72.0	100	134	170	190	210	1,500
Torque (ft-lb)	0.00	110	220	330	440	495	550	700
RPM	1800	1798	1795	1792	1790	1,788	1786	0
Efficiency (%)		86.5	92.4	93.6	94.5	94.5	94.5	
P.F. (%)	10.0	57.0	77.0	84.5	87.5	88.0	88.5	24.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1790	1800
Current (Amps)	1,500	1,400	900	170	57.0
Torque (ft-lb)	700	675	1,475	440	0.00



Information Block				
HP	150.0			
Sync. RPM	1800			
Frame	445			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	J			
Service Factor	1.0			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	55.0 Lb-Ft²			
Ref Wdg	T4454118 RS			
Sound Pressure @ 1M	85 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS55993-2025			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0160	0.0090	0.1540	0.1120	4.4230

Speed -Torque Curve

