# CMD-180 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



#### 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 know which knob is for the upper limit position?

The problem is it varies depending on the installation. It takes experimentation to figure it out for your installation.

#### 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 it 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-180 directly to a outlet?

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

#### Does gearbox orientation matter?

Yes installed orientation is very important.

#### Why does orientation matter?

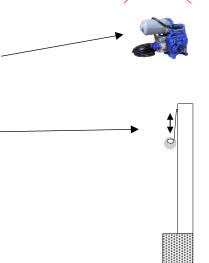
Because it will ruin motor, if installed upside-down or sideways

#### How do I orient the CMD-180?

Install with motor at the top. Always motor above the limit switches.

## 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.

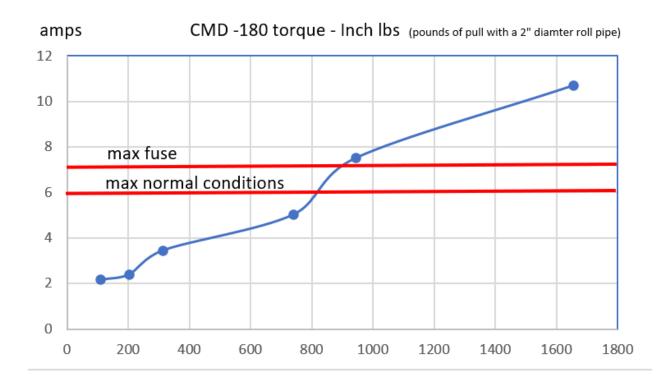


#### **Specifications**

Rated amps	6
Rated volts	24vdc
RPM	3
Max rotations	38
Weight without accessories	14 lb
Output shaft size	(2) 0.78"
Max circuit breaker size	7.5 amp
Max torque	800 inlb

### Motor torque

The CMD-180 max torque is approx. 800 inlb. The largest circuit breaker/fuse we recommend is 7.5 amps. Under normal conditions, keep the load to 6 amps or less, so there is some reserve for unusual conditions.



The chart above shows amps versus torque. Above 6 amps, your load is too big.

#### How big of a curtain can I roll with a CMD-180

Our experience is, this torque is a nominally 200ft of <u>bottom rolling</u> curtain. With a 2inch roll pipe and no ice.

#### 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.



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  $2^{nd}$  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

