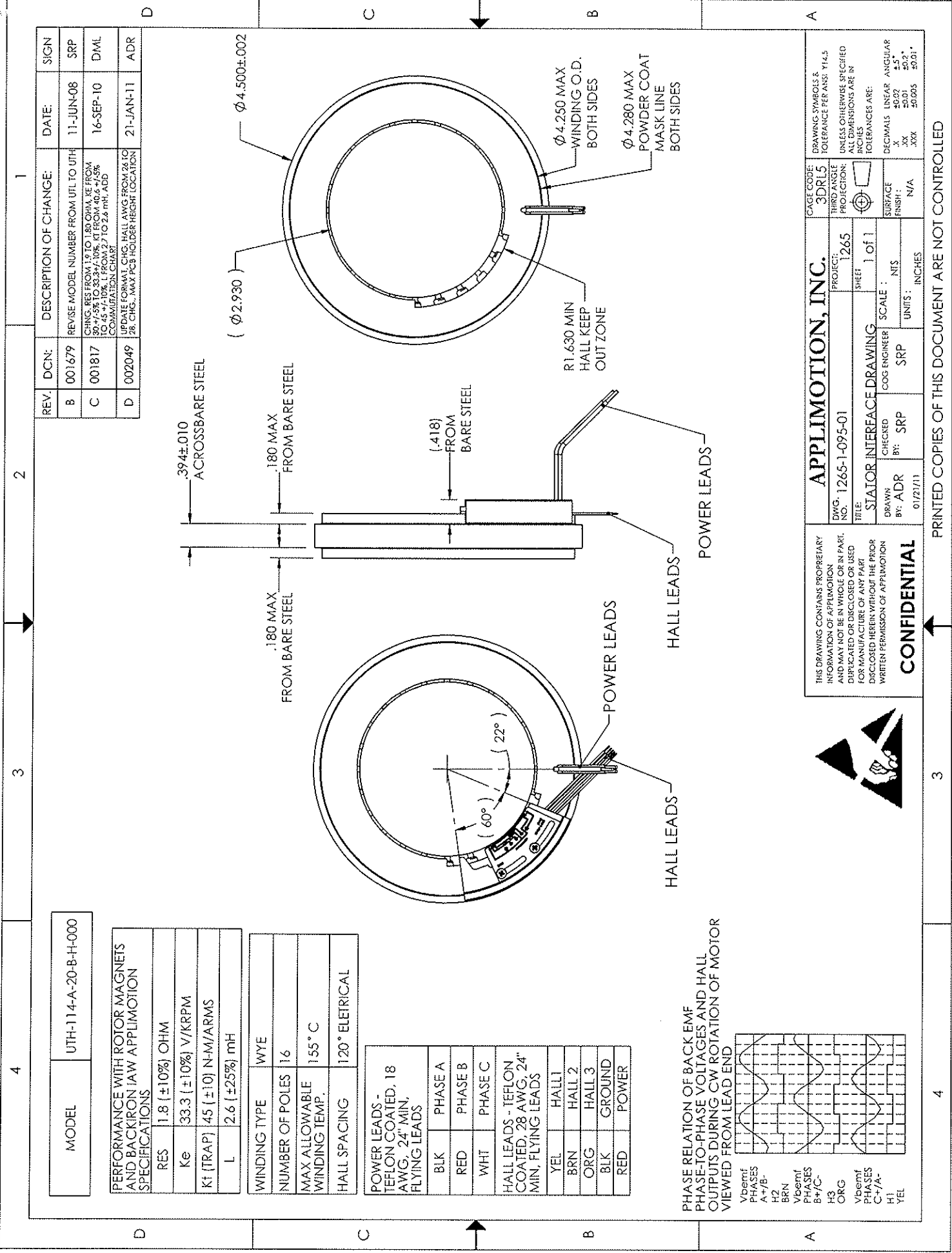


[illegible]

Date



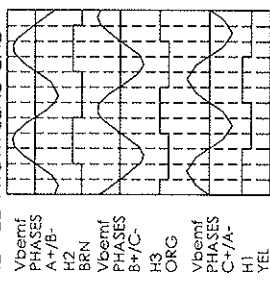
| MODEL | UTH-114-A-20-B-H-000 |
|-------|----------------------|
|-------|----------------------|

| PERFORMANCE WITH ROTOR MAGNETS AND BACKIRON IAW APPLIMOTION SPECIFICATIONS |                            |
|----------------------------------------------------------------------------|----------------------------|
| RES                                                                        | 1.8 ( $\pm 10\%$ ) OHM     |
| Ke                                                                         | 33.3 ( $\pm 10\%$ ) V/KRPM |
| Kt [TRAP]                                                                  | 45 ( $\pm 10$ ) N-M/ARMS   |
| L                                                                          | 2.6 ( $\pm 25\%$ ) mH      |

| WINDING TYPE                | WYE             |
|-----------------------------|-----------------|
| NUMBER OF POLES             | 16              |
| MAX ALLOWABLE WINDING TEMP. | 155° C          |
| HALL SPACING                | 120° ELECTRICAL |

| POWER LEADS - TEFLON COATED, 18 AWG, 24" MIN, FLYING LEADS |         |
|------------------------------------------------------------|---------|
| BLK                                                        | PHASE A |
| RED                                                        | PHASE B |
| WHT                                                        | PHASE C |
| HALL LEADS - TEFLON COATED, 28 AWG, 24" MIN, FLYING LEADS  |         |
| YEL                                                        | HALL 1  |
| BRN                                                        | HALL 2  |
| ORG                                                        | HALL 3  |
| BLK                                                        | GROUND  |
| RED                                                        | POWER   |

PHASE RELATION OF BACK EMF PHASE-TO-PHASE VOLTAGES AND HALL OUTPUTS DURING CW ROTATION OF MOTOR VIEWED FROM LEAD END



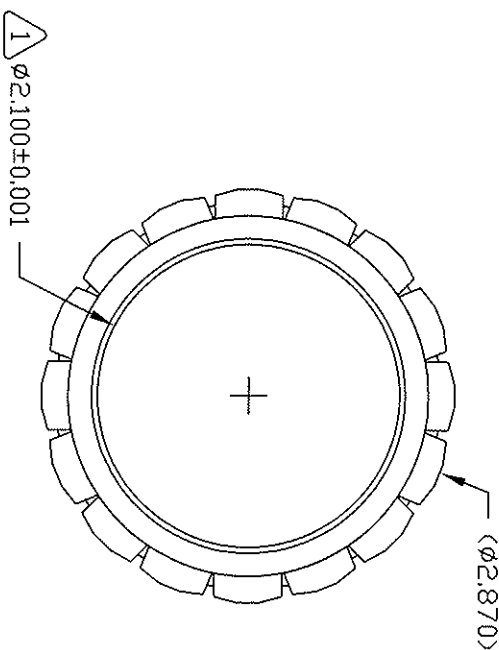
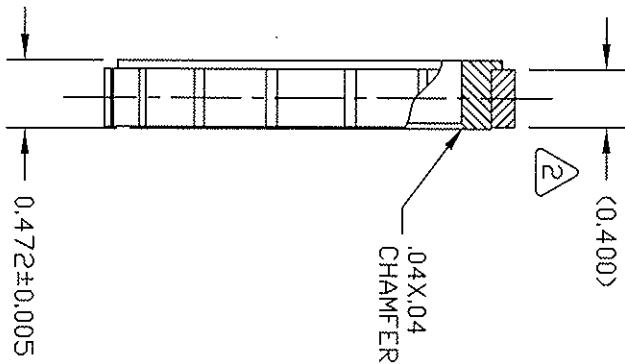
| REV. | DCN.   | DESCRIPTION OF CHANGE:                                                                                                              | DATE:     | SIGN |
|------|--------|-------------------------------------------------------------------------------------------------------------------------------------|-----------|------|
| B    | 001679 | REVISE MODEL NUMBER FROM UTH TO UTH-114-A-20-B-H-000                                                                                | 11-JUN-08 | SRP  |
| C    | 001817 | CHG. RES FROM 1.8 TO 1.8 OHM, KE FROM 30.7 TO 33.3 V/KRPM, KT FROM 40.5 TO 45 N-M/ARMS, L FROM 2.7 TO 2.6 mH, ADD COMMUTATION CHART | 16-SEP-10 | DML  |
| D    | 002049 | UPDATE FORMAT, CHG. HALL AWG FROM 28 TO 26, CHG. MAX PCB HOLDER HEIGHT LOCATION                                                     | 21-JAN-11 | ADR  |

|                                                                                                                                                                                                        |  |                   |  |                        |                                                                                                                    |                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------|--|------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
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| DWG. NO. 1265-1-095-01                                                                                                                                                                                 |  | PROJECT: 1265     |  | THIRD ANGLE PROJECTION |                                                                                                                    | DECIMALS LINEAR ANGULAR<br>X .002 15°<br>XX .001 15°<br>XXX .0005 15° |
| TITLE: STATOR INTERFACE DRAWING                                                                                                                                                                        |  | SHEET: 1 of 1     |  | SURFACE FINISH: N/A    |                                                                                                                    |                                                                       |
| DRAWN BY: ADR                                                                                                                                                                                          |  | CHECKED BY: SRP   |  | SCALE: NTS             |                                                                                                                    |                                                                       |
| BY: ADR                                                                                                                                                                                                |  | COG ENGINEER      |  | UNITS: INCHES          |                                                                                                                    |                                                                       |



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| REV | DCN    | REVISION DESCRIPTION                                                   | DATE        | SIGN |
|-----|--------|------------------------------------------------------------------------|-------------|------|
| A   | 000233 | INITIAL RELEASE                                                        | 28-OCT-2005 | SRP  |
| B   | 000240 | CHART CH AND NOTE 1.2 TO INCH. CORRECT<br>REV A REL. DATE. CHNG NOTE 1 | 7-NOV-2005  | SRP  |



- 3) ROTOR INERTIA: 4.0E-03 LB-IN-S-S
- 2) AXIAL CENTERLINES OF ROTOR MAGNETS AND STATOR STACK SHOULD BE ALIGNED WITHIN .025
- 1) ROTOR MATING HUB SHOULD BE CONCENTRIC TO STATOR MATING HOUSING WITHIN .002
- NOTES (UNLESS OTHERWISE SPECIFIED)

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**APPLIMOTION, INC.**

DWG NO: 1142-1-096-01

TITLE: ROTOR INTERFACE DRAWING

DRAWN BY: SRP

28-OCT-05

CAGE CODE: 3DRLS

PROJECT: 1142

SHEET: 1 OF 1

PROJECTION: 1

SCALE: NTS

UNITS: INCHES

DRAWING STANDARDS & TOLERANCES PER AMS Y14.5

UNLESS OTHERWISE SPECIFIED

ALL DIMENSIONS ARE IN INCHES

TOLERANCES ARE: -

DECREASING LINEAR

XX ±.020

XX ±.010

XX ±.005

XX ±.001