

PRODUCT INFORMATION PACKET



Model No: CZ145T17WC47A
Catalog No: 122200.00
2HP..1745RPM.145TC.TEFC.230/460V.3PH.60HZ.CONT.40C.1.15SF.C
FACE.CZ145T17WC47.....WASHGUARD II.T-STATS.....
Paint Free



Regal and Leeson are trademarks of Regal Beloit Corporation or one of its affiliated companies.
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E





Nameplate Specifications

Output HP	2 Hp	Output KW	1.5 kW
Frequency	60 Hz	Voltage	208-230/460 V
Current	6.0-5.8/2.9 A	Speed	1745 rpm
Service Factor	1.15	Phase	3
Efficiency	86.5 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	L	Frame	145TC
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6205
Opp Drive End Bearing Size	6203	UL	Recognized
CSA	Y	CE	N
IP Code	55		

Technical Specifications

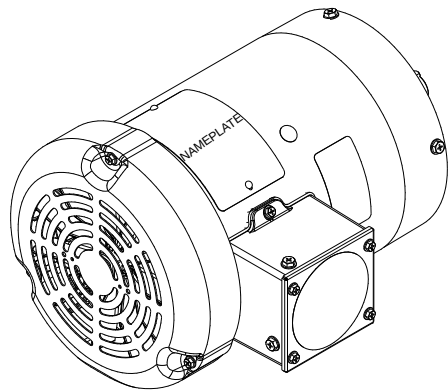
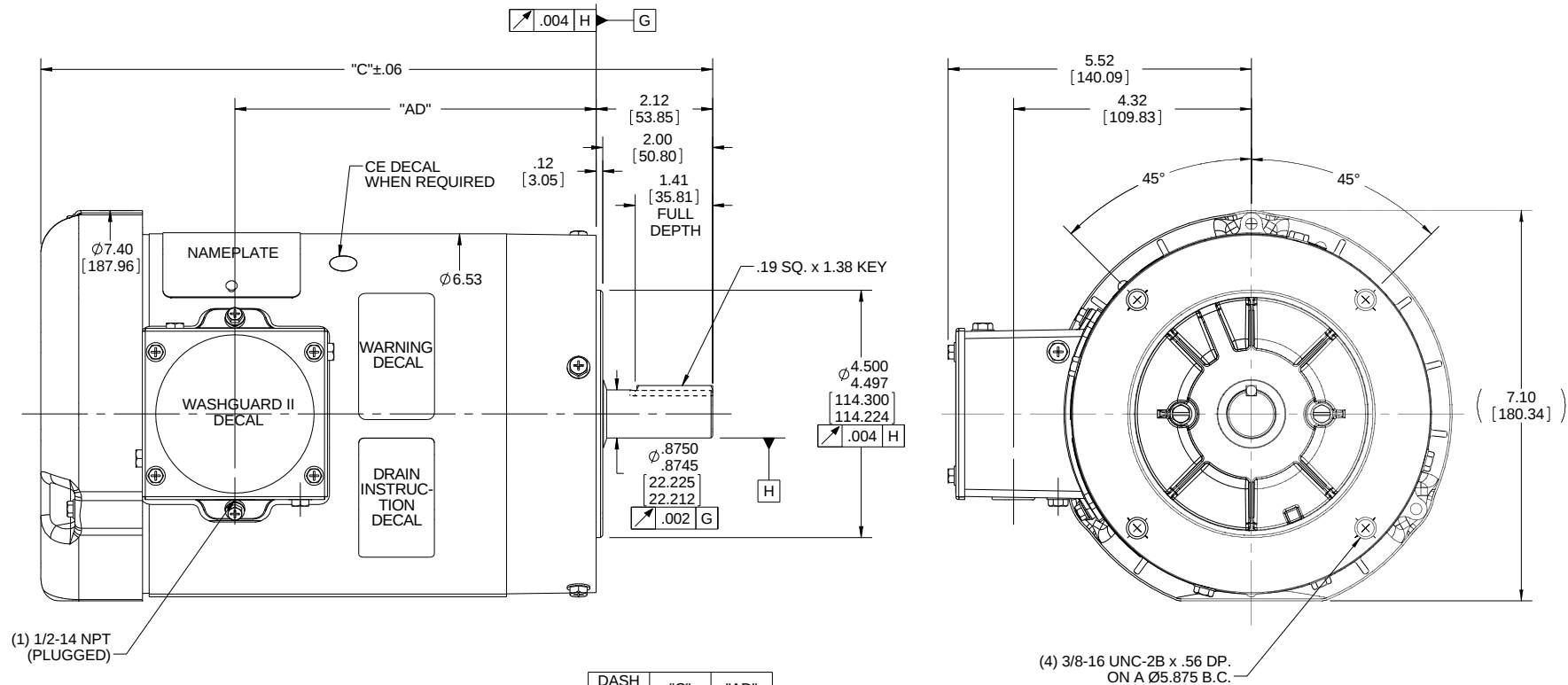
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Mounting	Round	Motor Orientation	HORIZONTAL
Drive End Bearing	BALL	Opp Drive End Bearing	BALL
Frame Material	Stainless Steel	Shaft Type	T
Overall Length	13.72 in	Frame Length	8.00 in
Shaft Diameter	0.875 in	Shaft Extension	2 in
Assembly/Box Mounting	F1 ONLY		
Outline Drawing	028899-800	Connection Diagram	005010.20

4

3

2

1



DASH NO.	"C"	"AD"
500	10.72	5.07
550	11.22	5.57
600	11.72	6.07
650	12.22	6.57
700	12.72	7.07
750	13.22	7.57
800	13.72	8.07

WASHGUARD II / BISSC MOTOR:

- 1) SHAFT SEALS & V-RING.
- 2) DRAIN HOLES IN ENDBELLS & CONDUIT BOX.
- 3) BUNA-N GASKETS THROUGHOUT.
- 4) STAINLESS STEEL HARDWARE, FRAME & NAMEPLATE
- 5) CORROSION RESISTANT FINISH ON ENDBELLS & CONDUIT BOX

DRAWING REVISION F	REVISION BY LK	DATE 04/22/2016
ECO ECO-0100560	APPROVED BY JD	DATE 04/22/2016
ECO DESCRIPTION DASH # TABLE UPDATED		
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.		

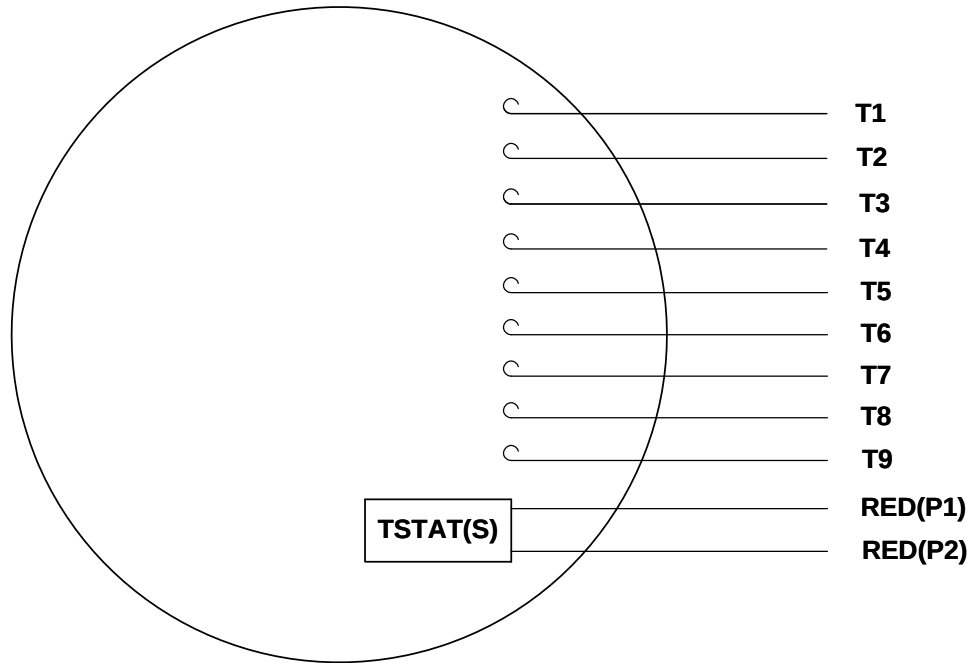
TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30'
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP			
EDGES: .003/.015 [0.076/.381] X 45°			
CORNER FILLETS: R.02 [51]			
MACHINED SURFACES: 200			
mm SHOWN IN [BRACKETS]			

DRAWN BY GRB 10/31/08	DATE
APPROVED BY	DATE
REFERENCE	THIRD ANGLE PROJECTION

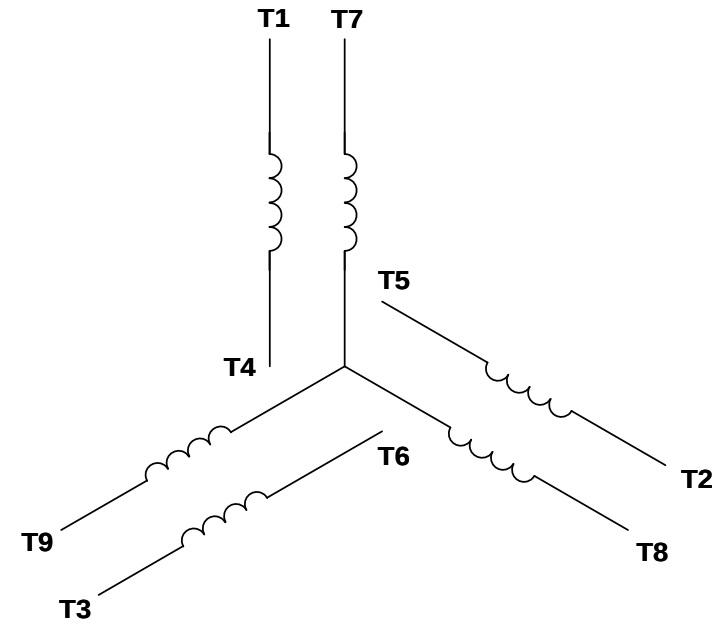
Regal Beloit America, Inc.	
OUTLINE TEFC - "C" FACE	
MATERIAL WASHGUARD	PROCESS/FINISH
SIZE B	DRAWING NUMBER 028899
SHEET 1 OF 1	

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.

Uncontrolled Copy



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

DRAWING REVISION G	REVISION BY MVG	DATE 04/05/2017
ECO ECO-0121253	APPROVED BY SM	DATE 04/05/2017

ECO DESCRIPTION
ADDED P1 & P2 FOR TSTAT

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 125/3.2 INCH/mm

mm SHOWN IN [BRACKETS]

DRAWN BY
DBT 12/16/97

DATE

APPROVED BY
KH 12/17/97

DATE

REFERENCE

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-EXTERNAL
3 PHASE WITH PROTECTOR

MATERIAL
DECAL - 004014 (TSTAT) - 080582

PROCESS/FINISH
STOCK

SIZE
A

DRAWING NUMBER

00501020

SHEET
1 OF 1



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: 005010.20
OUTLINE: 028899-800
WINDING: T634340

CAT #: 122200.00

FR 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN				
2	1.5	1800	1751	145TC	TEFC	TFR	L	B				
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.			
3	60/50	208-230/460#190/380	6.2-6/386/3	LINE OR INVERTER	CONT	F	1.15	40	3300			
F.L.EFF		86.5	3/4 LD EFF	85.6	1/2 LD EFF	83.4	GTD EFF	ELECT. TYPE				
F.L.PF		75.6	3/4 LD PF	64.0	1/2 LD PF	51.9	84.0	SQ CAGE INVERTED				
F.L. TORQUE		LR AMPS @ 460 V		L.R. TORQUE		B.D. TORQUE		F.L. RISE (°C)				
6.0 LB-FT		26.5		18.8 LB-FT		313%		24.6 LB-FT 410%		53		
PRESSURE @ 3		POWER		ROTOR WK²		MAX. LOAD WK²		SAFE STALL TIME		STARTS/HOUR	MOTOR WGT	
65 DBA		74 DBA		0.16 LB-FT²		0 LB-FT²		10 SEC.		3	0 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	NONE	NO	NONE	NO PAINT
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL	
DE CODE								
BALL	POLYREX EM	T	NONE	NONE	303 STAINLESS (C-501)	STAINLESS STEEL		
6205	6203							
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		
0	0	0	0	0	0.150	ODE		

INVERTER TORQUE: CONSTANT 6:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
BRAKE: NONE
FT-LB: NA
VOLTAGE: NONE
HZ:

DATE: 1/30/2018

UL: Y-(LEESON UL REC)

Data Sheet

Date: 1/30/2018

122200.00



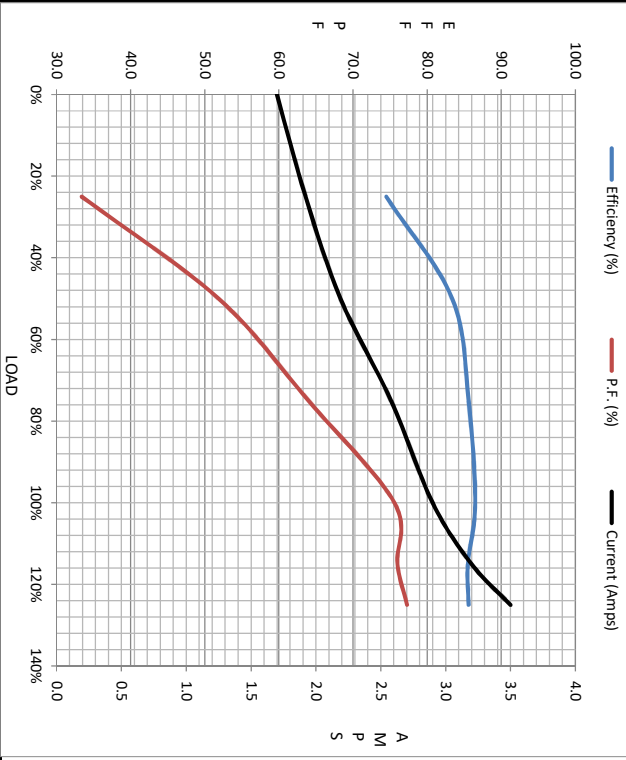
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.70	1.92	2.19	2.58	2.90	3.2	3.5	26.5
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.5	7.5	18.8
RPM	1800	1787	1774	1763	1751	1,730	1732	0
Efficiency (%)		74.5	83.4	85.6	86.5	85.5	85.6	
P.F. (%)	7.1	33.4	51.9	64.0	75.6	76.0	77.3	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	775	1085	1751	1800		
Current (Amps)	26.5	24.4	14.2	2.90	1.70		
Torque (ft-lb)	18.8	15.0	24.6	6.0	0.00		
						HP	2.0
						Sync. RPM	1800



Enclosure		TEFC	
Construction		TFR	
Voltage		208-230/460#190/380 V	
Frequency		60 Hz	
Design		A	
LR Code letter		L	
Service Factor		1.15	
Temp Rise @ FL		53 °C	
Duty		CONT	
Ambient		40 °C	
Elevation		1,000 feet	
Rotor/Shaft wk²		0.16 Lb-Ft²	
Ref Wdg		T634340 FR	
Sound Pressure @ 1M		65 dBA	
VFD Rating		CONSTANT 6:1	
Outline Dwg		028899-800	
Conn. Diag		005010.20	
Additional Specifications:			
0			
0			
EQUIV CKT (OHMS / PHASE)			
R1	R2	X1	X2 Xm
0.0000	0.0000	0.0000	0.0000 0.0000

