

# Contractors gain accuracy, save time with Electronic Unit Controller

## Summary

Emerson Electronic Unit Controllers (EUC) for condensing units can be set in less than one minute and will maintain low-pressure control more accurately than traditional mechanical controls over the life of the system. Assured accuracy and troubleshooting diagnostics reduce headaches for service technicians by decreasing the number of costly callbacks and time-intensive repairs.

## Application

Various commercial refrigeration systems, particularly for walk-in coolers and freezers

## Customer

Small-to-medium sized foodservice operation

## Challenge

Mechanical control devices for condensing units have been employed in commercial refrigeration applications for more than a half-century. Yet, they are typically time-consuming to install and adjust, and tend to lose setting accuracy over time — leading to poor temperature control, loss of efficiency and potential system failure. Broken cap tubes also present potential refrigerant leak paths and are a common reliability issue which can lead to sudden equipment downtime and expensive repair bills. Additionally, each callback to readjust an improperly set mechanical pressure switch can result in hundreds or thousands of dollars of lost revenue for maintenance contractors. While initially dependable, mechanical controls provide little else in terms of overall system reliability, predictive and preventive maintenance information or control functionality.



*“The Emerson Electronic Unit Controller is simple, trustworthy and easy to use. It has money- and time-saving benefits for both the customer and contractor, while offering superior condensing unit protection.”*

Ben Kungl, Oxford Energy Solutions  
Woodstock, Ontario

## Solution

New electronic controllers offer customers and contractors better control functions, diagnostics and system protection, along with time savings, all in one compact package. They are simple and easy to use while significantly improving compressor and system reliability.

The Emerson EUC saves contractors time and money with:

- Quick and accurate set up
- Faster system troubleshooting and more timely service response
- Reduced callbacks

For operators, Emerson's EUC saves time and money with:

- Refrigeration system shutdown protection to prevent costly compressor failure and related repairs
- Elimination of lost product expense
- Diagnostic troubleshooting to help prevent routine problems from becoming unexpected capital expenses

The Emerson EUC replaces the traditional mechanical low-pressure control switch with a highly accurate and reliable electronic controller and transducer. In addition to precise control, Emerson's EUC also provides built-in safety shutdowns and warns of developing problem conditions. The EUC records alarm occurrences for fundamental system service diagnostics and protection.



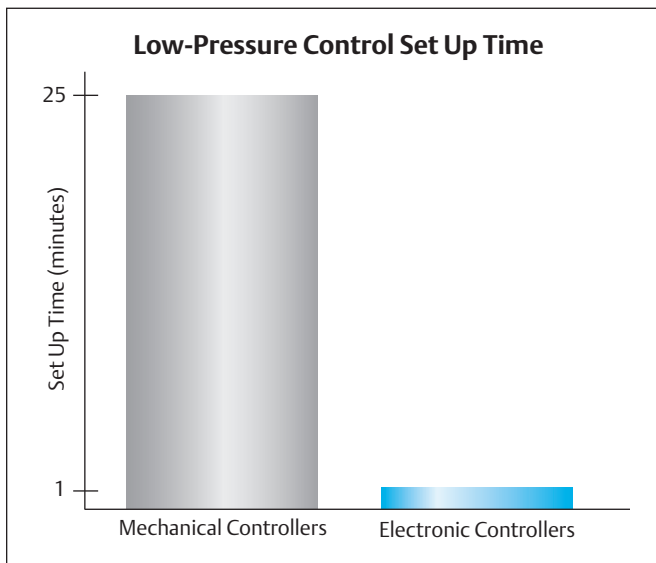
### Reducing callbacks

In a recent industry trade journal<sup>1</sup>, an HVACR contractor in the Midwest set out to determine the true cost of callbacks on his business.

With the help of an internal audit, the contractor discovered that the callbacks negatively affected every part of the business. From direct labor and equipment expenses to "opportunity costs," the contractor ascertained that the total cost for a callback averaged almost \$3,000.

Solutions such as the Electronic Unit Controller will significantly impact a contractor's operations by reducing the number and duration of unplanned service calls.

<sup>1</sup> "Cutting Out Callbacks," RSES Journal, April 2010. pg. 24



### Resources

Learn more about the new Emerson EUC at:  
[EmersonClimate.com/electronicunitcontroller](http://EmersonClimate.com/electronicunitcontroller)

# EmersonClimate.com