

PRODUCT INFORMATION PACKET

Model No: 143TTGN16539

Catalog No: C320B

1 HP Explosion Proof Motor, 3 phase, 1800 RPM, 230/460 V, 143TC Frame, EPFC
Explosion Proof NEMA Motors



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.
©2020 Regal Beloit Corporation, All Rights Reserved. MC017097E

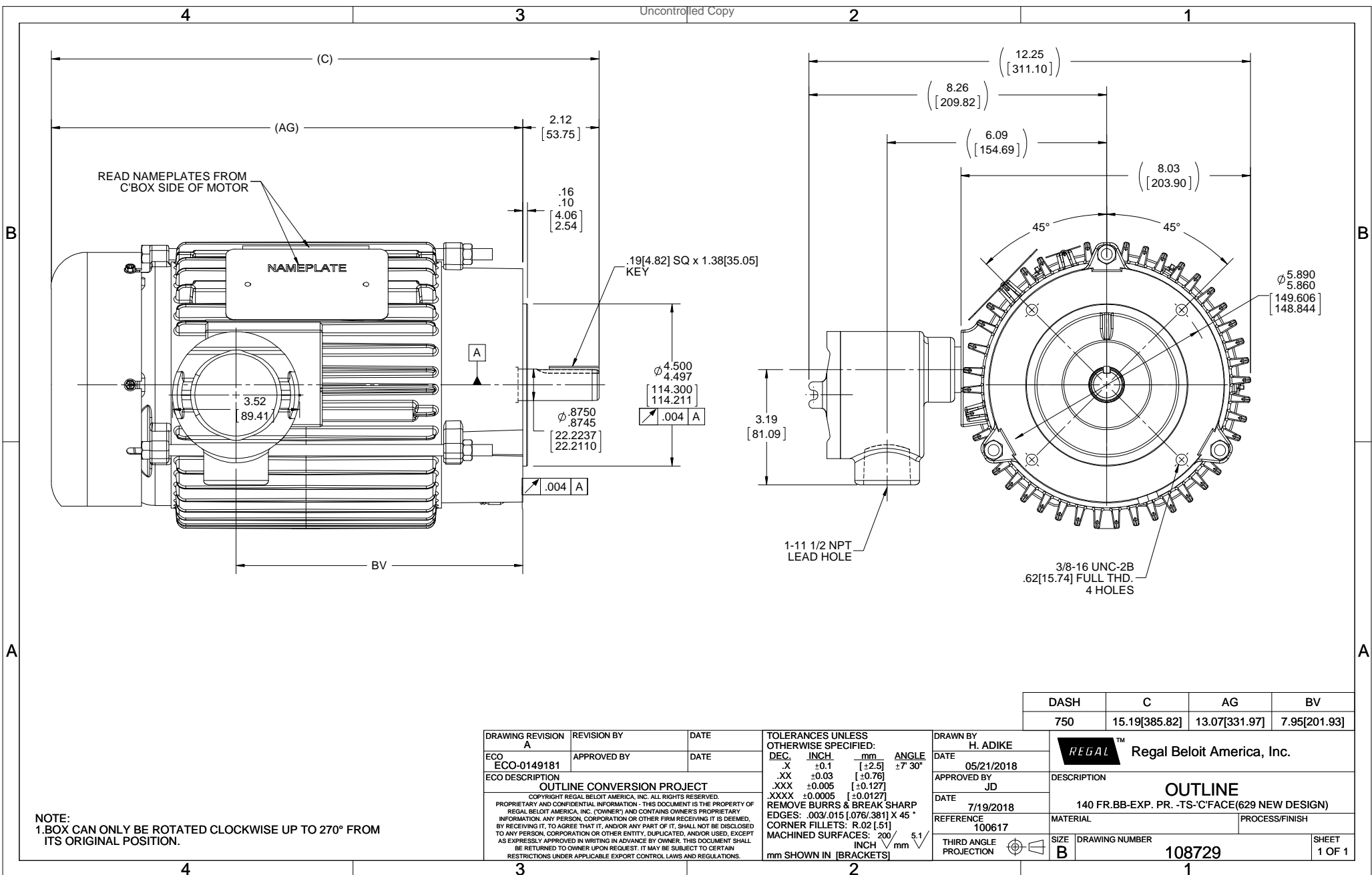
REGAL

Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	230/460 V
Current	3.3/1.7 A	Speed	1765 rpm
Service Factor	1.15	Phase	3
Efficiency	85.5 %	Power Factor	68
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	P
Frame	143TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	EXP PROOF CL I GR D CL II GR F&G T3B		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	11.8 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	15.19 in
Frame Length	7.50 in	Shaft Diameter	0.875 in
Shaft Extension	2.12 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	108729-750	Connection Drawing	EE7308T

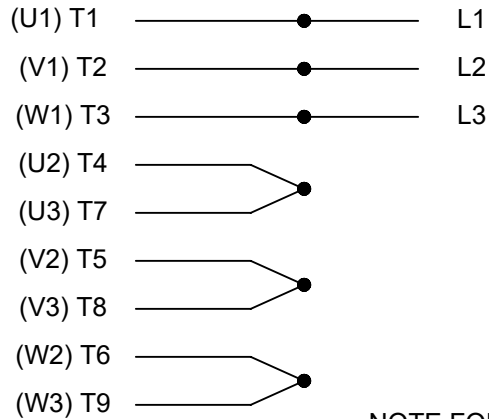


DASH	C	AG	BV
750	15.19[385.82]	13.07[331.97]	7.95[201.93]

DRAWING REVISION A	REVISION BY	DATE	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY H. ADIKE	Regal Beloit America, Inc.
ECO ECO-0149181	APPROVED BY	DATE	DEC. INCH mm ANGLE .X ±0.1 [±2.5] ±7-30° .XX ±0.03 [±0.76] .XXX ±0.005 [±0.127] .XXX ±0.0005 [±0.0127]	DATE 05/21/2018	
ECO DESCRIPTION OUTLINE CONVERSION PROJECT			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [076/.381] X 45° CORNER FILLETS: R.02 [51]	APPROVED BY JD	
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.			DATE 7/19/2018		
			MACHINED SURFACES: 200 INCH mm 5.1	REFERENCE 100617	DESCRIPTION 140 FR.BB-EXP. PR. -TS-'C'FACE(629 NEW DESIGN)
			THIRD ANGLE PROJECTION	SIZE B	MATERIAL
				DRAWING NUMBER 108729	PROCESS/FINISH
					SHEET 1 OF 1

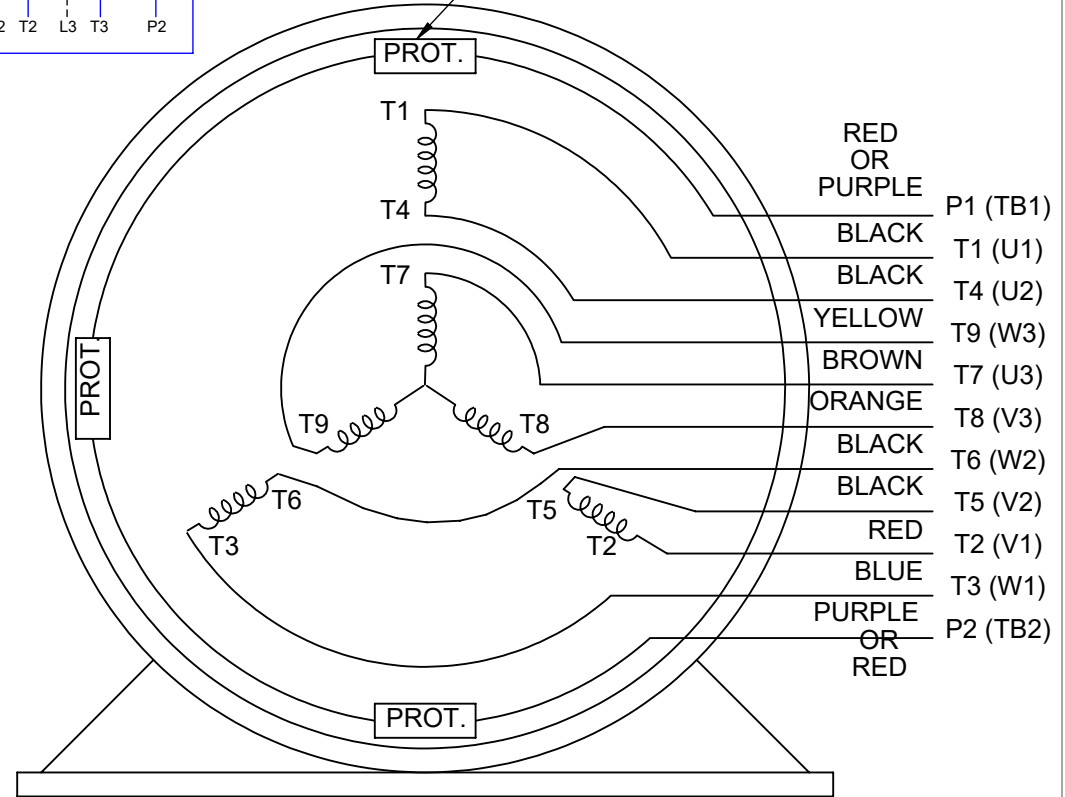
NOTE:
1.BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.

HIGH VOLTAGE



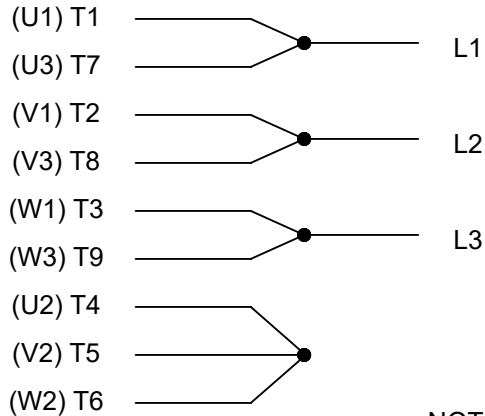
**THREE PHASE
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS
CONNECTED IN SERIES



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



VIEW OF TERMINAL END

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

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR
<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 05-13-1992	MATERIAL
			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A



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

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7308T
OUTLINE: A-108729-750
WINDING #: ZT4257 R2 3

CUSTOMER PO#:
MODEL #: 143TTGN16539 AA
CUSTOMER PART #:
MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1&3/4	0.75&80.56	1800	1765&1470	143TC	EPFC	P	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	3.3/1.65&3/1.5	LINE OR INVERTER	CONTINUOUS	B3	1.15/1.15	40

FULL LOAD EFF:	85.5&885	3/4 LOAD EFF:	84	1/2 LOAD EFF:	81.5	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	68&65.5	3/4 LOAD PF:	59.5	1/2 LOAD PF:	46.5	82.5	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	34 / 17	13.7 LB-FT	457 %	16.8 LB-FT
			560 %	30

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 DBA	72 DBA	0.12 LB-FT^2	0 LB-FT^2	15 SEC.	2	48 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	TRUE	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	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
6205	6203						

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

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE

N	ENCODER:	NONE
O	NONE	NONE
	NONE	PPR

T	BRAKE:	NONE	NONE
E	NONE	P/N	NONE
	NONE	NONE	NONE
S	NONE	FT-LB	NONE
		NONE	V
		NONE	NONE
			HZ

*

PREPARED BY: Dinesh
 Suddula
DATE: 02/12/2019 04:57:27 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

1431TTGNI6539



Submital

Data @ 460 V

Date: 1/22019

Customer:
 Attention:
 Submitted by: FAREEDA DUDEKULA

		Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR			
Current (Amps)	1.15	1.20	1.30	1.45	1.65	1.75	1.85	17.0			
Torque (ft-lb)	0.00	0.75	1.50	2.25	3.0	3.5	3.8	13.7			
RPM	1800	1790	1785	1775	1765	1,760	1755	0			
Efficiency (%)		72.0	81.5	84.0	85.5	85.5	85.5				
P.F. (%)	7.5	30.0	46.5	59.5	68.0	72.0	74.0	69.5			

		Motor Speed Data						Information Block																				
	LR	Pull-Up	BD	Rated	Idle		HP	Sync. RPM	Frame	Enclosure	Construction	Voltage	Frequency	Design	LR Code letter	Service Factor	Temp Rise @ FL	Duty	Ambient	Elevation	Motor/Shaft Wk ²	Ret Wdg	Sound Pressure @ 1M	VFD Rating	Outline Dwg	Conn. Diag	Additional Specifications:	
Speed (RPM)	0	115	1270	1765	1800		1.0	1800	145	EPFC	TFN	230/460#190/380	60	B	P	1.15	30	CONT	40 °C	1,000 feet	ZT4257 R2	62	dB(A)	CONSTANT 10:1	A-100617-750	EE7308T		
Current (Amps)	17.0	16.0	11.0	1.65	1.15																							
Torque (ft-lb)	13.7	12.5	16.8	3.0	0.00																							

