

# CMD-150 Curtain/ Vent Motor



With Wall Mount

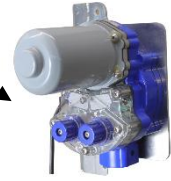


With Creeper and cordguide



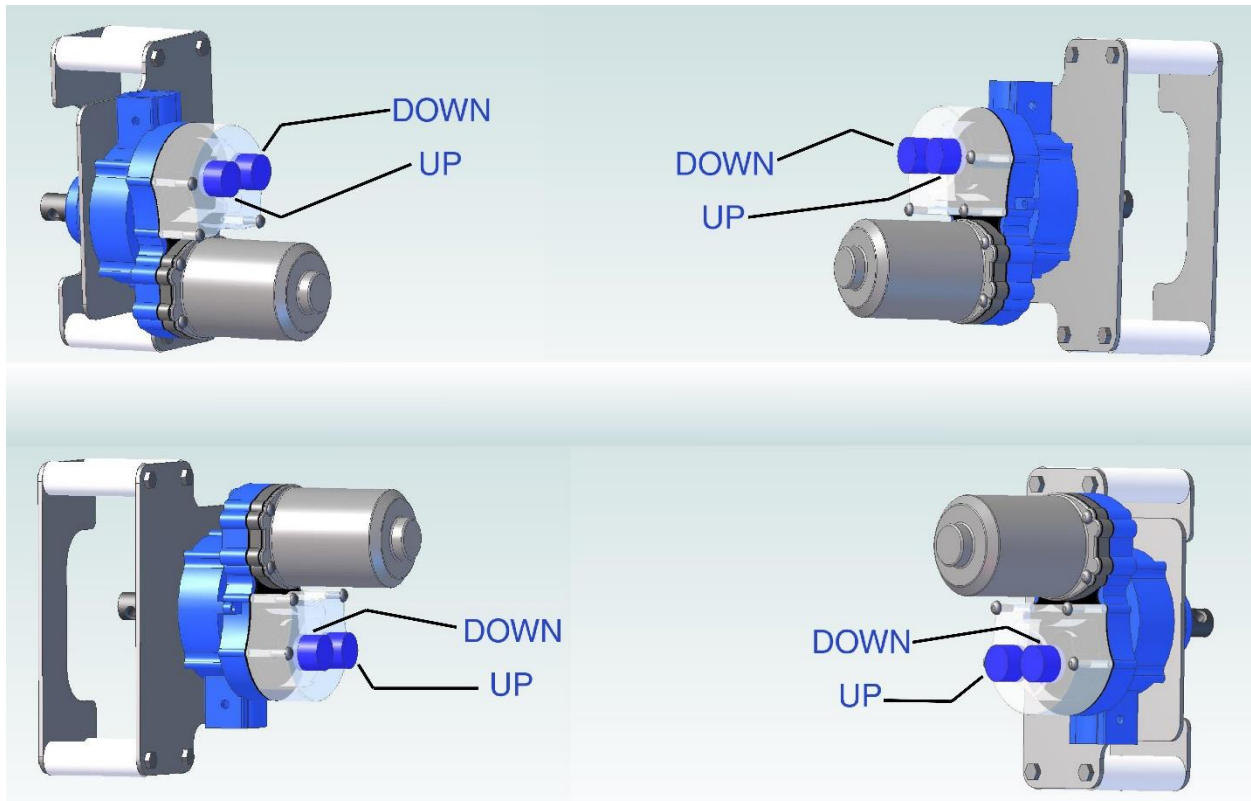
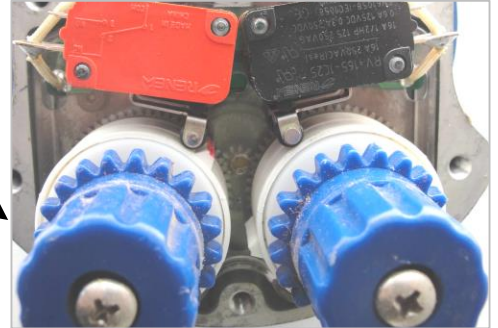
What keeps the motor from rolling too far?

The answer is the limit switches. There is 2 of them. A upper and lower Knob.



Can I change where the motor stops?

Yes. The particular position of the limit knobs sets the stopping point



How do I know which knob is for the upper limit position?

It varies depending on the installation. See above,

There are 2 knobs, what does than mean?

A knob only stops either the upper or lower position. It takes both to stop at each end.

How do I adjust the upper limit

Determine which knob stops the motor from rolling upwards.

Adjust the knob in small increments. Watch the stopping point

Run the motor to test the position.

Repeat until motor is at desired position. This process is much easier with a 2nd person.

Tighten the center screw before adjusting the other knob.

I can't turn the knob, whats wrong?

The screw in the center of the knob is needs to be loosened slightly.

My motor looses position, in a very short time.

The screw in center of limit knob needs to be hand screwdriver tight. If its slightly loose the knob will move on it own.

My rollup fabric has a big lump in it and motor wraps up too far. Fabric is tearing and everything is tight. Whats wrong?

The problem is fabric isn't rolling evenly. Bad rolling gets to the top too soon.

The motor doesn't know its not winding up poorly. It goes the same rotation count regardless. Motor limits are dumb. They only know total rotations.

Unroll the fabric, pull it taunt to remove all wrinkles. Try again until it rolls evenly.

The motor doesn't go at all. Even when its connected to a controller

Use a voltmeter, check if there is 24v at the end of the cord. Test voltage with control opening and closing.

Can I connect the CMD-115 directly to a outlet?

No, you will burn out the motor ad void warranty. Its a 24vdc device

Does gearbox orientation matter?

Its not a absolute

like some of the other models

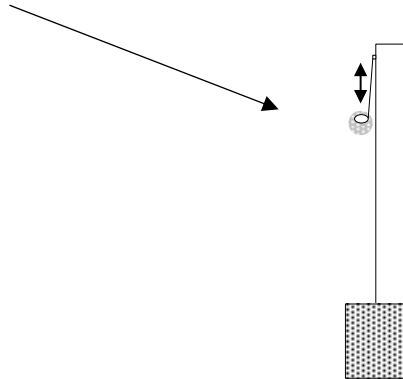
How do I orient the CMD-115?

Install with motor at the bottom



### How close can I set my top position

Don't set it too close. It will roll differently from summer to winter, You want about 6 inch room for error.



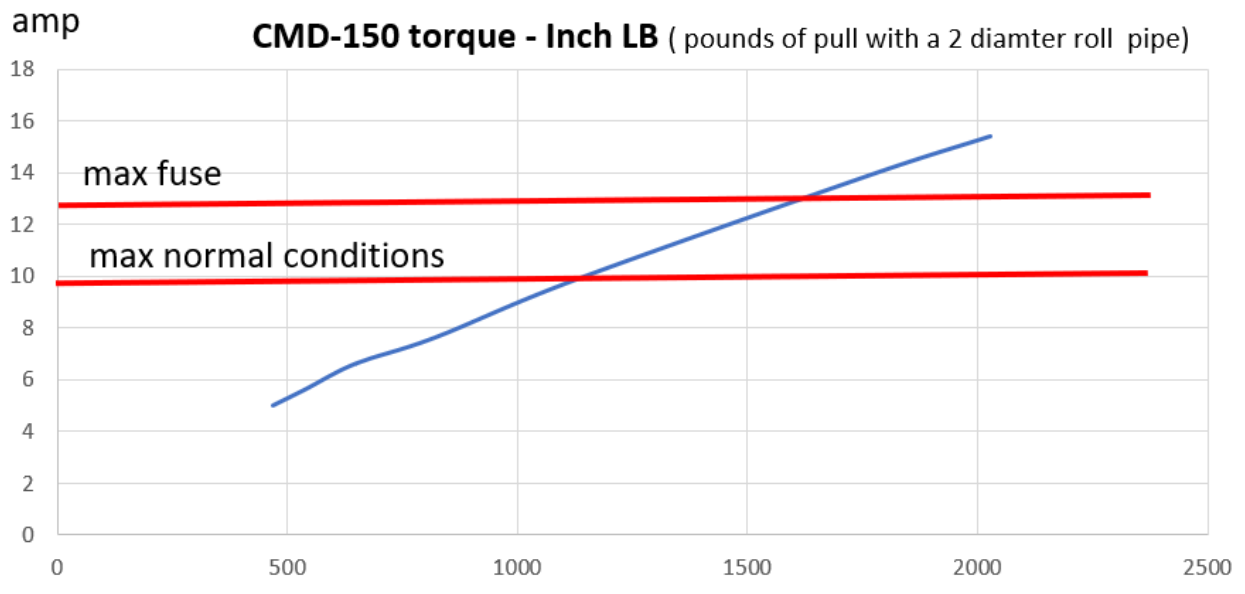
### Specifications

Rated amps	12.5
Rated volts	24vdc
RPM	3
Max rotations	38
Weight without accessories	12 lb
Output shaft size	0.87"
Max circuit breaker size	10 amp -15*
Max torque	1700 inlb

### Motor torque

The CMD-150 max torque is approx. 1700 inlb. The largest circuit breaker/fuse we recommend is 10amps. 15amp can be used but its possible to break things before it trips.

Under normal conditions, keep the load to 10 amps or less , so there is some reserve for unusual conditions.



The chart above shows amps versus torque. Above 12.5 amps, your load is too big.

#### How big of a curtain can I roll with a CMD-150

Our experience is, this torque is a nominally 200ft of bottom rolling curtain. With a 2inch roll pipe and no ice. However the CMD-150 is a single shaft motor. A dual shaft motor will distribute the weight better on the fabric. Curtain fabric lasts the longest when the motor is supported on both sides.

#### Bottom rolling versus middle rolling curtain

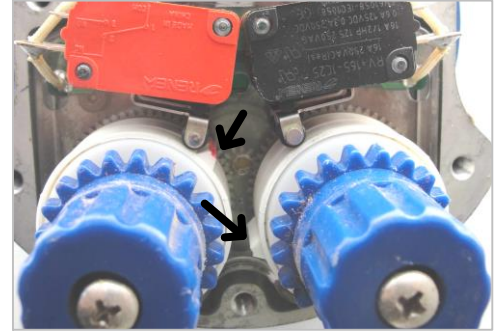
We recommend rolling curtains from the bottom.

Center rolling curtains turn 2 or 3x harder. Take way more torque. Especially if wind is blowing curtain against grippy bird wire.

## How the limit switches work

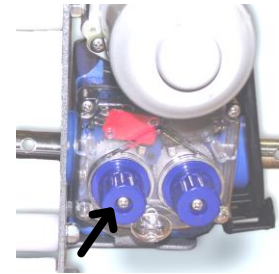
The cams slowly rotate as the gearbox shaft turns. When a cam pushes the switch, the motor will stop.

Note: Run the motor, to figure out which knob is for Up and which knob is for Down.



## Adjusting the limit switches

You figured out which knob to adjust. The center stainless screw locks the knob. Use your phillips screwdriver to loosen it slightly.



Adjust the knob in small increments. Run the motor to test the position. Repeat until motor is at desired position. This process is much easier with a 2<sup>nd</sup> person. Tighten the screw before adjusting the other knob .



At the top, leave minimum of 2-4" of unwrapped curtain. Cold weather or debris will cause it to wrap up bulkier, and use the 2-4inches of previously unwrapped fabric

