# ▲ PEAKTRONICS

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**

### 12V AC/DC to DC Motor Converter Module



### **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)

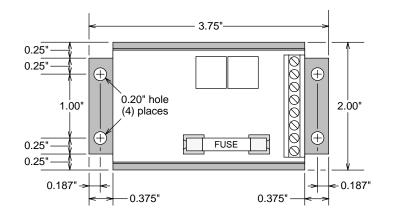
#### **DC MOTOR OUTPUTS**

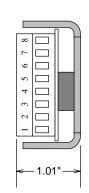
Maximum Load Current (ADM-101, ADM-101C): 20A locked rotor for 3 seconds typical Maximum Load Current (ADM-101A, ADM-101B): 6A locked rotor for 3 seconds typical

#### ENVIRONMENTAL

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

### OUTLINE

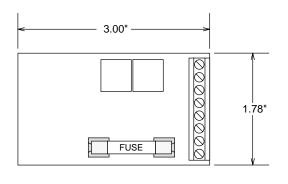


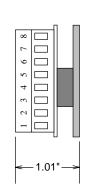


#### ELECTRICAL CONNECTIONS

- 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)



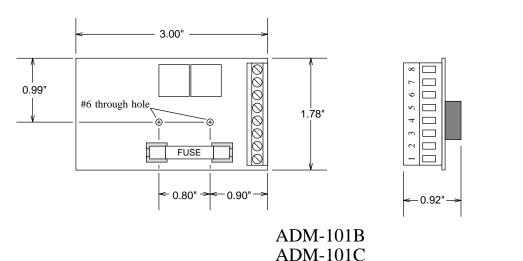




#### ELECTRICAL CONNECTIONS

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

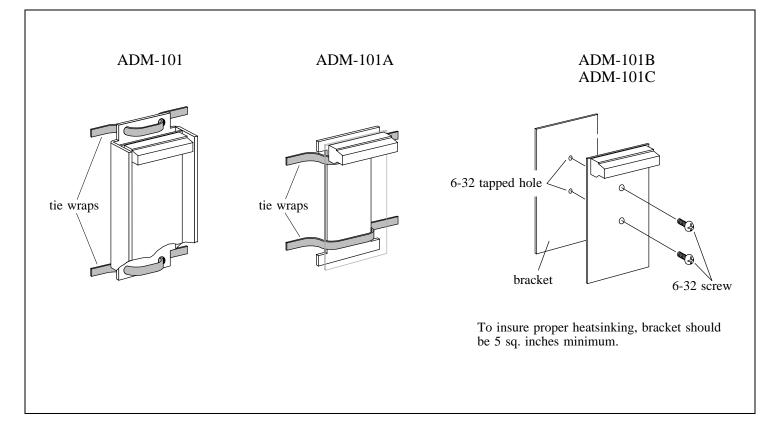
ADM-101A



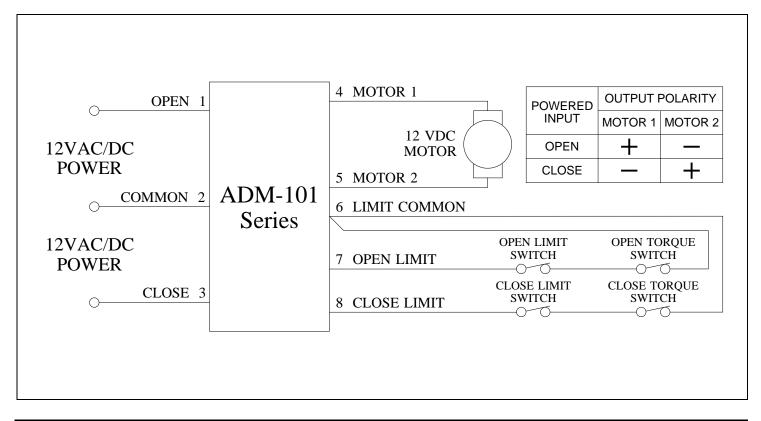
#### ELECTRICAL CONNECTIONS

- 8 CLOSE LIMIT7 OPEN LIMIT6 LIMIT COMMON5 MOTOR 2
- 5 MOTOR 2
- 4 MOTOR 1 3 CLOSE (12VAC/DC)
- 2 COMMON
- 1 OPEN (12VAC/DC)

## **MOUNTING DIAGRAMS**



# **BLOCK DIAGRAM**



www.peaktronics.com