

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 256TTTNA16544

Catalog No: U1872

XRI®-SD Severe Duty Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,  
256TV Frame, TEAO



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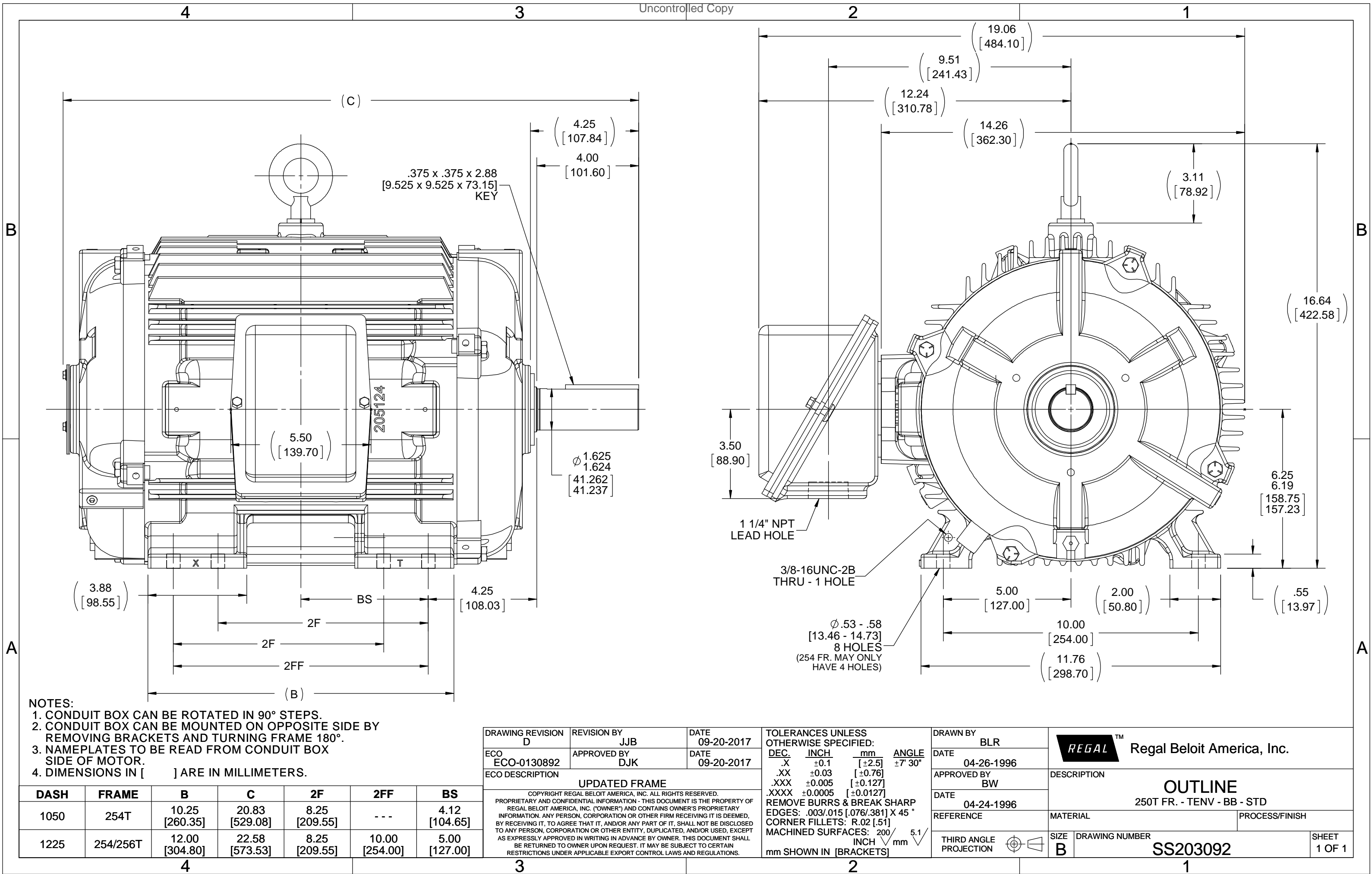
## Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	256TV	Enclosure	Totally Enclosed Air Over
Thermal Protection	No Protection	Efficiency	93 & 92.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	48/24.1 & 44/22 A	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	N	IP Code	56
Number of Speeds	1		

## Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.475 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal Or Up Or Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	22.35 in
Frame Length	12.25 in	Shaft Diameter	1.625 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 20:1		
Outline Drawing	B-SS203092-1225	Connection Drawing	A-EE7308







NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED	DEC.	INCHES	DRAWN RM	11/20/1990
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			REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005			FINISH	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	DRAWING NO. PAGE OF REV.
						DIST WP		A	EE7308 5

## CERTIFICATION DATA SHEET

Model#: 256TTTNA16544 AA  
 CONN. DIAGRAM: A-EE7308  
 OUTLINE: B-SS203092-1225

WINDING#: K2564164 R5 7  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	1800	1775&1475	256TV	TEAO	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&44/22	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 93&92.5	3/4 LOAD EFF: 93	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84&83.5	3/4 LOAD PF: 81	1/2 LOAD PF: 72	91	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	105 LB-FT 177	146 LB-FT 247	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
- dBA	- dBA	3.2 LB-FT^2	- LB-FT^2	25 SEC.	-	375 LBS.

## \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL OR UP OR DOWN	PREMIUM SEVERE DUTY	NONE	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
6309	6210						

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

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INVERTER TORQUE: CONSTANT 20:1 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

DATE: 06/21/2017 10:02:20 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



256TTTNA16544

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	105	
RPM	1800	1795	1785	1780	1775	1,770	1760	0	
Efficiency (%)		90.2	92.4	93.0	93.0	92.4	91.7		
P.F. (%)	8.0	51.0	72.0	81.0	84.0	84.5	85.0	40.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block				
Speed (RPM)	0	900	1625	1775	1800	HP	20.0			
Current (Amps)	138	115	86.0	24.1	8.5	Sync. RPM	1800			
Torque (ft-lb)	105	100	146	59.2	0.00	Frame	256			
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div><div>EFFICIENCY (%)</div><div>P.F. (%)</div><div>CURRENT (AMPS)</div><div>LOAD</div></div>						Enclosure	TEAO			
						Construction	TTN			
						Voltage	30/460#190/381V			
						Frequency	60 Hz			
						Design	B			
						LR Code letter	G			
						Service Factor	1.15			
						Temp Rise @ FL	0 °C			
						Duty	CONT			
						Ambient	40 °C			
						Elevation	1,000 feet			
						Rotor/Shaft wk²	3.2 Lb-Ft²			
						Ref Wdg	K2564164 R5			
						Sound Pressure @ 1M	999 dBA			
						VFD Rating	CONSTANT 20:1			
						Outline Dwg	B-SS203092-1225			
						Conn. Diag	A-EE7308			
Additional Specifications:						0				
0						EQUIV CKT (OHMS / PHASE)				
R1		R2		X1		X2		Xm		
0.2670		0.2070		0.9900		1.4910		28.4000		

## Speed -Torque Curve

