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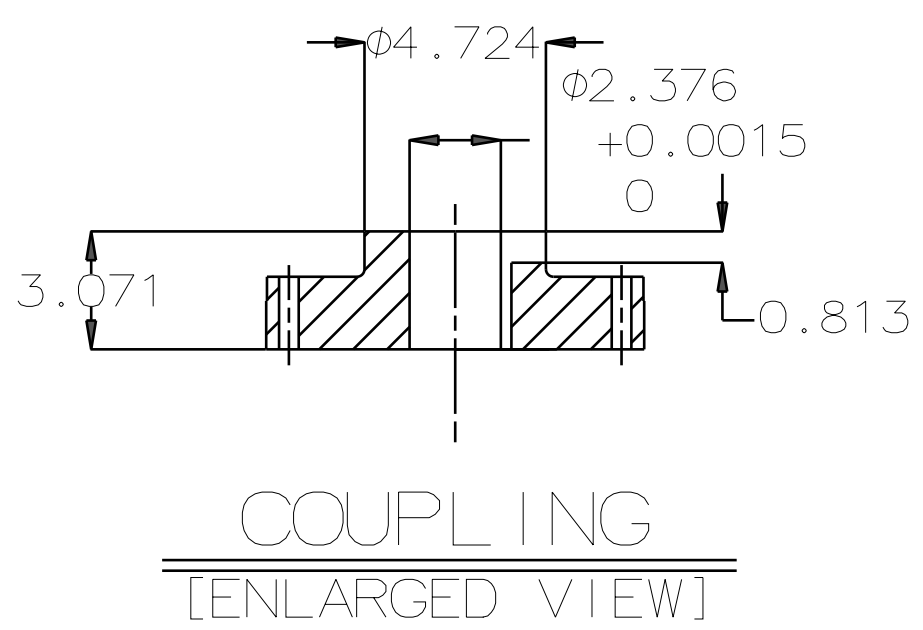
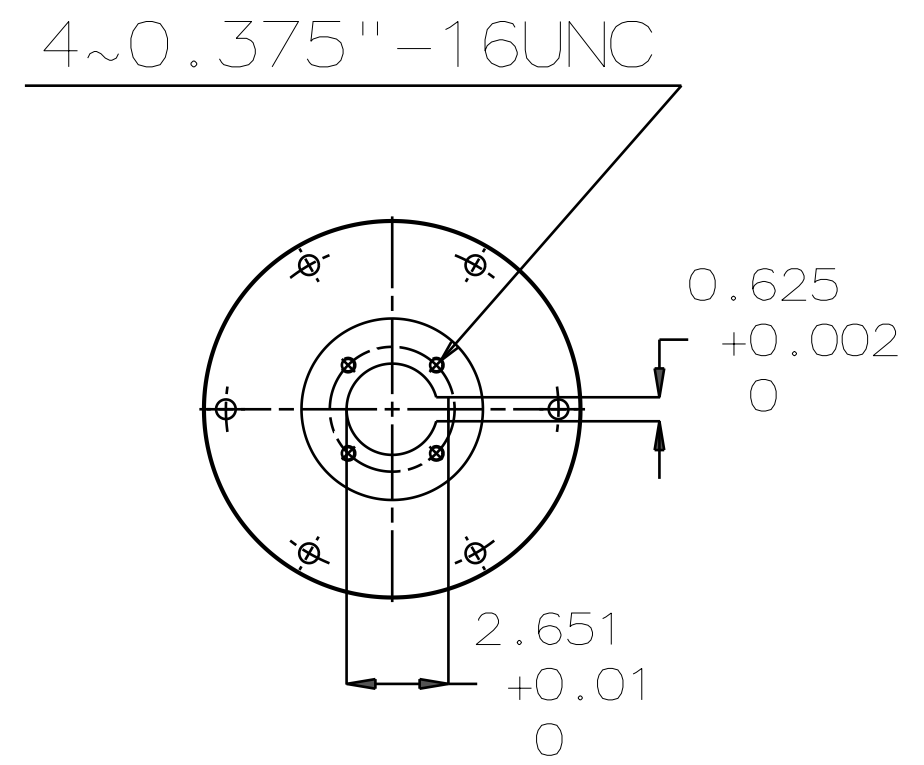
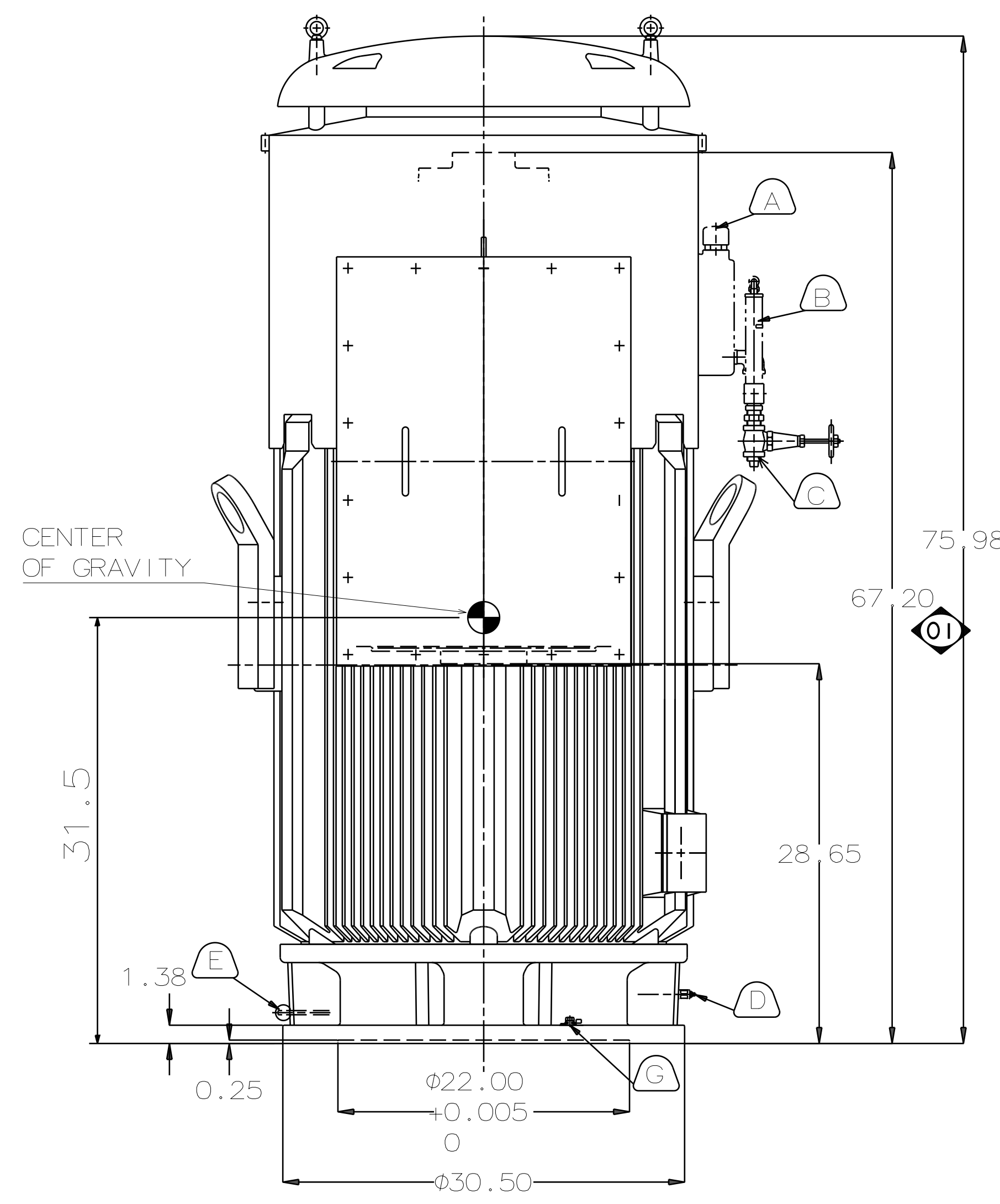
1

| TYPE    | OUTPUT |       | POLE | TIME RATING | VOLTAGE V | Hz | SYN. SPEED R.P.M |
|---------|--------|-------|------|-------------|-----------|----|------------------|
|         | HP.    | kW.   |      |             |           |    |                  |
| AEEH-NH | 700    | 522.2 | 4    | CONT        | 460       | 60 | 1800             |

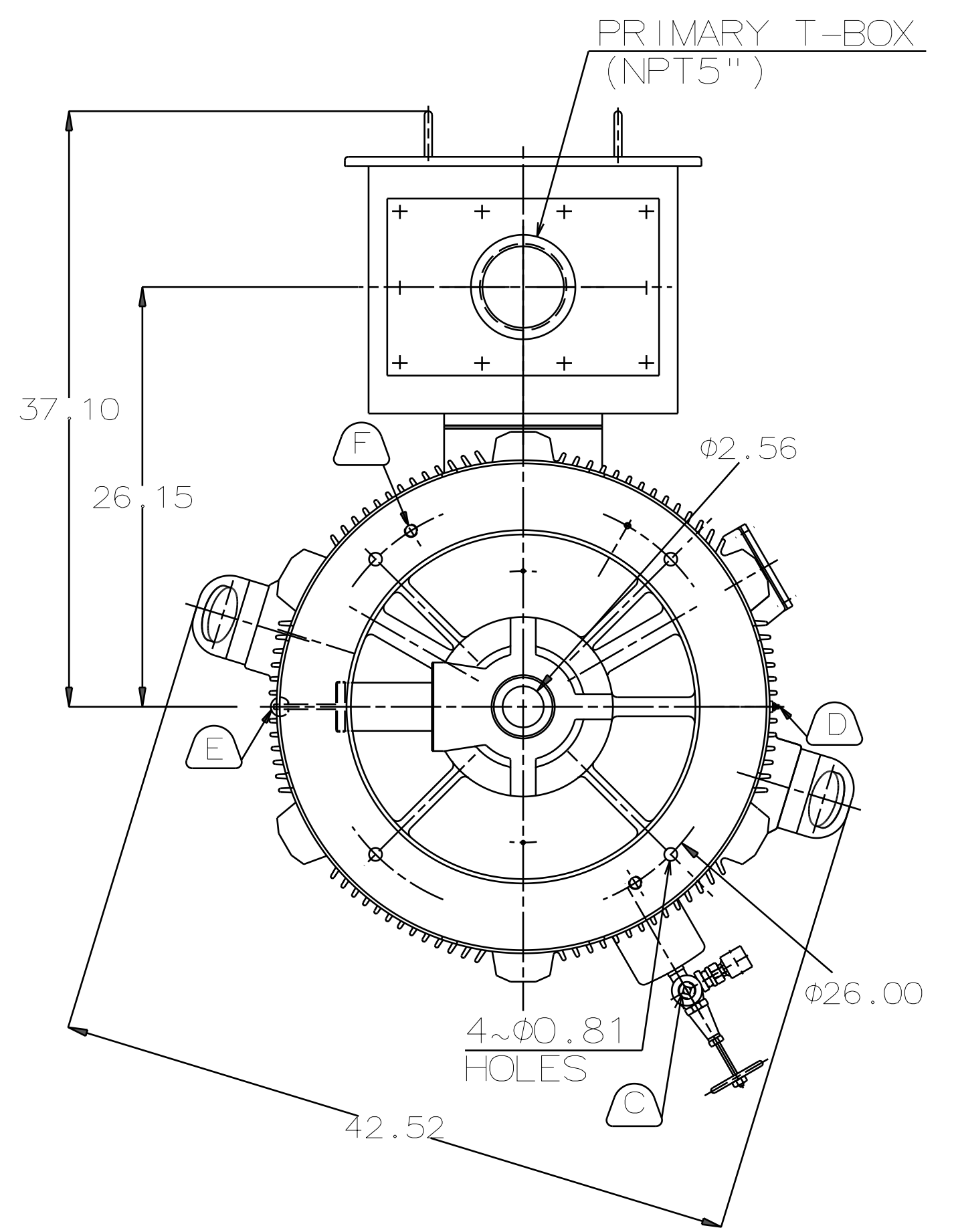
TOTALLY ENCLOSED FAN-COOLED VERTICAL HOLLOW SHAFT TYPE, SQUIRREL CAGE ROTOR

NOTE:

1. DIMENSIONS IN INCH
2. FRAME NO.5810
3. F CLASS INSULATION, S.F.: 1.15
4. FOR DIRECT COUPLING.
5. BEARING SIZE:  
UPPER BEARING: 7328B [INSULATED]  
LOWER BEARING: 6320C3 [UNINSULATED]
6. UPPER BEARING IS INSULATED. ANY METAL CONNECTIONS TO IT MUST BE INSULATED.
7. LUBRICATION:  
UPPER BEARING USE OIL.  
OIL VISCOSITY: ISO VG68 [300SSU AT 100 °F]  
OIL QUANTITY: 3.4 GAL  
LOWER BEARING USE GREASE. [MOBIL POLYREX EM]
8. ROTATION: COUNTER-CLOCKWISE [VIEW FROM TOP].
9. WITH NON-REVERSE RATCHET MECHANISM.
10. WITH GIB KEY:0.625X0.625X3.07,1PCS
11. APPROXIMATE WEIGHT: 6680
12. REED FREQUENCY: 40 HZ
13. DOWNTHRUST: 10,100 LBS (L10-8800HRS)



COUPLING [ENLARGED VIEW]



- (A) OIL FILLER [UPPER BEARING]
- (B) OIL GAUGE [UPPER BEARING]
- (C) OIL DRAIN [UPPER BEARING]
- (D) GREASE INLET [LOWER BEARING]
- (E) GREASE DISCHARGER [LOWER BEARING]
- (F) 2~M20 VERTICAL JACKING HOLES, 180°APART IN MOTOR BASE.
- (G) M10 TAPPED HOLE IN MOTOR BASE WITH GROUNDING TERMINAL [R38-10] & BOLT LOCATED AS SHOWN.

|                     |       |             |                         |        |
|---------------------|-------|-------------|-------------------------|--------|
| DATE<br>DEC 08 2016 |       |             | OUTLINE DIMENSIONS      |        |
| VHTP7004            |       |             | 3-PHASE INDUCTION MOTOR |        |
| DWN.                | C.FU  | APR.17.2015 | DWG NO.                 | REV:01 |
| CHKD.               | R.LEE | APR.17.2015 | 4B040L125               |        |
| APPD.               | C.LIU | APR.17.2015 | TECO Westinghouse       |        |

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|              |   |         |
|--------------|---|---------|
| ISSUED       | <h1>PERFORMANCE DATA</h1><br><b>HIGH THRUST HOLLOWSHAFT PUMP MOTORS</b><br><b>LOW VOLTAGE SQUIRREL CAGE</b> | MODEL   |
| APR. 20 2015 |   | AEEHNNH |
| REVISED      |   |         |
| OCT. 21 2016 |   |         |



TEFC, NEMA DESIGN B, CODE G, CLASS F, 40°C AMBIENT,  
CONTINUOUS DUTY, 1.15 S.F. 460V, 575V 60HZ

## TYPICAL PERFORMANCE (460V)

| HP  | FULL LOAD RPM | FRAME SIZE (EGV) | EFFICIENCY  |      |          |          | POWER FACTOR |            |            | CURRENT     |                | TORQUE          |                   |                 | ROTOR WR <sup>2</sup> lb-ft <sup>2</sup> | DOWN THRUST LBS | APPROX. ROTOR WEIGHT LBS | APPROX. WEIGHT LBS | REED FREQ. HZ |
|-----|---------------|------------------|-------------|------|----------|----------|--------------|------------|------------|-------------|----------------|-----------------|-------------------|-----------------|--|-----------------|--------------------------|--------------------|---------------|
|     |               |                  | FULL LOAD % |      | 3/4 LOAD | 1/2 LOAD | FULL LOAD %  | 3/4 LOAD % | 1/2 LOAD % | FULL LOAD A | LOCKED ROTOR A | FULL LOAD lb-ft | LOCKED ROTOR %FLT | BREAK-DOWN %FLT |  |                 |                          |                    |               |
|     |               |                  | NOM.        | MIN. | NOM.     | NOM.     | %            | %          | %          | A           | A              | lb-ft           | %FLT              | %FLT            |  |                 |                          |                    |               |
| 200 | 889           | 5007             | 94.5        | 93.6 | 94.5     | 94.2     | 80.0         | 75.0       | 65.0       | 247         | 1450           | 1181.8          | 90                | 200             | 200                                      | 13600           | 1030                     | 3620               | 37            |
| 250 | 889           | 5009             | 95.0        | 94.1 | 95.0     | 94.7     | 81.0         | 76.0       | 66.0       | 303         | 1825           | 1477.3          | 90                | 200             | 262                                      | 13600           | 1260                     | 4410               | 33            |
| 300 | 1190          | 5009             | 95.8        | 95.0 | 95.7     | 95.3     | 84.8         | 79.8       | 69.8       | 345         | 2200           | 1324.3          | 120               | 200             | 252                                      | 12400           | 1120                     | 4600               | 32            |
|     | 889           | 5808             | 95.0        | 94.1 | 95.0     | 94.7     | 74.0         | 69.0       | 59.0       | 399         | 2200           | 1772.7          | 90                | 200             | 262                                      | 22500           | 1290                     | 5070               | 50            |
| 350 | 1788          | 5009             | 96.2        | 95.4 | 96.1     | 95.7     | 86.3         | 81.3       | 71.3       | 394         | 2550           | 1028.3          | 120               | 200             | 165                                      | 10800           | 980                      | 4210               | 34            |
|     | 1190          | 5808             | 95.8        | 95.0 | 95.7     | 95.3     | 80.6         | 75.6       | 65.6       | 424         | 2550           | 1545.1          | 120               | 200             | 285                                      | 20400           | 1270                     | 5510               | 48            |
|     | 889           | 5808             | 95.0        | 94.1 | 95.0     | 94.7     | 76.0         | 71.0       | 61.0       | 453         | 2550           | 2068.2          | 90                | 200             | 327                                      | 22500           | 1430                     | 5620               | 47            |
| 400 | 1788          | 5009             | 96.2        | 95.4 | 96.1     | 95.7     | 86.6         | 81.6       | 71.6       | 449         | 2900           | 1175.2          | 120               | 200             | 182                                      | 10800           | 1050                     | 4410               | 33            |
|     | 1190          | 5808             | 95.8        | 95.0 | 95.7     | 95.3     | 80.9         | 75.9       | 65.9       | 482         | 2900           | 1765.8          | 120               | 200             | 307                                      | 20400           | 1320                     | 5890               | 46            |
|     | 889           | 5808             | 95.0        | 94.1 | 95.0     | 94.7     | 76.0         | 71.0       | 61.0       | 518         | 2900           | 2363.6          | 90                | 200             | 378                                      | 22500           | 1540                     | 5830               | 47            |
| 450 | 1788          | 5808             | 96.2        | 95.4 | 96.1     | 95.7     | 84.0         | 79.0       | 69.0       | 521         | 3250           | 1322.1          | 110               | 200             | 226                                      | 10100           | 1200                     | 5660               | 47            |
|     | 1190          | 5808             | 95.8        | 95.0 | 95.7     | 95.3     | 80.2         | 75.2       | 65.2       | 547         | 3250           | 1986.5          | 120               | 200             | 329                                      | 20400           | 1370                     | 5930               | 46            |
|     | 889           | 5808             | 95.0        | 94.1 | 95.0     | 94.7     | 76.0         | 71.0       | 61.0       | 583         | 3250           | 2659.1          | 90                | 200             | 429                                      | 22500           | 1640                     | 6440               | 45            |
| 500 | 1788          | 5808             | 96.2        | 95.4 | 96.1     | 95.7     | 84.0         | 79.0       | 69.0       | 578         | 3625           | 1469.0          | 110               | 200             | 249                                      | 10100           | 1270                     | 5900               | 46            |
|     | 1190          | 5808             | 95.8        | 95.0 | 95.7     | 95.3     | 81.2         | 76.2       | 66.2       | 601         | 3625           | 2207.2          | 120               | 200             | 365                                      | 20400           | 1450                     | 6020               | 46            |
|     | 889           | 5808             | 95.0        | 94.1 | 95.0     | 94.7     | 76.0         | 71.0       | 61.0       | 647         | 3625           | 2954.5          | 90                | 200             | 472                                      | 22500           | 1710                     | 6790               | 44            |
| 600 | 1788          | 5810             | 96.2        | 95.4 | 96.1     | 95.7     | 84.0         | 79.0       | 69.0       | 694         | 4744           | 1762.8          | 120               | 210             | 291                                      | 10100           | 1330                     | 6680               | 40            |
|     | 1190          | 5810             | 95.8        | 95.0 | 95.7     | 95.3     | 81.7         | 76.7       | 66.7       | 717         | 4744           | 2648.7          | 120               | 200             | 438                                      | 20400           | 1720                     | 6810               | 39            |
| 700 | 1788          | 5810             | 96.2        | 95.4 | 96.1     | 95.7     | 85.0         | 80.0       | 70.0       | 800         | 5535           | 2056.6          | 120               | 200             | 344                                      | 10100           | 1470                     | 7200               | 38            |
|     | 1190          | 5810             | 95.8        | 95.0 | 95.7     | 95.3     | 81.3         | 76.3       | 66.3       | 840         | 5535           | 3090.1          | 120               | 200             | 489                                      | 20400           | 1840                     | 7230               | 38            |
| 800 | 1788          | 5810             | 96.2        | 95.4 | 96.1     | 95.7     | 86.0         | 81.0       | 71.0       | 904         | 6326           | 2350.4          | 120               | 200             | 385                                      | 10100           | 1580                     | 7620               | 37            |

NOTE : 1. THE ABOVE ARE TYPICAL VALUES BASED ON TEST ACCORDING TO ANSI/IEEE STANDARD 112 METHOD B.

- BREAKDOWN & LOCKED ROTOR TORQUES ARE SHOWN AS AVERAGE EXPECTED VALUES.
- EFFICIENCY, POWER FACTOR, SPEED AND TORQUE ARE THE SAME FOR OTHER VOLTAGES. CURRENT VALUES VARY INVERSELY WITH VOLTAGE.

- DECLARED EFFICIENCY HAVN'T TAKEN INTO ACCOUNT OF THRUST LOAD LOSSES
- TOLERANCE ACCORDING TO NEMA MG1-12& IEC 34-1
- THRUST LOAD LOSSES ESTIMATED OF ANGULAR CONTACT BALL BEARING AS FOLLOWS : (ACCORDING TO NEMA STANDARD MG1-12.7)

| FRAME SIZE | LOSS HP/100 RPM RPM /1000 LB THRUST |
|------------|-------------------------------------|
| 5007-5810  | 0.0208                              |

- REDUCING THE THRUST LOAD WILL INCREASE BEARING LIFE AS FOLLOWS :

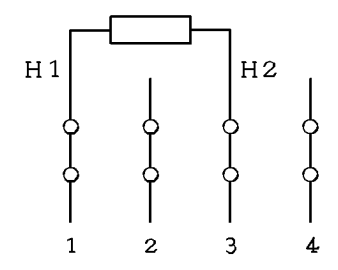
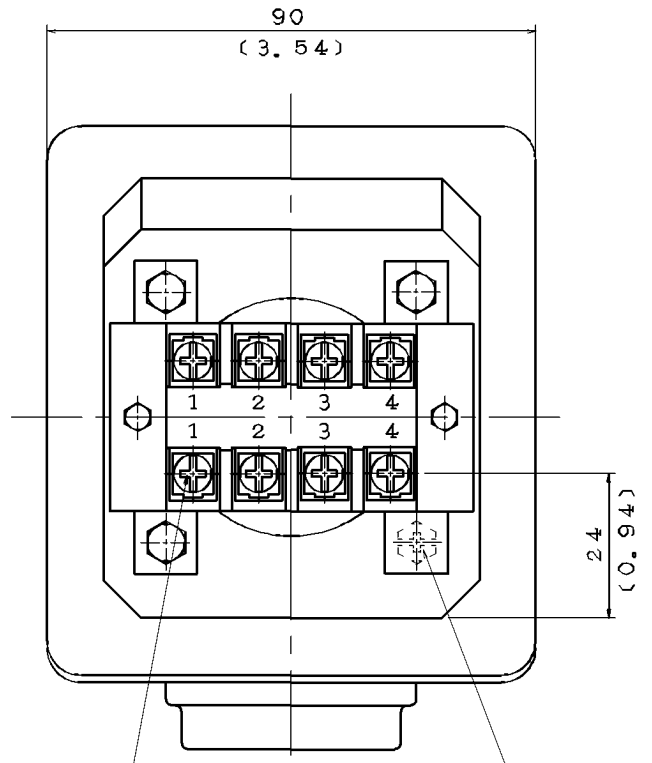
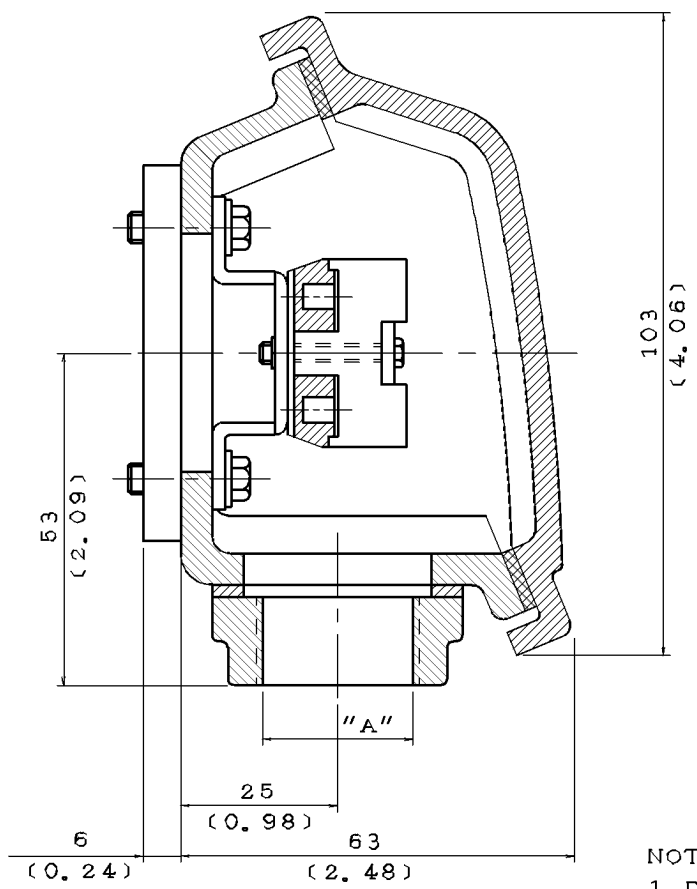
|                                 |                    |       |       |       |        |        |
|---------------------------------|--------------------|-------|-------|-------|--------|--------|
| ANGULAR CONTACT BALL BEARING    | THRUST(%)          | 100   | 80    | 71    | 60     | 52     |
|                                 | BEARING LIFE(Hrs.) | 8800  | 15000 | 20000 | 30000  | 40000  |
| SPHERICAL ROLLER THRUST BEARING | THRUST(%)          | 100   | 84    | 75    | 64     | 58     |
|                                 | BEARING LIFE(Hrs.) | 30000 | 50000 | 70000 | 110000 | 150000 |

- DATA SUBJECT TO CHANGE WITHOUT NOTICE

|       |          |              |  |         |                   |
|-------|----------|--------------|--|---------|-------------------|
| APPD. | M.Y.HSU  | JUN. 16 2016 | <b>TECO Electric &amp; Machinery Co., Ltd.</b> | DWG NO. | <b>3A057M061E</b> |
| CHKD. | H.Y.WANG | JUN. 16 2016 |  | REV.01  |                   |
| DWN.  | M.H.KUO  | JUN. 16 2016 |  | 1/1     |                   |

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D  
C  
B  
A



M4 SCREW FOR CONNECTION

M5 EARTH BOLT

- NOTE:
1. DIMENSIONS IN mm (inch)
  2. TW-06
  3. SPACE HEATER T-BOX.
  4. ENCLOSURE: IP55
  5. MATERIAL: CAST IRON

| ITEM | A         |
|------|-----------|
| 01   | M20×1.5   |
| 02   | PF-0.5"   |
| 03   | PF-0.75"  |
| 04   | PT-0.5"   |
| 05   | PT-0.75"  |
| 06   | NPT-0.5"  |
| 07   | NPT-0.75" |
| 08   | M25×1.5   |
| 09   | PF1"      |
| 10   | NPT1"     |
| 11   | PG16      |

|      |                                   |
|------|-----------------------------------|
| DATE | SCHEMATIC DRAWING<br>TERMINAL BOX |
|      |                                   |

|       |          |            |
|-------|----------|------------|
| DWN.  | H. HUANG | JUL 19 200 |
| CHKD. | H. HUANG | JUL 19 200 |
| APPD. | C. WANG  | JUL 19 200 |

**TECO** Westinghouse

DWG NO. 3A040U272  
REV:09

6 5 4 3 2 1

**TECO**

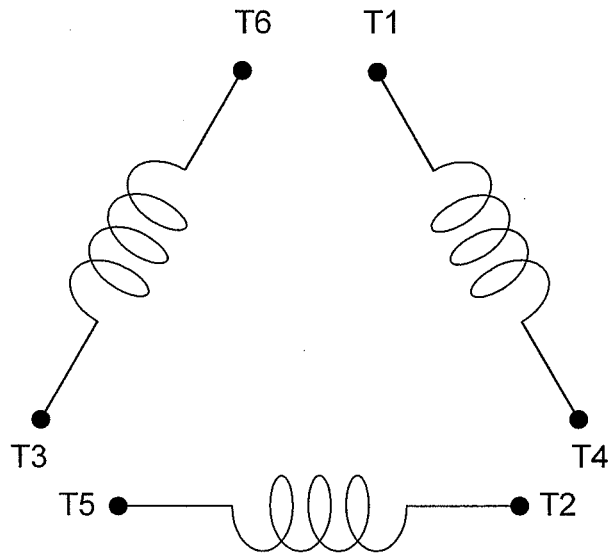
# CONNECTION DIAGRAM

MODEL

DATE :  
DEC.04.'02

For  $\Delta/\Delta$  connection

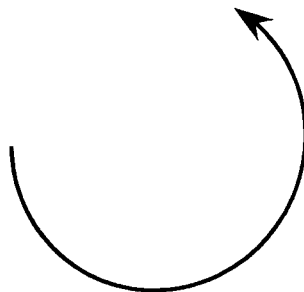
DAC-1545-1



**SCHEMATIC -  $\Delta/\Delta$  CONNECTION**

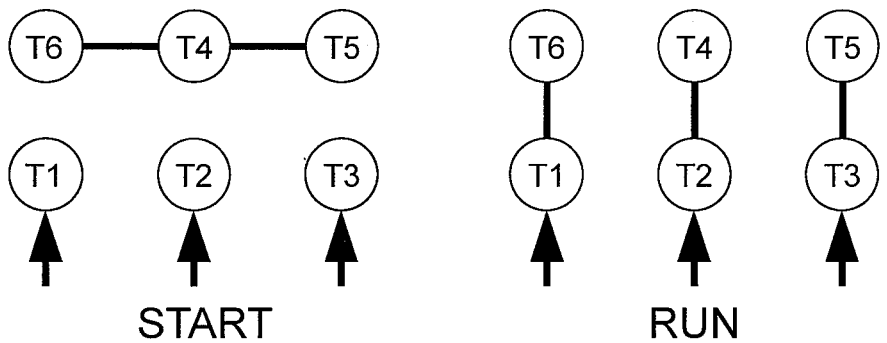
## ROTATION

(VIEWED FROM DRIVE END)

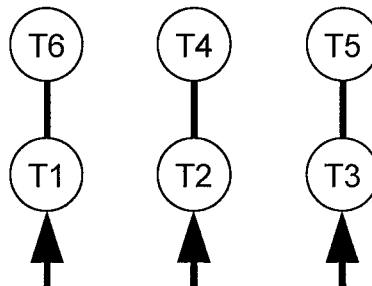


## CONNECTION

$\Delta-\Delta$  START



ACROSS-THE-LINE



|     |     |            |
|-----|-----|------------|
| 承 認 |     |            |
| 審 核 | 蔡   | Dec.05.02  |
| 校 對 | 林   | Dec.04.02  |
| 繪 製 | 林賢龍 | DEC,04,'02 |

**東元電機股份有限公司**  
**TECO ELECTRIC & MACHINERY CO., LTD.**  
 TAIWAN R.O.C.

圖 號：  
**DAC-1545-1**