

PRODUCT INFORMATION PACKET

Model No: 145TTFR16361
Catalog No: K2045A
2, TEFC, 1800, 145T, 3/60/230/460
Brake



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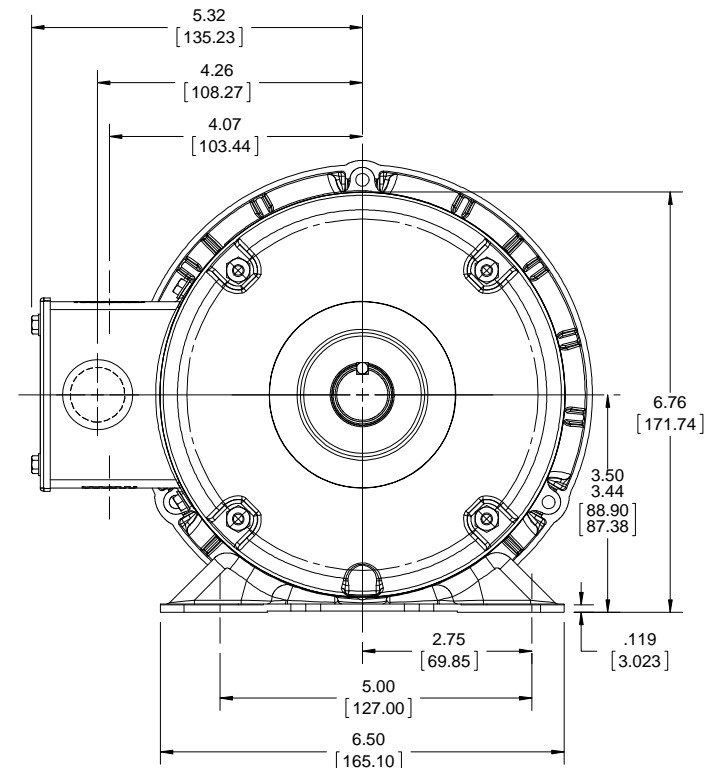
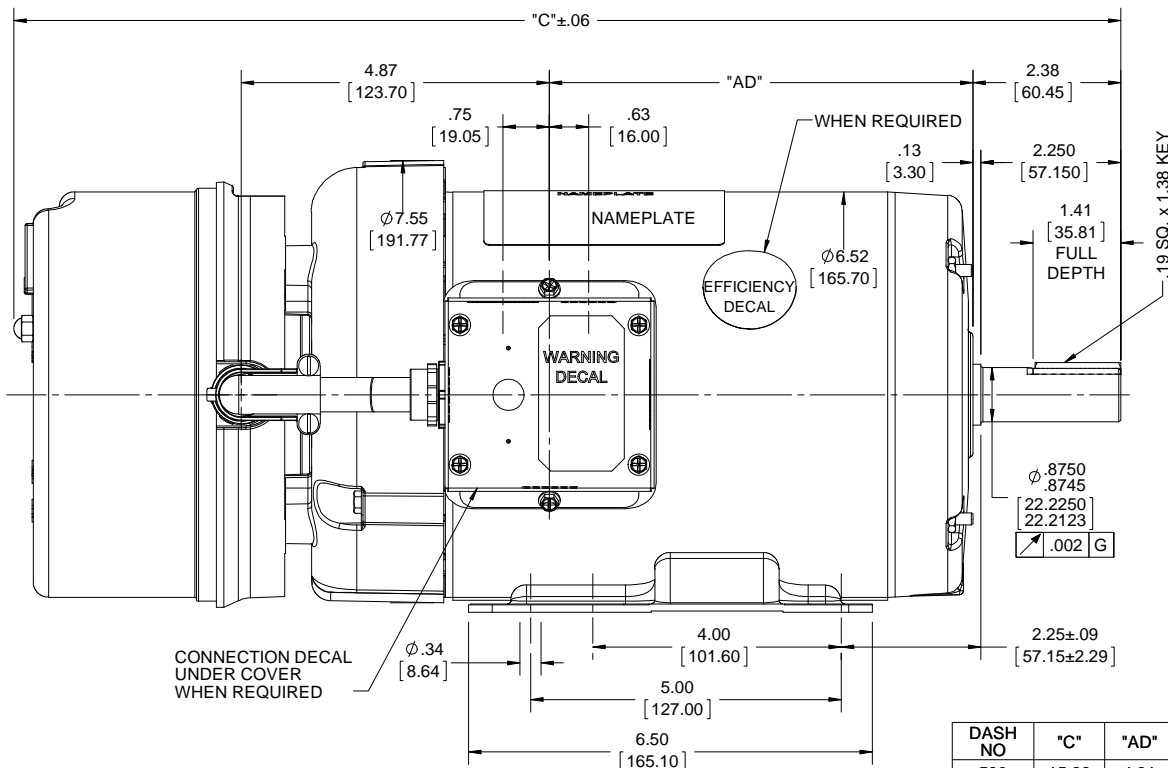
Nameplate Specifications

| | | | |
|----------------------------|------------------------------------|------------------------|-------------------|
| 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 | 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 | Y |
| IP Code | 43 | | |

Technical Specifications

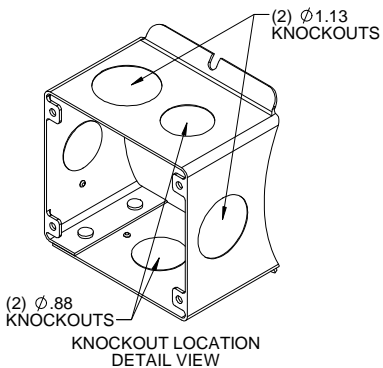
| | | | |
|-----------------------|------------------------------------|-----------------------|------------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 4 | Rotation | Reversible |
| Mounting | Rigid base | Motor Orientation | HORIZONTAL |
| Drive End Bearing | BALL | Opp Drive End Bearing | BALL |
| Frame Material | Rolled Steel | Shaft Type | T |
| Overall Length | 18.66 in | Frame Length | 8.00 in |
| Shaft Diameter | 0.875 in | Shaft Extension | 2.25 in |
| Assembly/Box Mounting | F1 ONLY | | |
| Outline Drawing | 028848-800 | Connection Diagram | 005010.15 |

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| DASH NO | "C" | "AD" |
|---------|-------|------|
| 500 | 15.66 | 4.81 |
| 550 | 16.16 | 5.31 |
| 600 | 16.66 | 5.81 |
| 650 | 17.16 | 6.31 |
| 700 | 17.66 | 6.81 |
| 750 | 18.16 | 7.31 |
| 800 | 18.66 | 7.81 |

NOTE:
1) GASKETS THROUGHOUT



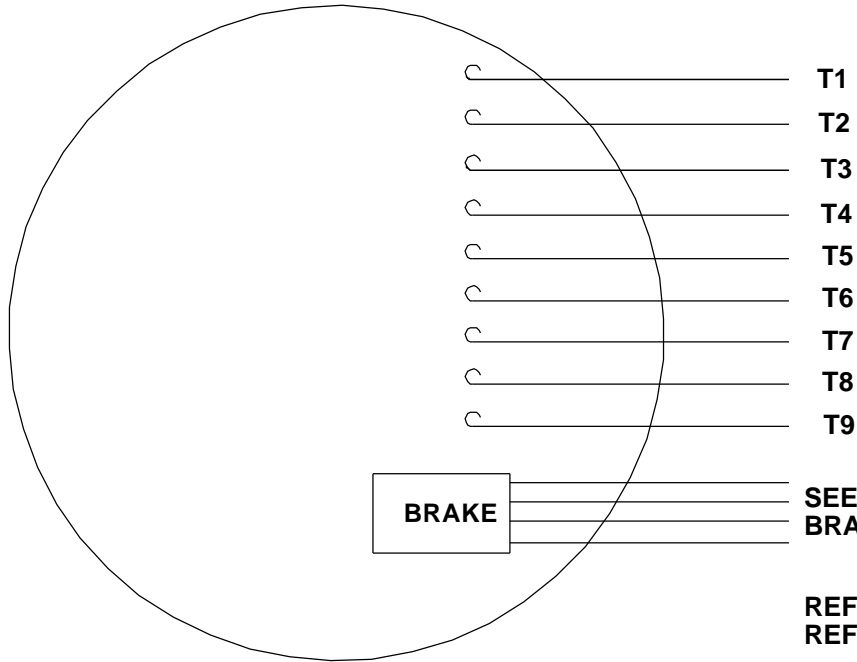
| | | |
|---|-------------------|--------------------|
| DRAWING REVISION K | REVISION BY DS | DATE 04/25/2018 |
| ECO ECO-0143956 | APPROVED BY AS | DATE 04/25/2018 |
| ECO DESCRIPTION BASE DIMENSION 5.00 WAS 6.50 | | |
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| | | | |
|--|---------|-----------|-------|
| 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 [0.076/.381] X 45° | | | |
| CORNER FILLETS: R.02 [51] | | | |
| MACHINED SURFACES: 125/3.2 | | | |
| mm SHOWN IN [BRACKETS] | | | |

| | |
|----------------------------|------------------------|
| DRAWN BY GRB 07/10/2008 | DATE |
| APPROVED BY | DATE |
| REFERENCE | THIRD ANGLE PROJECTION |

| | |
|----------------------------|---|
| Regal Beloit America, Inc. | |
| DESCRIPTION | OUTLINE TEFC - RIGID - BRAKEMOTOR |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER 028848 |
| | SHEET 1 OF 1 |

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.

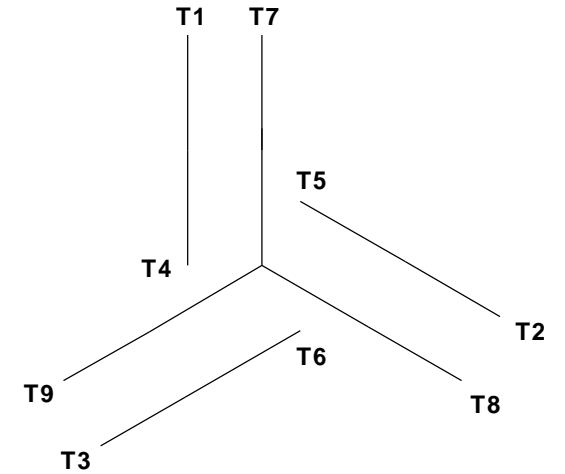


CAUTION:
LEAD WIRE INSULATION TO EXTEND
MINIMUM OF 1/4" INTO CONNECTOR
INSULATION

SEE TABLE FOR
 BRAKE CONNECTIONS

REF. DECAL (MOTOR) - 004014
 REF. DECAL (BRAKE) - 080034 (STEARNS & DINGS BRAKE)

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 |

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TYPE "T" W/O PROTECTOR

| VOLTAGE | BRAKE CONNECTION | | | | | |
|---------|--------------------|--------------------|----------------------|----------------------|------------------------|-----------------------|
| | STEARNS BRAKE | | | DINGS BRAKE | | |
| | L1 | L2 | Join | L1 | L2 | Join |
| HIGH | 1(RED) | 2(RED) | 3(BLACK) 4(BLACK) | 2(BLACK) | 4(YELLOW) | 1(YELLOW) 3(BLACK) |
| LOW | 1(RED) 3(BLACK) | 2(RED) 4(BLACK) | ----- | 2(BLACK) 3(BLACK) | 1(YELLOW) 4(YELLOW) | ----- |

| | | | | | | | | |
|------------------------|--|--------------|-------|-----------------------------|--|---|--------------------|---------|
| | | | | TOLERANCES UNLESS SPECIFIED | | ELECTRIC MOTORS GEARMOTORS AND DRIVES | DRAWN JJK 09/17/96 | |
| | | | | DEC | INCHES | | CHK | |
| | | | | .X | ±.1 | APPR | | |
| | | | | .XX | ±.01 | SCALE 1:1 | | |
| -- | REDRAWN IN SOLIDWORKS | VJB 02/08/11 | .XXX | ±.005 | TITLE EXTERNAL WIRING DIAGRAM STANDARD 3 PHASE - DUAL VOLTAGE | | REF 005010-01 | |
| 01 | ADDED DINGS AND BRAKE TABLE (PER CN114156) | TMZ 11/12/96 | .XXXX | ±.0005 | MAT'L W/STEARNS OR DINGS DUAL VOLTAGE BRAKE CONN. | | FMF | |
| NO | REVISION | BY & DATE | CHK | ANG | ±1/2° | FINISH LEESON STOCK | | PAGE OF |
| THIRD ANGLE PROJECTION | | | | RFP | PREV | SIZE | DRAWING NO | REV |
| | | | | NETWORK FILE NAME 00501015 | | A | 005010-15 | -- |



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:
 ORDER #: 005010.15
 REFERENCE MODEL #: 145TTR1636T
 CONN. DIAGRAM: 028948-800
 CAT #: K2045A
 OUTLINE: T634340 FR 3
 CUSTOMER PART #:
 WINDING: T634340 FR 3
 MOUNTING: F1 ONLY
 SPEED:
 TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNCRPM | FLRPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|-----|---------|-------|-------|-----------|------|----------|--------|
| 2 | 1.5 | 1800 | 1751 | 145T | TEFC | TEF | L | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|----|----------|---------|------------|-----------------|------------|------|---------|-----------------|-------|
| 3 | 60 | 230/460 | 6/3 | 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 | SQ 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 | 24.6 LB-FT | 410% |
| @ 3 FT. | POWER | ROTOR WK ² | MAX. LOAD WK ² | SAFE STALL TIME |
| 65 DBA | 74 DBA | 0.16 LB-FT ² | 0 LB-FT ² | 10 SEC. |
| | | | | START/SHOUR |
| | | | | 3 |
| | | | | MOTOR WGT |
| | | | | 0 LB. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|---------------|
| STANDARD | BRAKE | RIGID | HORIZONTAL | NO | NONE | NO | NONE | GRAY (ENAMEL) |

| BEARINGS | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT | MATERIAL | FRAME MATERIAL |
|--------------|------------|------------|------------|-------------|-------|---------------------|----------------|
| DE BALL 6205 | POLYREX EM | T | NONE | NONE | 1144 | STRESSPROOF (C-223) | ROLLED STEEL |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------|------------|-----------|-----------|-------------|---------|---------------|
| NONE | 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 |

| | | | |
|-----|---------------------------|-----------------------|--|
| * N | | INVERTER TORQUE: NONE | |
| O | INV. HP SPEED RANGE: NONE | | |
| T | ENCODER: NONE | | |
| E | BRAKE: STEARNS | | |
| S | FT-LB: 56,000 NEMA 2 | | |
| | VOLTAGE: 230/460-190/380 | | |
| | UL: V-INS, CONST UL REC | | |

PREPARED BY: FAREEDA DUDEKULA
 DATE: 9/17/2018
 FORM: 3531 REV_4 2/27/06

Data Sheet

145TFR16361



Submital

Data @ 460 V

Date: 9/17/2018

Customer:
 Attention:
 Submitted by: FAREEDA DUDEKULA

Motor Load Data

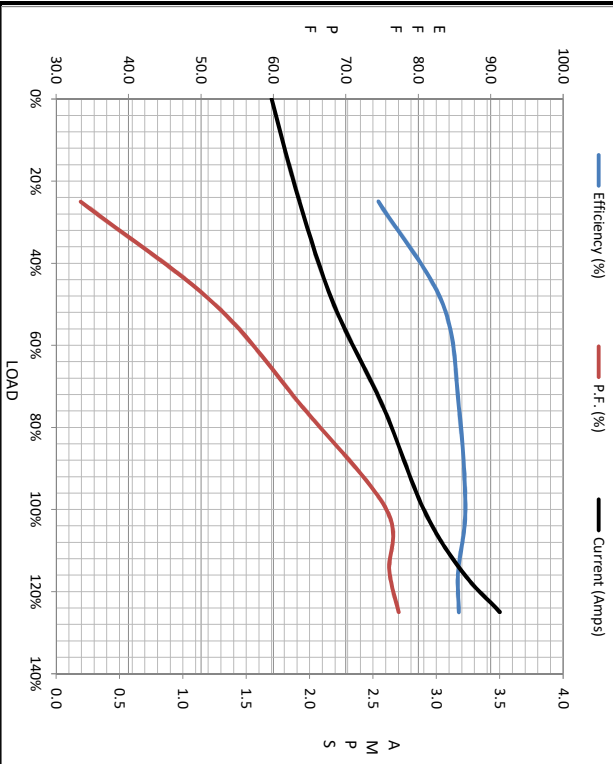
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 1.70 | 1.92 | 2.19 | 2.58 | 2.90 | 3.2 | 3.5 | 26.5 |
| Torque (ft-lb) | 0.00 | 1.50 | 3.0 | 4.5 | 6.0 | 6.5 | 7.5 | 18.8 |
| RPM | 1800 | 1787 | 1774 | 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 |
|----------------|------|---------|------|-------|------|
| 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 | 140182TFC080 | | | |
| Enclosure | TEFC | | | |
| Construction | TFR | | | |
| Voltage | 230/460 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 | | | |
| Ret Wdg | T634340 FR | | | |
| Sound Pressure @ 1M | 65 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | 028848-800 | | | |
| Conn. Diag | 005010.15 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |



Speed - Torque Curve

