

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 184TTTN16545  
Catalog No: U1868  
5,1800,TEAO,184TV,3/60/230/460  
Other Purpose



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**REGAL**<sup>®</sup>



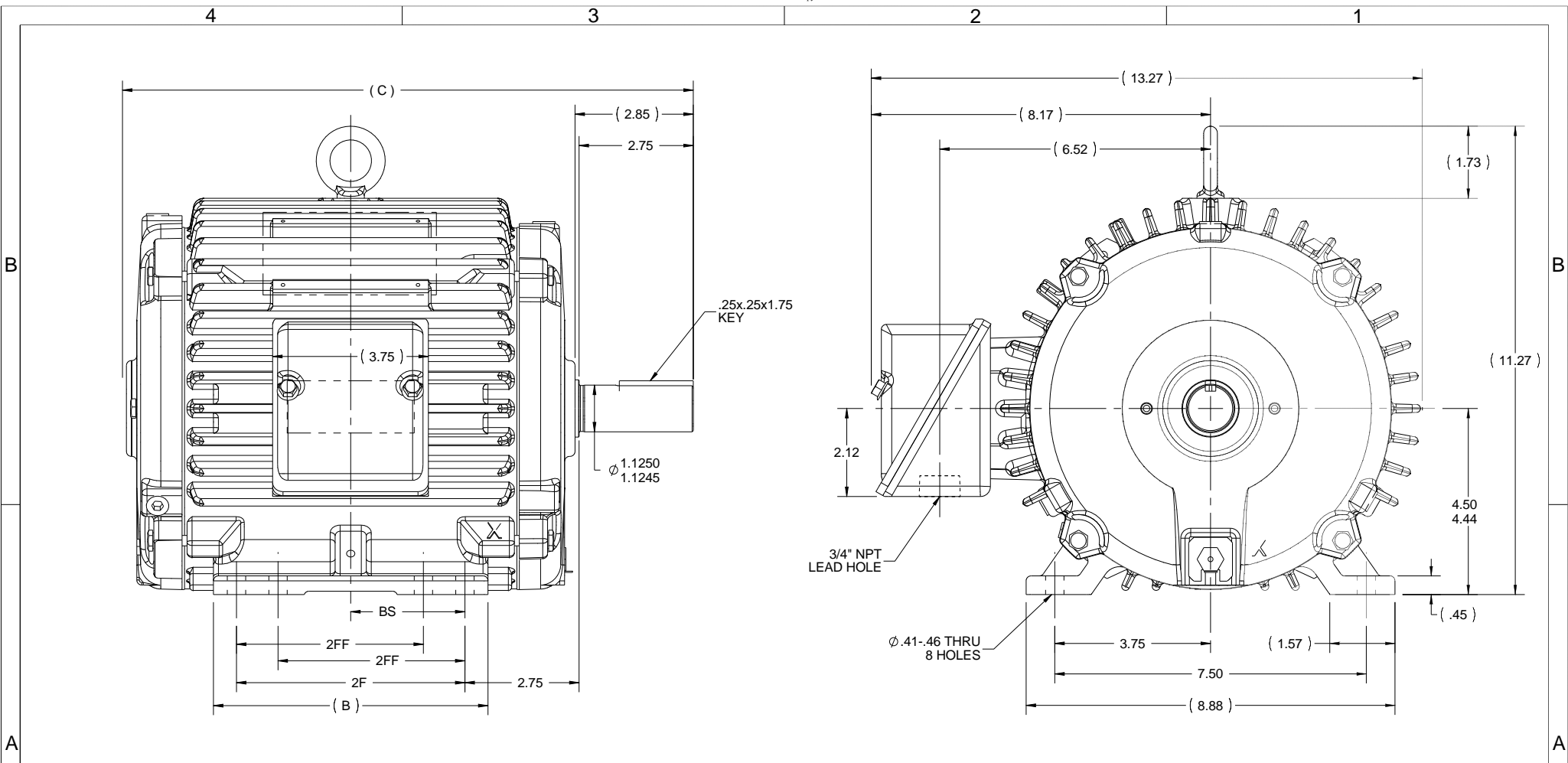
### Nameplate Specifications

Output HP	<b>5 Hp</b>	Output KW	<b>3.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>12.4/6.2 A</b>	Speed	<b>1755 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>90.2 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>J</b>	Frame	<b>184TV</b>
Enclosure	<b>Totally Enclosed Air Over</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6206</b>
Opp Drive End Bearing Size	<b>6206</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>N</b>
IP Code	<b>56</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 Or Up Or Down</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>15.74 in</b>	Frame Length	<b>10.00 in</b>
Shaft Diameter	<b>1.125 in</b>	Shaft Extension	<b>2.85 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>035670-1000</b>	Connection Diagram	<b>A-EE7308</b>

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- NOTES:  
 1. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.  
 2. CONDUIT BOX CAN ROTATED IN 90° STEPS.  
 3. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°

DRAWING REVISION C	REVISION BY SS	DATE 05/31/16
ECO ECO-0101042	APPROVED BY GR	DATE 05/31/16
ECO DESCRIPTION TEMPLATE UPDATED.		
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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] X 45°			
CORNER FILLETS: R.02 [.51]			
MACHINED SURFACES: 125/3.2			
mm SHOWN IN [BRACKETS]			

DRAWN BY TJW
DATE 3/25/2008
APPROVED BY SW
DATE 3/26/2008
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 180 FR. - CAST C'BOX	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER 035670
	SHEET 1 OF 1

1000	182/184	15.74	8.61	7.50	5.50	3.75
800	182/184	13.74	6.61	5.50	4.50	2.75
DASH	FRAME	C	B	2F	2FF	BS

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	PREV
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES		
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		
					±7'30"		
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	
						DIST WP	
						SIZE A	
						DRAWING NO. EE7308	
						PAGE OF 5	
						REV. 5	



TITLE CONNECTION DIAGRAM  
3Ø - DUAL VOLTAGE MOTOR

DRAWN RM 11/20/1990  
CHK ML 11/21/1990  
APPD SAS 04/24/2003  
SCALE 1=1  
REF  
FMF  
PREV

**CERTIFICATION DATA SHEET**

Model#: 184TTN16545 AA      WINDING#: K1844215 R15 1  
 CONN. DIAGRAM: A-EE7308      ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: 035670-1000

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5&3	3.70&2.24	1800	1755&1487	184TV	TEAO	J	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	12.4/6.2&9.4/4 .7	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 90.2&89.7	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83.5&89.3	3/4 LOAD PF: 78.5	1/2 LOAD PF: 70	89.5	SQ CAGE INV RATED	5.6 / 2.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
15 LB-FT	92 / 46	34.5 LB-FT 230	45 LB-FT 300	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.5 LB-FT^2	50 LB-FT^2	25 SEC.	2	135 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	1144 STRESSPROOF (C-223)	CAST IRON
6206	6206						

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

\*  
N  
O  
T  
E  
S  
\*

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

\*\* Subject to change without notice.



Submission  
Data @ 460 V

Date: 6/20/2017  
Customer:   
Attention:   
Submitted by: FAREEDA DUDEKULA

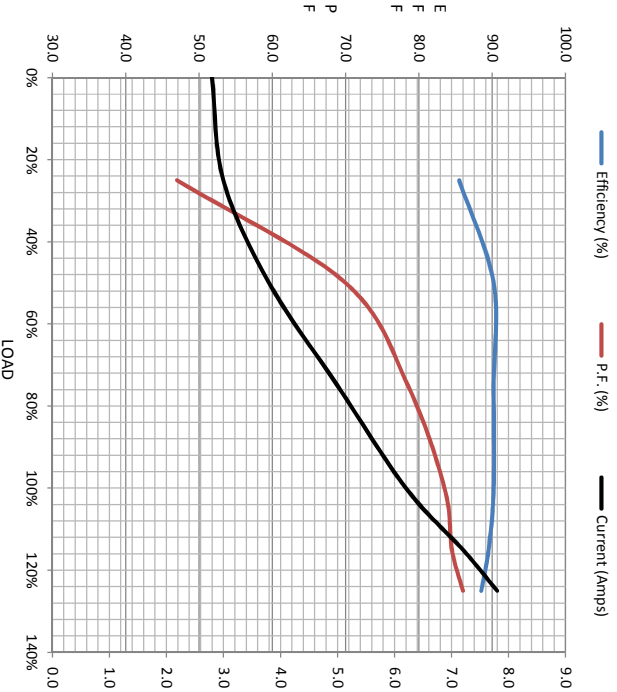
Load	Motor Load Data						
	0%	25%	50%	75%	100%	115%	125%
Current (Amps)	2.80	3.0	3.8	5.0	6.2	7.2	7.8
Torque (ft-lb)	0.00	3.7	7.4	11.5	15.0	17.5	19.0
RPM	1800	1790	1780	1765	1755	1745	1740
Efficiency (%)		85.5	90.2	90.2	90.2	89.5	88.5
P.F. (%)	6.5	47.0	70.0	78.5	83.5	84.5	86.0
							LR

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	900	1600	1755	1800
Current (Amps)	46.0	41.0	25.0	6.2	2.80
Torque (ft-lb)	34.5	31.0	45.0	15.0	0.00

Information Block

HP	5.0
Sync. RPM	1800
Frame	184
Enclosure	TEAO
Construction	TTS
Voltage	30/460#190/38 V
Frequency	60 Hz
Design	B
LR Code letter	J
Service Factor	1.15
Temp Rise @ FL	0 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	0.50 Lb-Fe
Ret Wdg	K1844215 R15
Sound Pressure @ 1M	62 dBA
VFD Rating	CONSTANT 20:1
Outline Dwg	035670-1000
Conn. Diag	A-EE7308
Additional Specifications:	
0	
EQUIV CKT (OHMS / PHASE)	
R1	R2
1.5080	1.1280
X1	X2
3.6910	5.6930
Xm	Xm
104.3280	



Speed - Torque Curve

