

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 444TTFC6683
Catalog No: Y851A
100,1200,TEFC,444T,3/60/460
Other Purpose



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REGAL[®]



Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	460 V
Current	114.0 A	Speed	1188 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Duty	Continuous
Insulation Class	F	Design Code	C
KVA Code	G	Frame	444T
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	NU319
Opp Drive End Bearing Size	6317	UL	Recognized
CSA	Y	CE	Y
IP Code	55		

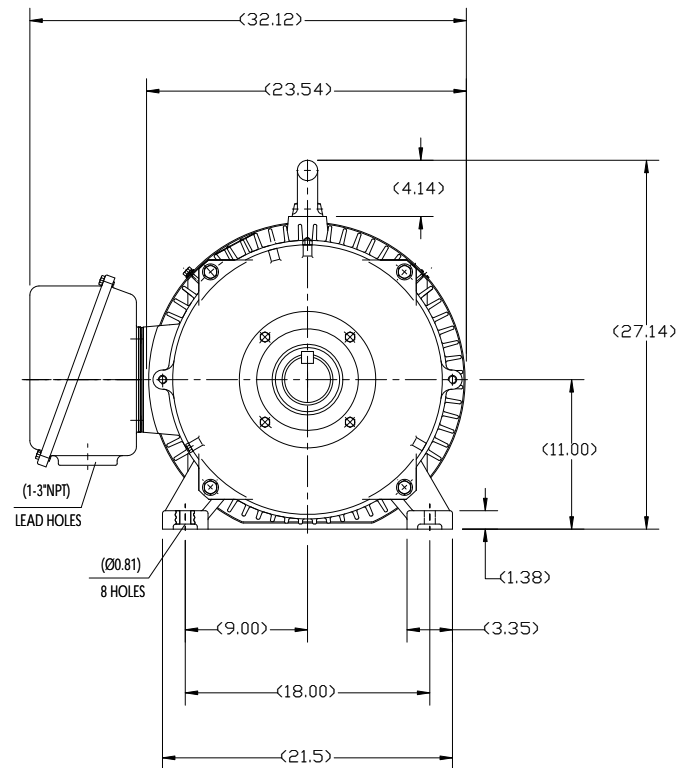
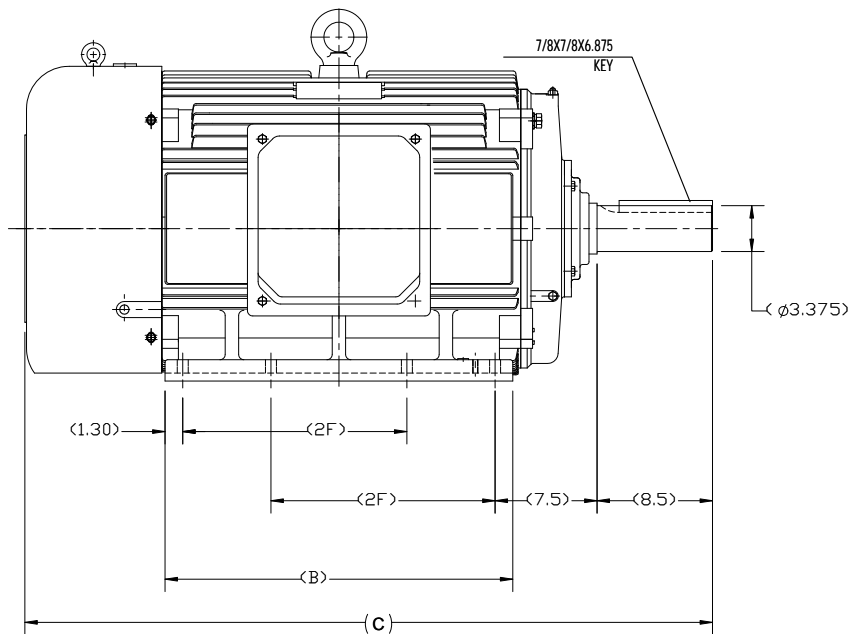
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start & Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal
Drive End Bearing	Roller	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	T
Overall Length	50.78 in	Shaft Diameter	3.375 in
Shaft Extension	8.5 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	SS620677	Connection Diagram	EE7308AA

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B

B



A

A

DRAWING REVISION B		REVISION BY W. JOERGER	DATE 02-27-2017	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH mm ANGLE .X -0.1 [-2.5] $\pm 7-30^\circ$.XX +0.03 [+0.76] .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: 200/5.1 mm SHOWN IN [BRACKETS]	DRAWN BY ZYH	Regal Beloit America, Inc.
ECO-0118824		APPROVED BY E. HEIL	DATE 02-27-2017		DATE 04-22-2012	
ECO DESCRIPTION REMOVED 447T/449T FRAME MOTORS <small>COPYRIGHT 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.</small>				APPROVED BY WGH	DESCRIPTION OUTLINE 444T/445T FR-TEFC-CAST IRON-SEVERE DUTY	
444T	50.787	25.60	14.50	DATE 04-22-2012	MATERIAL	PROCESS/FINISH
445T			16.50	REFERENCE	DRAWING NUMBER SS620677	SHEET 1 OF 1
FRAME	C	B	2F	THIRD ANGLE PROJECTION	SIZE B	
4		3		2		1



LOW VOLTAGE



HIGH VOLTAGE



DRAWING REVISION K	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		
<small>COPYRIGHT 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.</small>		



DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-12-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-2/1 DELTA-12 LEADS	
DATE 01-14-1994		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7308AA
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 444TTFC6683 AA **WINDING#:** CHT44460003 NONE 1
CONN. DIAGRAM: EE7308AA **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: SS620677

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75&56	1200	1188&990	444T	TEFC	G	C

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	114&105	PWS & YDRUN OR INV	CONTINUOU S	F7	1.15/1.15	40	3300

FULL LOAD EFF: 95&95	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86&87	3/4 LOAD PF: 84	1/2 LOAD PF: 78	94.1	SQ CAGE INV RATED	35

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
442 LB-FT	725	950 LB-FT 215	1000 LB-FT 225	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	95 LB-FT^2	1400 LB-FT^2	25 SEC.	2	2700 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						
ROLLER	BALL	SHC- 100/POLYREX	T	NONE	NONE	4140 STRESSPROOF (C-214)	CAST IRON
NU319	6317						

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 10:1 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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Data Sheet

Date: 19-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



444TTC6683

Submittal

Data @ 460 V

Motor Load Data

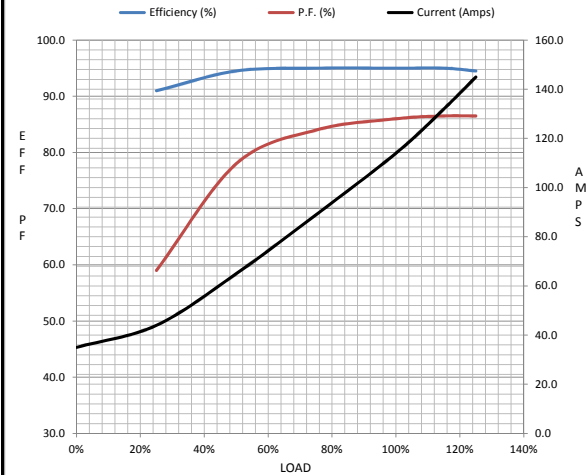
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	35.0	44.0	65.0	89.0	114	132	145	725
Torque (ft-lb)	0.00	110	220	331	442	510	554	950
RPM	1200	1196	1193	1190	1188	1,186	1184	0
Efficiency (%)		91.0	94.5	95.0	95.0	95.0	94.5	
P.F. (%)	6.5	59.0	78.0	84.0	86.0	86.5	86.5	34.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1188	1200
Current (Amps)	725	650	375	114	35.0
Torque (ft-lb)	950	800	1,000	442	0.00

Information Block

HP	100.0			
Sync. RPM	1200			
Frame	444			
Enclosure	TEFC			
Construction	TFC			
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 wk ²	95.0 Lb-Ft ²			
Ref Wdg	CHT44460003 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	SS620677			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0280	0.0190	0.2070	0.3890	7.5060



Speed -Torque Curve

