

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 143TTDR6027  
Catalog No: U758  
1,1800,DP,143T,3/60/230/460  
Open Drip Proof (ODP)



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**REGAL**<sup>®</sup>



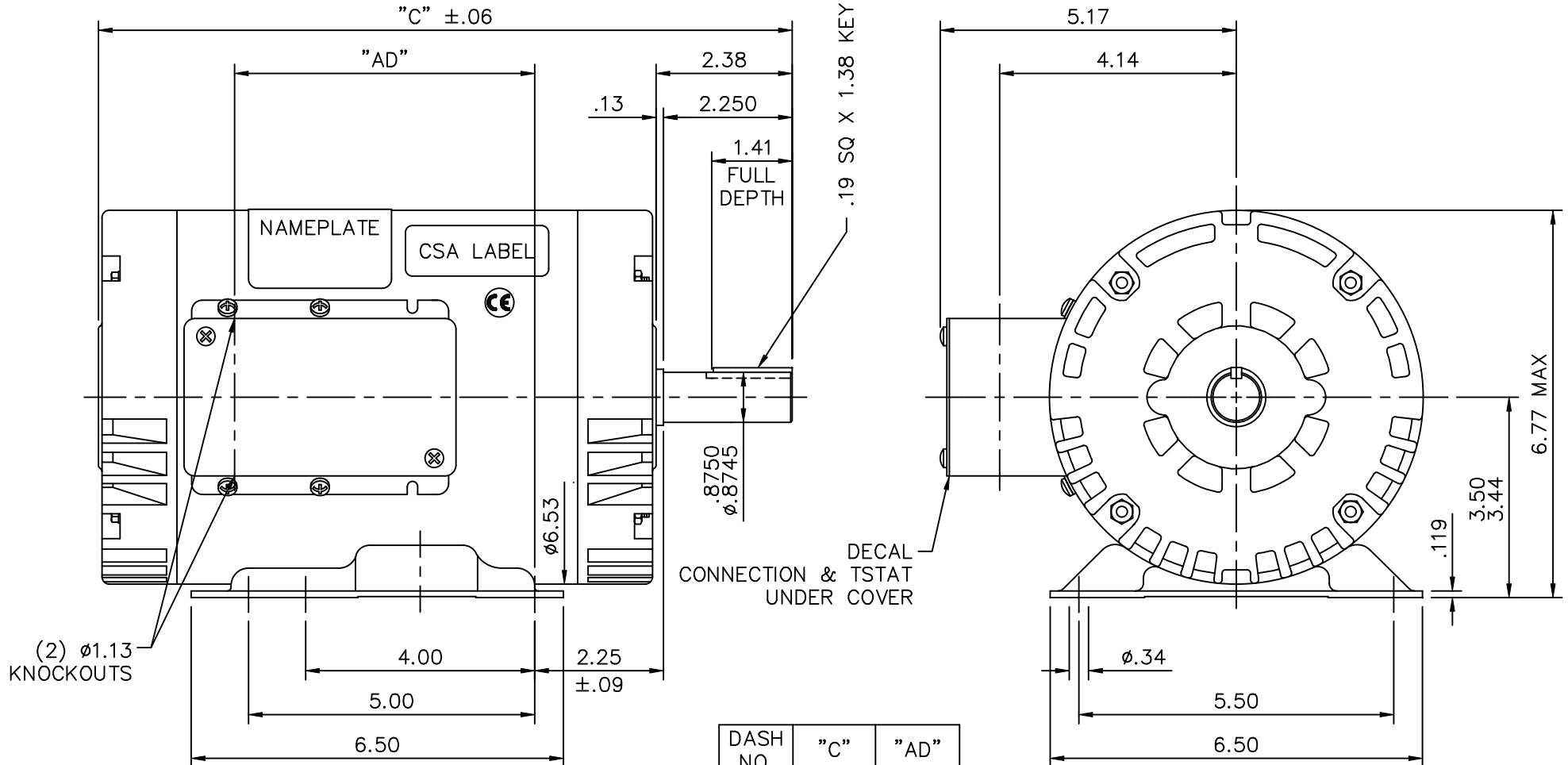
### Nameplate Specifications

Output HP	<b>1 Hp</b>	Output KW	<b>0.75 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>3.2/1.6 A</b>	Speed	<b>1760 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>85.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>N</b>	Frame	<b>143T</b>
Enclosure	<b>Drip Proof</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>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>22</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</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>Rolled Steel</b>	Shaft Type	<b>T</b>
Overall Length	<b>12.12 in</b>	Frame Length	<b>7.00 in</b>
Shaft Diameter	<b>0.875 in</b>	Shaft Extension	<b>2.38 in</b>
Assembly/Box Mounting	<b>F1 Only</b>		
Outline Drawing	<b>034908-700</b>	Connection Diagram	<b>005010.20ME</b>

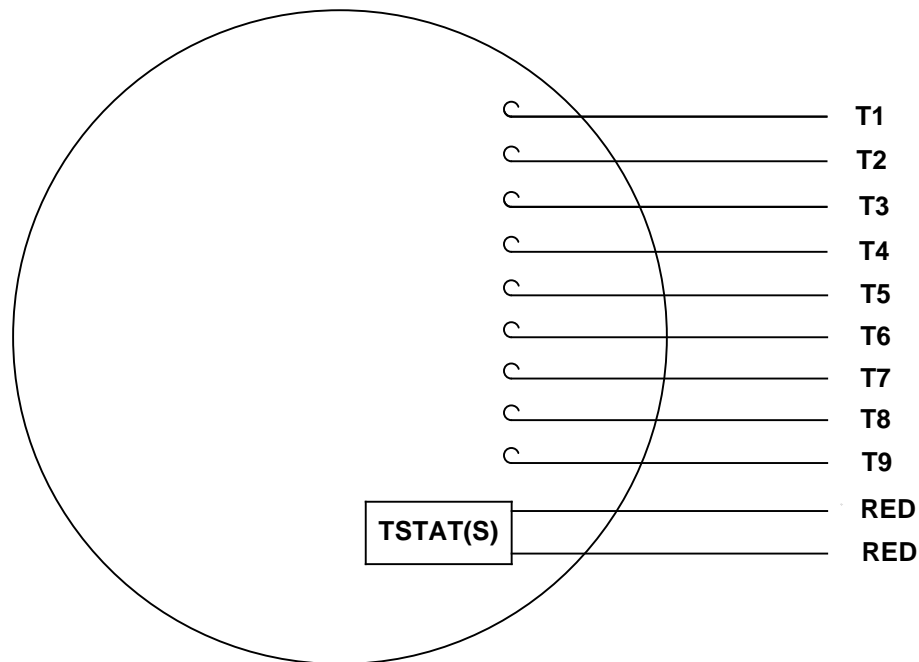
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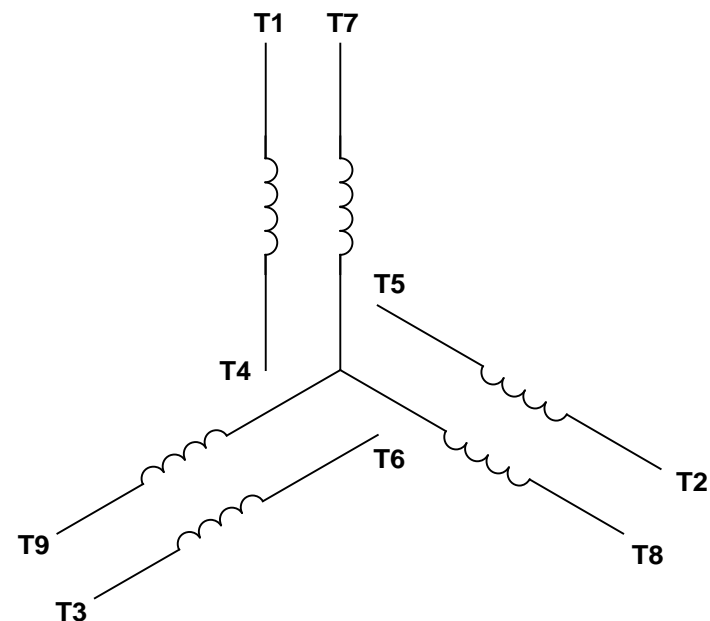
DASH NO.	"C"	"AD"
650	11.62	4.75
700	12.12	5.25
750	12.62	5.75
800	13.12	6.25
850	13.62	6.75

				TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN RDW 12/13/01	
				DEC.	INCHES			CHK	
				.X	±.1			APPD KMM 12/13/01	
				.XX	±.03	TITLE OUTLINE - 143T/145T FRAME DRIP PROOF - RIGID		SCALE 3=8	
				.XXX	±.005			REF 121003	
				.XXXX	±.0005			FMF	
01	ADDED CE LABEL	ARV 8/8/05		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	12/13/01	CAD FILE	034908	SIZE	DRAWING NO.	REV.
			DIST				A	034908	01

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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				TOLERANCES UNLESS SPECIFIED				DRAWN RDW 04/13/04	
				DEC	INCHES			CHK	
				.X	±.1			APPR	
				.XX	±.01			SCALE 1:1	
				.XXX	±.005	TITLE EXTERNAL WIRING DIAGRAM 3 PHASE		REF	
--	REDRAWN IN SOLIDWORKS	VJB 02/08/11		.XXXX	±.0005	MAT'L DECAL - 004014 (TSTAT) - 080582		FMF 129027	
NO	REVISION	BY & DATE	CHK	ANG	±1/2°	FINISH		PAGE OF	
THIRD ANGLE PROJECTION			RFP		PREV		SIZE	DRAWING NO	
			NETWORK FILE NAME		00501020ME		A	005010-20ME	
								REV	
								--	

CERTIFICATION DATA SHEET

Model#: 143TTDR6027 AA WINDING#: T634342 DR 3  
 CONN. DIAGRAM: 005010.20ME ASSEMBLY: F1 ONLY  
 OUTLINE: 034908-700

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1&3/4	.75&.56	1800	1760&1450	143T	DP	N	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	3.2/1.6&2.8/1.4	ACROSS THE LINE	CONTINUOUS	F4	1.15/1.15	40	3300

FULL LOAD EFF: 85.5&84	3/4 LOAD EFF: 85.2	1/2 LOAD EFF: 81.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 68.5&72	3/4 LOAD PF: 62.8	1/2 LOAD PF: 48	84	SQ CAGE IND RUN	2 / 1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	28 / 14	12 LB-FT 0	15.8 LB-FT 0	21

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.117 LB-FT^2	0.1 LB-FT^2	10 SEC.	2	0 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	NONE	FALSE	NONE	GREEN (ENAMEL)

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)	ROLLED STEEL
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

\*  
N  
O  
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 NONE
NONE FT-LB	NONE V NONE Hz

DATE: 06/22/2017 07:41:22 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.



Data Sheet

Date: 29-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



143TTDR6027

Submittal

Data @ 460 V

Motor Load Data

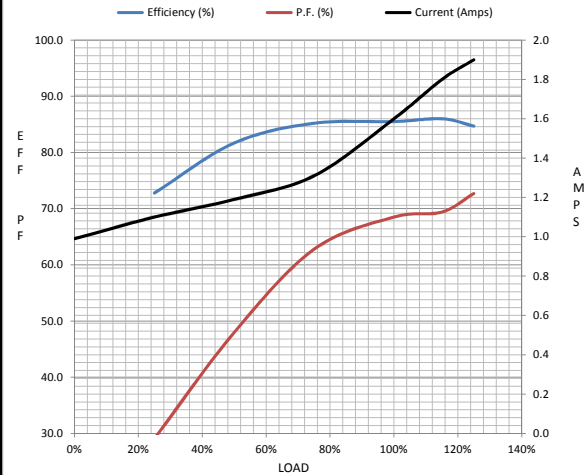
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.99	1.10	1.19	1.31	1.60	1.80	1.90	14.5
Torque (ft-lb)	0.00	0.73	1.47	2.22	2.98	3.4	3.8	12.0
RPM	1800	1791	1780	1770	1760	1,754	1749	0
Efficiency (%)		72.8	81.7	85.2	85.5	86.0	84.7	
P.F. (%)	8.2	29.1	48.0	62.8	68.5	69.4	72.7	0.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1575	1760	1800
Current (Amps)	14.5	13.0	9.9	1.60	0.99
Torque (ft-lb)	12.0	11.0	15.0	2.98	0.00

Information Block

HP	1.0			
Sync. RPM	1800			
Frame	140			
Enclosure	DP			
Construction	TDR			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	A			
LR Code letter	N			
Service Factor	1.15			
Temp Rise @ FL	21 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.12 Lb-Ft²			
Ref Wdg	T634342 DR			
Sound Pressure @ 1M	0 dBA			
VFD Rating	NONE			
Outline Dwg	034908-700			
Conn. Diag	005010.20ME			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed -Torque Curve

