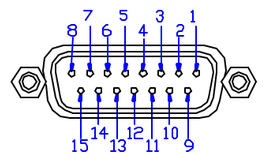
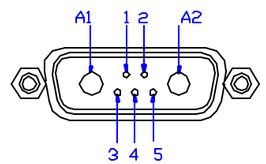
NOTES: 1) INTERNAL 1000 LINE ENCODER , 4000 ENCODER COUNTS PER REVOLUTION.
INDEX LINE ON ENCODER WHEEL.
2) TIED INTERNALLY: TX :CN2 PIN 10 TO CN1 PIN 3
RX :CN2 PIN 11 TO CN1 PIN 4
+5v :CN2 PIN 12 TO CN1 PIN 2
GND :CN2 PIN 13 TO CN1 PIN 5
3) FOR HIGH SPEED OR HIGH TORQUE OPERATION USE POWER PIN A1 AND 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 NORMINAL 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.
SM3416D

DRAWING REVISIONS

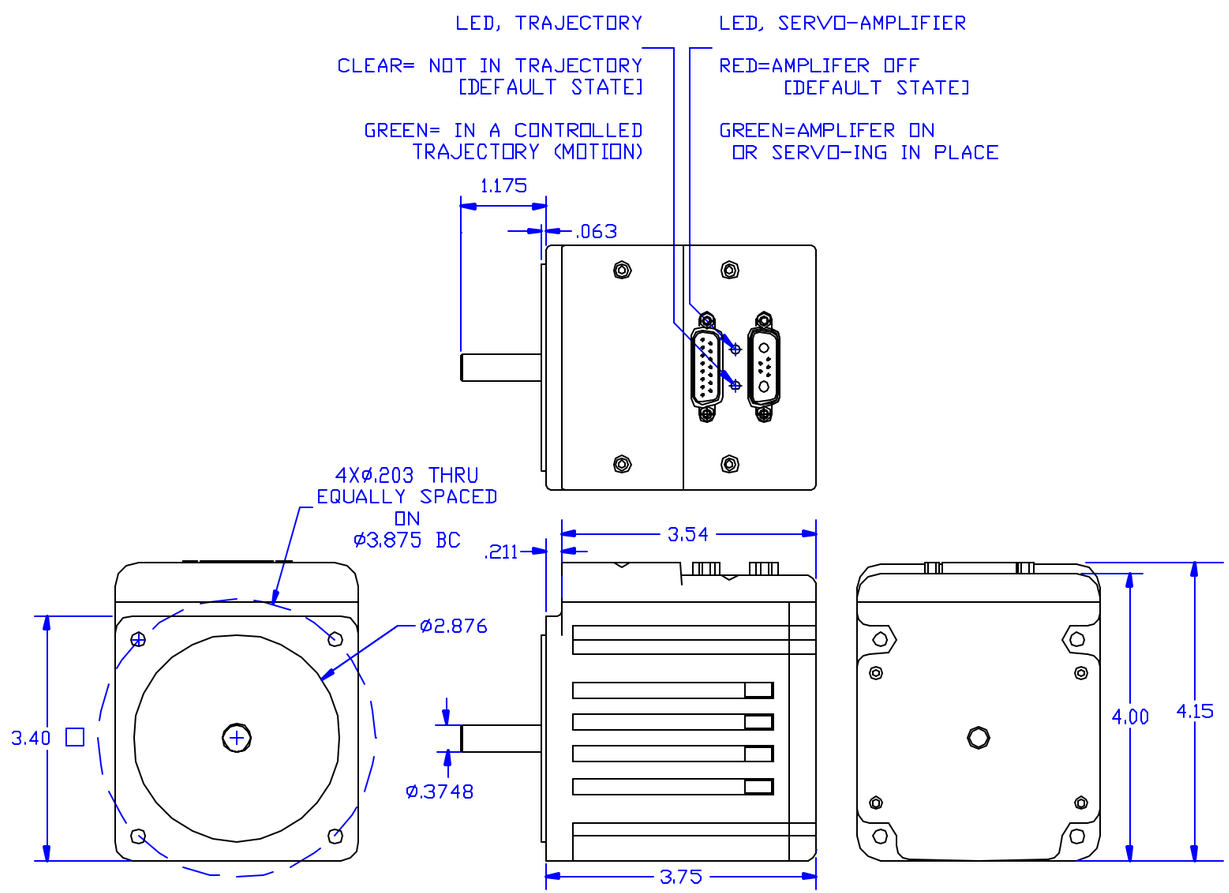
DWG REV	DESCRIPTION	DATE
1	PRODUCTION RELEASE	09/30/03
2	EDITED DIMENSION	06/25/04





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					
		SOFTWARE SELECTABLE FUNCTIONS			
PIN#	NAME	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	AniLink Data	RS-485 Signal A	5V	0 to 5V
6	I/O F	AniLink 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± .XXX± ANGLES ±
THIRD ANGLE PROJECTION

Animatics Corporation

TITLE SM3416D

MATERIAL

DRAWN TC

DATE 2/13/04

FINISH BLACK ECOAT

SCALE NOT TO SCALE

SIZE B

COMPUTER GENERATED DRAWING

PART NO. SM3416D

DWG REV 2

SIMILIAR TO: SM3416D-F1

CAD FILE NAME SM3416D

SHEET 1 OF 1

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