

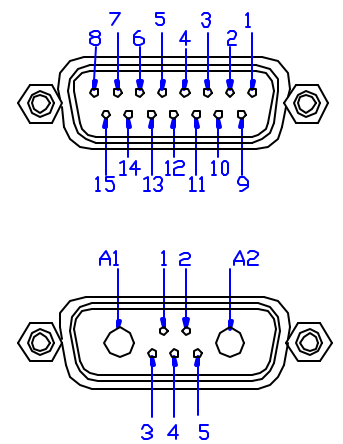
NOTES: 1) INTERNAL 1000 LINE ENCODER , 4000 ENCODER COUNTS PER REVOLUTION. INDEX LINE ON ENCODER WHEEL.
 2) TIED INTERNALLY: TX :CN2 PIN 10 TO CN1 PIN 3
 RX :CN2 PIN 11 TO CN1 PIN 4
 +5V :CN2 PIN 12 TO CN1 PIN 2
 GND :CN2 PIN 13 TO CN1 PIN 5
 3) FOR HIGH SPEED OR HIGH TORQUE OPERATION USE POWER PIN A1 AND A2 ON CN1.
 4) LED, SERVO-AMPLIFIER INDICATOR: RED = SERVO-AMPLIFIER OFF [DEFAULT STATE]
 GREEN = SERVO-AMPLIFIER ON OR SERVO-ING IN PLACE
 LED, TRAJECTORY INDICATOR: CLEAR = NOT IN CONTROLLED TRAJECTORY [DEFAULT STATE]
 GREEN = IN CONTROLLED TRAJECTORY [CONTROLLED MOTION]
 5) ALL DIMENSIONS ARE NORMAL UNLESS OTHERWISE SPECIFIED.
 6) PINOUT IS FOR SMARTMOTORS NOT EQUIPPED WITH DRIVE ENABLE.
 MOTORS EQUIPPED WITH DRIVE ENABLE 'DE' OPTION HAVE ALTERNATE PINOUT. REFER TO DRAWING FOR 'DE' SMARTMOTOR.

PART NO.
SV3416D
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| DRAWING REVISIONS | | |
|-------------------|--------------------|----------|
| DWG REV | DESCRIPTION | DATE |
| 1 | PRODUCTION RELEASE | 09/30/03 |
| 2 | EDITED DIMENSION | 06/25/04 |

CN1:CONNECTOR 1, 7 PIN COMBO D-SUB MALE CONNECTOR

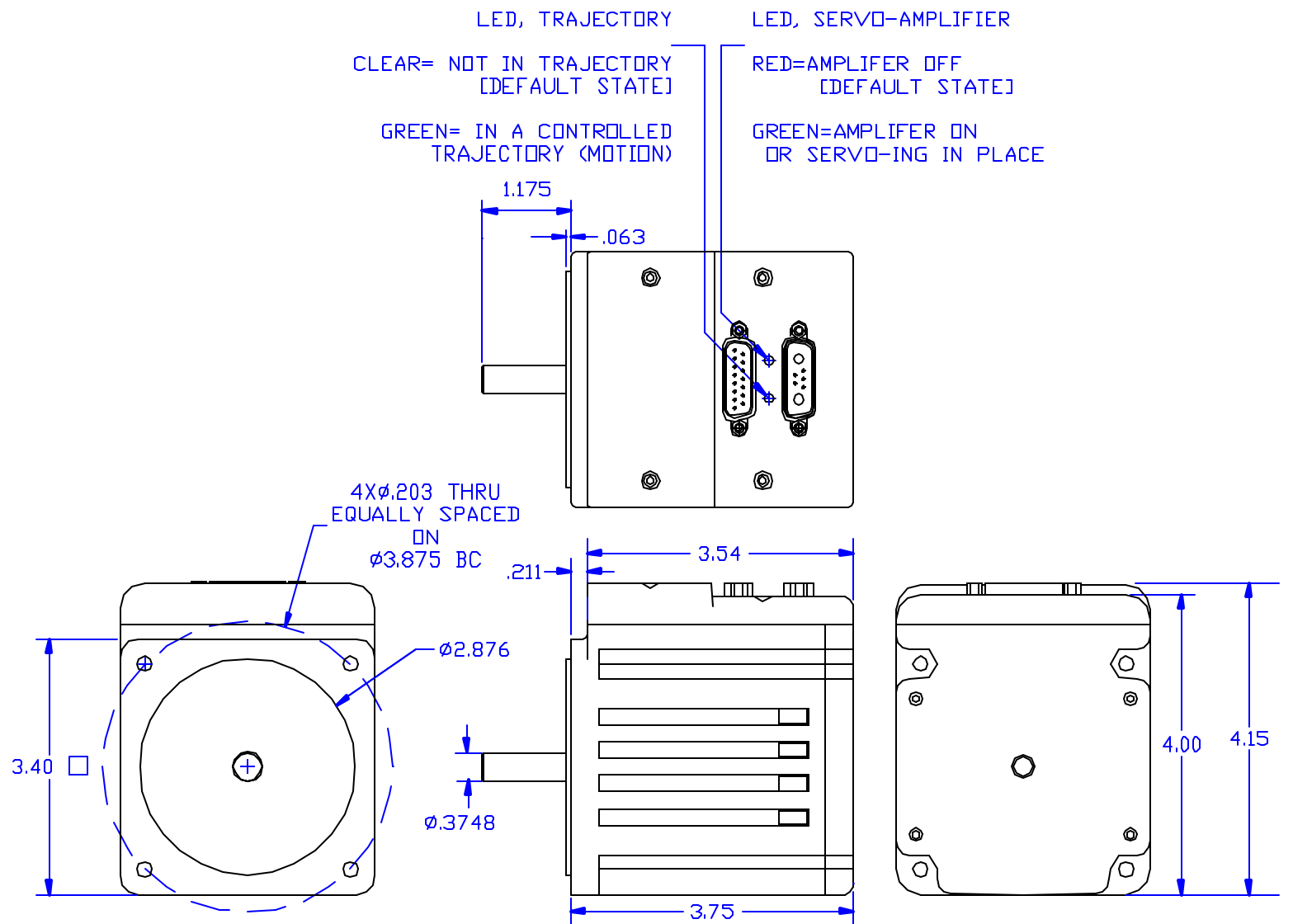
| PIN# | NAME | FUNCTIONS |
|------|----------|-----------------------|
| 1 | I/O G | G-Synchronization Pin |
| 2 | +5V OUT | +5V Out |
| 3 | RS232 TX | RS232-Transmit |
| 4 | RS232 RX | RS232-Receive |
| 5 | GND | Signal Ground |
| A1 | PWR | Power,+20 to 48V dc |
| A2 | PWR GND | Power Ground |



CN2: CONNECTOR 2, 15 PIN I/O D-SUB FEMALE CONNECTOR

| PIN# | NAME | SOFTWARE SELECTABLE FUNCTIONS | | | |
|------|----------|-------------------------------|----------------------------------|-------------------|-----------------------|
| | | FUNCTIONS | FUNCTIONS | DIGITAL I/O (TTL) | ANALOG INPUT (10 bit) |
| 1 | I/O A | Ext Encoder A Input | Step Input | 5V | 0 to 5V |
| 2 | I/O B | Ext Encoder B Input | Direction Input | 5V | 0 to 5V |
| 3 | I/O C | Positive (Right) Limit Input | | 5V | 0 to 5V |
| 4 | I/O D | Negative (Left) Limit Input | | 5V | 0 to 5V |
| 5 | I/O E | AnInk Data | RS-485 Signal A | 5V | 0 to 5V |
| 6 | I/O F | AnInk Clock | RS-485 Signal B | 5V | 0 to 5V |
| 7 | I/O G | G-Synchronization Pin | RS-485 Adapter Flow Control Line | 5V | 0 to 5V |
| 8 | ENCA OUT | Encoder A Output | | | |
| 9 | ENCB OUT | Encoder B Output | | | |
| 10 | RS232 TX | RS232-Transmit | | | |
| 11 | RS232 RX | RS232-Receive | | | |
| 12 | +5V OUT | +5V DC Output | | | |
| 13 | GND | Signal Ground | | | |
| 14 | PWR GND | Power Ground | | | |
| 15 | PWR | Power, +20V to 48V dc | | | |

NOTE: CURRENT CANNOT EXCEED 1AMPS ON PIN 14 AND PIN 15



| ITEM NO. | QTY | PART NO. | DESCRIPTION | MATERIAL SPECIFICATION |
|--|-----|----------------------------|------------------------|------------------------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED, DIMENSIONS & TOLERANCES ARE PER ANSI Y14.5M AND ARE IN INCHES. TOLERANCES ARE AS FOLLOWS: DECIMALS .XX± ANGLES ± .XXX± | | | THIRD ANGLE PROJECTION | |
| MATERIAL | | DRAWN | DATE | TITLE |
| | | TC | 2/13/04 | SERVIDA SV3416D |
| FINISH | | SCALE | | SIZE |
| BLACK ECOAT | | NOT TO SCALE | | B |
| | | COMPUTER GENERATED DRAWING | | PART NO. |
| | | | | SV3416D |
| | | SIMILIAR TO: SM3416D-FL | | DWG REV |
| | | CAD FILE NAME: SM3416D | | 2 |
| | | SHEET 1 OF 1 | | |

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