REV. **DESCRIPTION** ZONE ECO DATE **APPROVED** DRAWING APLLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS: PRELIMINARY RELEAS Α 1/29/2011 M. TRAN SM34105D-C SM34205D-C SM34305D-C SM34405D-C SM34505D-C SM34105D-DE-C SM34205D-DE-C SM34305D-DE-C SM34405D-DE-C SM34505D-DE-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 ERRORSINGLE 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. CANopen ERROR LED-NOTE #3 ----1.19[30.2] 4X Ø.223 5.66 THRU ON CANopen Ø2.875±.005[73.03±0.13]- \emptyset 3.876 \pm .005[98.45 \pm 0.13] RUN LED-**→** 1.13 28.6 **→ B.C. EQUALLY SPACED** NOTE #3 **→** .063 1.59 LED, TRAJECOTRY **⟨**} NOTE #2 (0000000) 3.25 82.6 .80 20.3 2.40 61.0 Ø.3747±.0003 9.517±0.008 **⟨**} .80 20.3 .25 6.4 SERVO-AMPLIFIER 3.25 82.6 **LENGTH -** - .18 | 4.6 LENGTH PART NUMBER mm 0000000 SM34105D 3.49 88.6 **CANopen** SM34205D 105.1 5-Pin M12, Female connector 121.6 SM34305D 4.79 NAME SM34405D 5.44 138.1 NC 1 SM34505D 2 NC 3 GND CAN CN2: 15PIN D-SUB FEMALE CONNECTOR 4 CANH **FUNCTIONS** PIN# NAME DETAIL C 5 CANL Secondary Function Digital I/O | Analog Input Default Function **SCALE 3:1** I/O A External Encoder A Input 5V TTL Step Input 0 to 5V I/OB 2 External Encoder B Input **Direction Input** 5V TTL 0 to 5V 3 I/O C 5V TTL 0 to 5V Positive Limit Input DETAIL A I/O D 5V TTL 4 Negative Limit Input 0 to 5V **SCALE 2:1** 5 I/0 E R5485 A (+) 5V TTL 0 to 5V I/0 F RS485 B (-) 5V TTL 6 0 to 5V CN1: 7PIN COMBO D-Sub Male Connector **CONFIDENTIAL.** THE INFORMATION CONTAINED HEREIN IS THE PROPRIETY PROPERTY OF ANIMATICS CORPORATION. AND IS PROTECTED AS A TRADE SECRET. IT IS SUBMITTED FOR USE BY RECIPIENT ONLY FOR A BUSINESS PURPOSE AUTHORIZED BY ANIMATICS CORPORATION. ANY OTHER USE IS PROHIBITED. RECIPIENT AGREES TO KEEP SUCH 7 I/O G RS485-ISO Adopter Data 5V TTL 0 to 5V G-Synchronization Ties to CN2 PIN# NAME **FUNCTIONS** Animatics Corporation 8 ENC A OUT Encoder A Output PIN# MATERIAL DRAWN M. TRAN DATE 1/29/2009 9 ENC B OUT Encoder B Output I/O G G-Synchronization **BLACK ANODIZE** ALUMINMUM RS232 Transmit DATE 10 R5232 Tx +5Vdc Output 12 +5V dc OUT HOUSING HOUSING SM34x05D SERIES 11 RS232 Rx RS232 Receive RS232 Tx RS232 Transmit 10 UNLESS OTHERWISE SPECIFIED: INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 1994. INCH W/CANOPEN OPTION DIMENSIONS ARE INCHES AND TOLERANCES ARE: 12 +5Vdc OUT +5Vdc Supply Out R5232 Rx RS232 Received 11 THIRD ANGLE ALL DIMENSIONS, TOLERANCES AND ROUGHNESS APPLY AFTER FINISHING, WHEN APPLICABLE. GND 13 Signal GND 5 GND Signal GND 13 **PROJECTION** SIZE DWG NO **DECIMALS: ANGLES:** SM34x05D-C POWER GND POWER GND For -DE Option, Pin 15 is Contorl power (20V to 48V) and Dirve Power (20 - 48Vdc) 15^ NO BURRS ALLOWED, BREAK SHARP EDGES .01 MAX. DRIVE PWR $.XXX \pm .010$ $.XX \pm 0.25^{\circ}$.X ± 0.5° DO NOT SCALE DRAWING SCALE 1:1 SHEET 1 OF 1 POWER POWER Pin 14 is PWR GND. $\,$ PIN 15 is not connected to A1 .XX ± .04 15 A2 POWER GND POWER GND 14

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