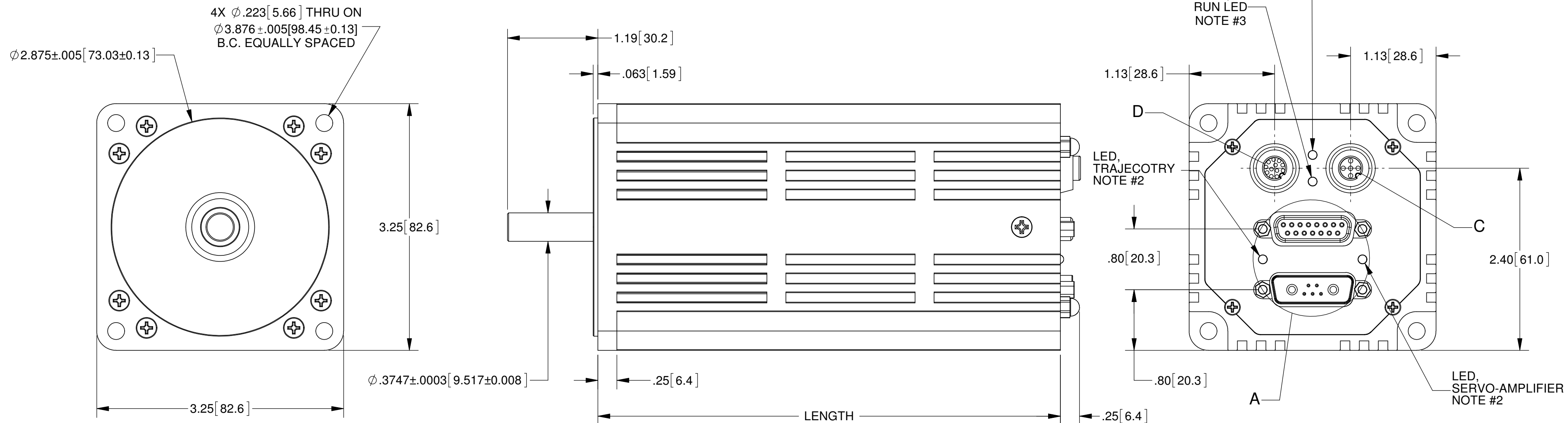
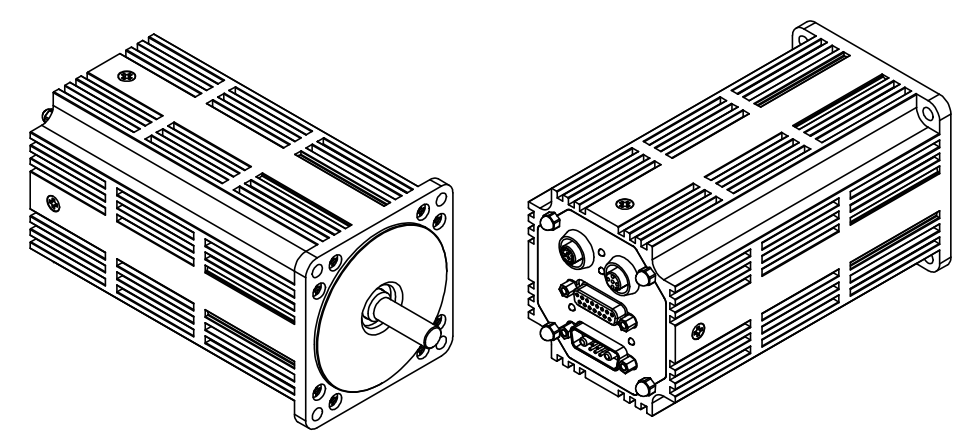


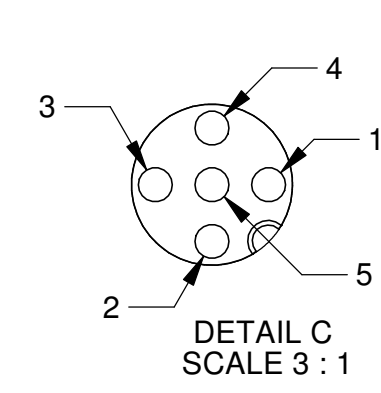
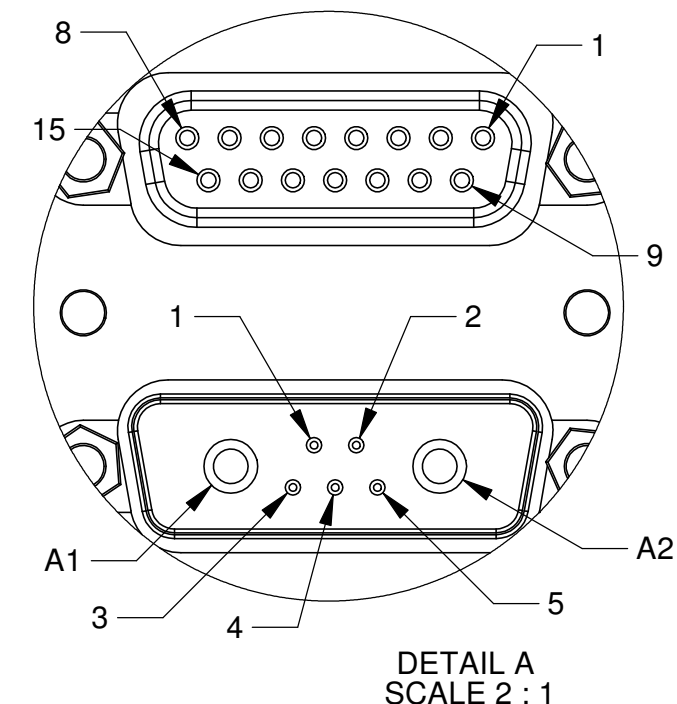
NOTES:

- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:  
 SM34105D-BRK-C-AD1 SM34205D-BRK-C-AD1 SM34305D-BRK-C-AD1 SM34405D-BRK-C-AD1 SM34505D-BRK-C-AD1  
 SM34105D-DEBRK-C-AD1 SM34205D-DEBRK-C-AD1 SM34305D-DEBRK-C-AD1 SM34405D-DEBRK-C-AD1 SM34505D-DEBRK-C-AD1
- LED, SERVO-AMPLIFIER:
  - CLEAR = CONTROLLER POWER NOT AVAILABLE
  - RED = FAULT
  - FLASH GREEN = DRIVE (AMPLIFIER) IS OFF
  - GREEN = DRIVE (AMPLIFIER) IS ON
- LED, TRAJECTORY
  - CLEAR = NOT IN CONTROLLED TRAJECTORY (DEFAULT STATE)
  - GREEN = IN CONTROLLED TRAJECTORY (CLOSE LOOP MOTION)
- CANopen ERROR LED (RED)
  - CLEAR = NO ERROR
  - SINGLE FLASH = WARNING, COMMUNICATION ERROR COUNT LIMIT REACHED
  - DOUBLE FLASH = GUARD OR HEART BEAT ERROR
- CANopen RUN LED (GREEN)
  - SINGLE FLASH = DEVICE IS IN STOPPED STATE
  - BLINKING = PREOPERATIONAL STATE
  - SOLID = OPERATIONAL STATE
- FOR -DE OPTION, DRIVE POWER AND CONTROLLER POWER ARE ON SEPARATE PINS. MUST PROVIDE POWER TO CONTROLLER AND DRIVE POWER TO OPERATE. SEE TABLE CN2 BELOW FOR PIN ASSIGNMENT.
- DIMENSIONS IN [ ] ARE mm.
- RECOMMENDED BOLTING SCREW SIZE TO BE 10-32 OR M5, SOCKET CAP.

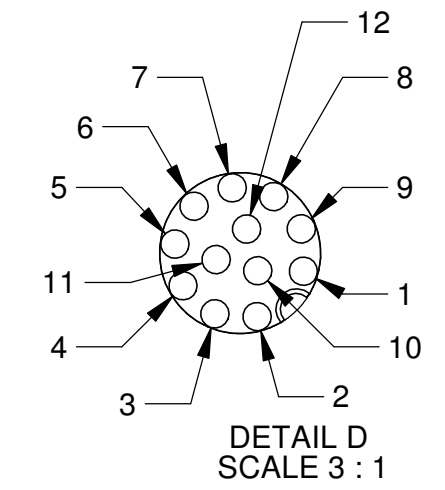
REV.	DESCRIPTION	ZONE	ECO	DATE	APPROVED
A	PRELIMINARY RELEAS			1/29/2011	M. TRAN



PART NUMBER	LENGTH	
	in	mm
SM34105D-BRK	5.44	138.1
SM34205D-BRK	6.09	154.6
SM34305D-BRK	6.74	171.1
SM34405D-BRK	7.39	187.7
SM34505D-BRK	8.04	204.2



CANopen	
5-Pin M12, Female connector	
PIN #	NAME
1	NC
2	NC
3	GND CAN
4	CAN H
5	CAN L



24V EXPANSION I/O	
12-Pin M12, Female connector	
PIN #	NAME
1	24V I/O #1
2	24V I/O #2
3	24V I/O #3
4	24V I/O #4
5	24V I/O #5
6	24V I/O #6
7	24V I/O #7
8	24V I/O #8
9	24V I/O #9
10	24V I/O #10
11	24V PWR IN
12	GND (I/O)

CN2 : 15PIN D-SUB FEMALE CONNECTOR				
PIN #	NAME	FUNCTIONS		
		Default Function	Secondary Function	Analog Input
1	I/O A	External Encoder A Input	Step Input	5V TTL 0 to 5V
2	I/O B	External Encoder B Input	Direction Input	5V TTL 0 to 5V
3	I/O C	Positive Limit Input		5V TTL 0 to 5V
4	I/O D	Negative Limit Input		5V TTL 0 to 5V
5	I/O E		RS485 A (+)	5V TTL 0 to 5V
6	I/O F		RS485 B (-)	5V TTL 0 to 5V
7	I/O G	G-Synchronization	RS485-ISO Adaptor Data	5V TTL 0 to 5V
8	ENC A OUT	Encoder A Output		
9	ENC B OUT	Encoder B Output		
10	RS232 Tx	RS232 Transmit		
11	RS232 Rx	RS232 Receive		
12	+5Vdc OUT	+5Vdc Supply Out		
13	GND	Signal GND		
14	POWER GND	POWER GND	For -DE Option, Pin 15 is Control power (20V to 48V) and Pin 14 is PWR GND. *PIN 15 is not connected to A1.	
15	POWER	POWER		

CN1 : 7PIN COMBO D-Sub Male Connector			
PIN #	NAME	FUNCTIONS	Ties to CN2, PIN #
1	I/O G	G-Synchronization	7
2	+5V dc OUT	+5Vdc Output	12
3	RS232 Tx	RS232 Transmit	10
4	RS232 Rx	RS232 Received	11
5	GND	Signal GND	13
A1	DRIVE PWR	Dirve Power (20 - 48Vdc)	15^
A2	POWER GND	POWER GND	14

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MATERIAL <b>ALUMINUM HOUSING</b>	FINISH <b>BLACK ANODIZE HOUSING</b>	DRAWN M. TRAN	DATE 1/29/2009
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE INCHES AND TOLERANCES ARE: <b>DECIMALS: .XXX ± .010</b> <b>ANGLES: .XX ± 0.25°</b> <b>.XX ± 0.5°</b>		INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 1994. ALL DIMENSIONS, TOLERANCES AND ROUGHNESS APPLY AFTER FINISHING, WHEN APPLICABLE. NO BURRS ALLOWED, BREAK SHARP EDGES .01 MAX.	

**Animatics Corporation**

TITLE: **SM34x05D SERIES W/BRAKE, CANOPEN, AND EXT 24VIO OPTIONS**

SIZE: **C** DWG NO: **SM34x05D-BRK-C-AD1**

DO NOT SCALE DRAWING SCALE: 1:1 SHEET: 1 OF 1