# A-200 Auto-Reset Module

General Instructions for Model A-200 Auto-Reset Module

The Auto-Reset Module is intended as an option for the AC-PRO retrofit kits.

The reset module resets the actuator after a trip. It does not close the breaker but allows the breaker to be manually or electrically closed without opening the cubical door to manually reset the actuator.

The reset module resets the actuator electrically without using any complicated linkage system. The power for the Module is taken from two of the breaker line side poles. An electronic circuit inside the module energizes the internal reset coil and automatically deenergizes it after the actuator is reset.

The reset module is suitable for use on 208, 240 and 480 Volt 50/60 Hertz systems. The power wires to the module must be fused with BUSS KTK5 current-limiting fuses.

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### Typical Installation Instructions:

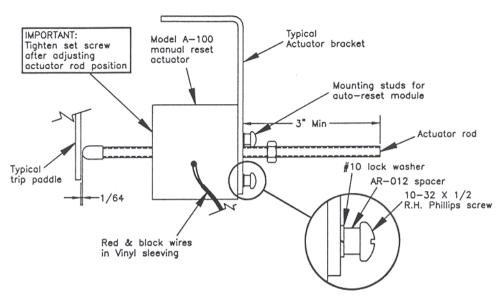


Figure 1

- Install trip paddle and the actuator bracket as outlined in the main retrofit instructions.
- 2) Attach Model A-100 manual reset actuator to bracket as follows:
  - a) Remove reset knob and all 1/4" hardware except for one 1/4-20 hex nut. The nut is for safety purposes.
  - b) Replace the existing actuator rod with the longer rod if provided in the retro-fit kit. Move the plastic tip to the new rod.
  - c) Attach the actuator to the bracket using the following hardware:
    - (3) #10 lock washers
    - (3) AR-012 spacers
    - (3) 10-32 X 1/2 R.H. Phillips screws
- 3) With the breaker closed and the actuator reset, adjust the position of the actuator rod in relation to the trip paddle. Screw the actuator rod in or out until it is about 1/64" away from the trip paddle.
- 4) Manually trip the actuator and tighten the set screw in the plunger using a 1/16" Allen wrench. This is very important because it locks the actuator rod in position.

IMPORTANT: The set screw in the plunger must be tightened to ensure that the actuator rod remains in proper adjustment.

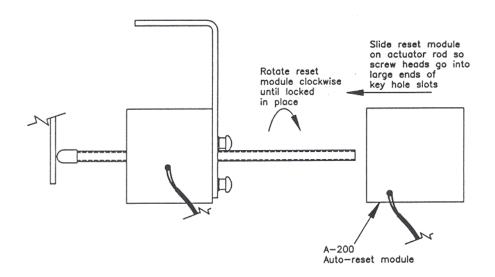


Figure 2

- 5) Attach the reset module as follows:
  - a) Verify that the actuator rod protrudes at least 3" from the bracket.
  - b) Remove the 1/4-20 nut from the actuator rod.
  - c) Slide the reset module on the actuator rod with the 3 key hole slots towards the actuator.
  - d) Push the reset module towards the actuator so the screw heads bottom out and rotate the reset module clockwise until the screw heads lock into position.
  - e) Try twisting the reset module to verify that it is fully locked in position.

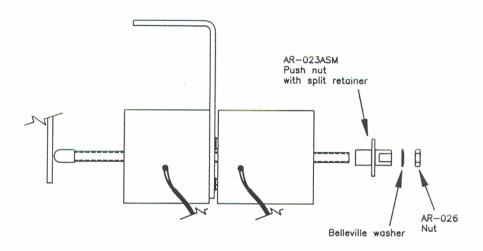
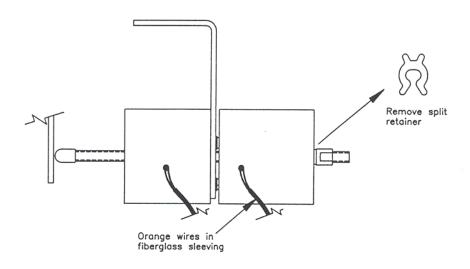


Figure 3

- 6) Screw the brass push nut onto the end of the actuator rod. The split retainer on the push nut must bottom out at the back of the reset module but do NOT use a wrench to tighten.
- 7) Hold the push nut with a wrench and lock the push nut to the actuator rod with a Belleville washer and the AR-025 brass nut. Make sure the push nut is still seated against the reset module.



## Figure 4

- 8) Remove the split retainer by using a pair of pliers to squeeze the two ends together. This opens up the retainer and it can be removed.
- 9) Manually trip and reset the actuator a few times to verify that it operates smoothly without any binding or drag.

IMPORTANT: The push nut must be positioned properly on the actuator rod and must be locked in position with the Belleville washer and AR-026 brass nut.

- 10) Verify trip-free operation of the actuator as follows:
  - a) With the actuator reset, close the breaker.
  - b) Manually trip the actuator or use a 9 Volt battery (Red is "+").
  - c) Attempt to close the breaker without resetting the actuator. The breaker must be trip-free.

IMPORTANT: With the actuator in the trip position (not reset), the breaker MUST BE TRIP-FREE.

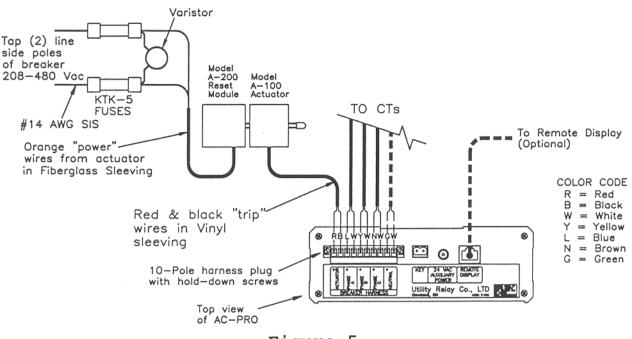


Figure 5

#### 11) Wire the reset module as follows:

- a) Install the fuse block as outlined in the main retro-fit instructions.
- b) Determine the line side of the breaker and drill and tap a 10-32 hole in two of the line side poles.
- c) Use #14 SIS wire from the bus taps to the fuse block.
- d) Connect the varistor to the load side of the fuse block. The varistor provides voltage surge protection for the reset module.
- e) Route the two orange wires from the reset module to the load side of the fuse block. Use the fiberglass sleeving to protect the wires.

#### 12) Test the reset module as follows:

- a) Manually trip the actuator.
- b) Temporarily apply 208, 240 or 480 Volt, 50/60 Hz to the two taped breaker poles.

The reset module will reset the actuator.

IMPORTANT:

Use normal safety precautions when energizing the breaker poles.

Make sure the BUSS KTK5 fuses are in the circuit.

Do not attempt to use 120 Volt 50/60 Hz.

Do not use DC with the reset module.