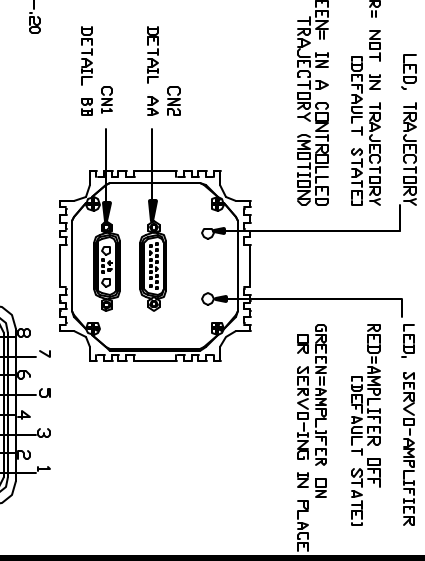
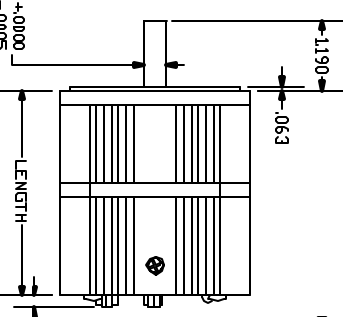
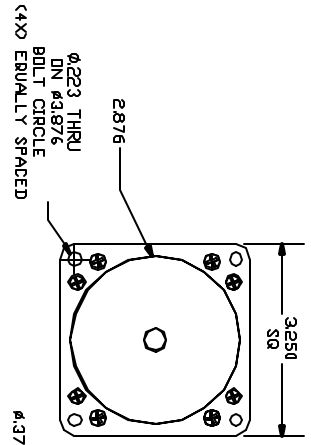


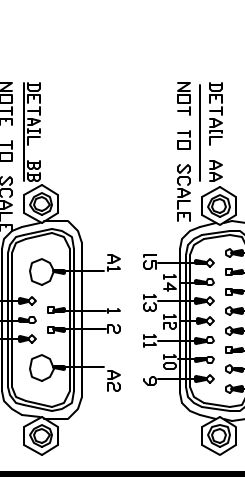
NOTES 1) INTERNAL 1000 LINE ENCODER, 4000 ENCODER COUNTS PER REVOLUTION.
 INDEX LINE ON ENCODER WHEEL.
 2) TIED INTERNALLY:
 TX : CN2 PIN 10 TO CN1 PIN 3
 RX : CN2 PIN 11 TO CN1 PIN 4
 +5V : CN2 PIN 12 TO CN1 PIN 2
 GND : CN2 PIN 13, CN2 PIN 14 AND CN1 PIN 5 TIED TO CN1 PIN A2
 3) DRIVE AND CONTROLLER POWER ON SEPARATE PINS.
 MUST PROVIDE POWER TO CONTROL AND DRIVE POWER TO OPERATE
 TO DISABLE DRIVE, DISCONNECT DRIVE (AMPLIFIER) POWER ON CN1.

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	DRV PWR	Drive Power, +20 to 48V dc
A2	PWR GND	Power Ground



PIN#	NAME	FUNCTIONS	DIGITAL I/O (TTL) INPUT (10 BIT)	ANALOG INPUT (10 BIT)
1	I/O A	Ext Encoder A Input	0 to 5V	0 to 5V
2	I/O B	Ext Encoder B Input	Direction Input	0 to 5V
3	I/O C	Positive (Right)	5V	0 to 5V
4	I/O D	Negative (Left)	Limit Input	0 to 5V
5	I/O E	Analog Data	RS-485 Signal A	0 to 5V
6	I/O F	Analog Clock	RS-485 Signal B	0 to 5V
7	I/O G	G-Synchronization Pin	RS-485 Adapter	0 to 5V

MODEL	LENGTH
SM3410D-DE	3.488
SM3420D-DE	4.138
SM3430D-DE	4.788
SM3440D-DE	5.438
SM3450D-DE	6.088



PIN#	NAME	FUNCTIONS
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	CONTROL PWR	Controller Power, +20V to 48V dc

TEN	INT	PART NO.	DESCRIPTION	MATERIAL	QUANTITY

REV	DESCRIPTION	DATE	APPROVED
1	PRODUCTION RELEASE	3/4/02	
2	PRODUCTION RELEASE	10/9/02	

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