

# FAQ for the CMR-3224-ISO



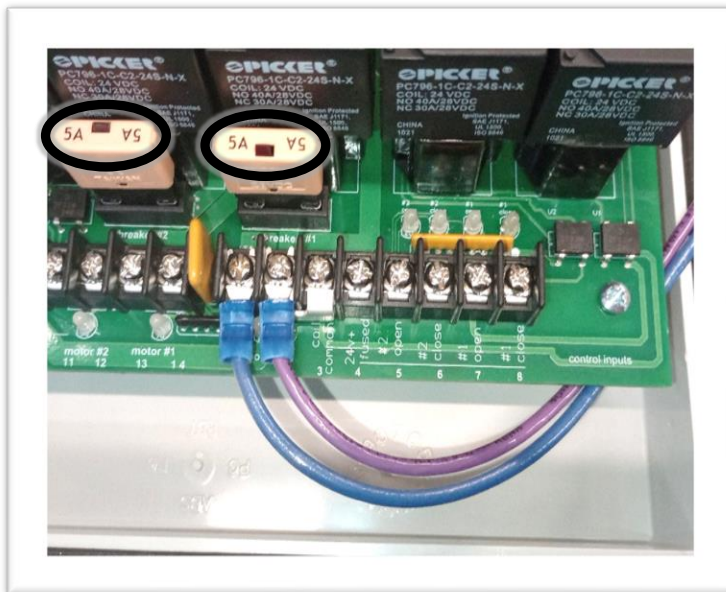
## WHAT DOES THE UNIT DO?

Provides a powered, overridable, fused and indicator interface to most any control system.

- Provides high current, reversing DC to the motors.
- Protects the motor. Comes with 5, 7.5 and 10 amp circuit breakers per motor/channel
- Easily test and manually override control system out near the motor.
- Easy to understand wiring. Indicator lights for each signal input. Indicator leds for each motor direction output
- Allows infinitely large zones. Connect control signals together to make 1 large system from a single curtain/vent signal.

## THE MOTORS DO NOT RUN

1. Check if a individual motor circuit breaker is tripped. If the tab is protruding, it is tripped. , push in to reset.
2. Check if a circuit breaker on bottom of the box is tripped. If tab is protruding, push in to reset.



Inside the box, individual motor circuit breakers



Bottom of box, transformer protection circuit breakers

3. Can you run it manually?

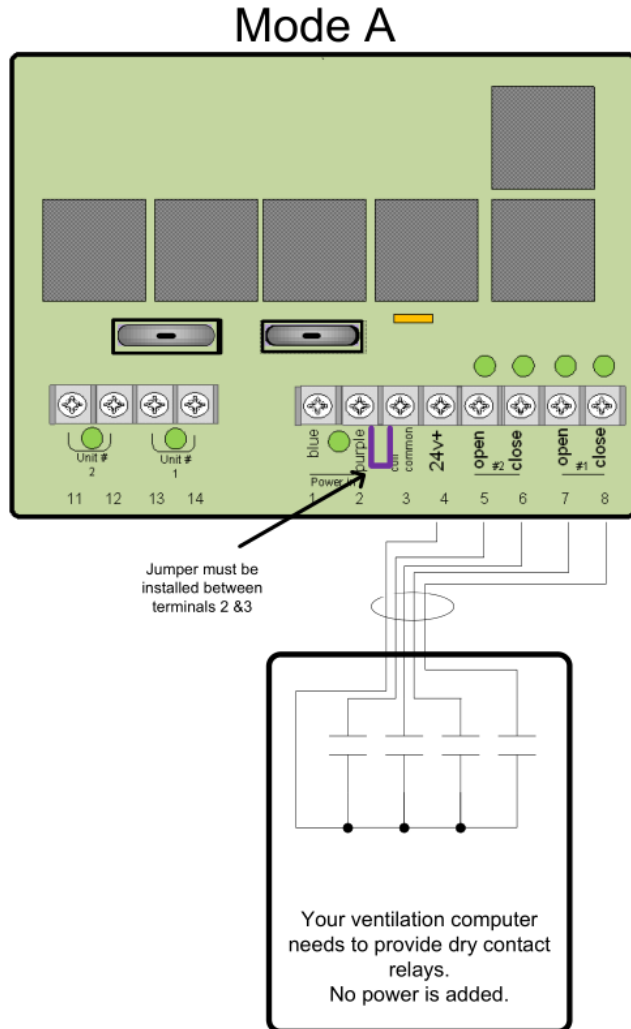
Use toggle switches to manually open and close the motor. Check LED. The LED should illuminate Green or Red depending on the direction. If it doesn't illuminate, check the circuit breakers.



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4. Motors don't run in automatic. Check Led above control signal inputs. If those are not illuminating whenever the vent control sends a signal, there is issue with the signal wiring. Most likely the common wire is misplaced.
5. Mode A wiring is the most common see below



## HOW DO I WIRE THE BOX?

1. **Power:** Supply the box with 120 or 240 volts
2. **Motor connection:** Wire your 24 vdc motors directly to the box. Important: Wire length from motor to the box is limited to approx. 200ft. Rule of thumb: 12 awg wire has a max distance of 200 ft.
3. **Control connection:** You provide Dry contacts. Control signals are powered by the CMR-3224's common terminal. Your ventilation computer needs to provide dry contacts capable of switching 24v, .5amp. Use 18 awg wire 5 conductor wire to connect the CMR to your ventilation computer.

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## WHY DOES A CIRCUIT BREAKER KEEP TRIPPING?

A individual motor breaker tripped	<ul style="list-style-type: none"><li>• Motor load is to high</li><li>• 2 motors connected to same circuit</li><li>• Circuit breaker sized too small for your curtain</li></ul>
Is it a bottom of the box circuit breaker?	<ul style="list-style-type: none"><li>• Too many motors where activated at the same time, exceeding total output of transformer .</li><li>• If the left breaker trips as fast as you can reset it, the converter block may have failed. Contact us for a replacement convertor block.</li></ul>
Check the wires out at the motor	<ul style="list-style-type: none"><li>• Motors wires got rubbed too much or tangled into the curtain .</li></ul>

## NOTES ABOUT THE INDIVIDUAL MOTOR CIRCUIT BREAKERS:

The individual motor circuit breakers are for your motor / fabric protection. You can put any size in you want and the CMR will still be ok when something goes wrong. However your curtain might not.

A 50ft versus a 200 ft curtain uses less amps with the same motor. Be aware it's not a exact science. Ideally you use the smallest circuit breaker that works year around. This way, it stops when it goes harder than normal. Be aware for dairy applications, the motor will use more amps in the winter. We have seen double the amps at -2°F compared to summer amps.

You can connect 2 motors to the same circuit under some conditions. Both motors must be driving smaller curtains. For this you may need use a larger individual motor circuit breaker.

Several individual motor circuit breakers sizes are available. 5 ,7.5 and 10 amp are available for the 300 watt units. 15 amp is also available for the 600 watt units. Alternately, the individual motor circuit breakers are replaceable with standard automotive fuses.