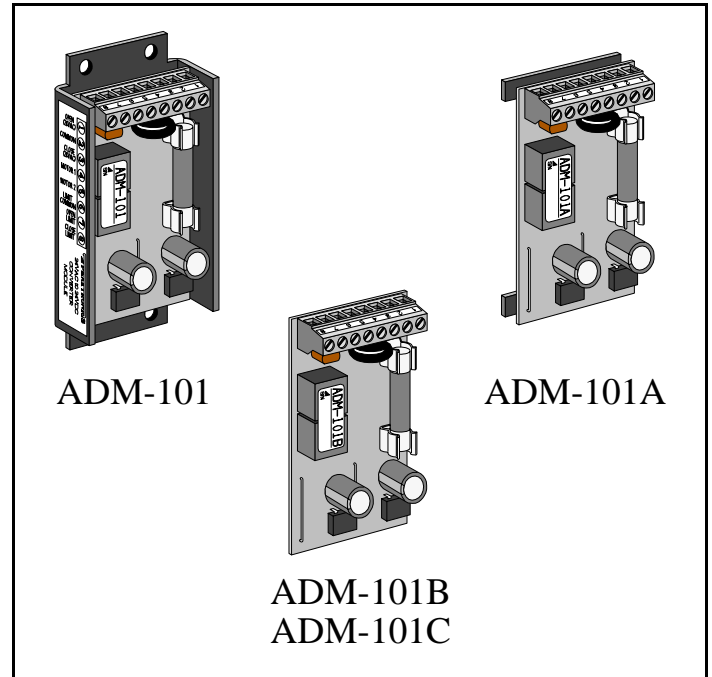# ▲ PEAKTRONICS

ADM-101

12V AC/DC to DC Motor Converter Module

The Peaktronics ADM-101 Series Motor Converter Modules are electronic interface units that allow a 12VDC motor to be powered and controlled in the same manner as a 12VAC split phase motor. Its compact size allows the unit to be mounted inside most DC actuators. The unit has an 8 pin screw terminal strip that provides easy wiring to the DC motor, limit switches, and torque switches. Three of the terminals provide the usual split phase motor connections: *open*, *close*, and *motor neutral*.

The unit allows a 12VDC actuator to directly replace a 12VAC actuator. The unit also features dynamic braking which provides better resolution and control while eliminating the need for a mechanical brake in many applications.

The ADM-101 and ADM-101C can be used with motors with up to 20A locked rotor current, while the ADM-101A and ADM-101B can be used with motors with up to 6A locked rotor current. The ADM-101 and ADM-101A come with two high temperature high strength tie wraps allowing the units to be strapped to the side of the motor which reserves space in the actuator for other controls. The ADM-101 also features two mounting flanges with provisions for screw mounting. The ADM-101B and ADM-101C are more compact and economical and must be mounted to a suitable metal bracket; the unit comes with two screws for direct mounting.

ADM-101   ADM-101A

ADM-101B
ADM-101C

SPECIFICATIONS

OPERATING VOLTAGE
10 to 15 VAC
10 to 15 VDC

OPERATING CURRENT
Limit Switch Current and Operating Current (typical): 100mA @ 12VAC, 40mA @ 12VDC
Fuse Type (ADM-101, ADM-101C): 10A (Bussman ABC-10 or Littelfuse 314010)
Fuse Type (ADM-101A, ADM-101B): 4A (Bussman ABC-4 or Littelfuse 314004)
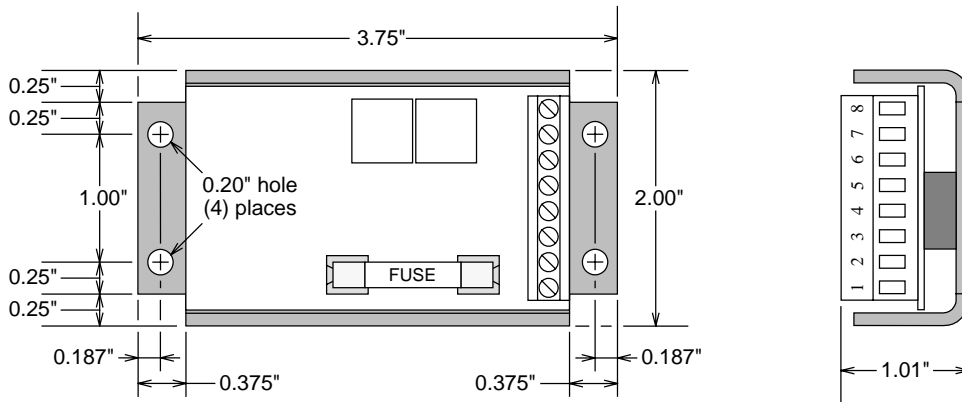
DC MOTOR OUTPUTS
Maximum Load Current (ADM-101, ADM-101C): 20A locked rotor for 3 seconds typical
Maximum Load Current (ADM-101A, ADM-101B): 6A locked rotor for 3 seconds typical

ENVIRONMENTAL

Operating Temperature	0 to 60 °C
Storage Temperature	-40 to 85 °C
Relative Humidity	0 to 90 % (non-condensing)

OUTLINE

ADM-101

ELECTRICAL CONNECTIONS

8 CLOSE LIMIT
7 OPEN LIMIT
6 LIMIT COMMON
5 MOTOR 2
4 MOTOR 1
3 CLOSE (12VAC/DC)
2 COMMON
1 OPEN (12VAC/DC)

3.75"
0.25"
0.25"
1.00"
0.20" hole (4) places
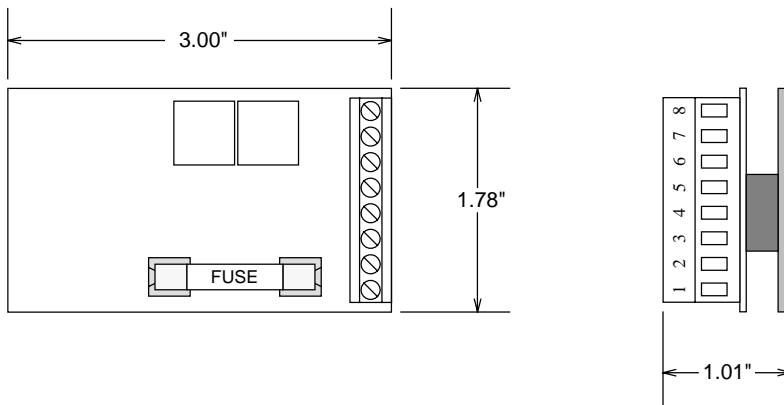2.00"
0.25"
0.25"
0.187"
0.375"
0.375"
0.187"
FUSE
1.01"

ADM-101A

ELECTRICAL CONNECTIONS

8 CLOSE LIMIT
7 OPEN LIMIT
6 LIMIT COMMON
5 MOTOR 2
4 MOTOR 1
3 CLOSE (12VAC/DC)
2 COMMON
1 OPEN (12VAC/DC)

3.00"
1.78"
FUSE
1.01"

ADM-101B
ADM-101C

ELECTRICAL CONNECTIONS

8 CLOSE LIMIT
7 OPEN LIMIT
6 LIMIT COMMON
5 MOTOR 2
4 MOTOR 1
3 CLOSE (12VAC/DC)
2 COMMON
1 OPEN (12VAC/DC)

3.00"
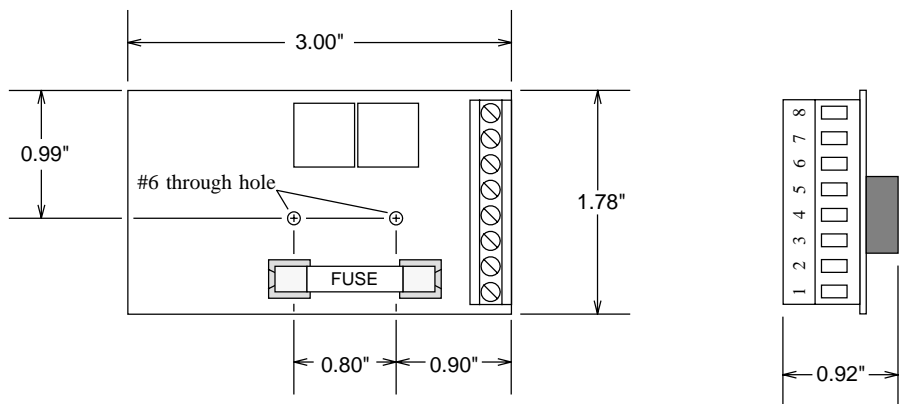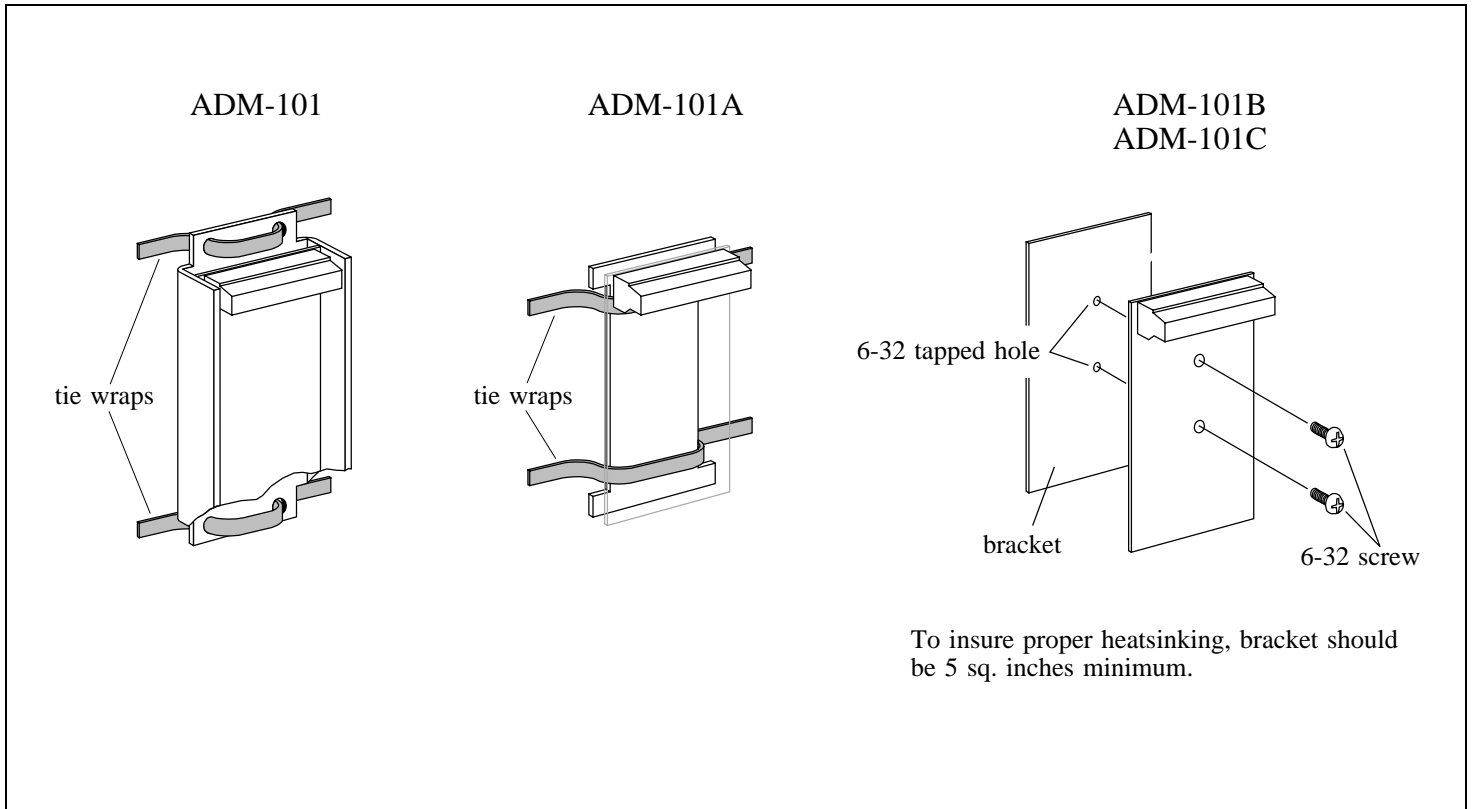0.99"
#6 through hole
1.78"
FUSE
0.80"
0.90"
0.92"

PEAKTRONICS

MOUNTING DIAGRAMS

ADM-101   ADM-101A   ADM-101B
ADM-101C

tie wraps

tie wraps

6-32 tapped hole

bracket

6-32 screw

To insure proper heatsinking, bracket should
be 5 sq. inches minimum.

BLOCK DIAGRAM

OPEN 1

12VAC/DC
POWER

COMMON 2

12VAC/DC
POWER

CLOSE 3

ADM-101
Series

4 MOTOR 1

12 VDC
MOTOR

5 MOTOR 2

6 LIMIT COMMON

7 OPEN LIMIT

OPEN LIMIT
SWITCH

OPEN TORQUE
SWITCH

8 CLOSE LIMIT

CLOSE LIMIT
SWITCH

CLOSE TORQUE
SWITCH

POWERED INPUT	OUTPUT POLARITY	
	MOTOR 1	MOTOR 2
OPEN	+	−
CLOSE	−	+

PEAKTRONICS, Inc. *1363 Anderson   Clawson, MI 48017   Phone (248) 542-5640   FAX (248) 542-5643*   800-187B