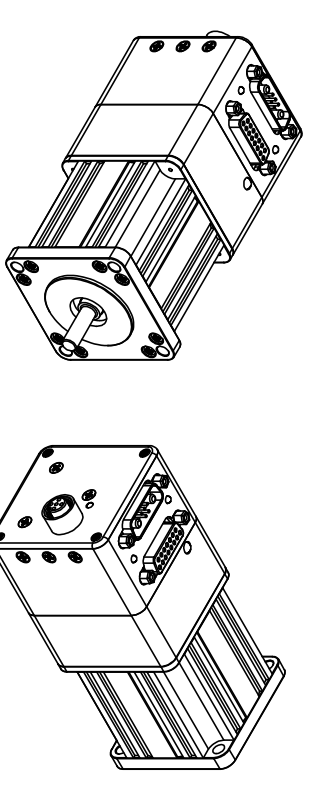
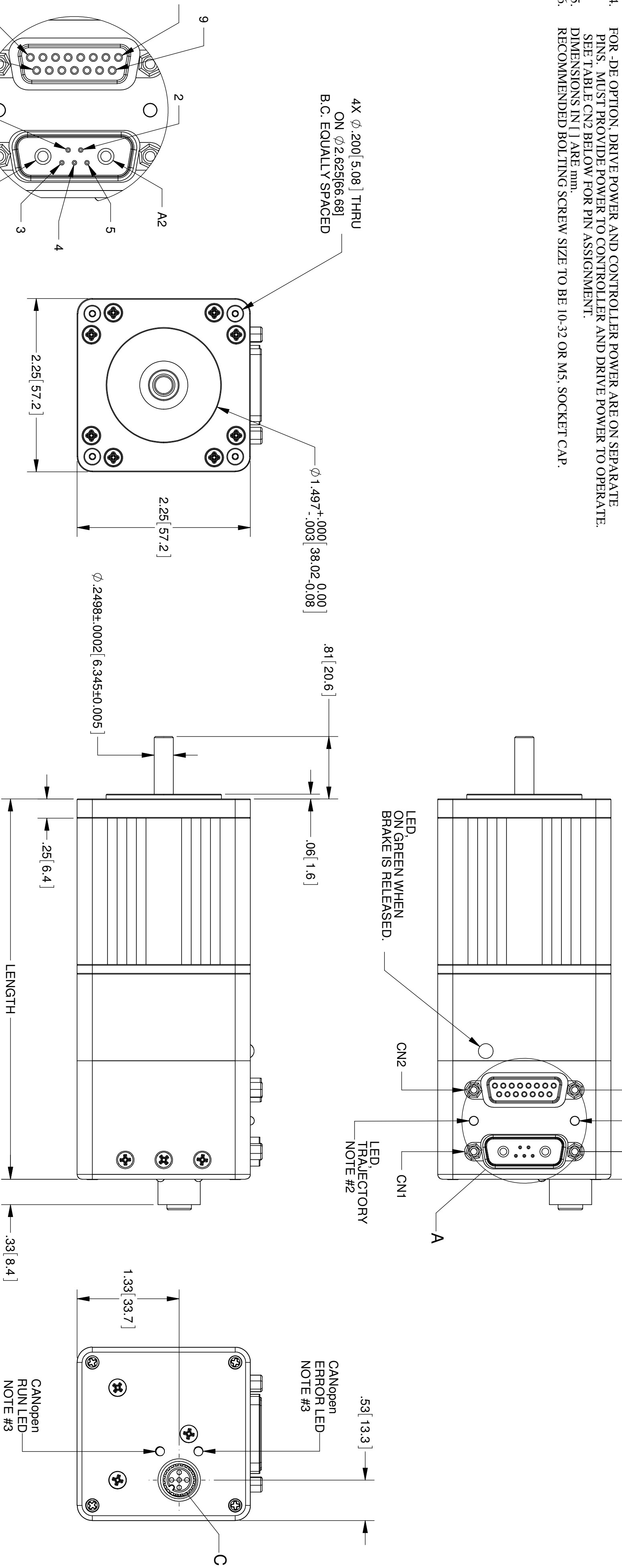


REV.	DESCRIPTION	ZONE	ECO	DATE	APPROVED
A	PRELIMINARY RELEASE			01/20/2011	M. TRAN



- NOTES:
- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:
 SM23105D-BRK-C SM23205D-BRK-C SM23305D-BRK-C SM23405D-BRK-C
 SM23105D-DEBRK-C SM23205D-DEBRK-C SM23305D-DEBRK-C SM23405D-DEBRK-C
 - 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.



DETAIL A
SCALE 1.5 : 1

PART NUMBER	LENGTH	
	in	mm
SM23105D-BRK	4.29	109.0
SM23205D-BRK	4.88	123.8
SM23305D-BRK	5.53	140.3
SM23405D-BRK	6.18	156.8

PIN #	NAME	FUNCTIONS	Ties to CN2, PIN #	
			1	7
1	I/O 6	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)		15
A2	POWER GND	POWER GND		14

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

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			5V TTL 0 to 5V
6	I/O F			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 Transmitt		
11	RS232 Rx	RS232 Receive		
12	+5Vdc OUT	+5Vdc Supply Out		
13	GND	Signal GND		
14	POWER GND	POWER GND		
15	POWER	POWER		

DETAIL C
SCALE 3 : 1

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Animatics Corporation
SM23x05D SERIES
W/BRAKE AND CANOPEN OPTIONS

CN2 : 15PIN D-SUB FEMALE CONNECTOR

PIN #	NAME	FUNCTIONS
1	I/O 6	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

CN1 : 7PIN COMBO D-Sub Male Connector

PIN #	NAME	FUNCTIONS	Ties to CN2, PIN #
1	I/O 6	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)	15
A2	POWER GND	POWER GND	14

ALUMINUM HOUSING
BLACK ANODIZED HOUSING

THIRD ANGLE PROJECTION

DECIMALS: ANGLES:
XXX ± .005 XX ± 0.25°
XX ± .03 X ± 0.5°

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE INCHES AND TOLERANCES ARE:
PER ASME Y14.5M - 1994.

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.

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

SM23x05D-BRK-C

SIZE DWG NO
C SM23x05D-BRK-C

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