

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 254TTFL16001
Catalog No: E2121
15,3600,TEFC,254T,3/60/230/460
Totally Enclosed Fan Cooled (TEFC)



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E

REGAL[®]



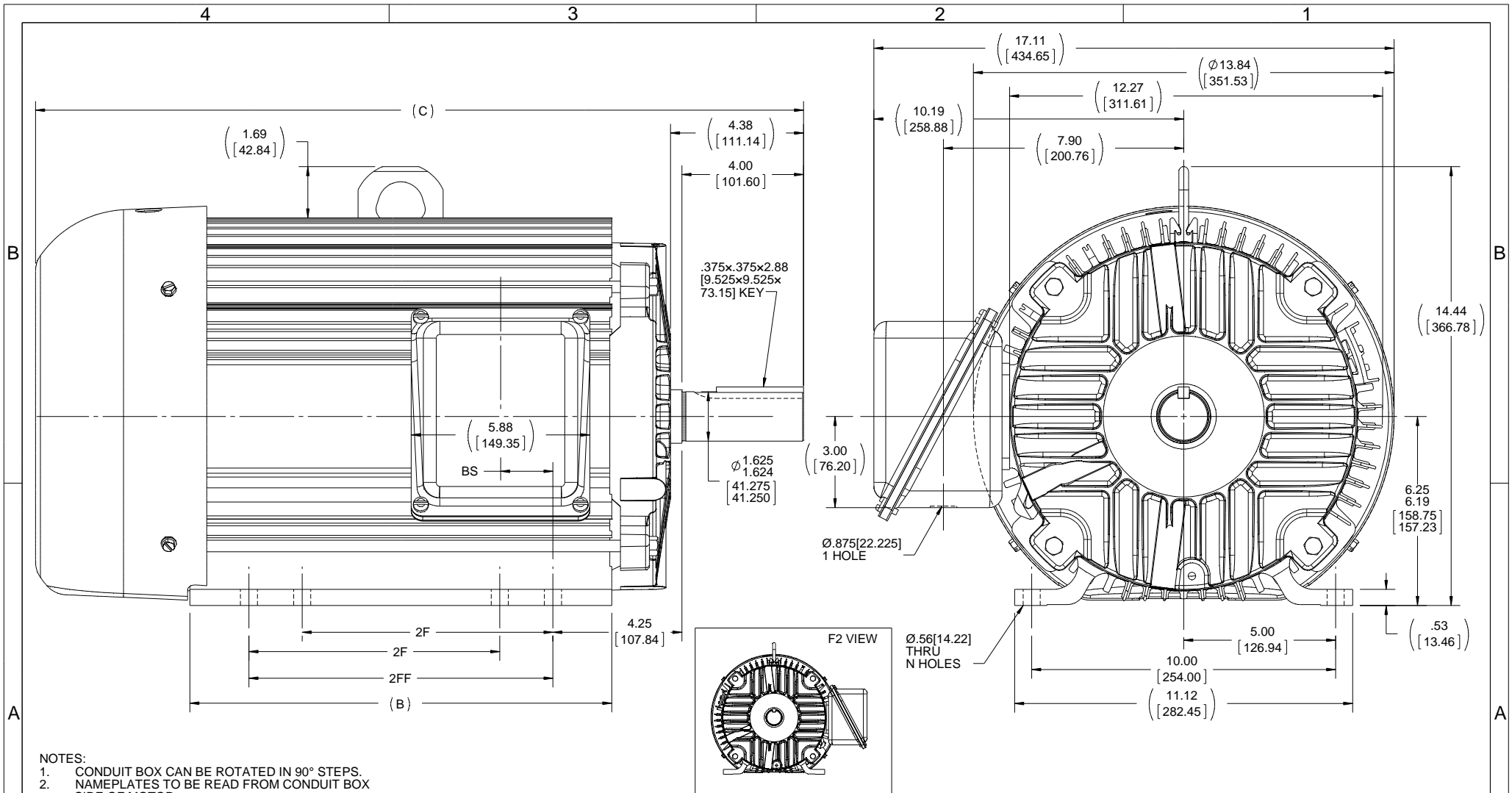
Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	35.0/17.5 A	Speed	3550 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Frame	254T
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6208	UL	Recognized
CSA	Y	CE	Y
IP Code	43		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Aluminum	Shaft Type	T
Overall Length	23.51 in	Frame Length	12.00 in
Shaft Diameter	1.625 in	Shaft Extension	4.37 in
Assembly/Box Mounting	F1/F2 Capable		
Outline Drawing	B-SS321100-1200	Connection Diagram	A-EE7308

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 06/29/2018



- NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	B	2F	2FF	BS	N
1200	254T	23.51 [597.15]	12.13 [308.10]	8.25 [209.55]	-----	1.73 [43.94]	4
1375	254/6T	25.26 [641.60]	13.88 [352.55]	8.25 [209.55]	10.00 [254.00]	1.73 [43.94]	8

DRAWING REVISION C	REVISION BY AJW	DATE 04-16-2015
ECO-0075524	APPROVED BY JHA	DATE 04-16-2015
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
<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>		

TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC	INCH	mm	ANGLE
.XX	+0.1	[+2.5]	±7 30°
.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: 200 INCH 5.1 mm SHOWN IN [BRACKETS]			

DRAWN BY RJW	DATE 02-01-2005
APPROVED BY BW	DATE 02-01-2005
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.	
DESCRIPTION	OUTLINE 250T FR.-ALUM. FR.-TEFC
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS321100
	SHEET 1 OF 1

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM	SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT							RFP	CAD FILE ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5	REV. 5
							DIST WP					



CERTIFICATION DATA SHEET

Model#: 254TTFL16001 AA **WINDING#:** K256289 R14 13
CONN. DIAGRAM: A-EE7308 **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS321100-1200

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&15	11.2&11.2	3600	3550&2940	254T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	35/17.5&43/21 .5	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&90.2	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85&87.5	3/4 LOAD PF: 83.5	1/2 LOAD PF: 75.5	91	SQ CAGE INV RATED	12 / 6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.2 LB-FT	232 / 116	41 LB-FT 185	65 LB-FT 293	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	1.1 LB-FT^2	22 LB-FT^2	20 SEC.	2	300 LBS.

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

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6309	BALL 6208	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM

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 - FT-LB NONE V NONE Hz

*
N
O
T
E
S
*

DATE: 06/23/2017 04:02:48 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



254TFL16001

Submittal

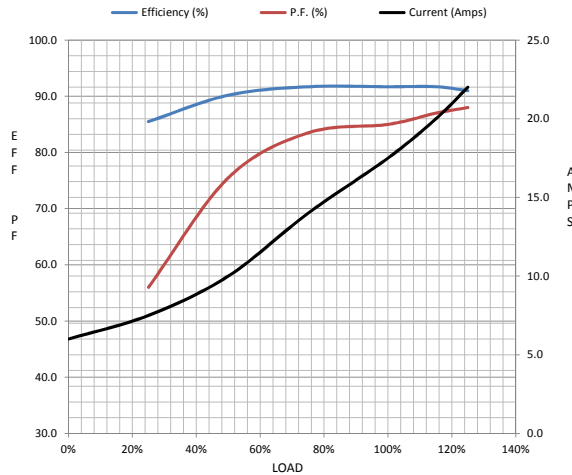
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.0	7.5	10.0	14.0	17.5	20.0	22.0	116
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.2	25.0	28.0	41.0
RPM	3600	3585	3570	3560	3550	3540	3525	0
Efficiency (%)		85.5	90.2	91.7	91.7	91.7	91.0	
P.F. (%)	10.5	56.0	75.5	83.5	85.0	87.0	88.0	38.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	1800	3175	3550	3600	HP	15.0
Current (Amps)	116	103	75.0	17.5	6.0	Sync. RPM	3600
Torque (ft-lb)	41.0	37.0	65.0	22.2	0.00	Frame	254
						Enclosure	TEFC
						Construction	TFY
						Voltage	30/460#190/38V
						Frequency	60 Hz
						Design	A
						LR Code letter	G
						Service Factor	1.15
						Temp Rise @ FL	50 ° C
						Duty	CONT
						Ambient	40 ° C
						Elevation	1,000 feet
						Rotor/Shaft wk²	1.10 Lb-Ft²
						Ref Wdg	K256289 R14
						Sound Pressure @ 1M	72 dBA
						VFD Rating	CONSTANT 10:1
						Outline Dwg	B-SS321100-1200
						Conn. Diag	A-EE7308



Information Block				
HP	15.0			
Sync. RPM	3600			
Frame	254			
Enclosure	TEFC			
Construction	TFY			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	50 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	1.10 Lb-Ft²			
Ref Wdg	K256289 R14			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS321100-1200			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000

Speed -Torque Curve

