PEAKTRONICS

RCT-102

Repeat Cycle Timer

The Peaktronics RCT-102 Repeat Cycle Timer is a compact module that extends the operating time of AC actuators by pulsing the motor on and off. Extending the cycle time of an actuator can avoid problems associated with system thermodynamic instabilities or rapidly changing pressures.

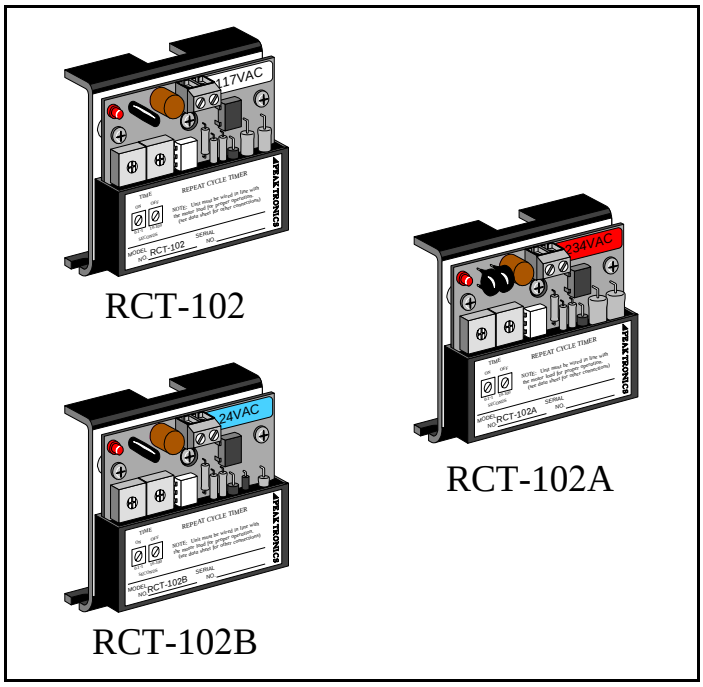
The RCT-102 has only two connections and can be easily added to new or existing installations. The unit is merely connected in-line with one of the motor wires, as shown in the wiring diagram below, using the two position screw terminal on the unit. An on-board replaceable fuse limits the load current to 6.3A at 60°C.

Connecting an RCT-102 in series with the *open* wire will allow the unit to only control the open cycle time. Likewise, the unit can be connected to the *close* wire to control the close cycle only. Using two units connected to both the *open* and *close* wires allows the open and close cycles to be controlled independently. A single RCT-102 unit could be connected to the motor *neutral* wire that would control both open and close cycles equally.

The ON time is adjustable from 0.1 to 1 second, and the OFF time is adjustable from 10 to 100 seconds. The on-board LED indicator aids in setting the ON/OFF times by turning on and off with the load.

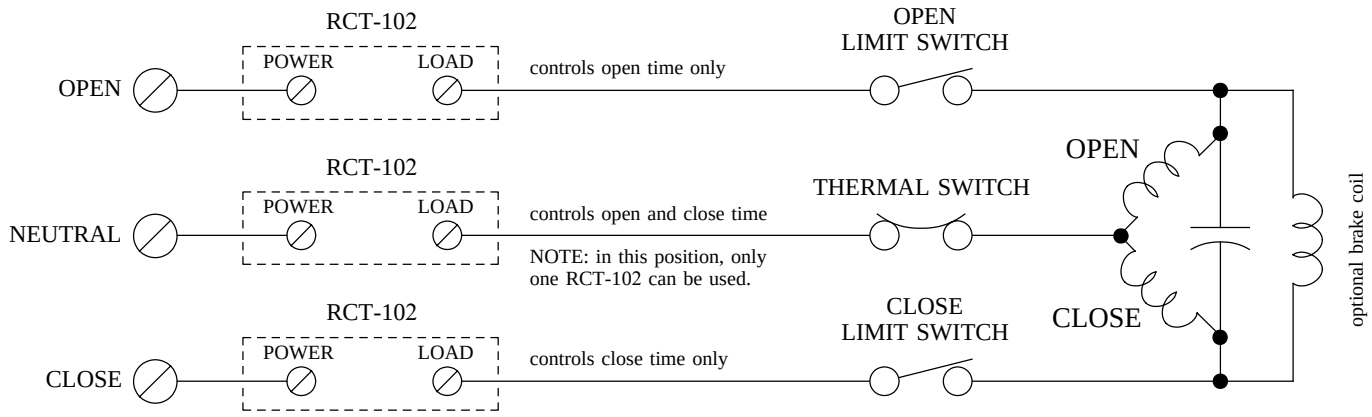
The unit can be used with Peaktronics AMC-100/101/103AC motor controllers in process control applications, or it can be used as a stand alone unit in ON/OFF applications. The unit draws power from a low trickle current through the motor, allowing it to be used with actuators that have an optional brake coil.

The encapsulated enclosure with wrap around bracket makes it rugged and easy to mount to square or round body motors using the two provided tie wraps. Other mounting configurations are possible using an MTB-102 mounting bracket.

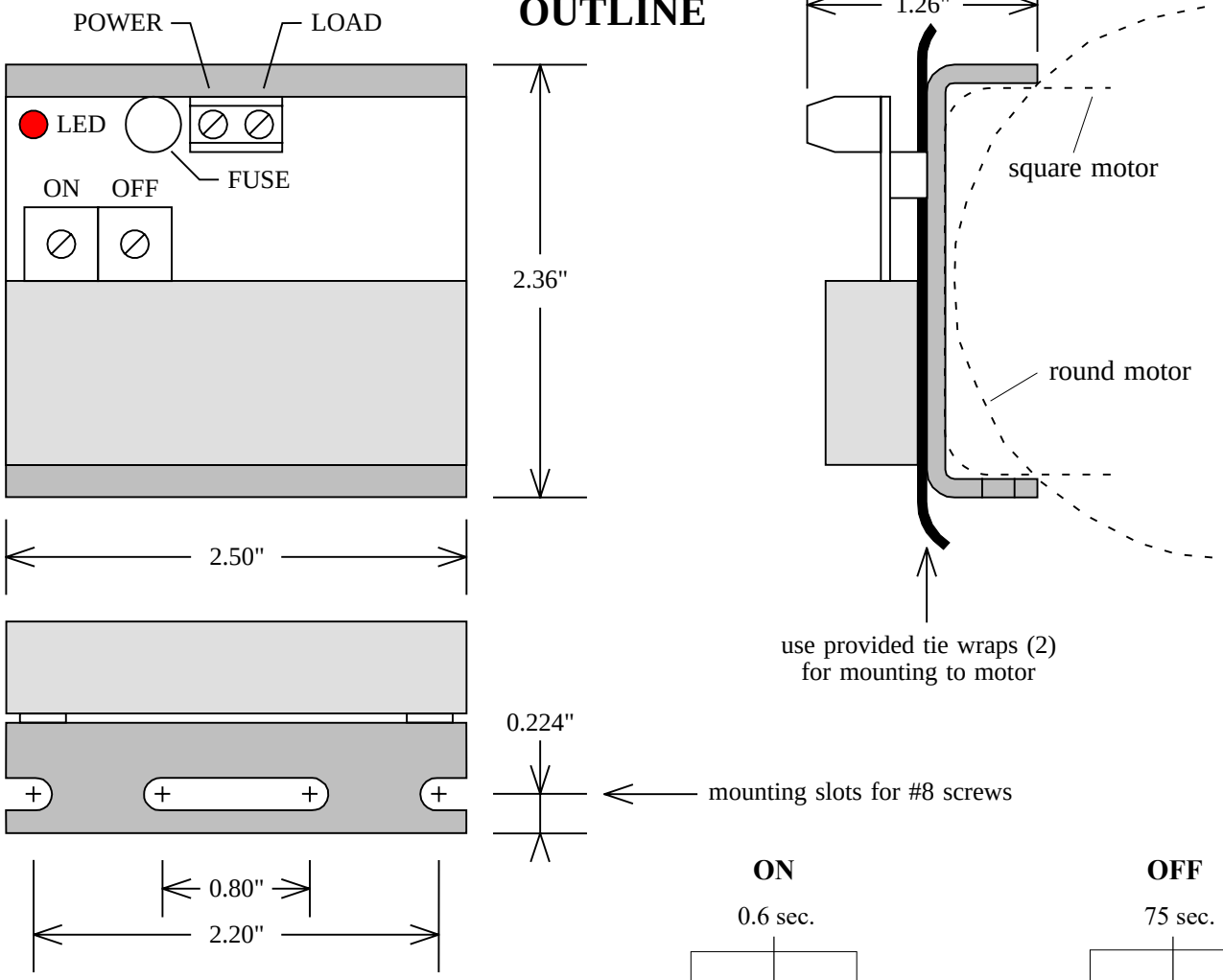


The unit is available in three AC voltage versions:

RCT-102	117VAC	±10%	50/60 Hz
RCT-102A	234VAC	±10%	50/60 Hz
RCT-102B	24VAC	±10%	50/60 Hz



OUTLINE

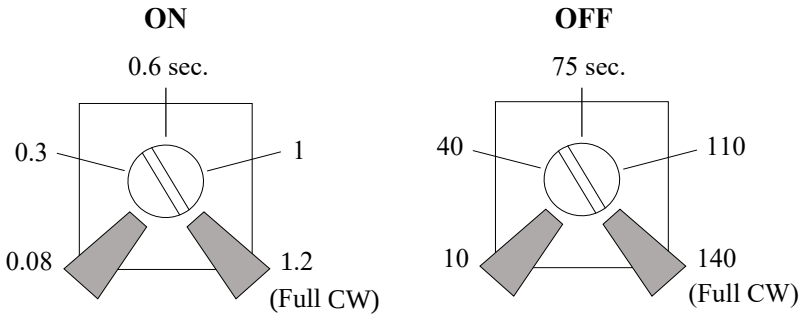


RCT-102 Adjustments

Actuator Cycle Time	RCT-102 "ON" Time	Approximate Steps
* 2 seconds	0.1 seconds	20 steps
* 5 seconds	0.1 seconds	50 steps
△ 10 seconds	0.2 seconds	50 steps
△ 15 seconds	0.3 seconds	50 steps
20 seconds	0.4 seconds	50 steps
30 seconds	0.6 seconds	50 steps
45 seconds	0.9 seconds	50 steps
60 seconds	1 second	60 steps
90 seconds	1 second	90 steps
120 seconds	1 second	120 steps

∗ Motor brake required.

△ May require motor brake depending on actuator load.



1) Using the table, select the actuator cycle time closest to the actuator cycle time being used, then set the "ON" time adjustment according to the table.

2) By knowing the customer's actuator cycle time, the following formula can be applied:

I.E. Customer's cycle time = 60 minutes (convert minutes to seconds)

60 seconds x 60 =3600 seconds
3600-15 seconds of actuator cycle time is 3585 seconds
3585÷50 steps = 71.7 seconds of "OFF" time

3) Set the "OFF" time to 71.7 seconds while recording the starting time. Then, verify the actuator cycle time from one end position to the other. Adjust the "OFF" time up or down to meet the customer requirements.
Note: Actuator cycle times may vary due to different loads and motor brakes, so having the actuator loaded while adjusting the "OFF" time will best meet the customer's application requirements.