



***“If you’re not prepared for the worst, you won’t be able to sustain the best.”***

A few key takeaways to keep in mind...

Don’t underestimate the potential risks

Take advantage of high-temperature cut-off technology

Being proactive and planning ahead is an investment

## **DO YOU HAVE A BACK-UP PLAN IN THE EVENT OF A CATASTROPHE?**

There’s an undoubtedly blissful feeling when your facility’s production level is good, the yield is successful, and everything is running smoothly, but a streak of good fortune may result in complacency where you’re not carefully looking after the most important parts of your operation.

In the ever-changing cannabis industry, with so many potentially indeterminate variables looming just beyond the horizon, it’s all too likely that this period is simply the calm before the storm. This lack of preparedness could prove devastatingly expensive when disaster strikes.

However, pre-emptively implementing an effective back-up plan to act as a safeguard – with procedures and reserve equipment – can be pivotal in preventing a catastrophic facility shutdown and costly crop failure.

Reviewing the potential hazards at play can best illustrate the full extent of difference that this equipment and these protocols can make in a facility, as they can positively affect the outcome of a situation by providing solutions.

## **KNOWING THE FACTORS**

Depending on the type of bulbs and systems used in your facility, you may know that Excel Air Systems’ 5-ton **Evolution Series** units are rated to a cooling capacity of 80 °F at 15 kW, simultaneously maintaining temperature, humidity, and air quality.

While they’re designed and built in North America with industry-leading components of the highest caliber, even the **Evolution Series** is not totally impervious to any problems that may arise, especially unexpectedly.

Despite the critical threat that unforeseen factors pose, when faced with issues like tripped breaker panels, sudden electrical surges, emergency voltage drops, an object lodged into the fan – or even in if the system itself stops working – the situation does not have to end in crop failure.

In the event that your facility room reaches excessive temperatures, there are ways to reduce the level of heat by bringing in cool air or evacuating the space.



***Evolution Series***



***Closely monitor data with a high-temperature thermometer sensor.***

## **IMPLEMENTING HIGH-TEMPERATURE CUT-OUT TECHNOLOGY**

What's most essentially recommended for facilities as the solid foundation on which to lay a back-up plan is setting up a thermometer sensor with some form of high-temperature cut-out technology, used in controlled conjunction with the system.

With precision monitoring indicators, if the thermometer sensor detects any sort of temperature irregularity, the system is adjusted to account and compensate for this increase, and the data is recorded. This can then send notifications to the device or relay to shut everything down.

Additionally, on a non-emergency, day-to-day basis, temperature sensors also introduce increased accountability measures within facilities.



***Take immediate corrective action with a digital electric ballast.***

## **USING ELECTRICAL BALLASTS FOR BACK-UP**

A series of built-in digital electrical ballasts can also be installed and programmed for specific settings, so that when a certain precise temperature hits, a direct response is instantly enacted, such as decreasing heat and light output from lamps, dimming them.

Naturally, long-term reduced light exposure would have a serious effect on the plants, but while temporarily dimming the lights or alternating which ones are powered until the problem is fixed, the difference is nearly negligible.

More importantly, the alternative is unthinkable, which is why these fail-safe protocols should be enacted to play a vital role in significantly reducing the chance of any product damage occurring.

The electrical ballasts' high-temperature cut-outs run directly to their actual power breaker panel, limiting the amount of current running through your facility's electrical circuit and allowing them to cut the power in the event of the temperature hitting excessive levels, thereby effectively preventing serious damage from sudden power surges.



**Get more than just  
a breath of fresh air  
with motorized dampers.**

## BRINGING COOLER AIR INTO THE EQUATION

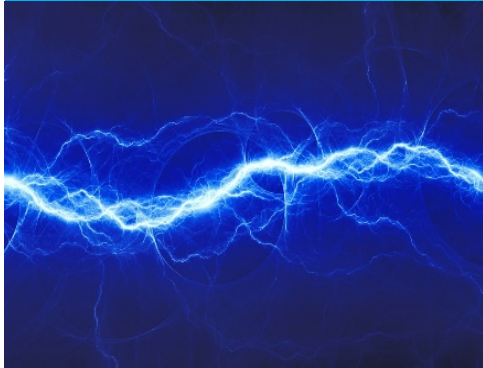
With a room overheating, it's important, if possible, to bring in cooler air via a motorized damper that is connected to the thermostat or controller on the wall. The thermostat is set with your highest possible temperature threshold, and, if room temperature exceeds that desire maximum temperature, the high-temperature cut-out technology sends a signal to the damper, driving the damper motor open.

This then allows air to move freely in and out of the space, while circulating cooler air from an adjacent space that isn't overheating.

Another viable option is the combination with an inline fan, which turns on and evacuates the air upon reaching a specific programmed temperature.

These two technologies actually work in conjunction with one another as a hybrid solution, where a damper opens in a sealed off room and the fan turns on. This assistance from the fan proves even more effective than just the passive opening of the air drifting in and out, which is not guaranteed to evacuate the air space in any set amount of time.

It's not a matter of  
if something happens,  
it's a matter of when.



Crop failure is just  
simply not an option.

## PLANNING AHEAD WITH EXCEL AIR SYSTEMS

Altogether, having these plans in place lays the groundwork for a solid defense against a considerable level of threats in the event of system malfunction, so it's important to make sure all your equipment is operating to the best of its ability.

With catastrophe always a possibility, it's only a matter of time. We've unfortunately often encountered customers in dire need of air conditioning or some type of environmental control system when it's already too late. When you're running a business, you can't afford the total loss of your crops, and even wilted crops are worth very little.

With that in mind, we encourage everyone to be proactive and plan ahead. If you're considering a facility equipment upgrade, there's no better time than the present to implement these safeguarding measures. Having a back-up plan constitutes more than just owning a certain a piece of equipment or an innovative gadget – it's the security and assurance of protecting your investment throughout the cycle.

At Excel Air Systems, with our knowledge, expertise, technology, and vast array of resources, we always have the solution. We're here to provide you with the necessary response equipment and educate you on the crucial counteractive procedural actions to be taken immediately in these mission critical situations.

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LIVE CHAT



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