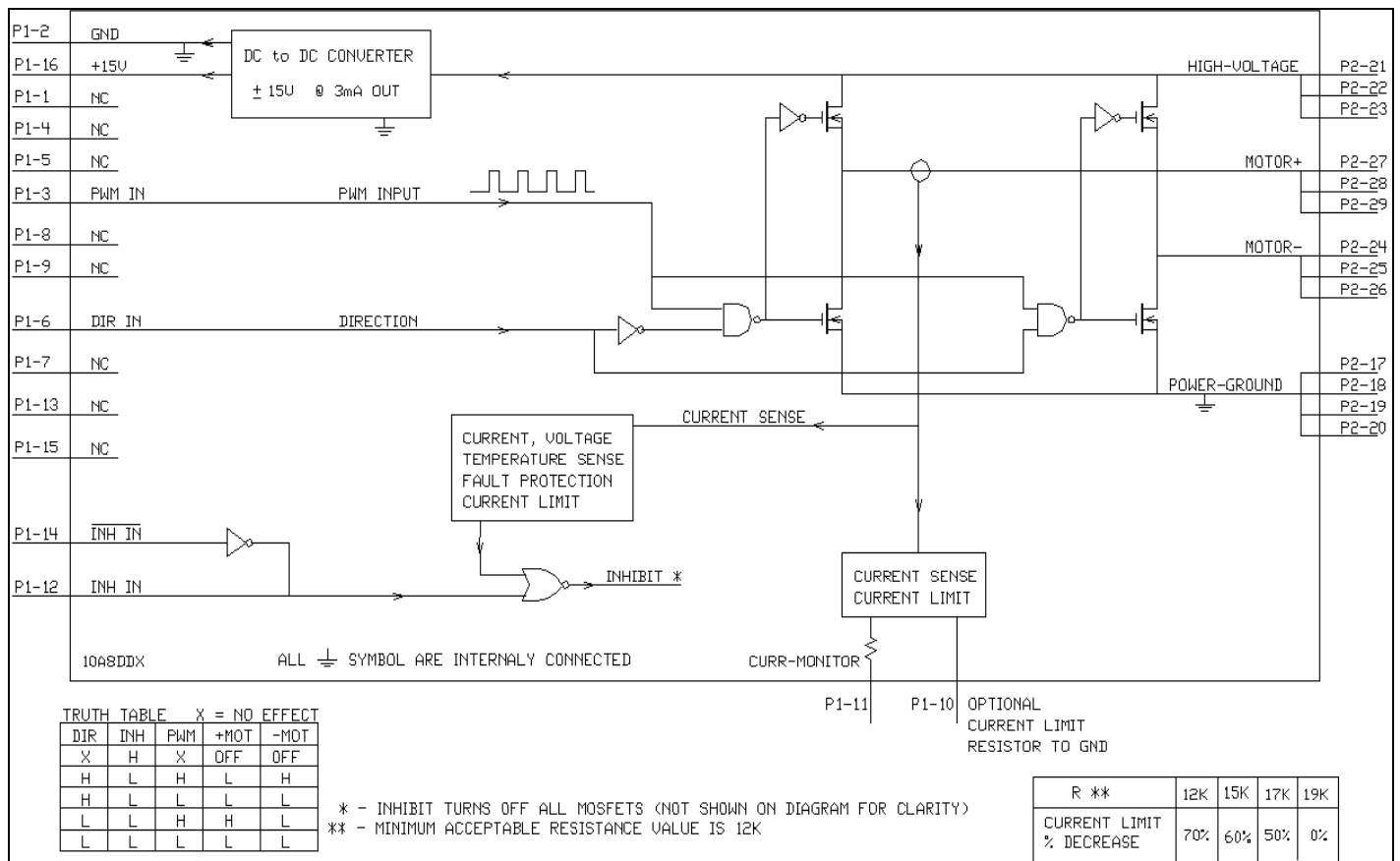
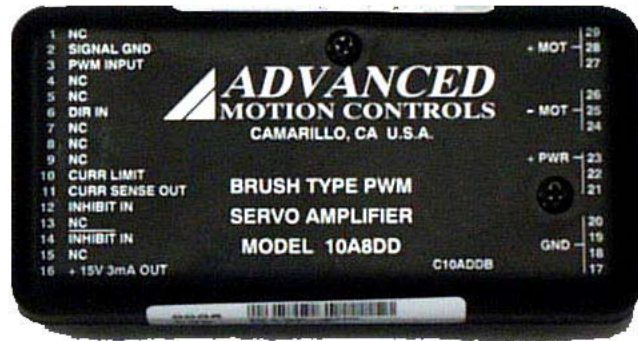


SERIES 10A-DD PWM BRUSH TYPE SERVO AMPLIFIERS Model: 10A8DD

FEATURES:

- Surface-mount technology
- Small size, low cost, ease of use
- Adjustable current limit
- Four quadrant regenerative operation
- Agency Approvals:



DESCRIPTION: The 10A8DD PWM servo amplifier is designed to drive brush type DC motors. The PWM frequency is determined by the PWM input signal. The 10A8DD is fully protected against over-voltage, over-current, over-heating and short circuits across motor, ground and power leads. This model interfaces with digital controllers that have a digital PWM output. It can also be used as a stand-alone system. The 10A8DD amplifier requires only a single unregulated DC power supply as all logic and control voltages are generated internally. PWM input determines the output duty cycle. "Direction In" determines which side of the "H bridge" output is switching. The current limit can be reduced by an external resistor. The voltage at the current monitor pin P1-11 is proportional to the actual motor current.

SPECIFICATIONS:

	MODEL
POWER STAGE SPECIFICATIONS	10A8DD
DC SUPPLY VOLTAGE	20 - 80 V
PEAK CURRENT	± 10 A
MAXIMUM CONTINUOUS CURRENT	± 6 A
MINIMUM LOAD INDUCTANCE*	150 µH
SWITCHING FREQUENCY	5-20 kHz ±15%
HEATSINK (base) TEMPERATURE RANGE	0° to + 65° C, disables if > +65° C
POWER DISSIPATION AT CONTINUOUS CURRENT	40 W
OVER-VOLTAGE SHUT-DOWN (self reset)	85 V

MECHANICAL SPECIFICATIONS	
SIGNAL CONNECTOR	Molex connectors
SIZE	4.00 x 2.00 x 0.60 inches 101.6 x 50.8 x 15.2 mm
WEIGHT	5.1 oz 0.143 kg

* "Pancake" and "basket-wound" motors require external inductors.

PIN FUNCTIONS:

CONNECTOR	PIN	NAME	DESCRIPTION / NOTES	I/O
P1	1	NC		
	2	SIGNAL GND	Reference ground	GND
	3	PWM / IN	2.5 - 15 V, Pulse Width Modulated Digital Input	I
	4	NC		
	5	NC		
	6	DIRECTION	2.5 - 15 V, Direction Input	I
	7	NC		
	8	NC		
	9	NC		
	10	CURRENT LIMIT	Can be used to reduce the factory preset maximum current limit.	I
	11	CURRENT MONITOR	This signal is proportional to the actual current in the motor leads. Scaling is 1V = 2A.	O
	12	INHIBIT	Turns off all mosfets of the "H" bridge drive when high.	I
	13	NC		
	14	INHIBIT	Turns off all mosfets of the "H" bridge drive when low.	I
	15	NC		
	16	15 V @ 3 mA	For customer use	O
	17-20	POWER GND	Power Ground, Common to P1-2	GND
	21-23	+ HIGH VTG	DC Power Input	I
24-26	- MOTOR	Negative Motor Output	O	
27-29	+ MOTOR	Positive Motor Output	O	

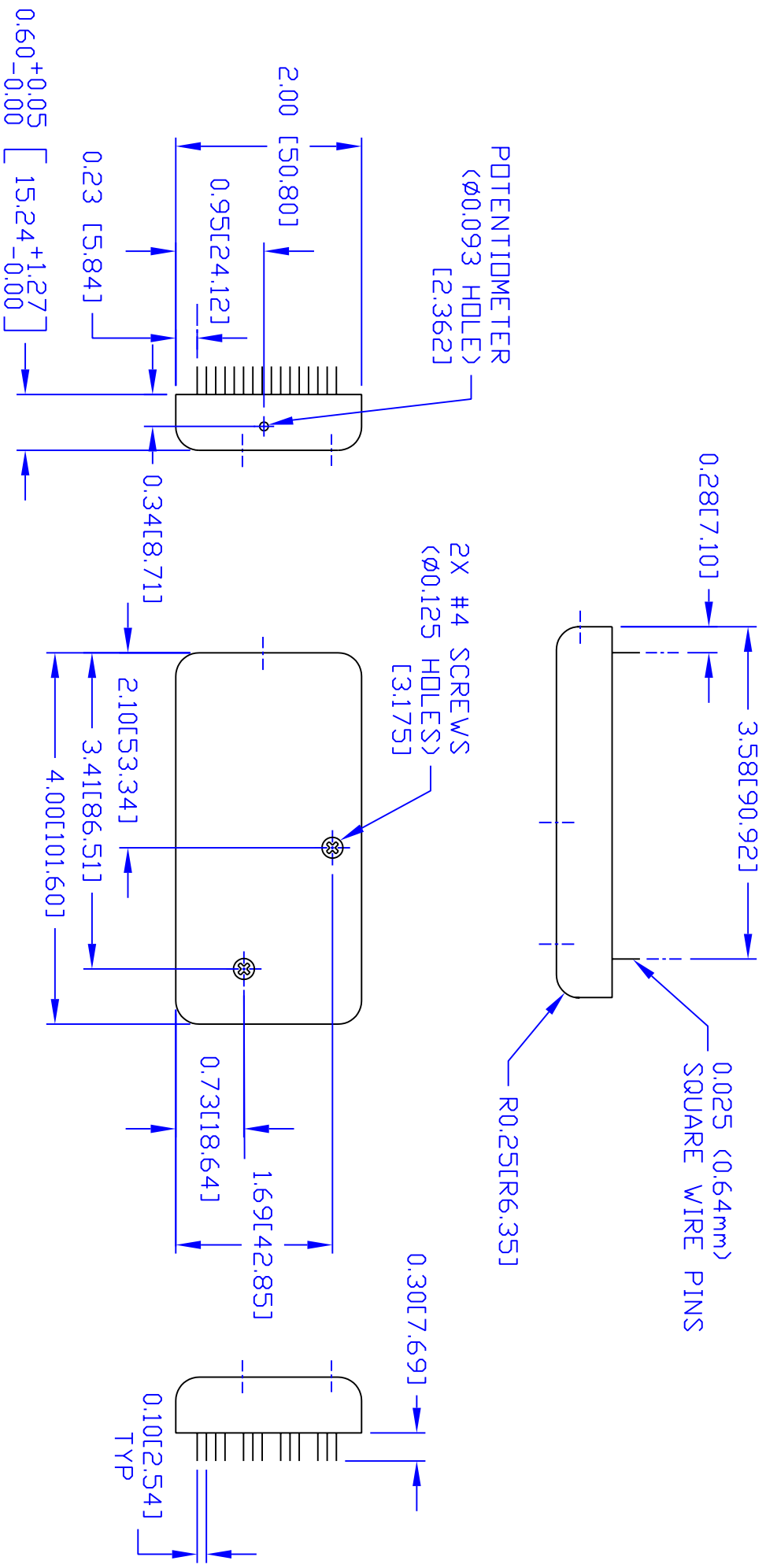
10A8DD Series

ORDERING INFORMATION:

Model: 10A8DDX

X indicates current revision letter.

MOUNTING DIMENSIONS: See page F-5.



MODEL 10A8, 10A8DD

REV	DESCRIPTION	DATE	BY
C	ADDED TOL. TO DIM. 0.60	11/19/03	RB
B	UPDATE ADDRESS ON DWG FORMAT	02/12/02	RB
A	UPDATE DWG FORMAT	08/22/96	RB

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES
.XX \pm .010
.XXX \pm .005
DO NOT SCALE DRAWING

ADVANCED
MOTION CONTROLS
• PWM SERVO AMPLIFIERS •
3805 Calle Tecate, Comarillo, CA 93012

TITLE MOUNTING DIMENSIONS
10A SERIES

10A8DD SERIES	DRAWN BY: AIDA	DATE: 06/03/93	SIZE DWG. NO. M10A	REV C
10A SERIES	CHECK BY:	DATE:	B	
USED ON	DESIGN APPROVED:	DATE:	SCALE: NONE	SHT. 1 OF 1

NOTE: DIMENSIONS IN [] ARE IN MM.