PRODUCT INFORMATION PACKET

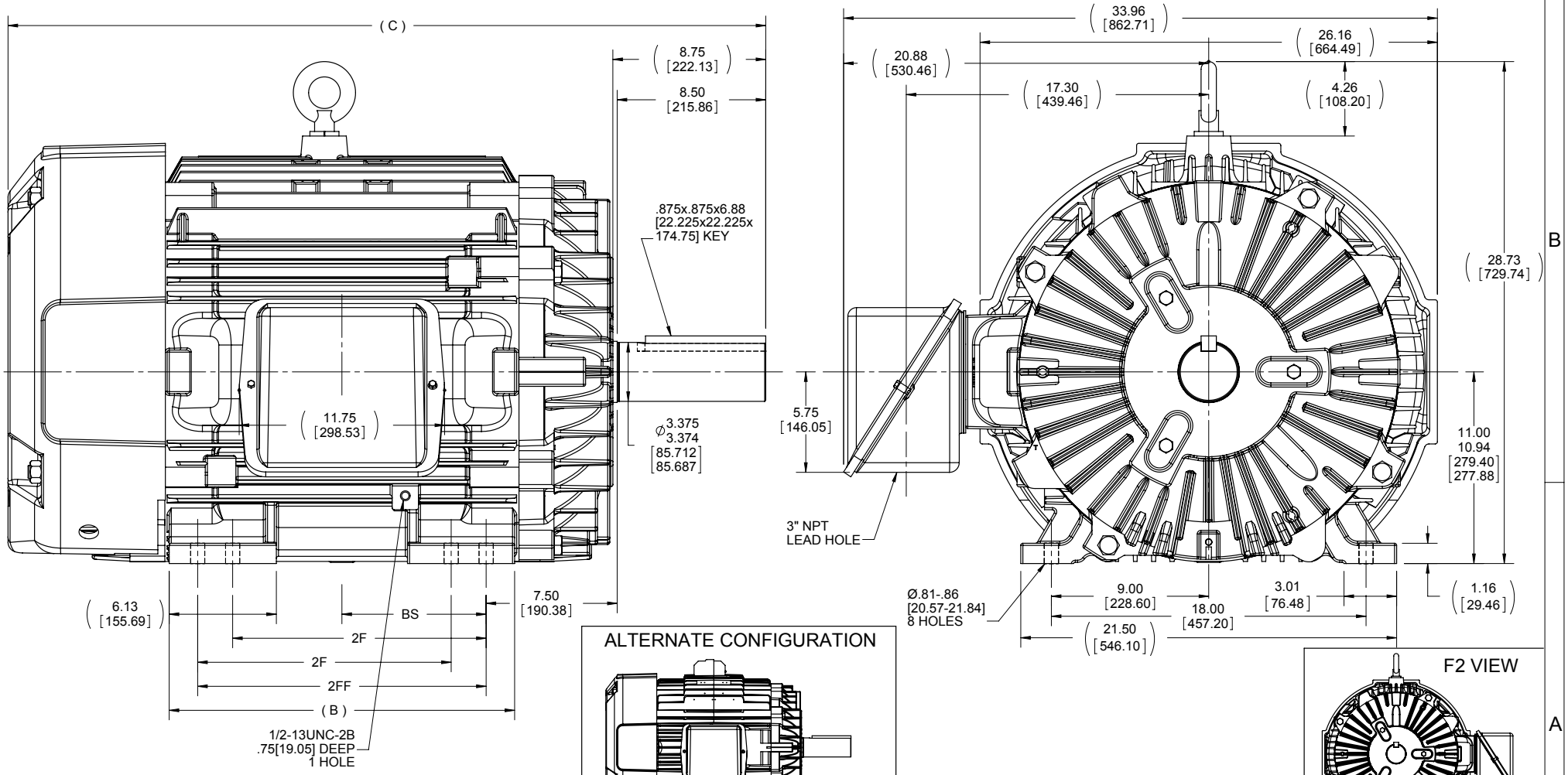
Model No: 445TTFN16852
Catalog No: U882A
200,1800,TEFC,445T,3/60/460
Cooling Tower

Nameplate Specifications

Output HP	**200 Hp**	Output KW	**149 kW**
Frequency	**60 Hz**	Voltage	**460 V**
Current	**226 A**	Speed	**1785 rpm**
Service Factor	**1.15**	Phase	**3**
Efficiency	**96.2 %**	Duty	**CONTINUOUS**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	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	**55**		

Technical Specifications

Electrical Type	**SQ CAGE INV RATED**	Starting Method	**LINE OR INVERTER**
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	**43.34 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-SS513797-2025**	Connection Diagram	**A-EE7300U**



ALTERNATE CONFIGURATION

F2 VIEW

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.

DASH	FRAME	B	C	2F	2FF	BS
1825	444T	17.75 [450.85]	41.34 [1050.04]	14.50 [368.30]	- - -	7.25 [184.15]
2025	444/445T	19.75 [501.65]	43.34 [1100.84]	14.50 [368.30]	16.50 [419.10]	8.25 [209.55]

DRAWING REVISION	REVISION BY	DATE
C	AJW	11-13-2014
ECO	APPROVED BY	DATE
ECO-0065299	TDB	11-13-2014

ECO DESCRIPTION: UPDATED TO CURRENT STANDARDS

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 [.076/.381]
CORNER FILLETS: .02 [.51]
MACHINED SURFACES: 125 INCH / 3.2 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	JL
DATE	06-28-1991
APPROVED BY	AAL
DATE	12-02-1991
REFERENCE	

Regal Beloit America, Inc.

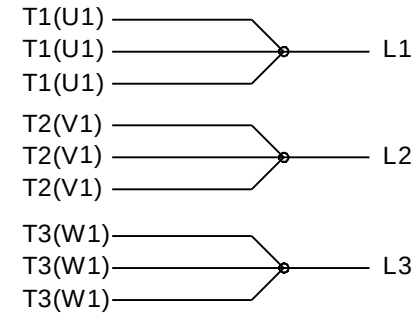
DESCRIPTION: OUTLINE
444/445T FR.-STD.

MATERIAL | PROCESS/FINISH

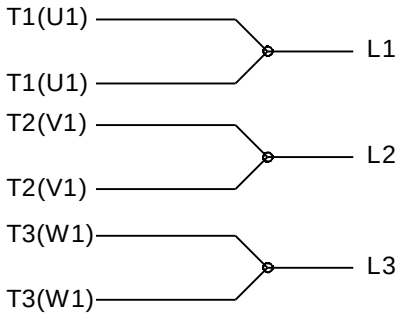
THIRD ANGLE PROJECTION

SIZE	DRAWING NUMBER	SHEET
B	SS513797	1 OF 1

IF MOTOR HAS 9 LEADS

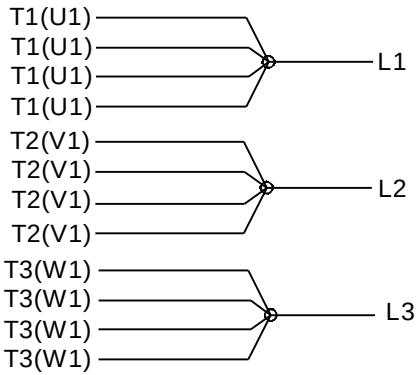


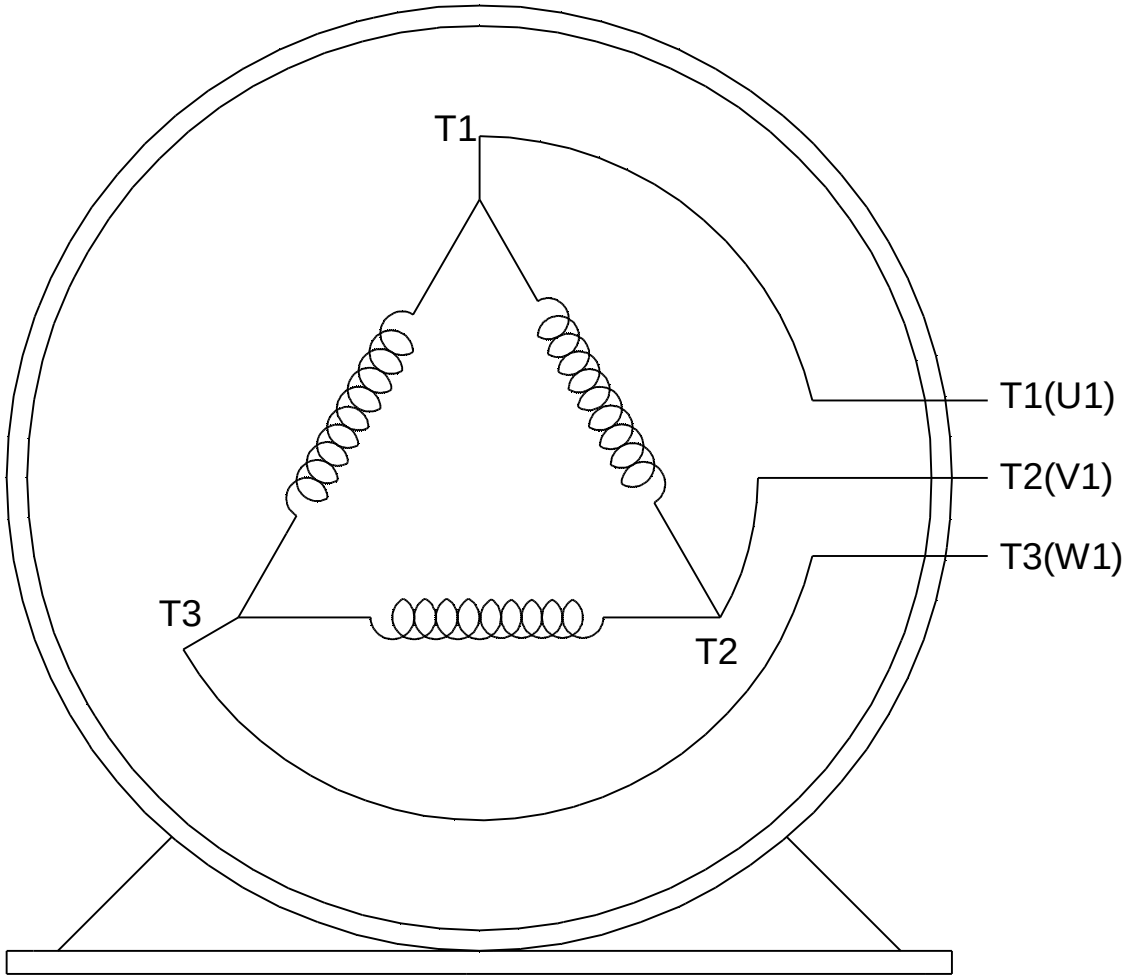
IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS





VIEW OF TERMINAL END

DRAWING REVISION	REVISION BY	DATE
L	AJW	05-04-2015
ECO	APPROVED BY	DATE
ECO-0077067	EWH	05-05-2015

ECO DESCRIPTION: UPDATED TO SOLIDWORKS

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.02	[±0.51]	
XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	DRS
DATE	09-27-1996
APPROVED BY	GK
DATE	09-30-1996
REFERENCE	

THIRD ANGLE PROJECTION

Regal Beloit America, Inc.

DESCRIPTION: CONN DIAGRAM-EXTERNAL
3Ø SINDLE VOLTAGE

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300U	1 OF 1

CERTIFICATION DATA SHEET

Model#:	445TTFN16852 AA	**WINDING#:**	T4454159 NONE 1
CONN. DIAGRAM:	A-EE7300U	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS513797-2025		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
200&150	149&112	1800	1785&1485	445T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	226&206	LINE OR INVERTER	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 96.2&95.8	3/4 LOAD EFF: 96.2	1/2 LOAD EFF: 95.8	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86&85.5	3/4 LOAD PF: 84	1/2 LOAD PF: 77	95.8	SQ CAGE INV RATED	70

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
589 LB-FT	1425	975 LB-FT 166	1450 LB-FT 246	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	59 LB-FT^2	1250 LB-FT^2	25 SEC.	2	2350 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	NONE	FALSE	NONE	BLUE (EPOXY)

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

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

INVERTER TORQUE: CONSTANT 2:1
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

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DATE: 06/21/2017 05:53:36 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

445TTFN16852

Submittal

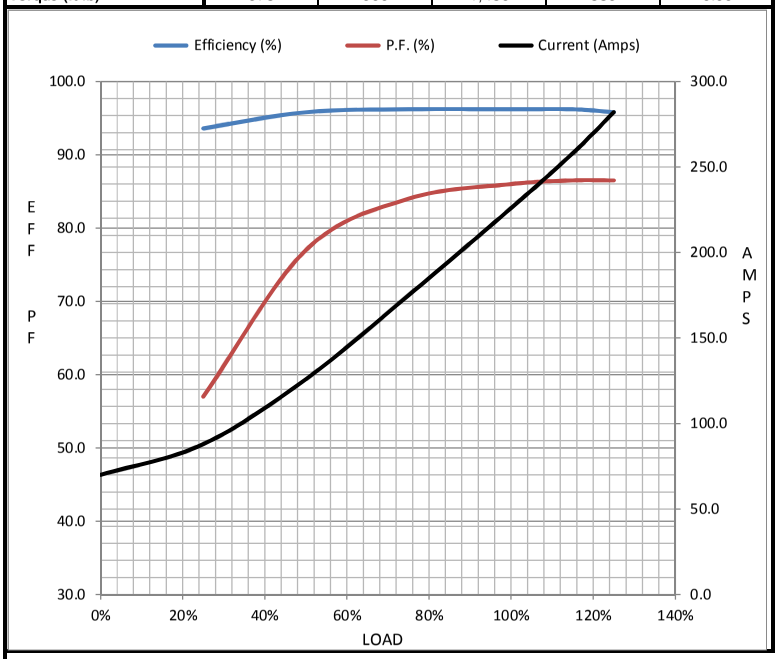
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	70.0	88.0	126	175	226	258	282	1,425	
Torque (ft-lb)	0.00	146	293	441	589	678	738	975	
RPM	1800	1795	1792	1788	1785	1,782	1778	0	
Efficiency (%)		93.6	95.8	96.2	96.2	96.2	95.8		
P.F. (%)	4.5	57.0	77.0	84.0	86.0	86.5	86.5	27.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1785	1800
Current (Amps)	1,425	1,300	850	226	70.0
Torque (ft-lb)	975	900	1,450	589	0.00



Information Block

HP	200.0
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	80 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	59.0 Lb-Ft²
Ref Wdg	T4454159 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	CONSTANT 2:1
Outline Dwg	B-SS513797-2025
Conn. Diag	A-EE7300U
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0140	0.0110	0.1300	0.1400	3.7060

Speed -Torque Curve