# PRODUCT INFORMATION PACKET

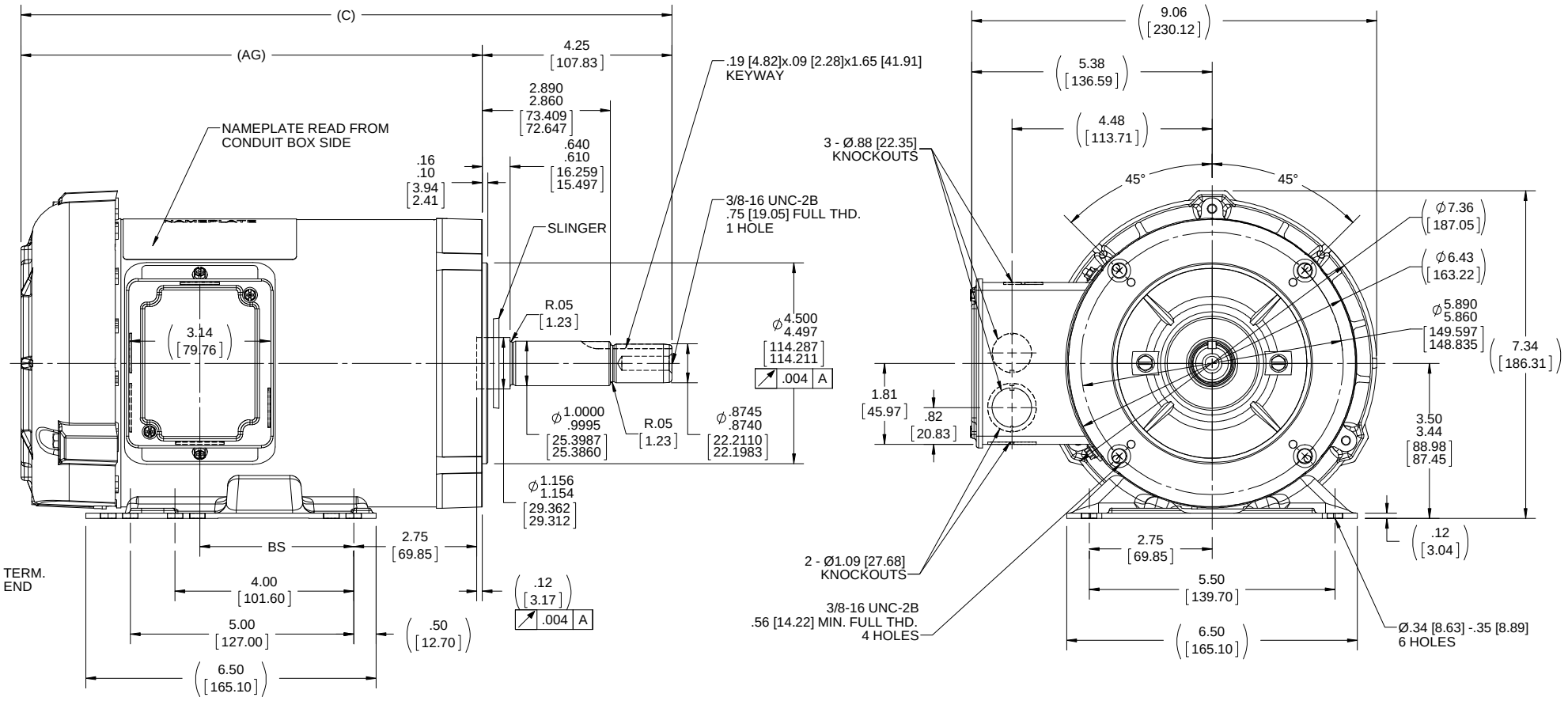
Model No: 145TTFR16010
Catalog No: GT3006
2,3600,TEFC,145JMV,3/60/200
JM

## Nameplate Specifications

| | | | |
|---|---|---|---|
| Output HP | **2 Hp** | Output KW | **1.5 kW** |
| Frequency | **60 Hz** | Voltage | **200 V** |
| Current | **5.8 A** | Speed | **3500 rpm** |
| Service Factor | **1.15** | Phase | **3** |
| Efficiency | **85.5 %** | Duty | **Continous** |
| Insulation Class | **F** | Design Code | **B** |
| KVA Code | **K** | Frame | **145JMV** |
| Enclosure | **Totally Enclosed Fan Cooled** | Overload Protector | **No** |
| Ambient Temperature | **40 °C** | Drive End Bearing Size | **6206** |
| Opp Drive End Bearing Size | **6203** | UL | **Recognized** |
| CSA | **Y** | CE | **Y** |
| IP Code | **43** | | |

## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | **Squirrel Cage Inverter Rated** | Starting Method | **Line Or Inverter** |
| Poles | **2** | Rotation | **Reversible** |
| Mounting | **Rigid base** | Motor Orientation | **Horizontal Or Shaft Down** |
| Drive End Bearing | **Ball** | Opp Drive End Bearing | **Ball** |
| Frame Material | **Rolled Steel** | Shaft Type | **JM** |
| Overall Length | **16.5 in** | Frame Length | **9.06 in** |
| Shaft Diameter | **0.875 in** | Shaft Extension | **4.25 in** |
| Assembly/Box Mounting | **F1 Only** | | |
| Outline Drawing | **A-100133-906** | Connection Diagram | **A-EE7300** |




NOTE:
1.CONDUIT BOX CAN BE ROTATED IN 180° STEPS.

| DASH | C | AG | BS |
|---|---|---|---|
| 706 | 14.57 [370.07] | 10.33 [262.38] | 3.45 [87.63] |
| 756 | 15.07 [382.77] | 10.83 [275.08] | 3.95 [100.33] |
| 806 | 15.57 [395.47] | 11.33 [287.78] | 4.45 [113.03] |
| 856 | 16.07 [408.17] | 11.83 [300.48] | 4.95 [125.73] |
| 906 | 16.57 [420.87] | 12.33 [313.18] | 5.45 [138.43] |

| DRAWING REVISION | REVISION BY | DATE |
|---|---|---|
| L | H. ADIKE | 1-29-2018 |
| ECO | APPROVED BY | DATE |
| ECO-0143026 | PST | 2-5-2018 |

ECO DESCRIPTION
OUTLINE CONVERSION PROJECT



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 [.076/.381] X 45 °
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

| DRAWN BY | MRB |
|---|---|
| DATE | 12-20-1994 |
| APPROVED BY | GK |
| DATE | 12-21-1994 |
| REFERENCE | 100133 |
| THIRD ANGLE PROJECTION | |

Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
140 FR. - TEFC - 'C' FACE

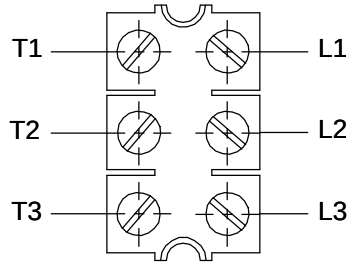
| MATERIAL | PROCESS/FINISH |
|---|---|
| | |

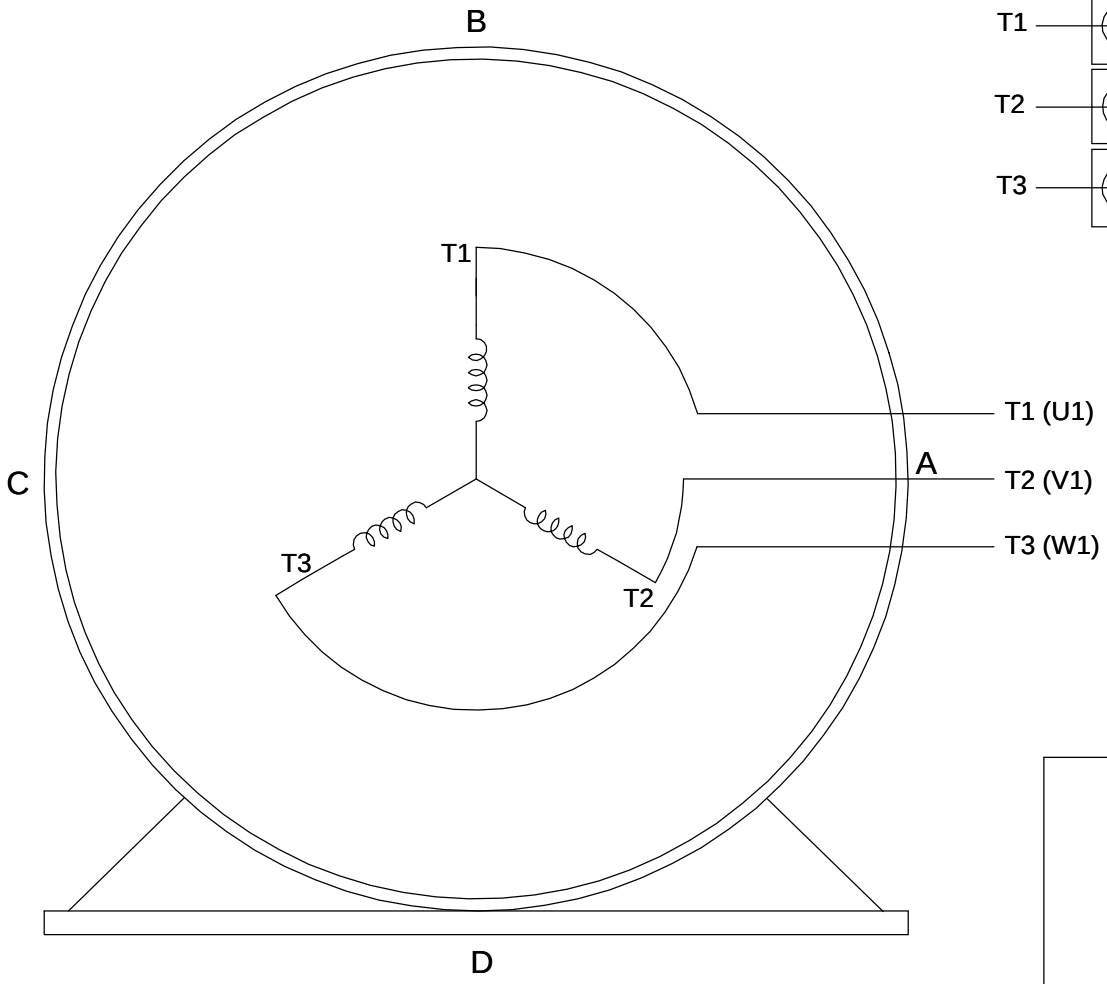
| SIZE | DRAWING NUMBER | SHEET |
|---|---|---|
| B | 100133 | 1 OF 1 |

THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

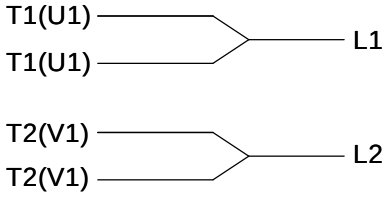
TERMINAL BLOCK WHEN SPECIFIED




VIEW OF TERMINAL END

IF MOTOR HAS
6 LEADS




A-9806 DECAL

OPTIONAL CORD
CONNECTION

| | |
|---|---|
| L1 | WHITE |
| L2 | RED |
| L3 | BLACK |

| | | |
|---|---|---|
| DRAWING REVISION: AB | REVISION BY: JJB | DATE: 06-27-2017 |
| ECO: ECO-0125361 | APPROVED BY: TB | DATE: 06-27-2017 |
| ECO DESCRIPTION: UPDATED TO CURRENT STANDARDS | | |



| | |
|---|---|
| DRAWN BY: DA | |
| DATE: 03-26-1993 | |
| APPROVED BY: TB | |
| DATE: 03-26-1993 | |
| REFERENCE | |
| THIRD ANGLE PROJECTION | |

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
# CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

| MATERIAL | PROCESS/FINISH |
|---|---|
| | |

| SIZE | DRAWING NUMBER | SHEET |
|---|---|---|
| A | EE7300 | 1 OF 1 |

## CERTIFICATION DATA SHEET

| | | | |
|---|---|---|---|
| **Model#:** | 145TTFR16010 AA | **WINDING#:** | ZT2142 FR 4 |
| **CONN. DIAGRAM:** | A-EE7300 | **ASSEMBLY:** | F1 ONLY |
| **OUTLINE:** | A-100133-906 | | |

### TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|
| 2 | 1.49 | 3600 | 3500 | 145JMV | TEFC | K | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 60 | 200 | 5.75 | LINE OR INVERTER | CONTINUOUS | F3 | 1.15 | 40 | 3300 |

| FULL LOAD EFF: 85.5 | 3/4 LOAD EFF: 85.9 | 1/2 LOAD EFF: 84 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|---|---|---|---|---|---|
| FULL LOAD PF: 86 | 3/4 LOAD PF: 82 | 1/2 LOAD PF: 72.5 | 84 | SQ CAGE INV RATED | 2.3 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|---|---|---|---|---|
| 3 LB-FT | 49.9 | 9.5 LB-FT 316 | 12.2 LB-FT 406 | 40 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---|---|---|---|---|---|---|
| 69 dBA | 79 dBA | 0.065 LB-FT^2 | 4 LB-FT^2 | 20 SEC. | 2 | 80 LBS. |

### *** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|---|---|---|---|---|---|---|---|---|
| C-FACE | STANDARD | RIGID | HORIZONTAL OR SHAFT DOWN | FALSE | NONE | PROVISIONS ONLY | NONE | BLUE (POWDER) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|---|---|---|---|---|---|---|---|
| DE | OPE | | | | | | |
| BALL | BALL | POLYREX EM | JM | NONE | NONE | 1144 STRESSPROOF (C-223) | ROLLED STEEL |
| 6206 | 6203 | | | | | | |

| THERMO-PROTECTORS | | | | THERMISTORS | CONTROL | SPACE /n HEATERS |
|---|---|---|---|---|---|---|
| THERMOSTATS | PROTECTORS | WDG RTDs | BRG RTDs | | | |
| NONE | NOT | NONE | NONE | NONE | FALSE | NONE VOLTS |

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

* NOTES *

DATE: 06/23/2017 07:04:08 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

# Data Sheet

Date: 15-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

145TTFR16010

**Submittal**

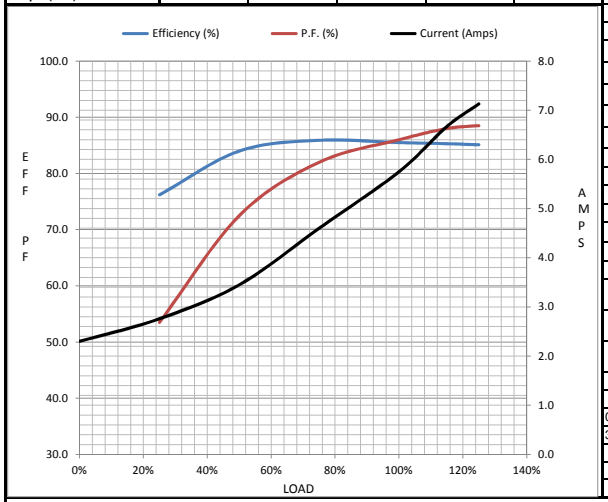
Data @ 200 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 2.30 | 2.76 | 3.5 | 4.6 | 5.8 | 6.7 | 7.1 | 49.9 | |
| Torque (ft-lb) | 0.00 | 0.74 | 1.48 | 2.23 | 3.0 | 3.5 | 3.8 | 9.5 | |
| RPM | 3600 | 3575 | 3550 | 3525 | 3500 | 3,485 | 3470 | 0 | |
| Efficiency (%) | | 76.2 | 84.0 | 85.9 | 85.5 | 85.3 | 85.1 | | |
| P.F. (%) | 20.0 | 53.5 | 72.5 | 82.0 | 86.0 | 88.0 | 88.5 | 42.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 1500 | 2615 | 3500 | 3600 |
| Current (Amps) | 49.9 | 47.2 | 33.4 | 5.8 | 2.30 |
| Torque (ft-lb) | 9.5 | 9.4 | 12.2 | 3.0 | 0.00 |




## Information Block

| | |
|---|---|
| HP | 2.0 |
| Sync. RPM | 3600 |
| Frame | 145 |
| Enclosure | TEFC |
| Construction | TFR |
| Voltage | 200 V |
| Frequency | 60 Hz |
| Design | B |
| LR Code letter | K |
| Service Factor | 1.15 |
| Temp Rise @ FL | 36 ° C |
| Duty | CONT |
| Ambient | 40 ° C |
| Elevation | 1,000 feet |
| Rotor/Shaft wk² | 0.07 Lb-Ft² |
| Ref Wdg | ZT2142 FR |
| Sound Pressure @ 1M | 69 dBA |
| VFD Rating | CONSTANT 2:1 |
| Outline Dwg | A-100133-906 |
| Conn. Diag | A-EE7300 |

Additional Specifications:

0

365THFS8036

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 0.8320 | 0.5910 | 1.2350 | 1.0470 | 39.4590 |