# PRODUCT INFORMATION PACKET

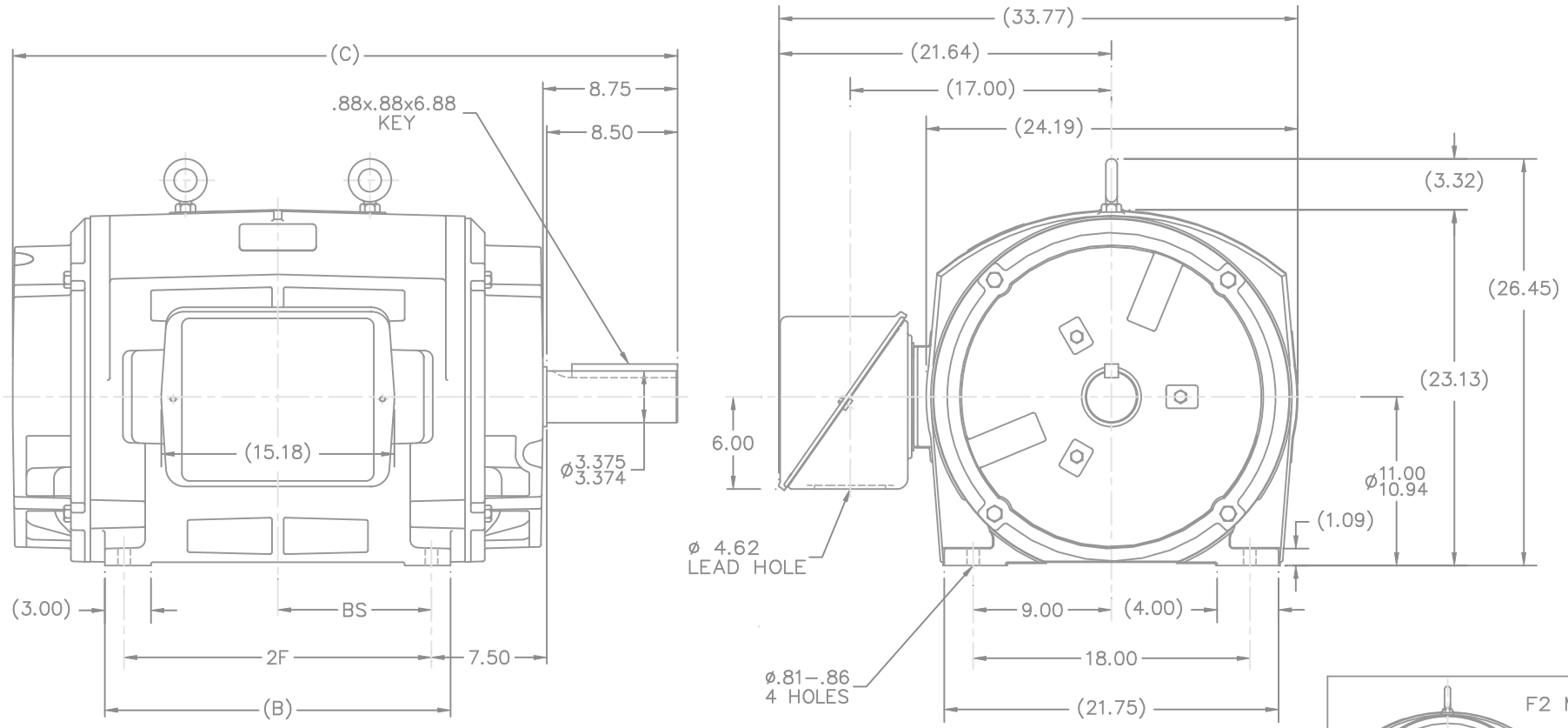
Model No: 449TTDN16076
Catalog No: U275
200,1200,DP,449T,3/60/460
Open Drip Proof (ODP)

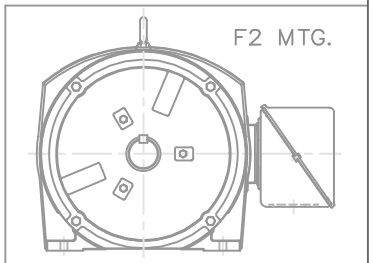
## Nameplate Specifications

| | | | |
|---|---|---|---|
| Output HP | **200 Hp** | Output KW | **149.0 kW** |
| Frequency | **60 Hz** | Voltage | **460 V** |
| Current | **245.0 A** | Speed | **1188 rpm** |
| Service Factor | **1.15** | Phase | **3** |
| Efficiency | **95.4 %** | Duty | **Continous** |
| Insulation Class | **F** | Design Code | **B** |
| KVA Code | **G** | Frame | **449T** |
| Enclosure | **Drip Proof** | Overload Protector | **No** |
| Ambient Temperature | **40 °C** | Drive End Bearing Size | **6319** |
| Opp Drive End Bearing Size | **6318** | UL | **Recognized** |
| CSA | **Y** | CE | **Y** |
| IP Code | **12** | | |

## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | **Squirrel Cage Inverter Rated** | Starting Method | **Part Wdg Start & Wye Start Delta Run Or Inverter** |
| Poles | **6** | Rotation | **Reversible** |
| Mounting | **Rigid base** | Motor Orientation | **Horizontal** |
| Drive End Bearing | **Ball** | Opp Drive End Bearing | **Ball** |
| Frame Material | **Cast Iron** | Shaft Type | **T** |
| Overall Length | **48.25 in** | Frame Length | **29.38 in** |
| Shaft Diameter | **3.375 in** | Shaft Extension | **8.75 in** |
| Assembly/Box Mounting | **F1/F2 Capable** | | |
| Outline Drawing | **B-SS514252-2938** | Connection Diagram | **A-EE7300CB** |




NOTES:

1. C.BOX CAN BE ROTATED IN 90° STEPS.
2. C.BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS & TURNING FRAME 180°.
3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

| DASH | FRAME | C | AG | B | 2F | 2FF | 2FFF | BS |
|---|---|---|---|---|---|---|---|---|
| 2438 | 447T | 43.25 | --- | 22.50 | 20.00 | --- | --- | 10.00 |
| 2938 | 449T | 48.25 | --- | 27.50 | 25.00 | --- | --- | 12.50 |

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 7 | UPDATED DE BRACKET GEOMETRY CN 35521 | DRS | |
| 6 | ADDED F2 MOUNTING VIEW CN 29200-263 | DRS 03-24-2000 | |
| 5 | ADDED OVERALL DIMENSIONS CN 27400-627 | BJW 01-17-2000 | |
| 4 | REVISED TO NEC CONDUIT BOX CN 28405 | BJW | |
| 3 | REMOVED 700 CU.IN. C'BOX NOTE CN 16342 | KL 10-07-1993 | |
| 2 | 'C' DIM. WAS 43.19 & 48.19 CN 15854 | JL 06-09-1993 | |

TOLERANCES UNLESS SPECIFIED: DEC. INCHES; .X ±.1; .XX ±.03; .XXX ±.005; .XXXX ±.0005; ANG ±7'30"

MARATHON ELECTRIC

TITLE OUTLINE – DR.PR. 447–449T FR.

MAT'L.

FINISH

CAD FILE SS514252

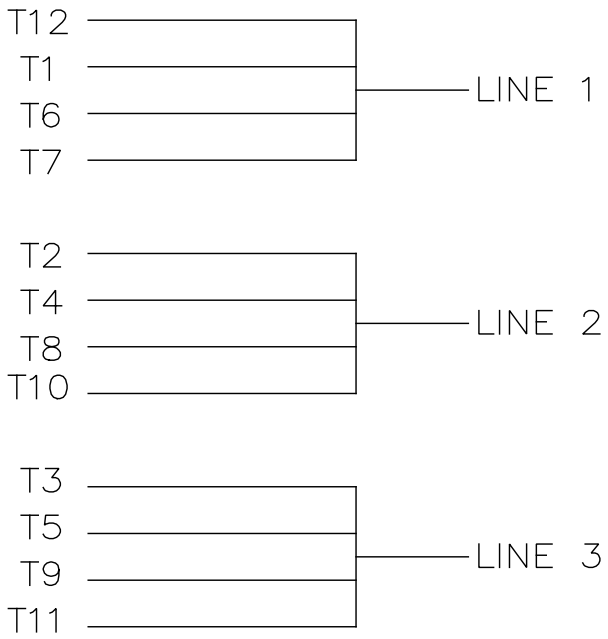
RFP

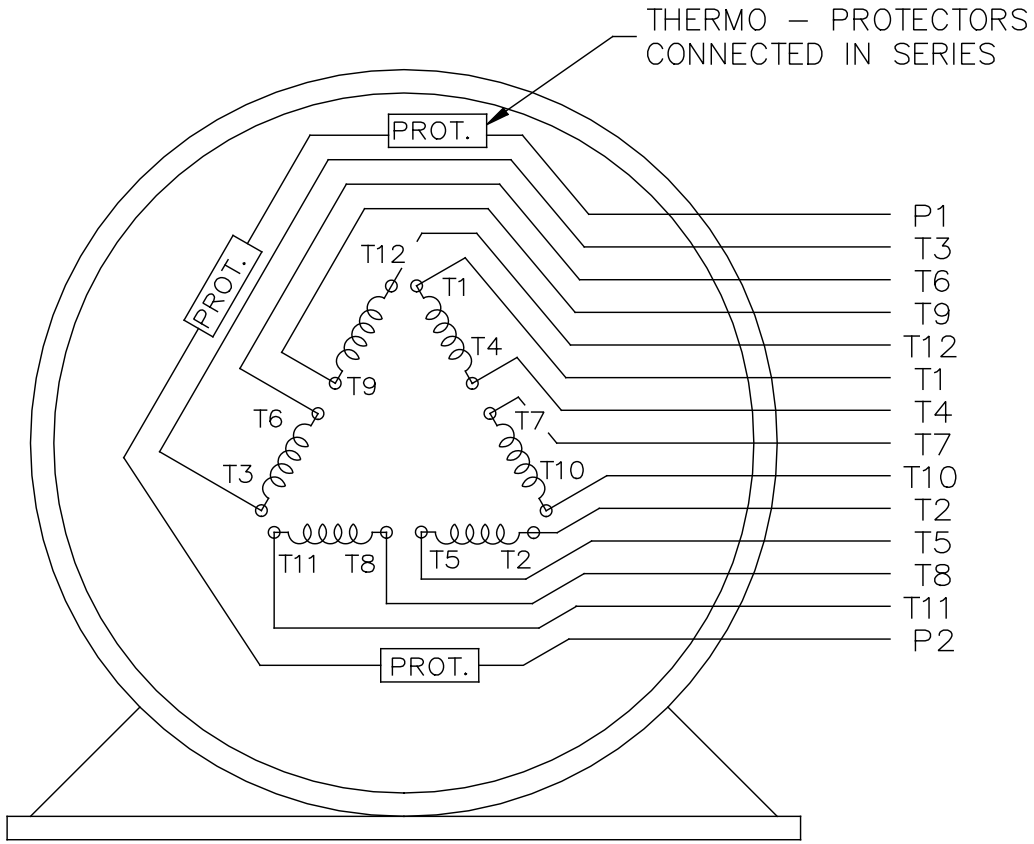
DIST WA–SB

| | |
|---|---|
| DRAWN | JL 06-23-1992 |
| CHK | TB 06-23-1992 |
| APPD | JPN 07-10-1992 |
| SCALE | 1=7 |
| REF | |
| FMF | |
| PREV | |

SIZE B | DRAWING NO. SS514252 | PAGE OF | REV. 7

EE7300CB




*VIEW OF TERMINAL END*

| | | | | TOLERANCES UNLESS SPECIFIED | | REGAL - BELOIT CORPORATION | DRAWN KL 02–27–2003 |
|---|---|---|---|---|---|---|---|
| | | | | DEC. | INCHES | | CHK GFH 03–03–2003 |
| | | | | .X | ± – | | APPD JES 03–03–2003 |
| | | | | .XX | ± – | TITLE CONNECTION DIAGRAM – EXTERNAL | SCALE 1=1 |
| | | | | .XXX | ± – | 12 LEAD SINGLE VOLTAGE | REF |
| A | CHANGED TO REGAL TITLEBLOCK ECO–0108299 | WGJ 08–18–2016 | EMH | .XXXX | ± – | MAT'L. | FMF |
| NO. | REVISION | BY & DATE | CHK | ANG | ± – | FINISH | PREV |



| RFP | CAD FILE EE7300CB | SIZE | DRAWING NO. PAGE OF | REV. |
|---|---|---|---|---|
| DIST | | A | EE7300CB | |

## CERTIFICATION DATA SHEET

| | | | |
|---|---|---|---|
| **Model#:** | 449TTDN16076 AA | **WINDING#:** | T447617 NONE 2 |
| **CONN. DIAGRAM:** | A-EE7300CB | **ASSEMBLY:** | F1/F2 CAPABLE |
| **OUTLINE:** | B-SS514252-2938 | | |

### TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|
| 200&150 | 149&112 | 1200 | 1188&988 | 449T | DP | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 60/50 | 460#380 | 245&225 | PWS & YDRUN OR INV | CONTINUOUS | F1 | 1.15/1.0 | 40 | 3300 |

| FULL LOAD EFF: 95.4&95 | 3/4 LOAD EFF: 95.4 | 1/2 LOAD EFF: 95 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|---|---|---|---|---|---|
| FULL LOAD PF: 80&79 | 3/4 LOAD PF: 76 | 1/2 LOAD PF: 67 | 94.5 | SQ CAGE INV RATED | 97 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|---|---|---|---|---|
| 885 LB-FT | 1400 | 1475 LB-FT 167 | 2000 LB-FT 225 | 60 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---|---|---|---|---|---|---|
| 76 dBA | 86 dBA | 84 LB-FT^2 | 2600 LB-FT^2 | 20 SEC. | 2 | 2150 LBS. |

### *** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|---|---|---|---|---|---|---|---|---|
| STANDARD | STANDARD | RIGID | HORIZONTAL | FALSE | NONE | FALSE | NONE | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|---|---|---|---|---|---|---|---|
| DE | OPE | | | | | | |
| BALL 6319 | BALL 6318 | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |

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

If Inverter equals NONE, contact factory for further information

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

ENCODER: NONE
NONE NONE
NONE NONE PPR

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

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DATE: 06/21/2017 07:02:13 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

# Data Sheet

Date: 6/19/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

449TTDN16076

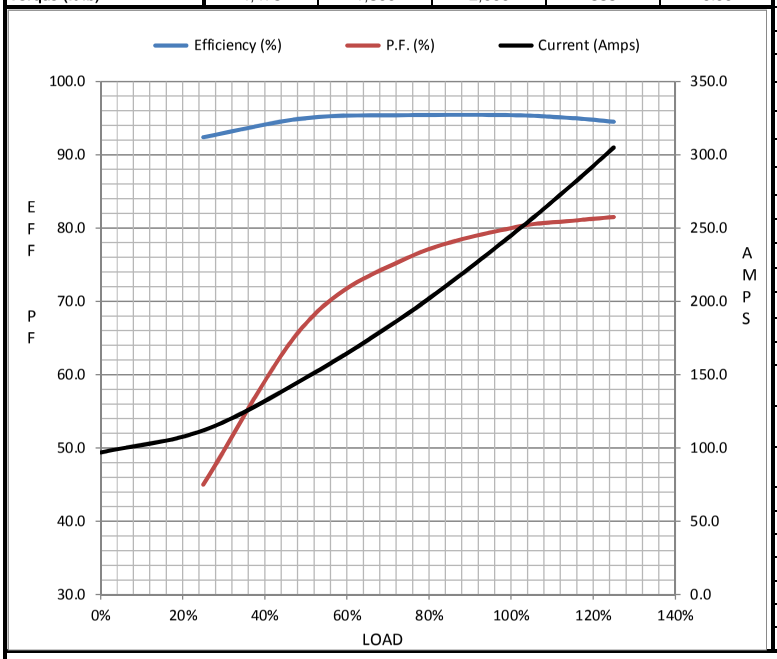
**Submittal**
Data @ 460 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 97.0 | 112 | 148 | 192 | 245 | 280 | 305 | 1,400 | |
| Torque (ft-lb) | 0.00 | 220 | 440 | 662 | 885 | 1,020 | 1,110 | 1,475 | |
| RPM | 1200 | 1196 | 1194 | 1190 | 1188 | 1,185 | 1182 | 0 | |
| Efficiency (%) | | 92.4 | 95.0 | 95.4 | 95.4 | 95.0 | 94.5 | | |
| P.F. (%) | 3.0 | 45.0 | 67.0 | 76.0 | 80.0 | 81.0 | 81.5 | 30.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 600 | 1150 | 1188 | 1200 |
| Current (Amps) | 1,400 | 1,250 | 750 | 245 | 97.0 |
| Torque (ft-lb) | 1,475 | 1,300 | 2,000 | 885 | 0.00 |




## Information Block

| | |
|---|---|
| HP | 200.0 |
| Sync. RPM | 1200 |
| Frame | 447 |
| Enclosure | DP |
| Construction | TDN |
| Voltage | 460#380 V |
| Frequency | 60 Hz |
| Design | B |
| LR Code letter | G |
| Service Factor | 1.15 |
| Temp Rise @ FL | 60 ° C |
| Duty | CONT |
| Ambient | 40 ° C |
| Elevation | 1,000 feet |
| Rotor/Shaft wk² | 84.0 Lb-Ft² |
| Ref Wdg | T447617 NONE |
| Sound Pressure @ 1M | 76 dBA |
| VFD Rating | VARIABLE 10:1 |
| Outline Dwg | B-SS514252-2938 |
| Conn. Diag | A-EE7300CB |
| Additional Specifications: | |
| 0 | |
| 0 | |

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 0.0160 | 0.0120 | 0.1210 | 0.1870 | 2.7070 |

## Speed -Torque Curve