

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 056T17W99031  
Catalog No: N770A  
2,1800,TEFC,56C,3/60/230/460  
Encapsulated



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**REGAL**<sup>®</sup>



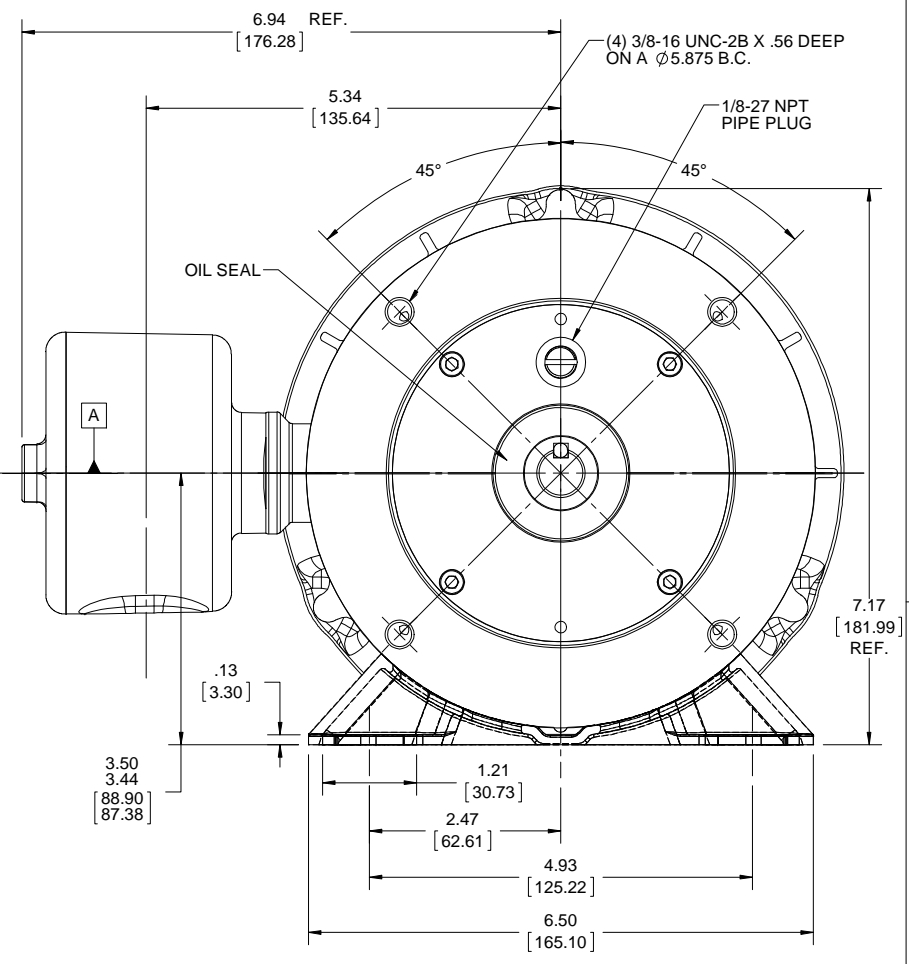
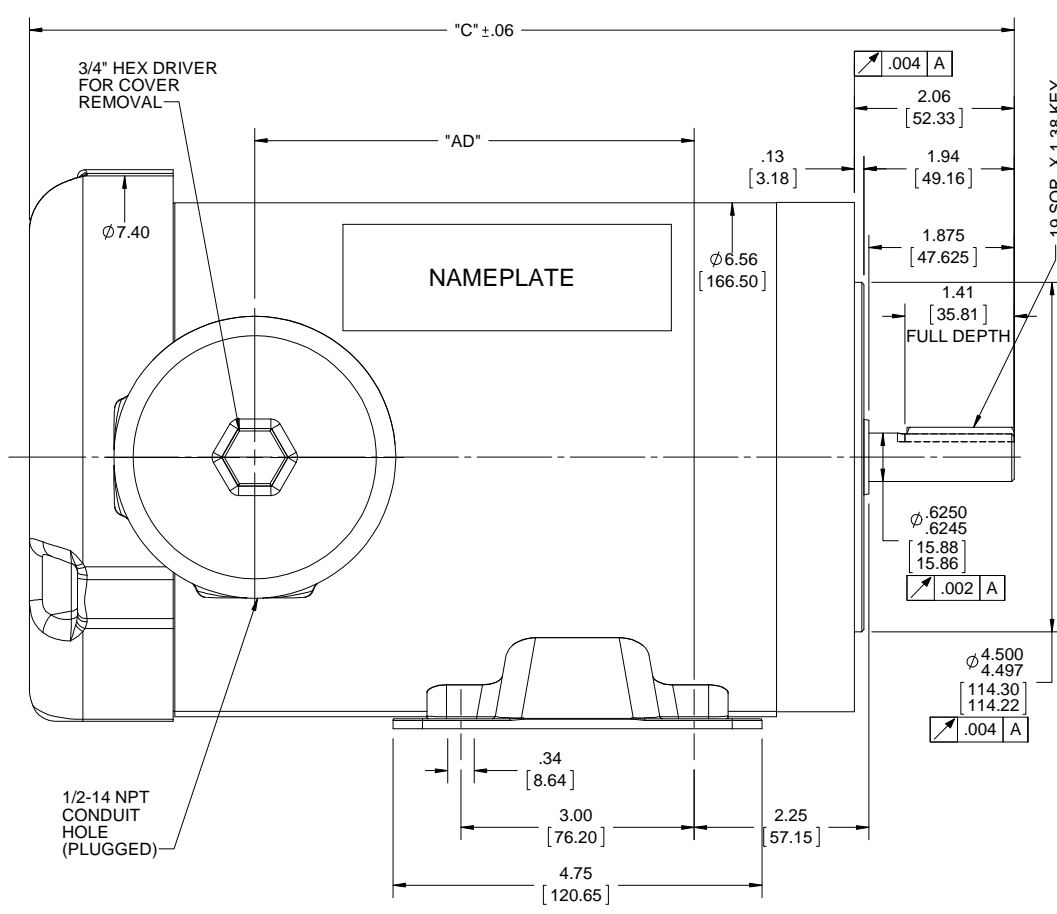
### Nameplate Specifications

Output HP	<b>2 Hp</b>	Output KW	<b>1.5 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>5.8/2.9 A</b>	Speed	<b>1745 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>86.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>L</b>	Frame	<b>56C</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6205</b>
Opp Drive End Bearing Size	<b>6205</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>66</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>HORIZONTAL</b>
Drive End Bearing	<b>BALL</b>	Opp Drive End Bearing	<b>BALL</b>
Frame Material	<b>Stainless Steel</b>	Shaft Type	<b>NEMA 56</b>
Overall Length	<b>13.19 in</b>	Frame Length	<b>8.25 in</b>
Shaft Diameter	<b>0.625 in</b>	Shaft Extension	<b>2.06 in</b>
Assembly/Box Mounting	<b>F1 ONLY</b>		
Outline Drawing	<b>607-0174-825</b>	Connection Diagram	<b>005010.52</b>

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DASH NO.	"C"	"AD"
625	11.19	3.65
675	11.69	4.15
700	11.94	4.40
725	12.19	4.65
750	12.44	4.90
775	12.69	5.15
800	12.94	5.40
825	13.19	5.65

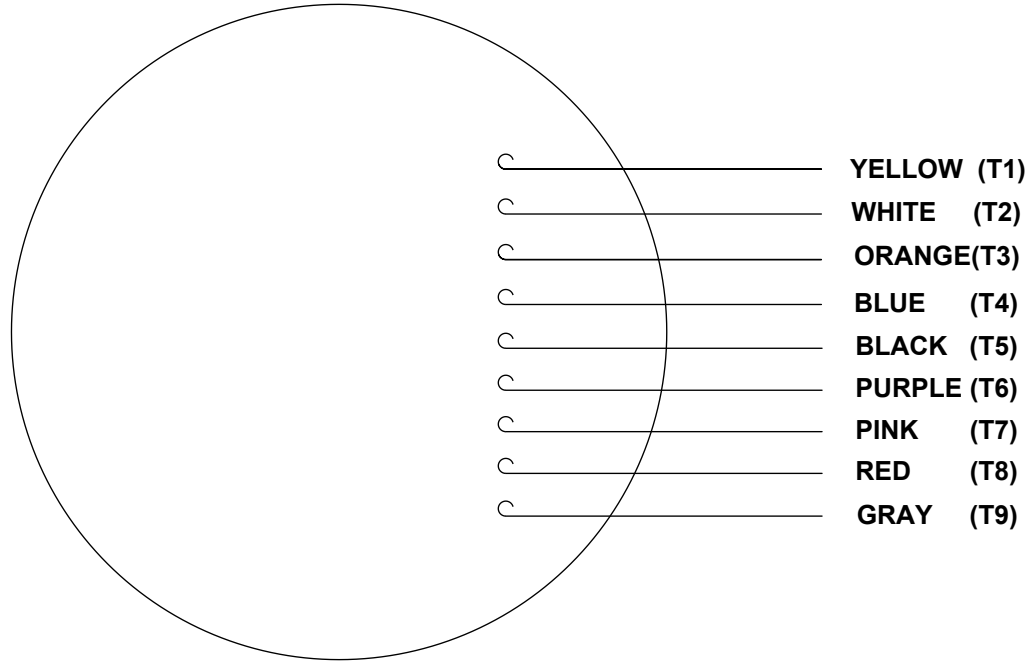
DRAWING REVISION F	REVISION BY UDAY	DATE 10/05/2017
ECO ECO-0132348	APPROVED BY REETESH	DATE 10/05/2017
ECO DESCRIPTION ADDED DASH # 825		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	+0.1	[+2.5]	±0.5°
.XX	+0.01	[+0.25]	
.XXX	+0.005	[+0.127]	
.XXXX	+0.0005	[+0.0127]	
REMOVE BURRS & BREAK SHARP			
EDGES: .003/.015 [0.076/3.81]			
CORNER FILLETS: .02 [51]			
MACHINED SURFACES: 125/3.2			
mm SHOWN IN [BRACKETS]			

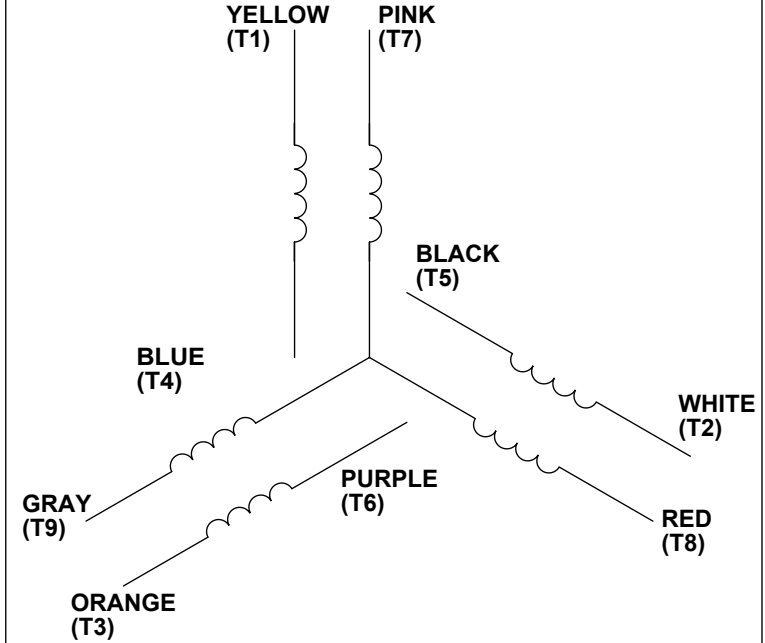
DRAWN BY LST
DATE 6/12/14
APPROVED BY
DATE
REFERENCE
THIRD ANGLE PROJECTION

<b>REGAL</b> ™ Regal Beloit America, Inc.	
<b>OUTLINE</b> 56C FRAME - TEFC- RIGID "C"	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>607-0174</b>
SHEET 1 OF 1	

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



## LINE LEADS



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4, T7) (T5, T8) (T6, T9)
LOW	T1, T7	T2, T8	T3, T9	T4, T5, T6

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DRAWING REVISION <b>C</b>	REVISION BY <b>PVR</b>	DATE <b>04/23/14</b>
ECO <b>ECO-0049985</b>	APPROVED BY <b>JD</b>	DATE <b>04/23/14</b>
ECO DESCRIPTION <b>UPDATED PER ECO-0049985</b>		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	+0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP			
EDGES: .003/.015 [.076/.381]			
CORNER FILLETS: .02 [.51]			
MACHINED SURFACES: 125/3.2			
INCH <input checked="" type="checkbox"/> mm <input checked="" type="checkbox"/>			
mm SHOWN IN [BRACKETS]			

DRAWN BY <b>LST</b>
DATE <b>4/3/14</b>
APPROVED BY
DATE
PROCESS/FINISH
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>	
DESCRIPTION <b>LEAD ASSY EXT. WIRING DIA. 3 PH. W/O PROT.</b>	
MATERIAL	
SIZE <b>A</b>	DRAWING NUMBER <b>00501052</b>
SHEET <b>1 OF 1</b>	



P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:   
 ORDER #: 00501052   
 REFERENCE MODEL #: 56T17W99031   
 CONN. DIAGRAM: 607-0174-825   
 CAT #: N770A   
 OUTLINE: T634340   
 CUSTOMER PART #:   
 WINDING: FR 3   
 MOUNTING: F1 ONLY   
 SPEED:   
 TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
2	1.5	1800	1751	56C	TEFC	TEF	L	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	6/38 6/3	LINE OR INVERTER	CONT	F	1.15	40	3300
	F.L. EFF	86.5	3/4 LD EFF	85.6	1/2 LD EFF	83.4	GTD EFF	ELECT. TYPE	
	F.L. PF	75.6	3/4 LD PF	64.0	1/2 LD PF	51.9	84.0	SO CAGE INV BATED	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
6.0 LB-FT	28.5	18.8 LB-FT	24.6 LB-FT	410%
@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME
65 DBA	74 DBA	0.16 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	10 SEC.
				START/SHOUR
				3
				MOTOR WGT
				0 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	NO PAINT

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE BALL 6205	POLYREX EM	STANDARD 56	NONE	NONE	303 STAINLESS (C-501)	STAINLESS STEEL

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0	0	0	0	0	0.080	ODE

\* INVERTER TORQUE: CONSTANT 3:1  
 INV. HP SPEED RANGE: NONE  
 ENCODER: NONE  
 NONE  
 NONE  
 BRAKE: NONE  
 NONE  
 FT-LB: NA  
 VOLTAGE: NONE  
 NONE  
 NONE PPR

PREPARED BY: FAREEDA DUDEKULA  
 DATE: 9/17/2018  
 FORM: 3531 REV\_4 2/27/06  
 UL: V:INS, CONST UL REC  
 HZ:

Data Sheet

56117W99031



Submital

Data @ 460 V

Date: 9/17/2018

Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA

Motor Load Data

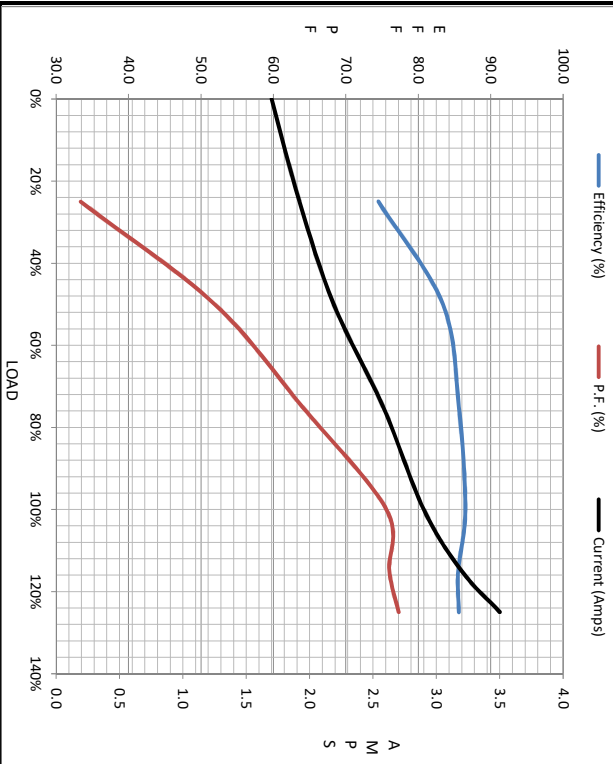
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.70	1.92	2.19	2.58	2.90	3.2	3.5	26.5
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.5	7.5	18.8
RPM	1800	1787	1774	1763	1751	1,730	1732	0
Efficiency (%)		74.5	83.4	85.6	86.5	85.5	85.6	
P.F. (%)	7.1	33.4	51.9	64.0	75.6	76.0	77.3	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	775	1085	1751	1800
Current (Amps)	26.5	24.4	14.2	2.90	1.70
Torque (ft-lb)	18.8	15.0	24.6	6.0	0.00

Information Block

HP	2.0
Sync. RPM	1800
Frame	140182TFC080
Enclosure	TEFC
Construction	TFR
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	A
LR Code letter	L
Service Factor	1.15
Temp Rise @ FL	53 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wk <sup>2</sup>	0.16 Lb-Ft <sup>2</sup>
Ret Wdg	T634340 FR
Sound Pressure @ 1M	65 dBA
VFD Rating	CONSTANT 3:1
Outline Dwg	607-0174-825
Conn. Diag	005010.52
Additional Specifications:	
0	
0	
	EQUIV CKT (OHMS / PHASE)
	R1 R2 X1 X2 Km
	0.0000 0.0000 0.0000 0.0000 0.0000



Speed - Torque Curve

