

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 143TTGN14011
Catalog No: C301B
1 1/2,3600,EPFC,143TC,3/60/230/460
Explosion Proof



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REGAL[®]



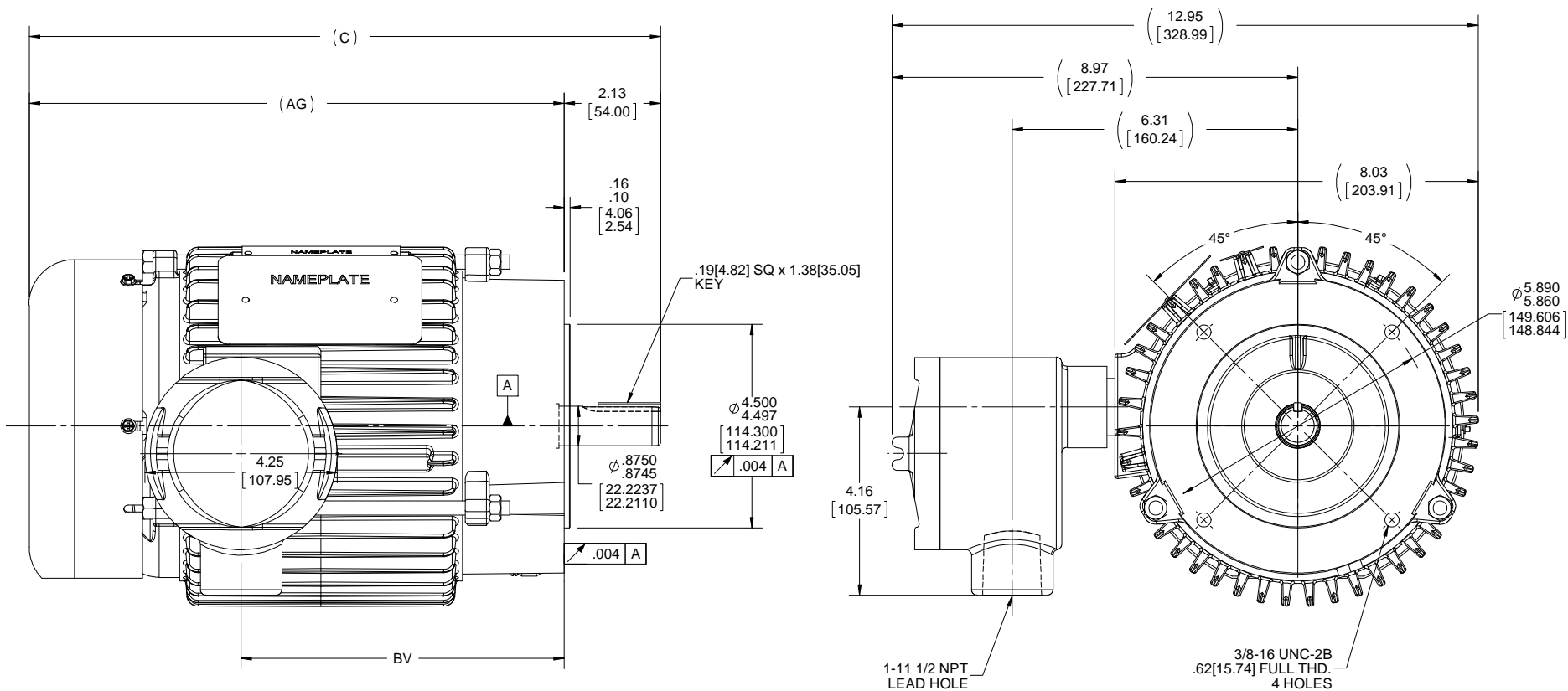
Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	60 Hz	Voltage	230/460 V
Current	4.0/2.0 A	Speed	3515 rpm
Service Factor	1.15	Phase	3
Efficiency	85.5 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	M	Frame	143TC
Enclosure	Explosion Proof Fan cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6205
Opp Drive End Bearing Size	6203	UL	No
CSA	N	CE	N
IP Code	54		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Mounting	Round	Motor Orientation	HORIZONTAL
Drive End Bearing	BALL	Opp Drive End Bearing	BALL
Frame Material	Cast Iron	Shaft Type	T
Overall Length	13.95 in	Frame Length	6.25 in
Shaft Diameter	0.875 in	Shaft Extension	2.13 in
Assembly/Box Mounting	F1 ONLY		
Outline Drawing	A-100617-625	Connection Diagram	A-EE7308T

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DASH	C	AG	BV
525	12.95[328.93]	10.82[274.82]	6.64[168.65]
625	13.95[354.33]	11.82[300.22]	7.14[181.35]
750	15.19[385.82]	13.07[331.97]	7.95[201.93]

NOTE:
 1. BOX CAN BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. READ NAMEPLATES FROM C'BOX SIDE OF MOTOR

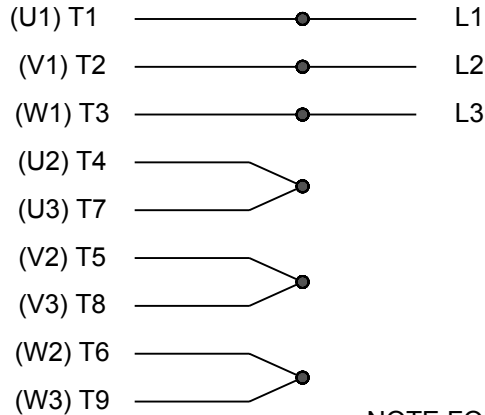
DRAWING REVISION F	REVISION BY H. ADIKE	DATE 5-15-2018
ECO ECO-0148233	APPROVED BY JD	DATE 07/06/2018
ECO DESCRIPTION OUTLINE CONVERSION PROJECT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	+0.1	[+2.5]
.XX	+0.03	[+0.76]
.XXX	+0.005	[+0.127]
.XXXX	+0.0005	[+0.0127]
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°		
CORNER FILLETS: R.02 [51]		
MACHINED SURFACES: 200 $\sqrt{\text{mm}}$ 5.1 $\sqrt{\text{mm}}$		
mm SHOWN IN [BRACKETS]		

DRAWN BY SMC
DATE 06-04-1992
APPROVED BY JA
DATE 06-08-1992
REFERENCE 100617
THIRD ANGLE PROJECTION

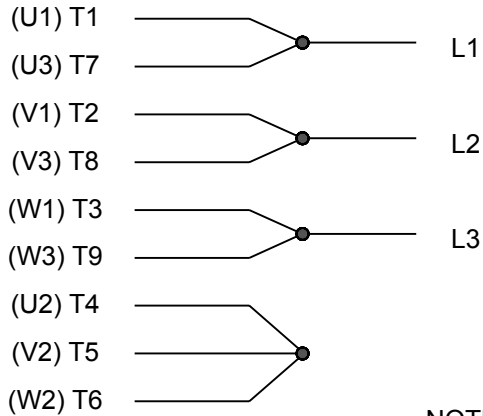
Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 140 FR.BB-EXP. PR. -TS-'C'FACE(629 NEW DESIGN)	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER 100617
SHEET 1 OF 1	

HIGH VOLTAGE



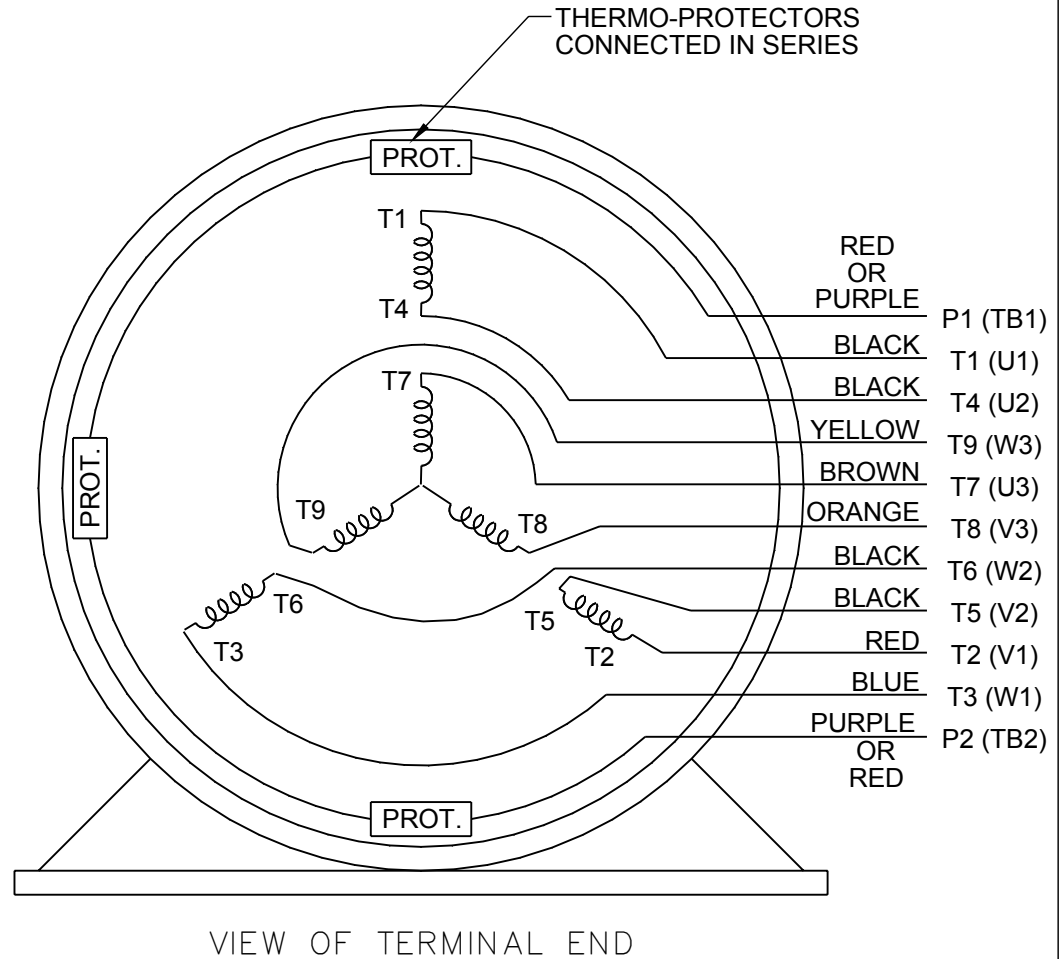
**NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1**

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		
ECO DESCRIPTION REV'D IEC NOTATIONS PER IEC 60034-8				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR	
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1
			THIRD ANGLE PROJECTION			



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:
 ORDER #: A-EE7308T
 REFERENCE MODEL #: 143TTGN14011
 CONN. DIAGRAM: A-100617-625
 CAT #: C301B
 OUTLINE: A-100617-625
 CUSTOMER PART #:
 WINDING: ZT2141 NONE 1
 MOUNTING: F1 ONLY
 SPEED:
 TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
1.5	1.1	3600	3515	143TC	TEFC	TEN	M	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	4/2&3.4/1.7	LINE OR INVERTER	CONT	F	1.15	40	3300
F.L. EFF		85.5	3/4 LD EFF	84.0	1/2 LD EFF	81.5	GTD EFF	ELECT. TYPE	
F.L. PF		85.5	3/4 LD PF	81.0	1/2 LD PF	71.0	82.5	SO CAGE INV BATED	
F.L. TORQUE		LR AMPS @ 460 V		L.R. TORQUE		B.D. TORQUE		F.L. RISE (°C)	
2.20 LB-FT		19.0		7.0 LB-FT		318%		9.3 LB-FT 423% 25	
@ 3 FT. DBA		POWER 78 DBA		ROTOR WK ² 0.05 LB-FT ²		MAX. LOAD WK ² 3 LB-FT ²		SAFE STALL TIME 20 SEC.	
69		78		0.05		3		2	
								START/SHOUR MOTOR WGT	
								58 LB.	

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	NO	DOF CL I GR D CL II GR	NO	NONE	BLUE (POWDER)
BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
DE BALL 6205	ODE BALL 6203	POLYREX EM	T	NONE	NONE	1144	STRESSPROOF (C-223)	CAST IRON
THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS		
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA		
R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT		
1.419	0.946	2.318	2.129	79.937	0.150	ODE		

* INVERTER TORQUE: CONSTANT 10:1
 INV. HP SPEED RANGE: NONE
 ENCODER: NONE
 NONE
 NONE
 BRAKE: NONE
 NONE
 NONE
 NONE PPR

PREPARED BY: FAREEDA DUDEKULA
 DATE: 9/10/2018
 FT-LB: NA
 VOLTAGE: NONE
 HZ:
 UL: NONE

Data Sheet

143TGN14011

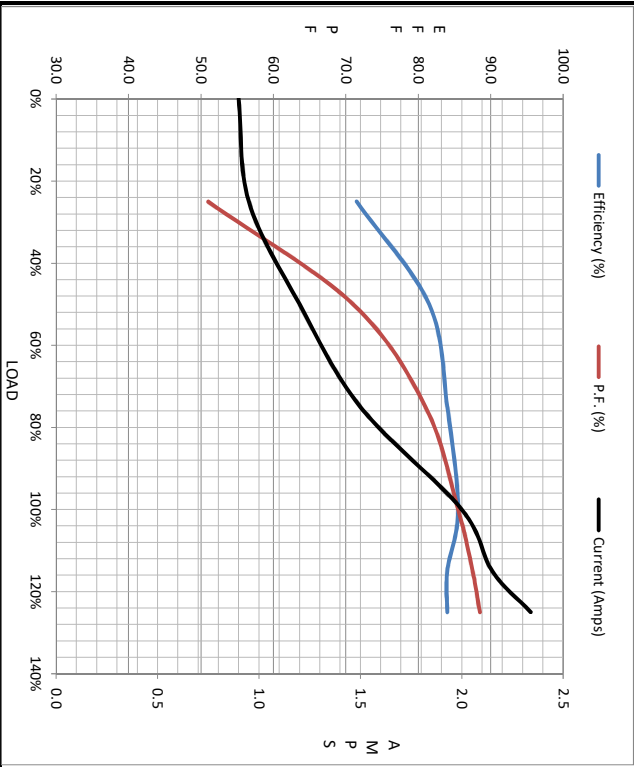


Date: 9/10/2018
 Customer:
 Attention:
 Submitted by: FAREEDA DUDEKULA

Submital
 Data @ 460 V

Load	Motor Load Data						LR	
	0%	25%	50%	75%	100%	115%		125%
Current (Amps)	0.90	0.95	1.20	1.50	2.00	2.15	2.34	19.0
Torque (ft-lb)	0.00	0.60	1.10	1.70	2.20	2.60	2.80	7.0
RPM	3600	3575	3550	3530	3515	3,485	3475	0
Efficiency (%)		71.5	81.5	84.0	85.5	84.0	84.0	
P.F. (%)	15.0	51.0	71.0	81.0	85.5	87.5	88.5	60.0

	Motor Speed Data					Information Block	
	LR	Pull-Up	BD	Rated	Idle	HP	Sync. RPM
Speed (RPM)	0	1800	2875	3515	3600	1.5	3600
Current (Amps)	19.0	16.5	12.0	2.00	0.90		143182TFC6080
Torque (ft-lb)	7.0	6.3	9.3	2.20	0.00		TFN
							230/460#190/380 V
							60 Hz
							A
							M
							1.15
							25 °C
							CONT
							40 °C
							1,000 feet
							0.05 Lb-Ft ²
							ZT2141 NONE
							69 DBA
							CONSTANT 10.1
							A-100617-625
							A-EE7308T



Outline Dwg	A-100617-625		
Conn. Diag	A-EE7308T		
Additional Specifications:	0		
	0		
	EQUIV CKT (OHMS / PHASE)		
	R1	R2	X1
	1.4190	0.9460	2.3180
		X2	Xm
		2.1290	79.9370

