



# Economizers: smart cooling that saves money

## What is an economizer?

An economizer is a component of your HVAC system that uses cool outside air to help regulate indoor temperatures, reducing the need for mechanical cooling and lowering energy use. Your system may already have a built-in economizer, or it may be added on for additional benefits.

## Benefits of an economizer

- 1** Save energy: cut cooling energy use by up to 30%
- 2** Lower costs: reduce utility bills with less AC usage
- 3** Extend equipment life: less wear and tear on HVAC systems
- 4** Improve environmental impact: reduces your carbon footprint
- 5** Quick return on investment (ROI): typical payback is 1.5-5 years, depending on climate and building type

## How economizers work

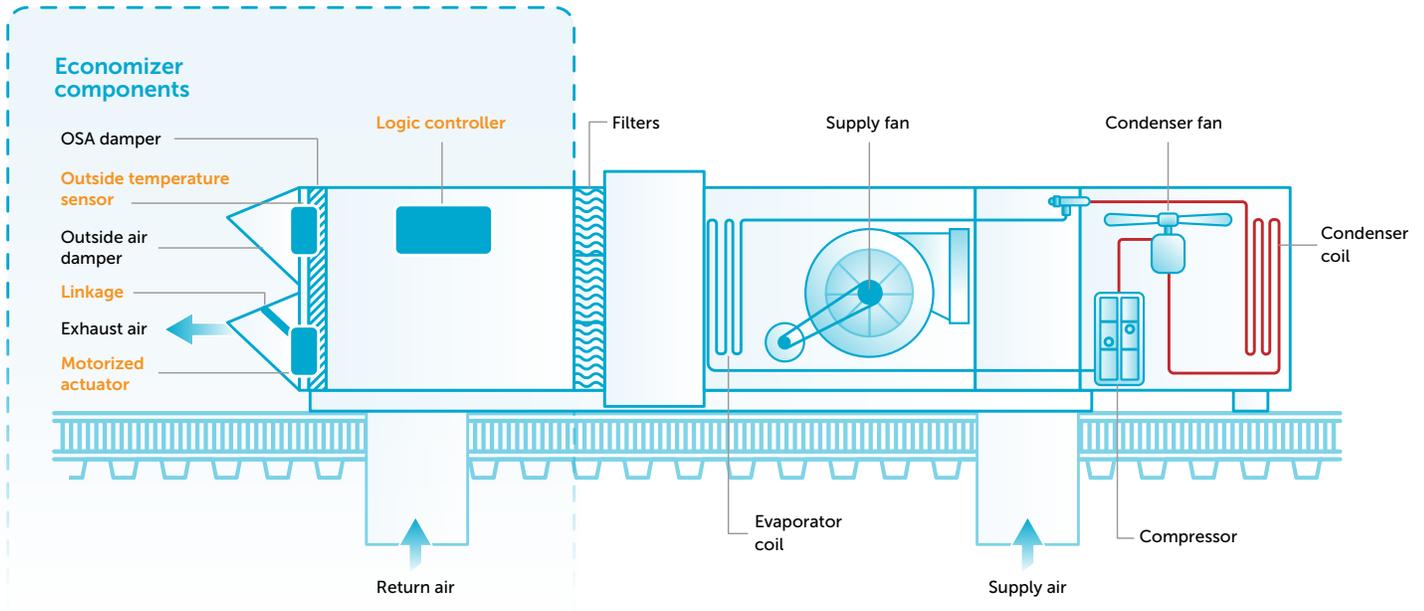
Every component of an economizer plays a critical role in managing airflow and ensuring the system operates efficiently. A few key parts of an economizer include:

- Outdoor damper: controls fresh air intake
- Indoor damper: regulates recirculated air (return air)
- Barometric relief damper: releases excess indoor air pressure safely
- Actuator (motor): moves dampers based on sensor input
- Control logic and sensors: monitor temperature and humidity for optimal performance

## Maintenance matters

Each economizer component is vital to system efficiency. If one fails, performance – and your energy and cost savings – suffers. Regular maintenance of all parts ensures optimal operation and maximum savings. Common issues can include:

- Stuck or dirty dampers
- Faulty sensors giving incorrect readings
- Broken actuators
- Malfunctioning control boards
- Incorrect damper settings affecting ventilation



## Is an economizer right for your building?

Economizers are ideal for:

- Buildings in cooler or mixed climates
- Facilities with large cooling loads (e.g., offices, schools, retail)
- Businesses focused on energy efficiency and cost savings

## Next steps

Talk to your HVAC professional about:

- Inspecting your current system
- Installing an economizer if you don't have one
- Setting up a regular maintenance schedule
- Integrating economizers with DCV and VFDs for maximum savings
- Exploring rebates and incentives for energy-efficient upgrades

## About Efficiency Works

Efficiency Works is a regional utility collaboration that provides guidance and resources to enable customers to use energy effectively, work toward a noncarbon energy future and build strong, resilient communities for customers served by Platte River Power Authority and its owner communities of Estes Park, Fort Collins, Longmont and Loveland.

