

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 090ST34FH6301  
Catalog No: R318A  
2,3600,TEFC,90S,3/60/230/460  
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**<sup>®</sup>



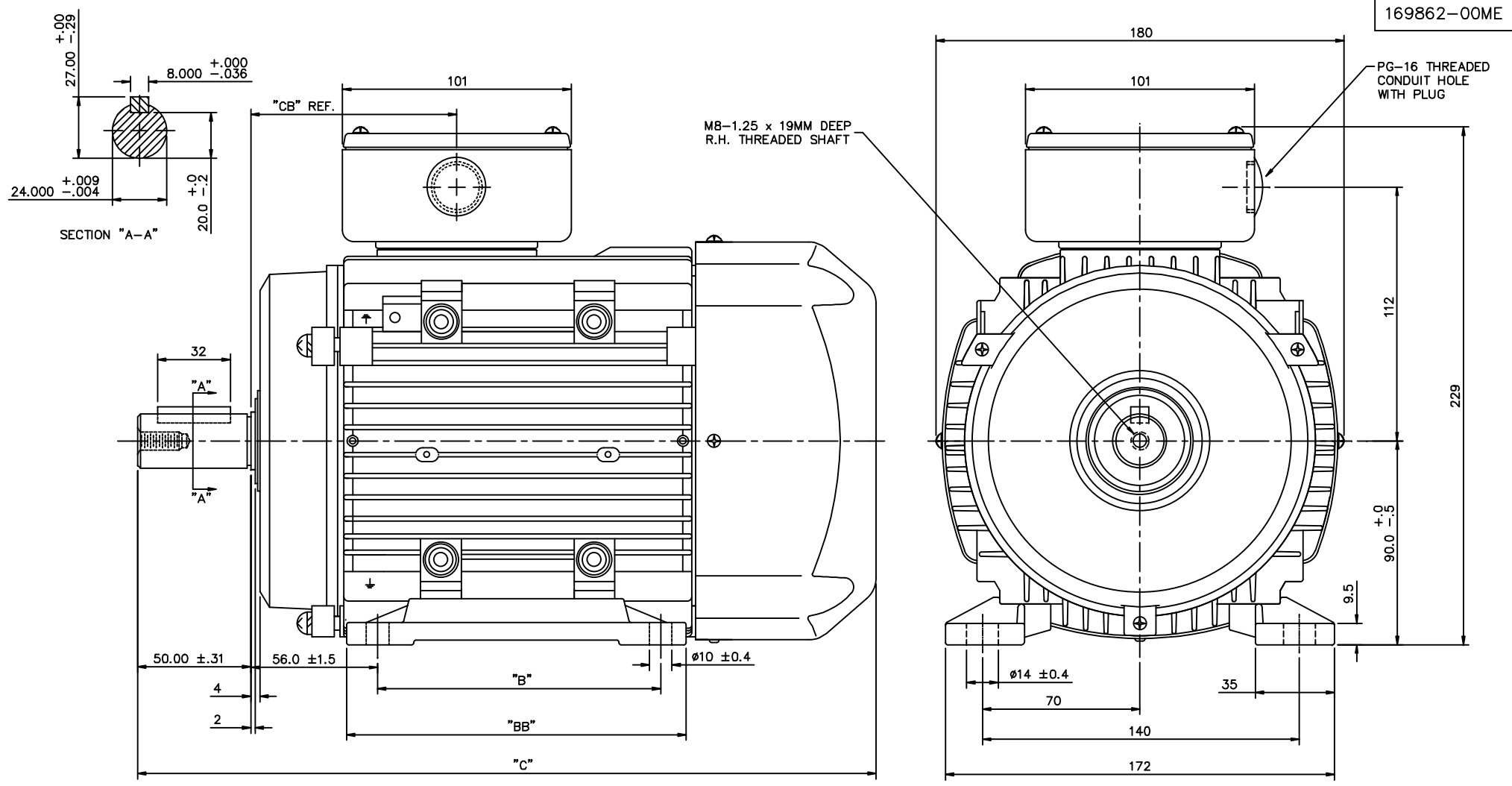
### Nameplate Specifications

Output HP	2 Hp	Output KW	1.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	5.0/2.5 A	Speed	3520 rpm
Service Factor	1.15	Phase	3
Efficiency	85.5 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	L	Frame	90S
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6205
Opp Drive End Bearing Size	6205	UL	Recognized
CSA	Y	CE	Y
IP Code	55		

### Technical Specifications

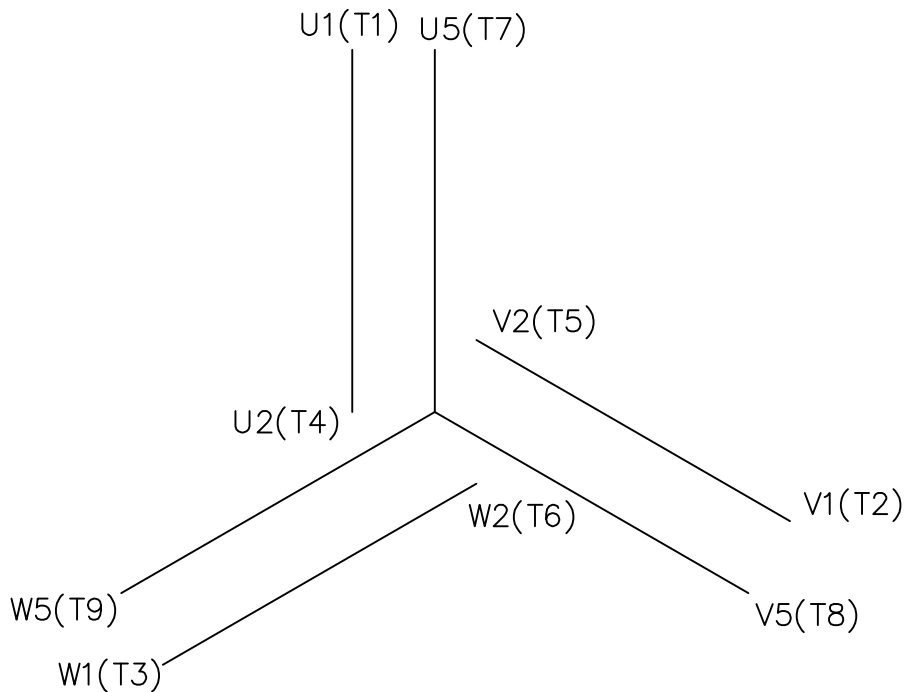
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Aluminum	Shaft Type	IEC
Overall Length	12.83 in	Shaft Diameter	1.000 in
Shaft Extension	1.96 in	Assembly/Box Mounting	F3
Outline Drawing	16986200ME	Connection Diagram	00546501ME

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



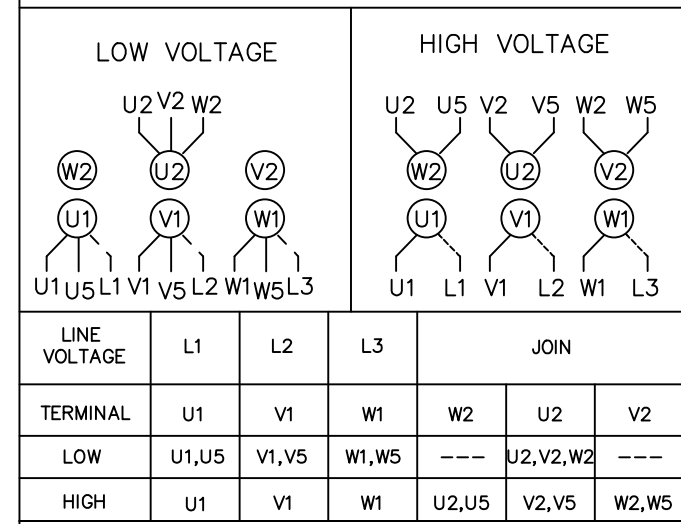
FRAME DESIGN	"B"	"BB"	"CB"	"C"
90L	125±0.7	150	91	341
90S	100±0.7	125	79	326

TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN ADS 01/24/02	
DEC.	METRIC			CHK	
.X	±2.5	TITLE METRIC OUTLINE, IMB3 IEC-90 FRAME		APPD	SCALE 1=1.6
.XX	±.76			REF	OSVC-300-551
.XXX	±.127			FMF	
.XXXX	±.0127			PREV	
NO.	REVISION	BY & DATE	CHK ANG ±1/2'	FINISH	
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	16986200ME
				SIZE	DRAWING NO. B 169862-00ME
				DIST	REV.

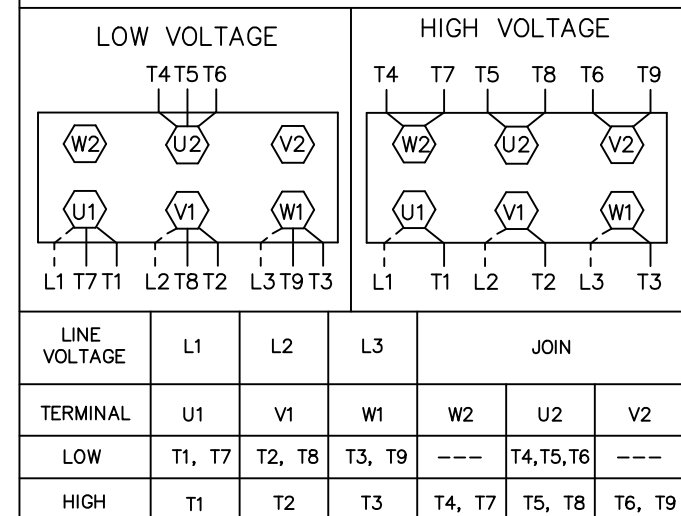


REF. DECAL (IEC) 080644  
REF. DECAL (NEMA) 080446

IEC MARKINGS



NEMA MARKINGS



				TOLERANCES UNLESS SPECIFIED			DRAWN JGO 3/10/04	
				DEC.	INCHES		CHK SB 02-17-2010	
				.X	±.1		APPD MJS 02-17-2010	
				.XX	±.01		SCALE 1=1	
				.XXX	±.005		REF	
				.XXXX	±.0005	FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2'	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	02-17-2010	CAD FILE	00546501ME	SIZE	DRAWING NO.
			DIST				A	005465ME-01
								REV.

CERTIFICATION DATA SHEET

Model#: 90ST34FH6301 A WINDING#: QT9025 FR 3  
 CONN. DIAGRAM: 00546501ME ASSEMBLY: F3  
 OUTLINE: 16986200ME

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
2&2	1.49&1.49	3600	3520&2910	90S	TEFC	L	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/ 400	5.0/2.5&5.8/2. 9	LINE OR INVERTER	CONTINUOU S	F5	1.15/1.15	40	3300

FULL LOAD EFF: 85.5&84	3/4 LOAD EFF: 86.4	1/2 LOAD EFF: 86.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84.9&88	3/4 LOAD PF: 80.5	1/2 LOAD PF: 68.8	0	SQ CAGE INV RATED	2.4 / 1.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	50 / 25	9.16 LB-FT 307	13.28 LB-FT 446	27

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0 LB-FT^2	0 LB-FT^2	10 SEC.	0	0 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	B3	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	STANDARD IEC	NONE	NONE	AISI 1045 (C-240)	ALUMINUM
6205	6205						

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 20:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

\*  
N  
O  
T  
E  
S  
\*

DATE: 06/28/2017 04:52:20 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.