

PRODUCT INFORMATION PACKET

Model No: 444TTFN16577

Catalog No: E327

Severe Duty Motors, TEFC, 100 HP, 3 Ph, 60 Hz, 460 V, 1188 RPM, 444T Frame



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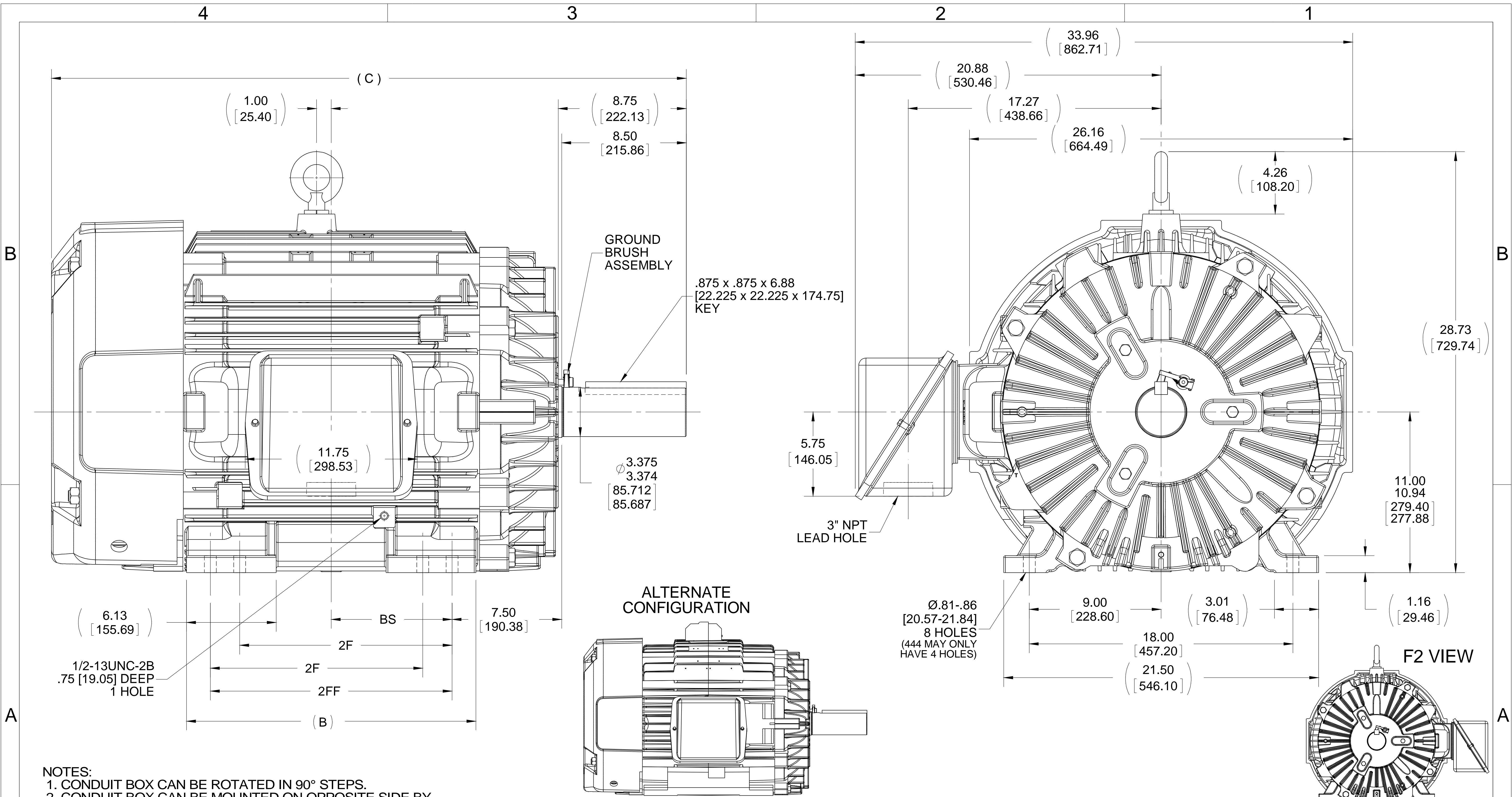
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	460 V
Current	124.0 A	Speed	1188 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	444T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

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	8.75 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300U	Outline Drawing	B-SS519971-1825

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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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 4. DIMENSION IN [] DESIGNATE MILLIMETERS.

DASH	FRAME	B	C	2F	2FF	BS
1825	444T	17.75 [450.85]	41.35 [1050.29]	14.50 [368.30]	---	7.25 [184.15]
2025	444/445T	19.75 [501.65]	43.35 [1101.09]	14.50 [368.30]	16.50 [419.10]	8.25 [209.55]

DRAWING REVISION C	REVISION BY JJB	DATE 05-28-2015
ECO ECO-0078560	APPROVED BY DJK	DATE 05-28-2015
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.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: 125 INCH 3.2 mm SHOWN IN [BRACKETS]

DRAWN BY KL	DATE 08-28-2003
APPROVED BY JES	DATE 08-28-2003
REFERENCE B-SS519554	THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE	
444/445T FR.-TEFC-GRD BRUSH-TFN-TAPPED LEAD HOLE	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS519971
	SHEET 1 OF 1

IF MOTOR HAS 9 LEADS

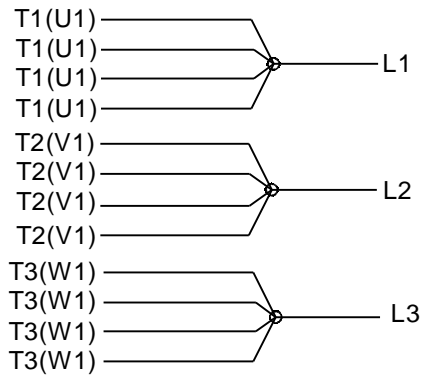


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY DRS	Regal Beloit America, Inc.																					
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7° 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7° 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE 09-27-1996
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			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]			REFERENCE	THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1																

CERTIFICATION DATA SHEET

Model#: 444TTFN16577 AB WINDING#: T444689 NONE 1
 CONN. DIAGRAM: A-EE7300U ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: B-SS519971-1825

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100	75	1200	1188	444T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	124	LINE OR INVERTER	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 75	1/2 LOAD PF: 64.5	94.5	SQ CAGE INV RATED	53.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
442 LB-FT	725	750 LB-FT 170	1100 LB-FT 249	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	55 LB-FT^2	1400 LB-FT^2	25 SEC.	2	1850 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	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

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			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: CONSTANT 2:1 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 NONE FT-LB NONE V NONE Hz

DATE: 06/21/2017 04:32:13 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



444TFN16577

Submittal

Data @ 460 V

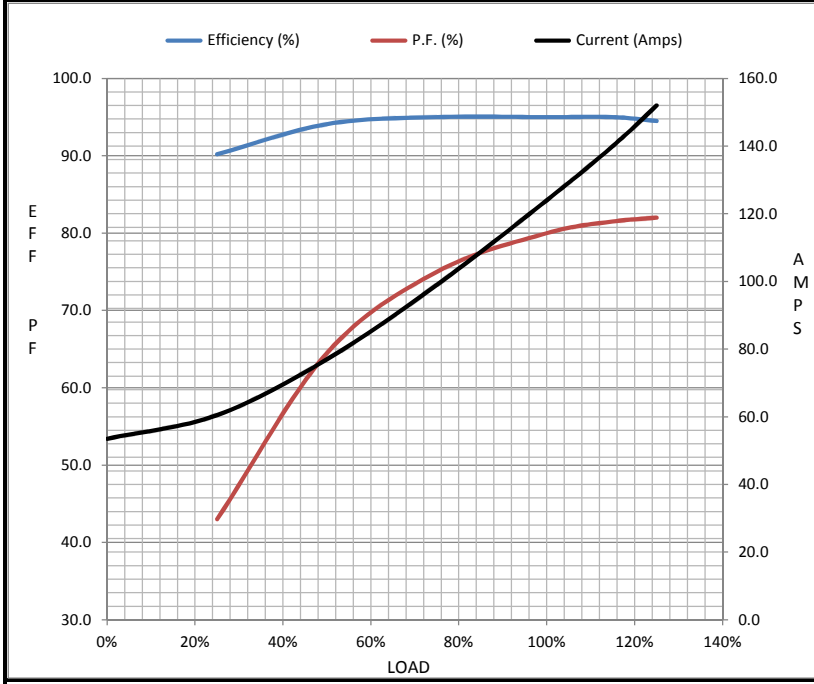
Motor Load Data

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	460 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-SS519971-1825			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0340	0.0220	0.2350	0.2780	4.8420



Speed - Torque Curve

