

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 215THFS8029
Catalog No: Y596
10,1800,TEFC,215TC,3/60/230/460
2000:1 With Encoder Provision



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REGAL

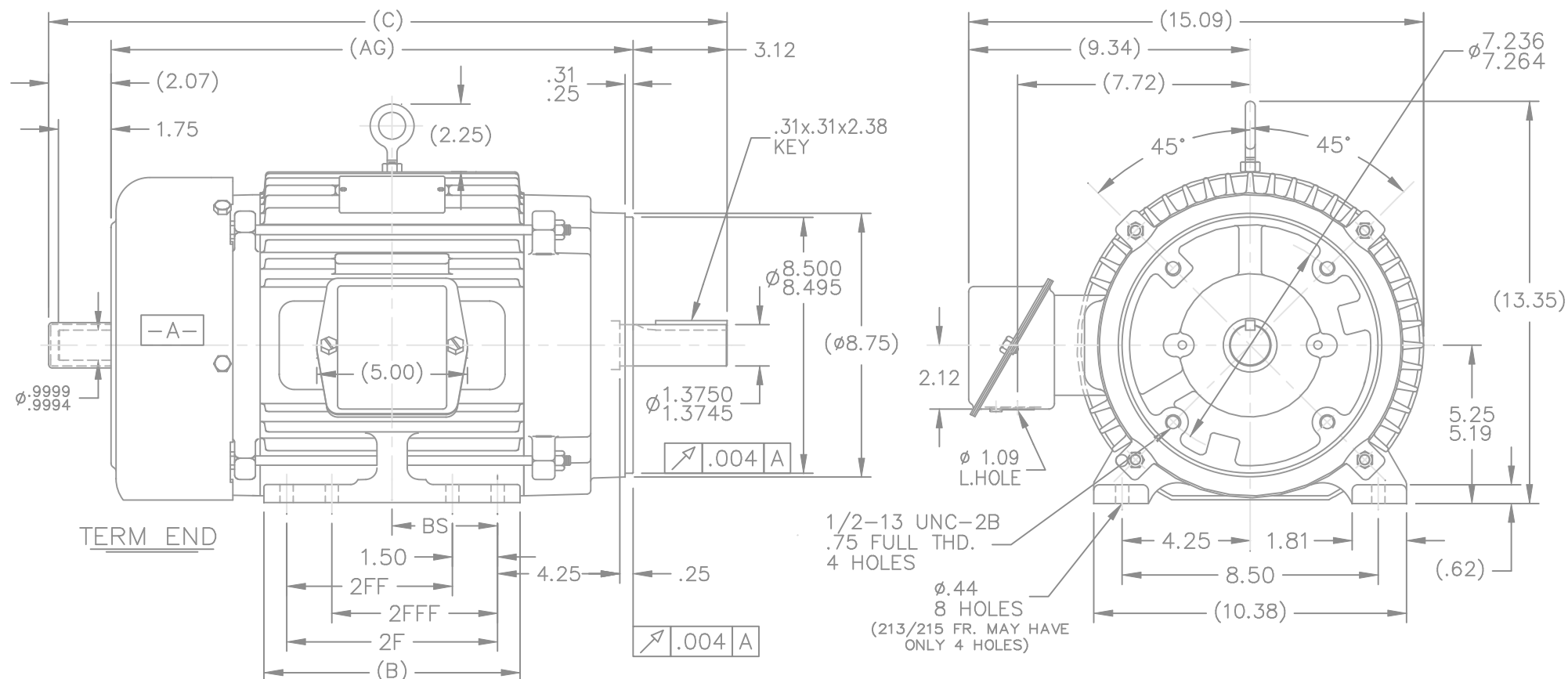


Nameplate Specifications

Output HP	10 Hp	Output KW	7.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	25.4/12.7 A	Speed	1765 rpm
Service Factor	1	Phase	3
Efficiency	90.2 %	Duty	CONTINUOUS
Insulation Class	H	Design Code	INV
KVA Code	H	Frame	215TC
Enclosure	TEFC	Overload Protector	NOT
Ambient Temperature	40 °C	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6207	UL	Recognized
CSA	Y	CE	Y
IP Code	43		

Technical Specifications

Electrical Type	SQ CAGE INV DUTY	Starting Method	INVERTER ONLY
Poles	4	Rotation	REV
Mounting	RIGID	Motor Orientation	HORIZONTAL
Drive End Bearing	BALL	Opp Drive End Bearing	BALL
Frame Material	CAST IRON	Shaft Type	T
Overall Length	22.53 in	Frame Length	8.75 in
Shaft Diameter	1.38 in	Shaft Extension	3.12 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	A-SS88574-875	Connection Diagram	A-EE7308T



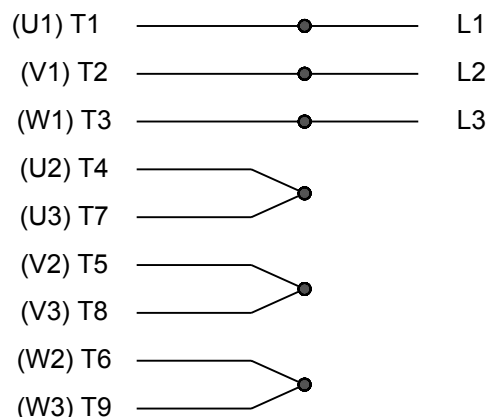
DASH	FRAME	C	AG	B	2F	2FF	2FFF	BS
725	213T	21.03	15.84	7.00	5.50	—	—	2.75
875	215T	22.53	17.34	8.50	7.00	—	—	3.50
875	213/5T	22.53	17.34	8.50	7.00	5.50	5.50	3.50
1000	213T	23.78	18.59	9.75	8.25	5.50	5.50	4.12
1000	215T	23.78	18.59	9.75	8.25	7.00	7.00	4.12

NOTES:

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

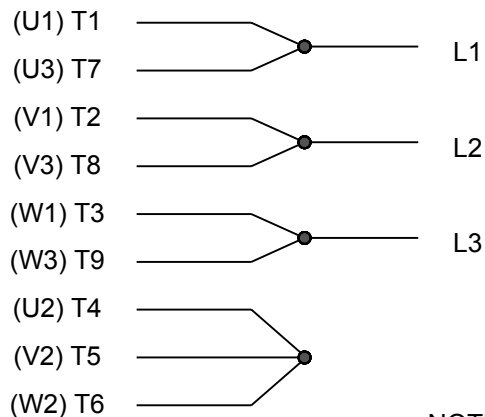
				TOLERANCES UNLESS SPECIFIED			DRAWN DRS 11-15-2001				
				DEC.	INCHES		CHK ML 01-09-2002				
4	UPDATED DRAWING	TJW 05/04/2007		.X	±.1		APPD TB 01-09-2002				
3	REVISED FOOT HOLE NOTE CN 29200-2241	NJS 02-18-2002	DRS	.XX	±.03		SCALE 1=5				
2	UPDATED C'BOX GEOMETRY CN 28426	DRS 01-25-2002	ML	.XXX	±.005		REF				
1	NEW DRAWING CN 28945	DRS 10-09-2002		.XXXX	±.0005		FMF				
NO.	REVISION	BY & DATE	CHK	ANG	± 7'30"	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		CAD FILE ss88574		SIZE	DRAWING NO.	PAGE	OF	REV.
			DIST LB				A	SS88574			4

HIGH VOLTAGE

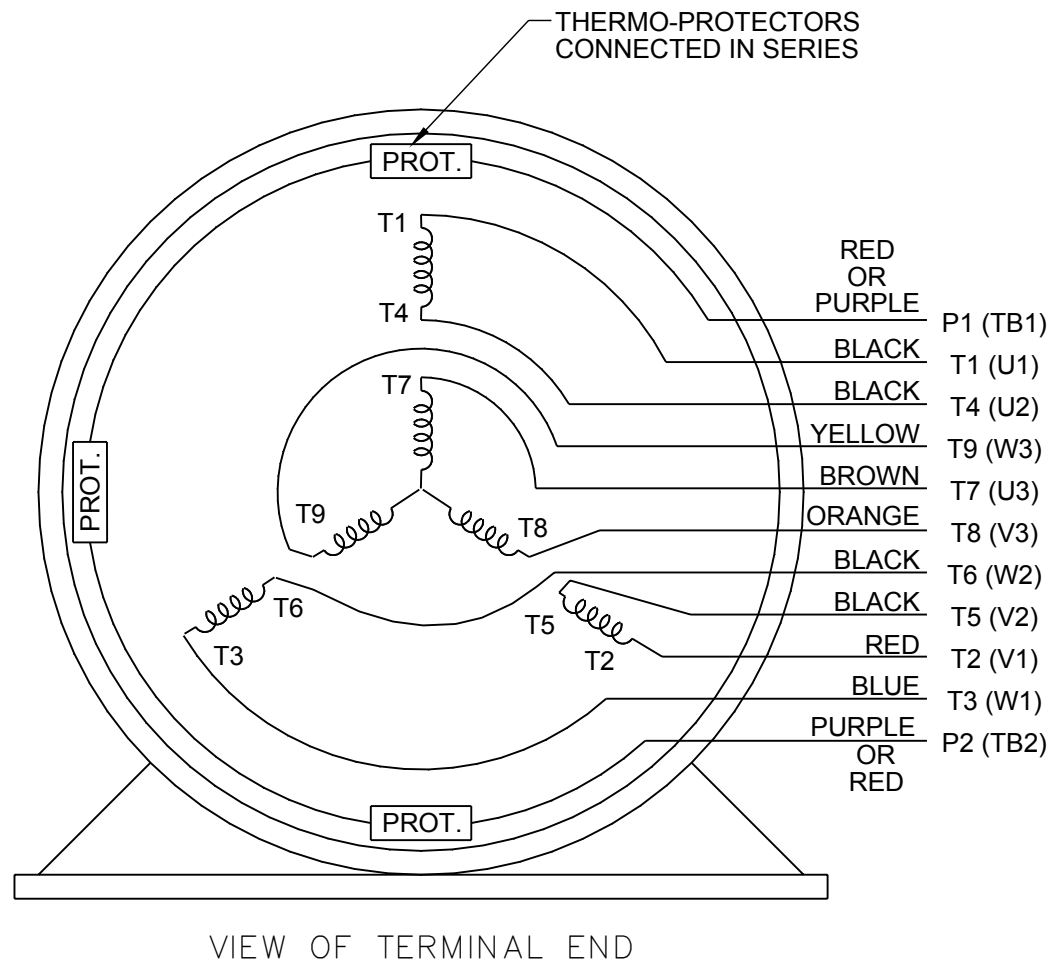


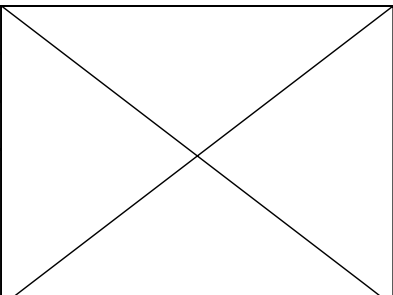
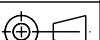
NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1

LOW VOLTAGE



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

THREE PHASE
DUAL VOLTAGE MOTOR

DRAWING REVISION R	REVISION BY AJW	DATE 07-17-2015		DRAWN BY SMC	 Regal Beloit America, Inc.			
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015		DATE 05-13-1992	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR			
ECO DESCRIPTION REV'D IEC NOTATIONS PER IEC 60034-8				APPROVED BY TB				
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				REFERENCE EE7308/EE7300	MATERIAL		PROCESS/FINISH	
				THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7308T	

CERTIFICATION DATA SHEET

Model#:

215THFS8029 CT

WINDING#:

K2154382 R6 6

CONN. DIAGRAM:

A-EE7308T

ASSEMBLY:

F1/F2 CAPABLE

OUTLINE:

A-SS88574-875

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10	7.5	1800	1765	215TC	TEFC	H	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	25.4/12.7	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 90.2	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81	3/4 LOAD PF: 76.5	1/2 LOAD PF: 66.5	88.5	SQ CAGE INV DUTY	11 / 5.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.8 LB-FT	164 / 82	66.5 LB-FT 223	75 LB-FT 252	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	1.1 LB-FT^2	0 LB-FT^2	0 SEC.	0	230 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.53676	0.44588	2.0306	3.0814	48.422

RM	ZREF	XR	TD	TD0
1905.64	28.4	4.2	0.017	0.305

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6207	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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 2000:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE

*
N
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E
S
*

NONE	NONE	
NONE FT-LB	NONE V	NONE Hz

DATE: 06/21/2017 11:13:30 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/20/2017

215THFS8029

Customer:



Submittal

mitted by:

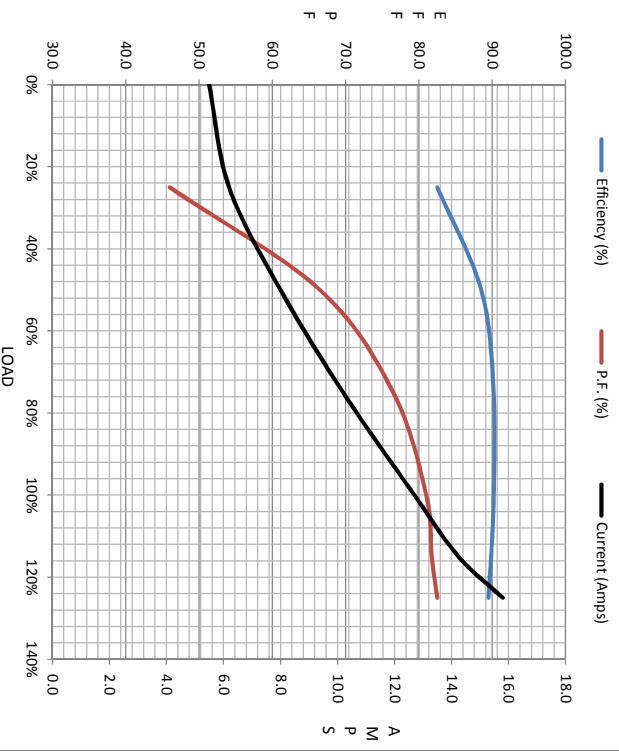
FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data									
	0%	25%	50%	75%	100%	115%	125%	LR	
Load									
Current (amps)	5.5	6.2	8.0	10.2	12.7	14.3	15.8	82.0	
Torque (ft-lb)	0.00	7.4	14.8	22.2	29.8	33.7	37.5	66.5	
RPM	1800	1790	1782	1775	1765	1,760	1752	0	
Efficiency (%)		82.5	88.5	90.2	90.2	89.9	89.5		
P.F. (%)	7.0	46.0	66.5	76.5	81.0	81.8	82.5	42.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	750	1575	1765	1800	HP	10.0
Current (Amps)	82.0	75.0	45.0	12.7	5.5		
Torque (ft-lb)	66.5	62.0	75.0	29.8	0.00	Sync. RPM	1800



Information Block				
HP		10.0		
Sync. RPM		1800		
Frame		215		
Enclosure		TEFC		
Construction		TFN		
Voltage		230/460	V	
Frequency		60	Hz	
Design		B		
LR Code letter		H		
Service Factor		1.0		
Temp Rise @ FL		55	° C	
Duty		CONT		
Ambient		40	° C	
Elevation		1,000	feet	
Rotor/Shaft wr²		1.10	Lb-Ft²	
Flt Wdg		K215A382	R6	
Sound Pressure @ 1M		72	dBA	
VFD Rating		CONSTANT 2000:1		
Outline Dwg		A-SS885/4-875		
Conn. Diag		A-EE7308T		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.5370	0.4460	2.0310	3.0810	48.4220

Speed -Torque Curve

