

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 256TTFL16033
Catalog No: E2124
20,1800,TEFC,256T,3/60/230/460
Totally Enclosed Fan Cooled (TEFC)



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REGAL[®]



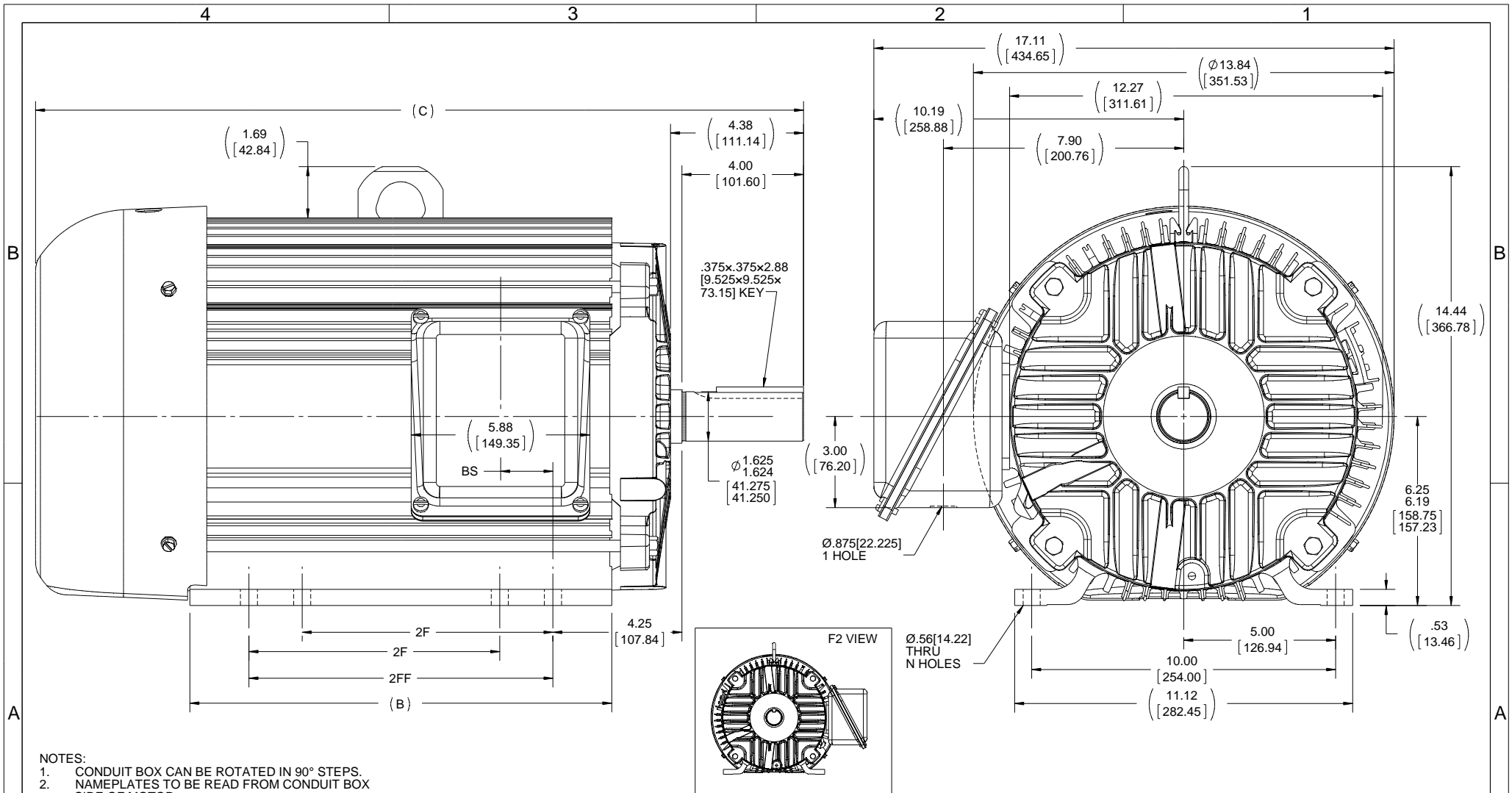
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	48.0/24.1 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Frame	256T
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	4	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	25.26 in	Frame Length	13.75 in
Shaft Diameter	1.625 in	Shaft Extension	4.38 in
Assembly/Box Mounting	F1/F2 Capable		
Outline Drawing	B-SS321100-1375	Connection Diagram	A-EE7308

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- 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		
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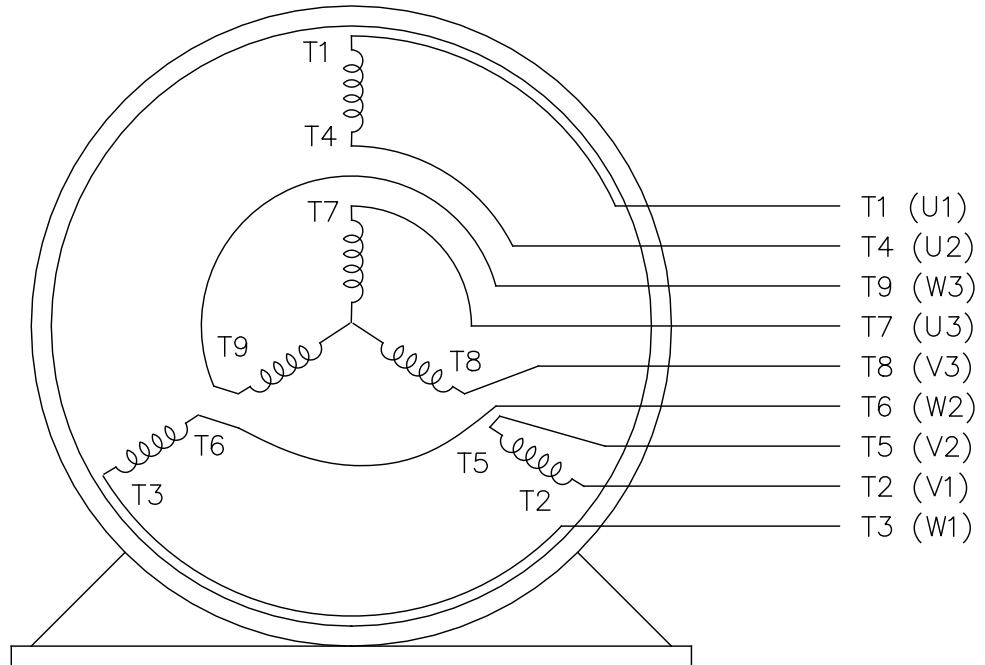
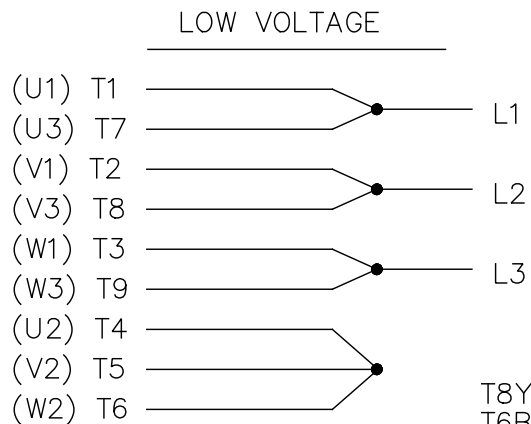
TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC	INCH	mm	ANGLE
.XX	+0.1	[+2.5]	±7 30°
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°			
CORNER FILLETS: R.02 [51]			
MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

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

REGAL ™ 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			SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
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							DIST WP					



Regal Beloit America, Inc.

CERTIFICATION DATA SHEET

Model#: 256TTFL16033 AN **WINDING#:** K2564164 R26 6
CONN. DIAGRAM: A-EE7308 **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS321100-1375

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&20	14.9&14.9	1800	1775&1450	256T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	48/24.1&57/28 .5	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 93&91.7	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
			92.4	SQ CAGE INV RATED	17 / 8.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59.2 LB-FT	276 / 138	104 LB-FT 176	146 LB-FT 247	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	3.2 LB-FT^2	125 LB-FT^2	25 SEC.	2	425 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	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM
BALL	BALL						
6309	6208						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs	NONE	FALSE	NONE VOLTS
NONE	NOT	NONE	NONE			

If Inverter equals NONE, contact factory for further information

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N
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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

DATE: 06/23/2017 07:04:23 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

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



256TFL16033

Submittal

Data @ 460 V

Motor Load Data

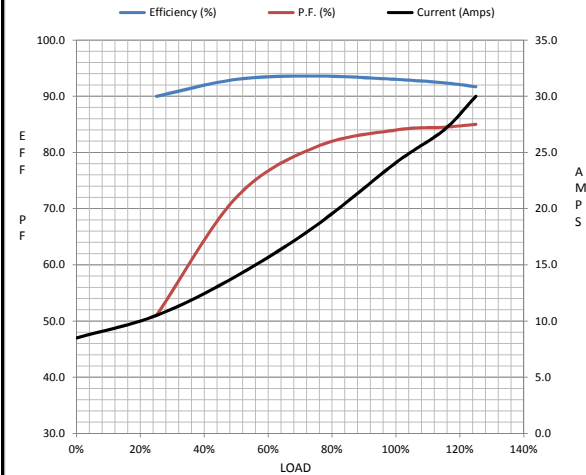
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	8.5	10.5	14.0	18.5	24.1	27.0	30.0	138
Torque (ft-lb)	0.00	14.5	29.5	44.5	59.2	68.0	74.5	104
RPM	1800	1795	1785	1780	1775	1,770	1760	0
Efficiency (%)		90.0	93.0	93.6	93.0	92.4	91.7	
P.F. (%)	8.5	51.0	72.0	81.0	84.0	84.5	85.0	40.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1775	1800
Current (Amps)	138	115	86.0	24.1	8.5
Torque (ft-lb)	104	100	146	59.2	0.00

Information Block

HP	20.0			
Sync. RPM	1800			
Frame	256			
Enclosure	TEFC			
Construction	TFY			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	3.2 Lb-Ft ²			
Ref Wdg	K2564164 R26			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS321100-1375			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2670	0.2070	0.9900	1.4910	28.4000



Speed -Torque Curve

