

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 048A17O153

Catalog No: X016

0.50 HP 3 speed Fan and Blower HVAC/R Motor, 1 phase, 1800 RPM, 115 V, 48Z Frame, OPAO
Direct Drive Motors



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REGAL

Nameplate Specifications

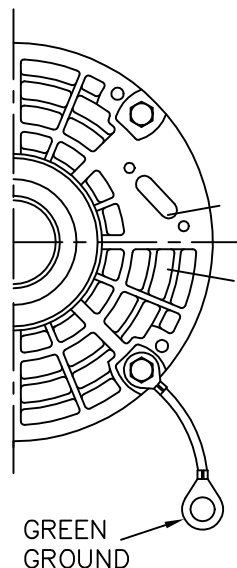
Output HP	0.50 Hp	Output KW	0.37 kW
Frequency	60 Hz	Voltage	115 V
Current	7.4 A	Speed	1625 rpm
Service Factor	1	Phase	1
Efficiency	71.7 %	Power Factor	92.9
Duty	Continuous	Insulation Class	B
Design Code	NO DESIGN CODE	KVA Code	C
Frame	48Z	Enclosure	Open Air Over
Thermal Protection	Automatic Lock Rotor Only	Ambient Temperature	40 °C
Drive End Bearing Size	6203	Opp Drive End Bearing Size	6203
UL	Recognized	CSA	Y
CE	N	IP Code	10

Technical Specifications

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	4	Rotation	Selective Counterclockwise
Resistance Main	0 Ohms	Mounting	Resilient Ring - Extended Studs
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	Single Special Extension	Overall Length	10.25 in
Frame Length	4.75 in	Shaft Diameter	0.500 in
Shaft Extension	4.06 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	A-SS403608-475	Connection Drawing	6906493

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TERM. END



LEADS & BUSHINGS

.03
 $\phi 2.25$

N.P. LOC'D @ "C" READ
 FROM T.E. WHEN
 TWO PEICE N.P. IS
 USED CENTER @ "C"

1.82 (A)

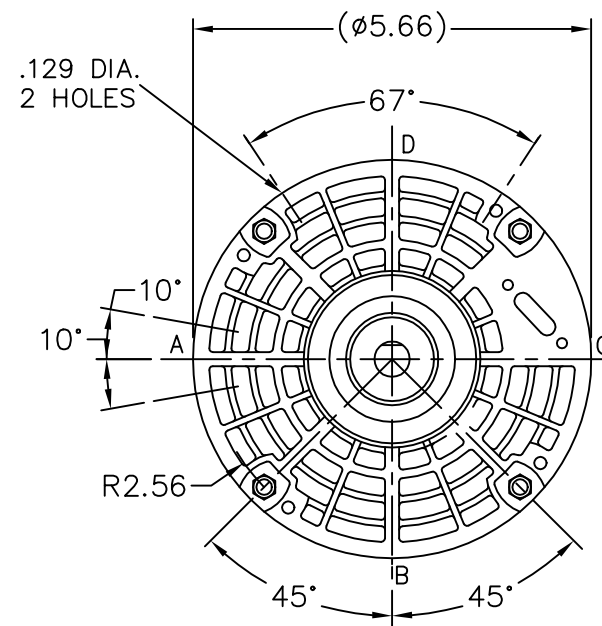
.31
 .16
 CONNECTION
 DECAL READ
 FROM T. END

OPEN EACH END

.19
 .75
 .94

4.06
 4.00
 3.50
 FULL
 FLAT

$\phi .5000$
 $\phi .4995$
 8-32 UN



DASH	FR.	C	A
400	48Y	10.00	5.00
475	48Y	10.25	5.25
500	48Y	10.50	5.50
525	48Y	10.75	5.75

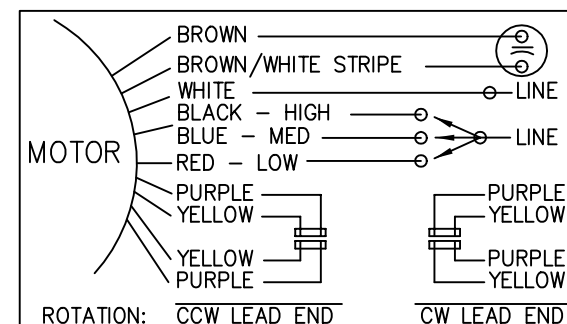
LEAD DESCRIPTION:

1 WHITE, 1 BLACK, 1 BLUE, & 1 RED LEAD WITH
 .50 BARE WIRE STRIP. 30.00" LONG.

2 BROWN LEADS WITH .25 FLAG-TYPE QUICK
 CONNECTS, 30.00" LONG. BROWN/WHITE MARKED
 LEAD IS COMMON TO WHITE.

REVERSING LEADS ARE MOLDED INTO MATING
 PULL-APART PLUGS. 1 YELLOW & 1 PURPLE
 LEAD PER PLUG. 5.00" LONG.

GREEN LEAD WITH TERM. FOR #10 SCREW 12.00" LONG.



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED
					DEC. INCHES
					.X $\pm .1$
					.XX $\pm .03$
02	FEW MORE DASH VALUES ADDED.	SP 7/7/2008	NB	.XXX	$\pm .005$
01	DASH VALUE ADDED.	SP 05-20-2008	NB	.XXXX	$\pm .0005$
					FINISH $\pm 7'30"$



TITLE OUTLINE

MAT'L.

FINISH

DRAWN NB 05-15-2007

CHK VL 05-20-2007

APPD VL 05-20-2007

SCALE 3=8

REF SS75119

FMF MU79124

PREV

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RFP 05-20-2007

DIST WP

CAD FILE ss403608

SIZE

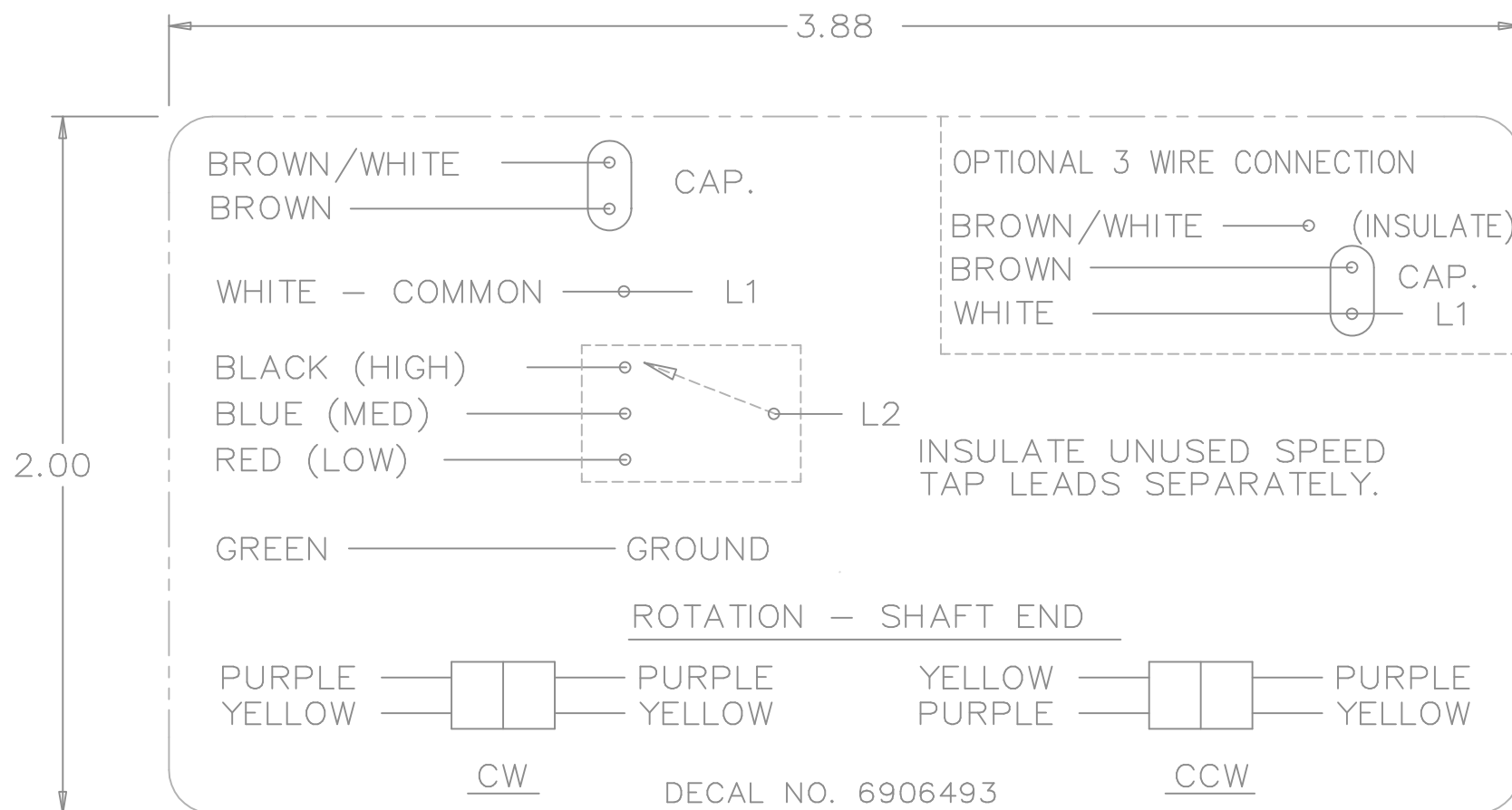
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REV.

02



				TOLERANCES UNLESS SPECIFIED		REGAL-BELOIT <i>Motor Technologies</i>	DRAWN MRB 04-16-1998			
				DEC.	INCHES		CHK	ML	04-22-1998	
				.X	±.1		APPD	GK	04-22-1998	
3	REMOVED 'MARATHON ELECTRIC' CN 35106	DRS 05-01-2002	TOM	.XX	±	TITLE CONNECTION DECAL	SCALE 1=1			
2	PART NAME WAS CONNECTION DIAGRAM CN 25669	MRB 04-25-1998		.XXX	±.005		REF			
1	NEW DRAWING CN 25669	MRB 04-22-1998		.XXXX	±.0005	MAT'L.	FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±	FINISH	PREV			
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				DIST	WP		A	6906493		3

CERTIFICATION DATA SHEET

Model#: 48A170153 E
 CONN. DIAGRAM: 6906493
 OUTLINE: A-SS403608-475

WINDING#: PE484236 NONE 1
 ASSEMBLY: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1/2	.37	1800	1625	48Z	OPAO	C	NO DESIGN CODE

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
1	60	115	7.4	ACROSS THE LINE	CONTINUOUS	B3	1.0	40	3300

FULL LOAD EFF: 71.7	3/4 LOAD EFF: -	1/2 LOAD EFF: -	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: -	3/4 LOAD PF: -	1/2 LOAD PF: -	-	PSC 3 SPEED	1.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
24.6 LB-FT	17.7	8.72 LB-FT -	41.2 LB-FT -	-

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

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RESILIENT RING-EXTENDED STUDS	HORIZONTAL	FALSE	NONE	FALSE	NONE	GRAY (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	BEACON 325	SGL SPL EXT	0.500 x 4.00 IN SEF WITH 3.50 IN FULL FLAT	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6203	6203						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	AUT LCK RTR ONLY	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

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N
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T
E
S
*

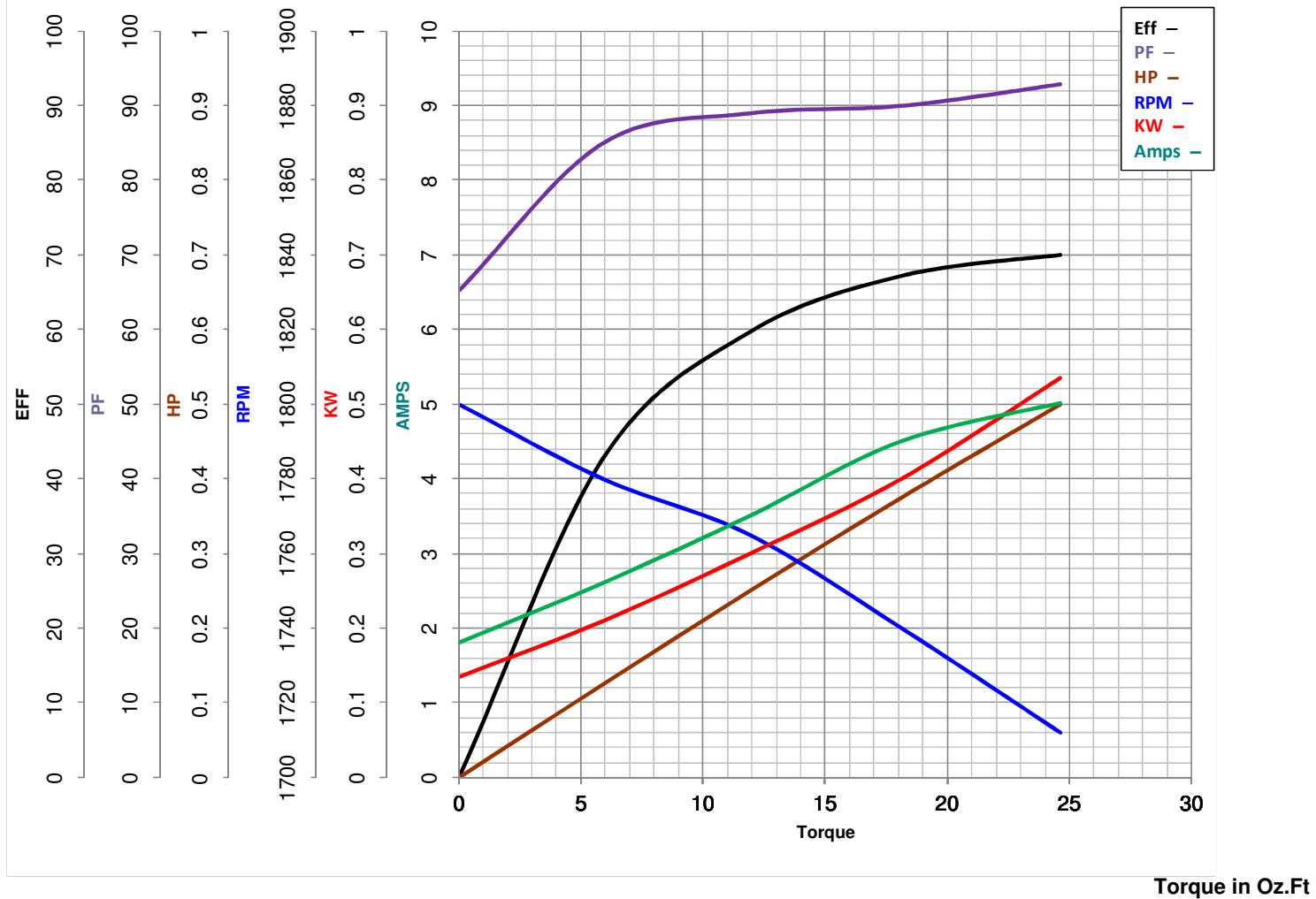
INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

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** Subject to change without notice.

MARATHON ELECTRIC CORPORATION

TYPICAL PERFORMANCE CURVE for AC MOTOR

Customer**Curve at**115**Volts****HP** 0.50**PHASE** 1**Model No** 48A17015360**HZ****VOLTS** 1150.5**HP****Catalog No** X016**HZ** 60**RPM** 1625

FL TORQUE 24.6 Oz.Ft
BD TORQUE 41.2 Oz.Ft
LR TORQUE 8.72 Oz.Ft

FL AMPS 7.4
PU TORQUE 7.2 Oz.Ft
LR AMPS 17.7

WINDING

PE484236-1

Prepared By

CHANDANA

Date

1/9/2018