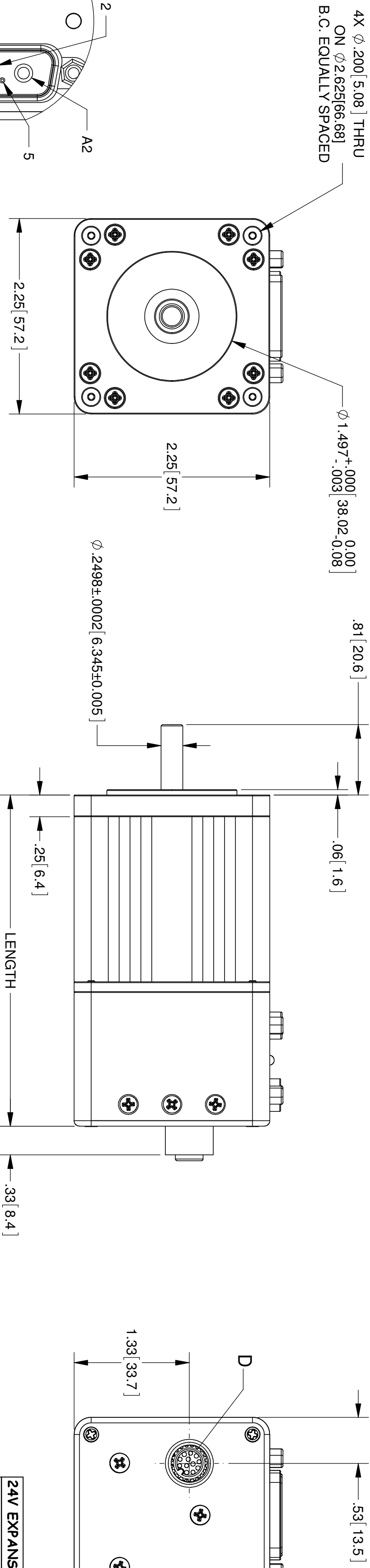
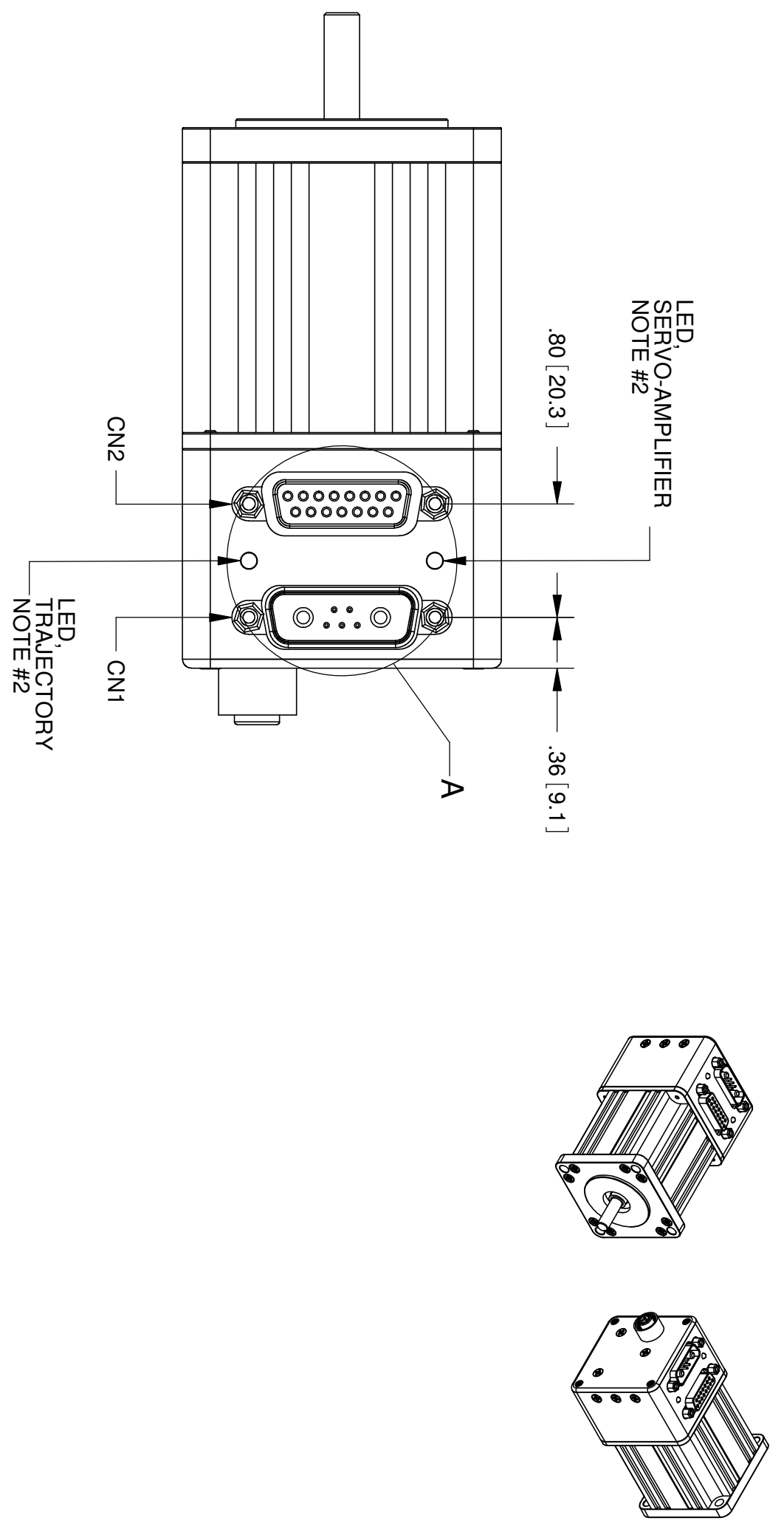


REV.	DESCRIPTION	ZONE	ECO	DATE	APPROVED
A	PRELIMINARY RELEASE			01/20/2011	M. TRAN

- NOTES:
- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:  
SM23105D-AD1 SM23205D-AD1 SM23305D-AD1 SM23405D-AD1  
SM23105D-DE-AD1 SM23205D-DE-AD1 SM23305D-DE-AD1 SM23405D-DE-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)  
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.



PART NUMBER	LENGTH	
	in	mm
SM23105D	3.17	80.4
SM23205D	3.75	95.3
SM23305D	4.40	111.8
SM23405D	5.05	128.3

24V EXPANSION I/O	24V EXPANSION I/O
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)

PIN #	NAME	FUNCTIONS		
		Default Function	Secondary Function	Digital I/O 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	RS485-150 Adapter Data	5V TTL 0 to 5V
8	ENC A OUT	Encoder A Output		
9	ENC B OUT	Encoder B Output		
10	RS232 Tx	RS232 Transmitt		
11	RS232 Rx	RS232 Receive		
12	+5Vdc OUT	+5Vdc Supply Out		
13	GND	Signal GND		
14	POWER GND	POWER GND		
15	POWER	POWER		

CN1 : 7PIN COMBO D-Sub Male Connector		
PIN #	NAME	FUNCTIONS
1	I/O G	G-Synchronization
2	+5Vdc OUT	+5Vdc Output
3	RS232 Tx	RS232 Transmitt
4	RS232 Rx	RS232 Received
5	GND	Signal GND
A1	DRIVE PWR	Drive Power (20 - 48Vdc)
A2	POWER GND	POWER GND

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**INCH** UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES AND TOLERANCES ARE:  
DECIMALS: .XXX ± .005  
XXX ± .005  
XX ± .03

**ANGLES:** ANGLES: XX ± 0.25°  
X ± 0.5°  
NO BURRS ALLOWED. BREAK SHARP EDGES .01 MAX.

DRAWN: M. TRAN  
ENGR: ENGR  
DATE: 01/20/2011

**Animatics Corporation**

SM23x05D SERIES  
W/EXT 24VIO OPTION

SM23x05D-AD1

SCALE: 1:1

SHEET 1 OF 1