

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 143TTGN7076  
Catalog No: H350  
3/4,1200,EPFC,143T,3/60/208-230/460  
Explosion Proof



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**REGAL**<sup>®</sup>

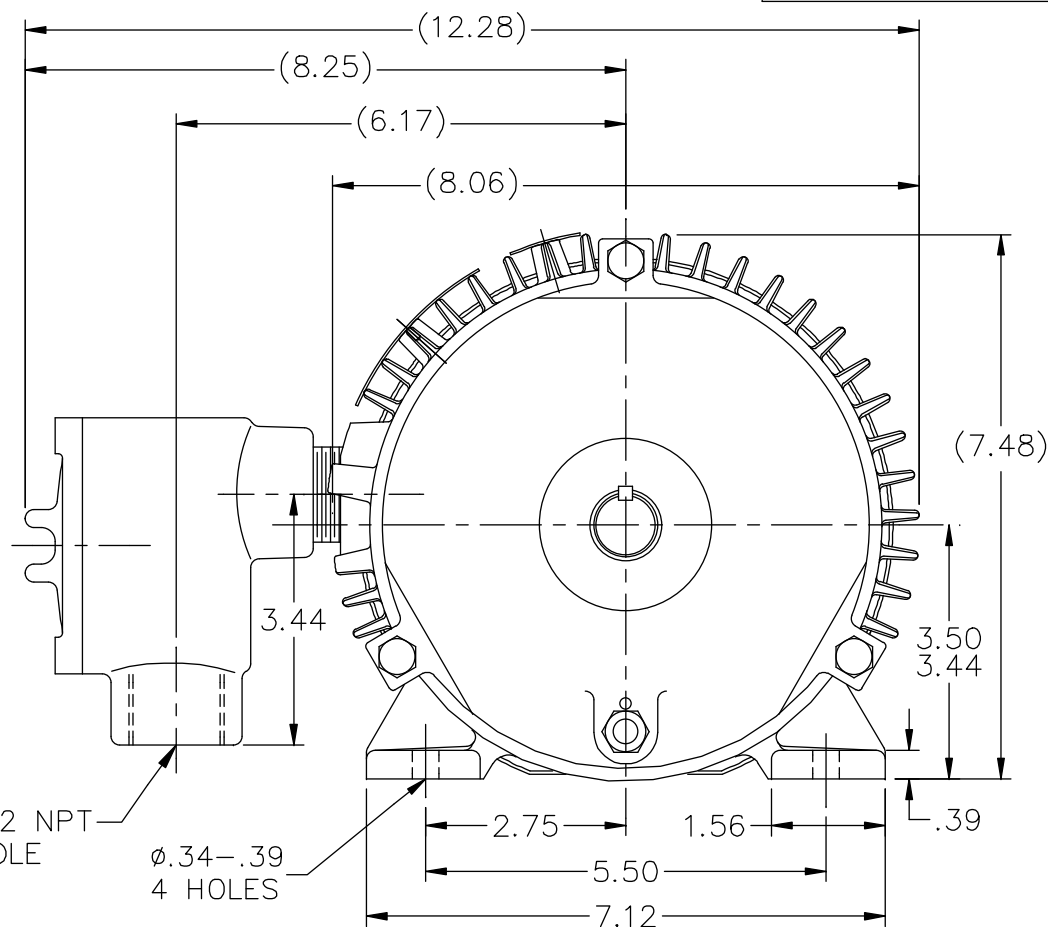
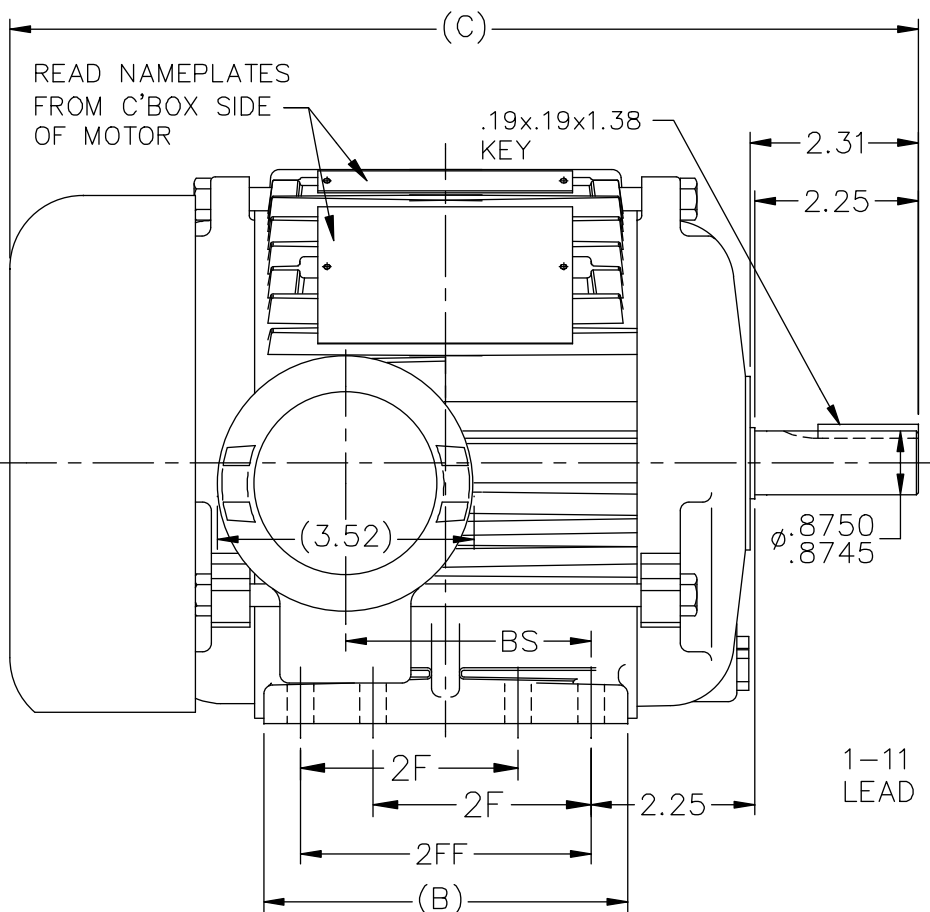


### Nameplate Specifications

Output HP	<b>0.75 Hp</b>	Output KW	<b>0.56 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>208-230/460 V</b>
Current	<b>3.0-3.2/1.6 A</b>	Speed	<b>1145 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>74 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>B</b>	Design Code	<b>B</b>
KVA Code	<b>K</b>	Frame	<b>143T</b>
Enclosure	<b>Explosion Proof 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>6203</b>	UL	<b>No</b>
CSA	<b>N</b>	CE	<b>N</b>
IP Code	<b>54</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</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>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>12.48 in</b>	Frame Length	<b>5.25 in</b>
Shaft Diameter	<b>0.875 in</b>	Shaft Extension	<b>2.31 in</b>
Assembly/Box Mounting	<b>F1 Only</b>		
Outline Drawing	<b>A-100612-525</b>	Connection Diagram	<b>A-EE7308T</b>



NOTE:  
1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.

DASH	FR.	C	B	2F	2FF	BS
525	143	12.48	5.00	3.00	4.00	3.37
625	145	13.48	6.00	3.00	5.00	3.87

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN SMC 05-21-1992				
					DEC.	INCHES			CHK	ML 05-21-1992		
6	MOUNTING HOLES UPDATED PER ECR-0045944	UD 10/30/13	ST	DEC.	INCHES			APPD JA 05-29-1992				
5	REDRAWN IN AUTOCAD	TAT 06-29-2004	ML	.X	±.1			SCALE 3=8				
4	ADDED DRAIN PLUG TO REAR BRACKET CN 26916	DRS 01-11-1999		.XX	±.03		TITLE OUTLINE	REF				
3	ADDED 'BS' DIMENSION	MRB 04-25-1996		.XXX	±.005		140 FR.-BB-EXP.PR.-TS (629 NEW DESIGN)	FMF				
2	REVISED NOTE CN 14695	RM 10-14-1992		.XXXX	±.0005		MAT'L.	PREV				
					±7'30"		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 100612	SIZE A	DRAWING NO. 100612	PAGE OF	REV. 6
							DIST WP					

## HIGH VOLTAGE

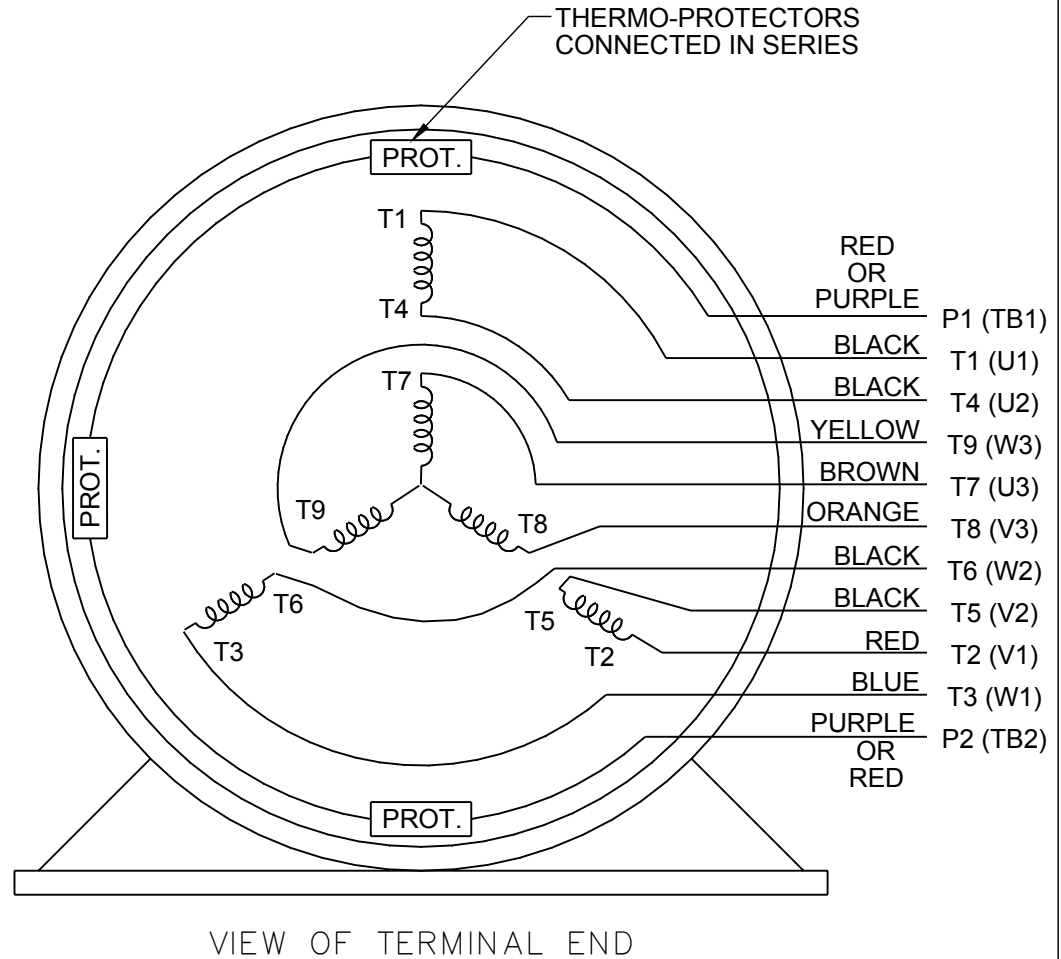


**NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:**  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

## LOW VOLTAGE



## THREE PHASE DUAL VOLTAGE MOTOR



**NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT**

DRAWING REVISION <b>R</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>		DRAWN BY <b>SMC</b>	<b>Regal Beloit America, Inc.</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>		DATE <b>05-13-1992</b>	
ECO DESCRIPTION <b>REV'D IEC NOTATIONS PER IEC 60034-8</b>				APPROVED BY <b>TB</b>	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b>
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>				DATE <b>05-13-1992</b>	<b>3 PHASE - DUAL VOLTAGE MOTOR</b>
			REFERENCE <b>EE7308/EE7300</b>	MATERIAL	PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7308T</b>

CERTIFICATION DATA SHEET

Model#: 143TTGN7076 BD WINDING#: ZT607 FS 3  
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1 ONLY  
 OUTLINE: A-100612-525

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3/4&1/2	.56&.37	1200	1145&970	143T	EPFC	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	208- 230/460#190/ 380	3- 3.2/1.6&3/1.5	LINE OR INVERTER	CONTINUOU S	B3	1.15/1.15	40	3300

FULL LOAD EFF: 74&73.5	3/4 LOAD EFF: 74	1/2 LOAD EFF: 68.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 59.1&52	3/4 LOAD PF: 49	1/2 LOAD PF: 37.5	70	SQ CAGE INV RATED	2.5 / 1.3

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3.4 LB-FT	17 / 8.5	8.8 LB-FT 259	12.6 LB-FT 371	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.06 LB-FT^2	15 LB-FT^2	15 SEC.	2	46 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	EXP PROOF CL I GR D CL II GR F&G T3B	FALSE	NONE	BLUE (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
BALL	BALL						
6205	6203						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 10:1
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

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FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

1431TGN7076



Submission  
Data @ 460 V

Date: 6/29/2017  
Customer:   
Attention:   
Submitted by: FAREEDA DUDEKULA

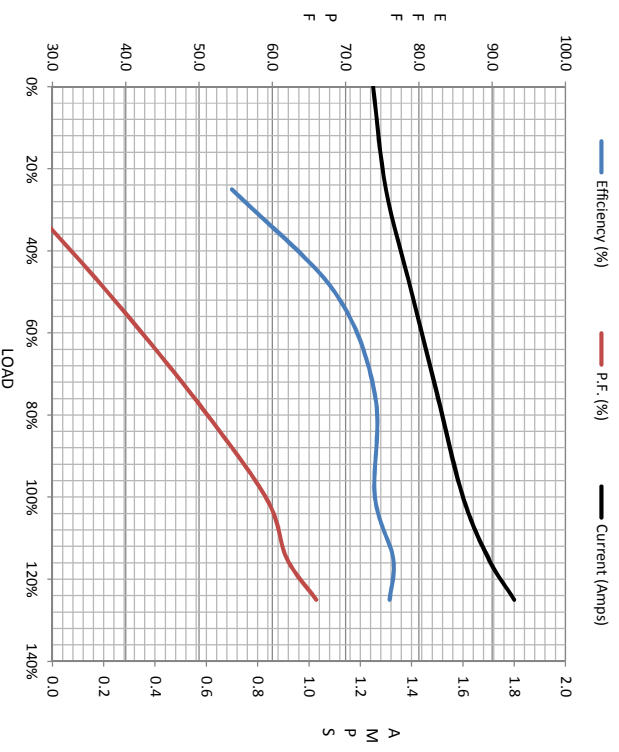
Load	Motor Load Data							
	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.25	1.30	1.40	1.50	1.60	1.70	1.80	8.5
Torque (ft-lb)	0.00	0.83	1.70	2.50	3.4	4.0	4.3	8.8
RPM	1200	1190	1180	1180	1145	1,140	1135	0
Efficiency (%)		54.5	68.5	74.0	74.0	76.5	76.0	
P.F. (%)	10.2	25.0	37.5	49.0	59.1	62.0	66.0	69.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	573	845	1145	1200
Current (Amps)	8.5	7.3	6.0	1.60	1.25
Torque (ft-lb)	8.8	10.8	12.6	3.4	0.00

Information Block

HP	0.8			
Sync. RPM	1200			
Frame	143			
Enclosure	TEFC			
Construction	TEN			
Voltage	3-230/460#190˚V			
Frequency	60 HZ			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Motor/Shaft wkt	0.06 Lb-Fe			
Rel Wdg	ZT607 FS			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	A-100612-525			
Conn. Diag	A-EE7308T			
Additional Specifications:				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
16.2540	10.9620	18.4460	19.0890	207.9000



Speed -Torque Curve

