

PRODUCT INFORMATION PACKET



Model No: C145T17FB99A

Catalog No: 121998.00

..2HP..1745RPM.145T.TEFC.230/460V.3PH.50/60HZ.CONT.40C.1.15SF.RIGID.C145T17FB99.....FARM
DUTY.NONE.....

Agricultural



Regal and Leeson are trademarks of Regal Beloit Corporation or one of its affiliated companies.

©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E



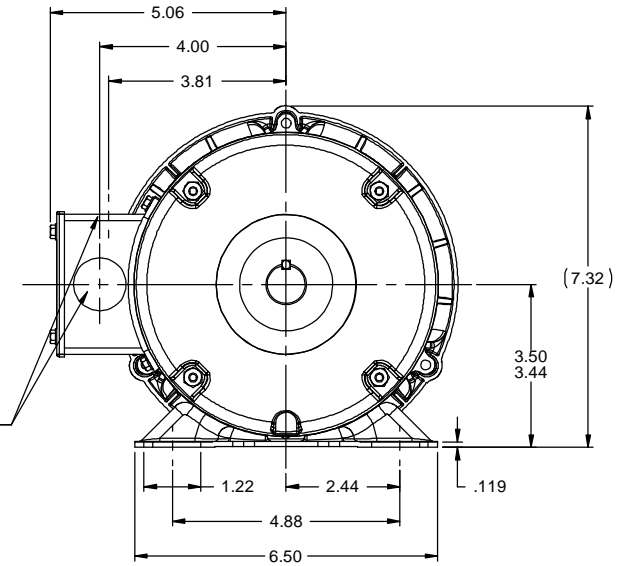
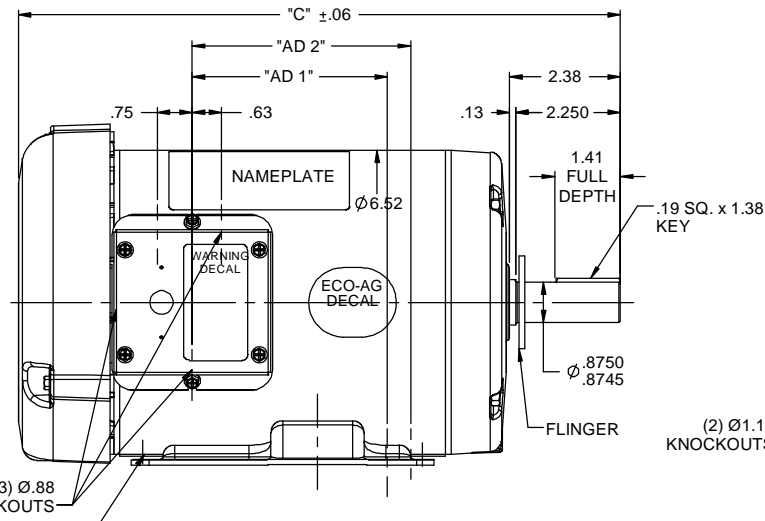
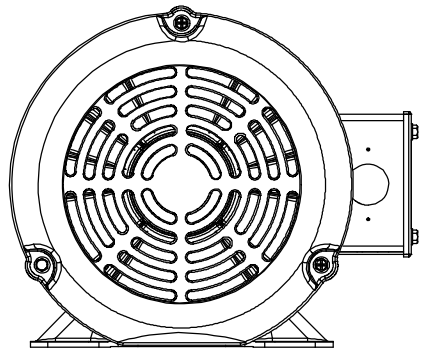


Nameplate Specifications

| | | | |
|----------------------------|-----------------------------|------------------------|------------|
| Output HP | 2 Hp | Output KW | 1.5 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 5.8/2.9 A | Speed | 1745 rpm |
| Service Factor | 1.25 | Phase | 3 |
| Efficiency | 86.5 % | Duty | Continuous |
| Insulation Class | F | Design Code | B |
| KVA Code | L | Frame | 145T |
| 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 | 43 | | |

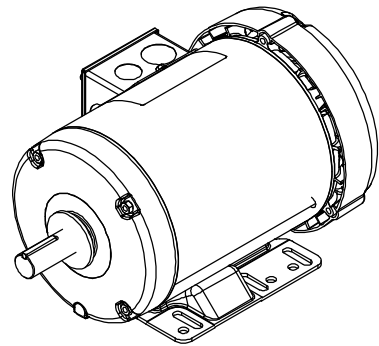
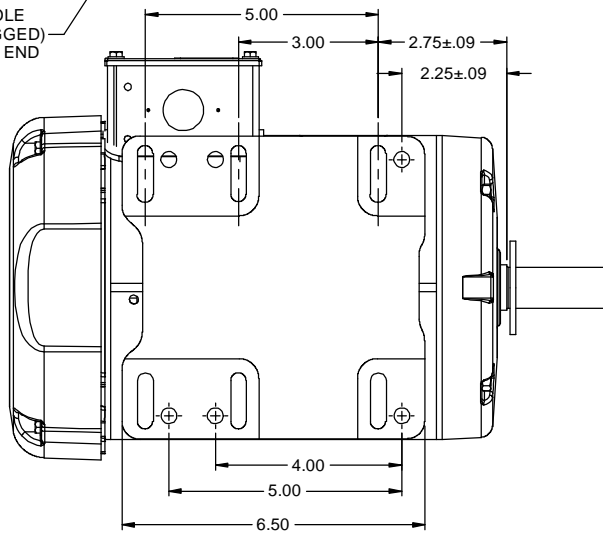
Technical Specifications

| | | | |
|-----------------------|-----------------------------|-----------------------|-----------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 4 | Rotation | Reversible |
| Mounting | Rigid base | Motor Orientation | HORIZONTAL |
| Drive End Bearing | BALL | Opp Drive End Bearing | BALL |
| Frame Material | Rolled Steel | Shaft Type | T |
| Overall Length | 13.98 in | Frame Length | 8.50 in |
| Shaft Diameter | 0.875 in | Shaft Extension | 2.25 in |
| Assembly/Box Mounting | F1 ONLY | | |
| Outline Drawing | 029033-850 | Connection Diagram | 005010.20 |



(3) Ø.88
KNOCKOUTS

DRAIN HOLE
(UN PLUGGED)
ON EACH END

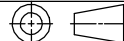


- NOTES:
 1) GASKETS THROUGHOUT
 2) FLINGER ON SHAFT END
 3) DRAIN HOLES ON EACH END OF FRAME (UNPLUGGED)

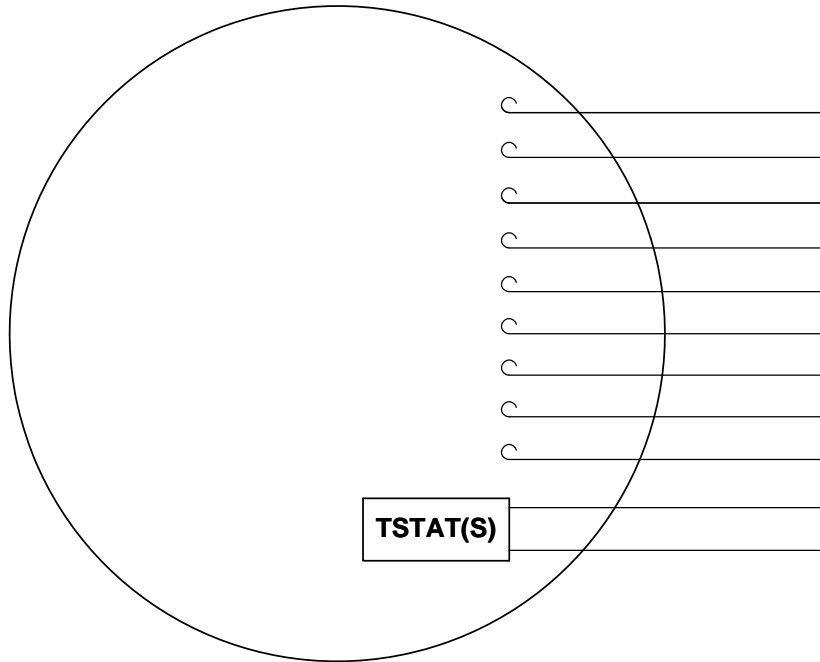
| DASH NO. | "C" | "AD 1" | "AD 2" |
|----------|-------|--------|--------|
| 700 | 12.48 | 4.19 | 4.69 |
| 750 | 12.98 | 4.69 | 5.19 |
| 800 | 13.48 | 5.19 | 5.69 |
| 850 | 13.98 | 5.69 | 6.19 |

| TOLERANCES UNLESS SPECIFIED | | REGAL Regal-Beloit Corporation | DRAWN VS 6/11/2012 | | | | | |
|-----------------------------|----------|---|--------------------|-----------|-------|------------------------|------------|-----|
| DEC | INCHES | | CHK | APPR | | | | |
| X | ±.1 | TITLE OUTLINE - 140/56HZ FRAME TEFC - RIGID MATL FINISH GENERAL PURPOSE | SCALE | 3:8 | | | | |
| XX | ±.03 | | REF | 028765 | | | | |
| XXX | ±.005 | | FMF | 121997.00 | | | | |
| XXXX | ±.0005 | | PAGE | OF | | | | |
| NO | REVISION | BY & DATE | CHK | LANG | ±1/2" | FINISH GENERAL PURPOSE | PAGE | OF |
| | | | RFP | PREV | | SIZE | DRAWING NO | REV |
| | | | NETWORK FILE NAME | 029033 | | B | 029033 | |

THIRD ANGLE PROJECTION

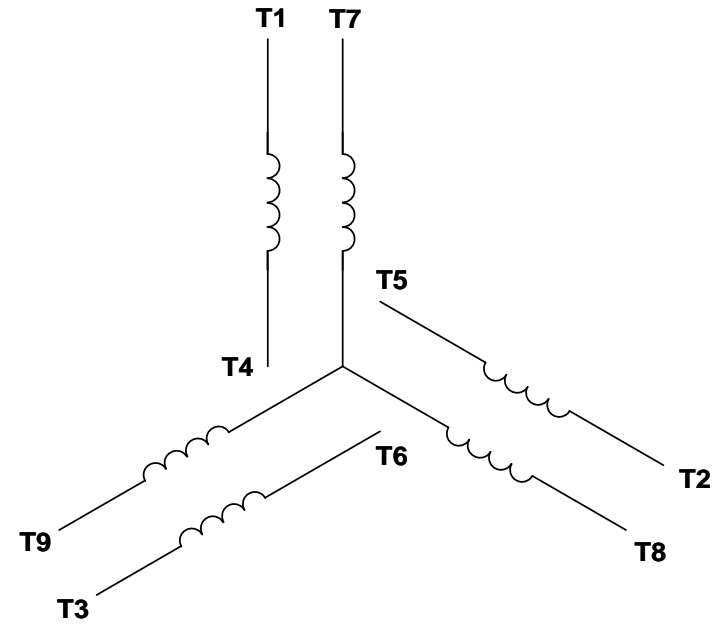


VIEW FROM OUTSIDE OF MOTOR AT SWITCH END. Uncontrolled Copy



- T1
- T2
- T3
- T4
- T5
- T6
- T7
- T8
- T9
- RED(P1)
- RED(P2)

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

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] | ±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™ 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: 029033-850
WINDING: T634340

CAT #: 121998.00

FR 3

TYPICAL MOTOR PERFORMANCE DATA

| | | | | | | | | | | | | |
|--------------|-----------------|-----------------|---------------|-----------------|-------------|-----------|----------------|-----------------|-------|---|---|-----|
| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN | | | | |
| 2 | 1.5 | 1800 | 1751 | 145T | TEFC | TFR | L | B | | | | |
| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. | | | |
| 3 | 60/50 | 230/460#190/380 | 6/386.8/3.4 | ACROSS THE LINE | 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 | | SO CAGE IND RUN | | | | |
| 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 |
| STANDARD | STANDARD | RIGID | HORIZONTAL | NO | NONE | NO | NONE | GREEN (ENAMEL) |
| 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) | ROLLED 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 | 0.080 | ODE |

| | | | | |
|---------------------------------|--|-------------------------------|-----------------------------|----------|
| * N O T E S * | INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE | ENCODER: NONE NONE NONE | BRAKE: NONE NONE NONE | NONE PPR |
|---------------------------------|--|-------------------------------|-----------------------------|----------|

| | | | | | |
|-------|-------------------|----------|------|------|-----|
| DATE: | 2/15/2018 | FT-LB: | NA | NONE | HZ: |
| UL: | Y-(LEESON UL REC) | VOLTAGE: | NONE | NONE | |



Motor Load Data

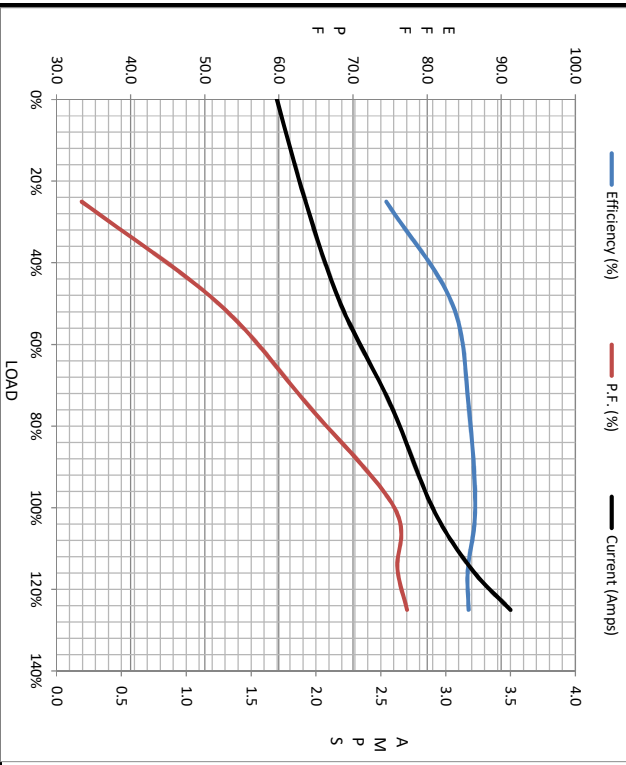
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|------|------|------|
| Current (Amps) | 1.70 | 1.92 | 2.19 | 2.58 | 2.90 | 3.2 | 3.5 | 26.5 |
| Torque (ft-lb) | 0.00 | 1.50 | 3.0 | 4.5 | 6.0 | 6.5 | 7.5 | 18.8 |
| HPM | 1800 | 1787 | 1774 | 1763 | 1751 | 1730 | 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 |
|----------------|------|---------|------|-------|------|
| 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 |

Information Block

| | | | | |
|-----------------------------|-------------------------|--------|--------|--------|
| HP | 2.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 140 | | | |
| Enclosure | TEFC | | | |
| Construction | TFR | | | |
| Voltage | 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 wk ² | 0.16 Lb-Ft ² | | | |
| Ref Wdg | T634340 FR | | | |
| Sound Pressure @ 1M | 65 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | 029033-850 | | | |
| Conn. Diag | 005010.20 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |



Speed - Torque Curve

