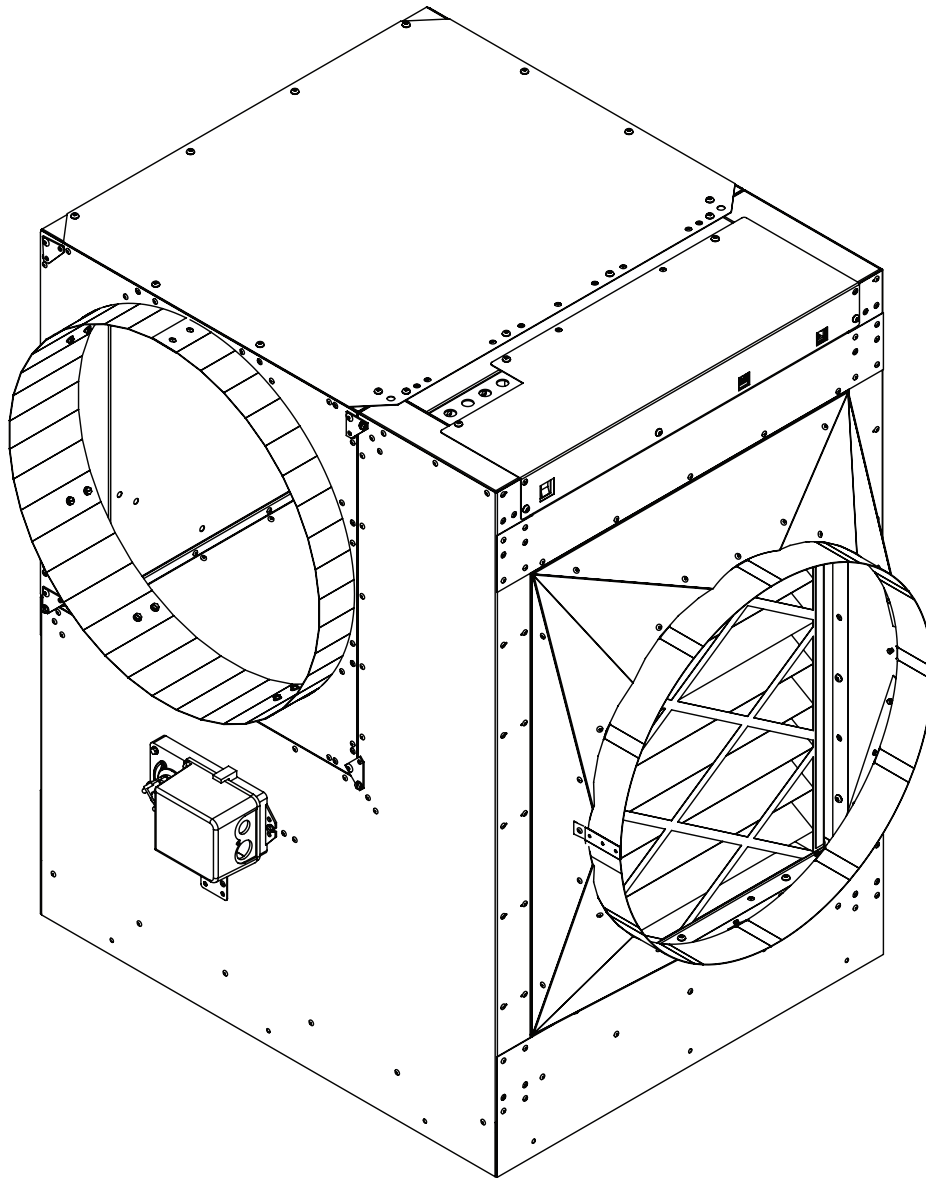




Residential Economizer



Air Conditioning is both expensive and often necessary. The best way of cooling a home without air conditioning is to ventilate it with cooler outdoor air using a whole house fan. Unfortunately, whole house fans are not ideal for every home: those with allergies prefer not to allow unfiltered air into the home, and in hot climates it is often not cool enough outside for ventilation until after the home's occupants have gone to sleep.

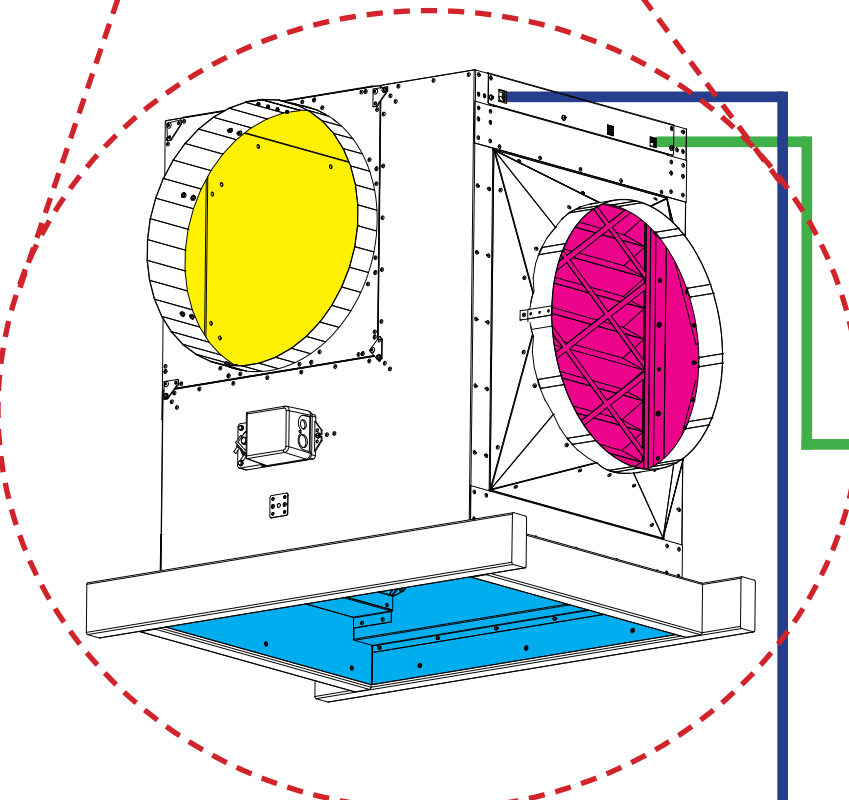
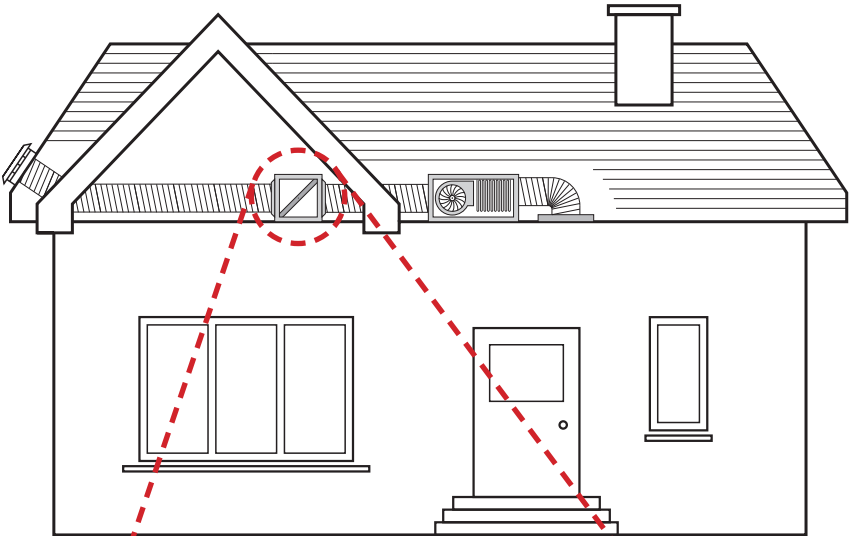
The AirScape residential economizer provides the cost-saving benefits of ventilation cooling to those homes for which a whole house fan might not be well-suited. Designed to install over a central return and connect to the home's central air handler and to an outdoor air inlet, the economizer reduces the load on the air conditioner by supplying it with filtered outdoor air whenever home's thermostat calls for cooling and it is cooler outdoors than in.




Economizer Installation

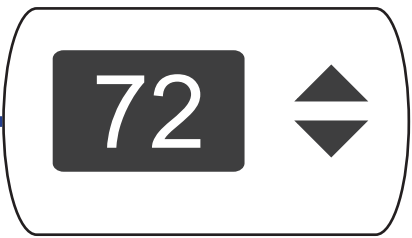
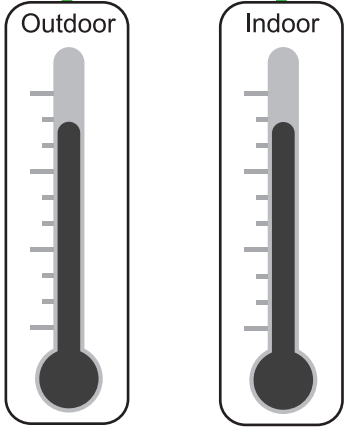
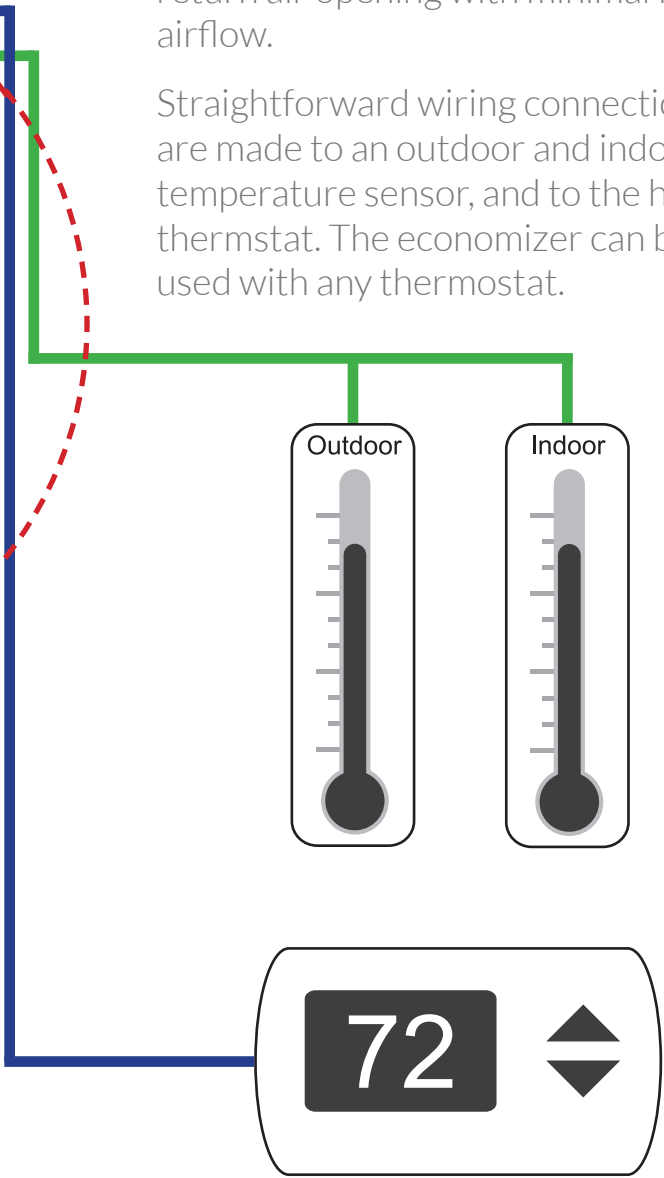
The economizer's straightforward, packaged design makes installation a breeze. The unit, which fits between 24" on-center framing, is positioned over the home's central air return and "upstream" of the air handler and cooling coil.

Ductwork is used to connect it to the air handler and to an outdoor air inlet. Flanges sized for 18" diameter flex-duct have been incorporated into the design of the economizer, and a cube-core grille is provided to cover the return air opening with minimal loss of airflow.

Straightforward wiring connections are made to an outdoor and indoor temperature sensor, and to the home's thermostat. The economizer can be used with any thermostat.



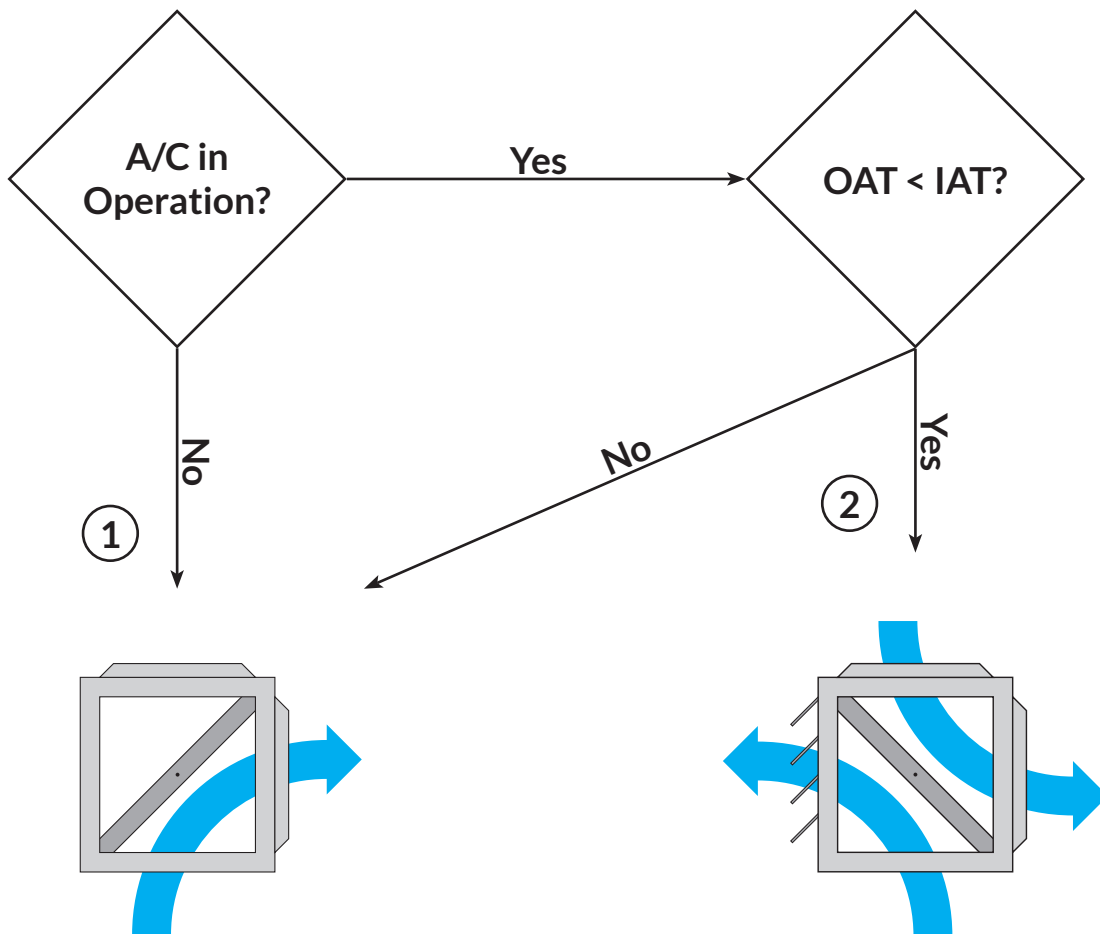
-  Outdoor Air Inlet
-  Supply to Air Handler
-  Return from Indoors



Economizer Operation

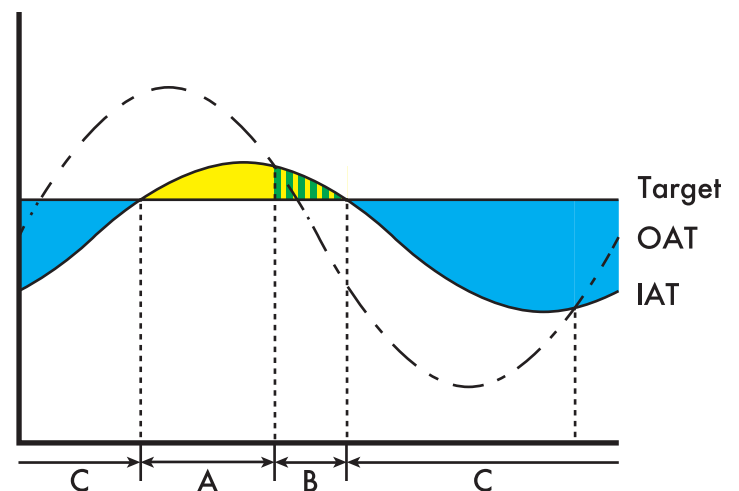
When not in use, the economizer remains closed. In this position return air is drawn into the central HVAC system through the central return. The unit's R-8 insulation prevents heat loss or gain, and industrial-grade actuator maintains an airtight seal to keep unconditioned air out of the home.

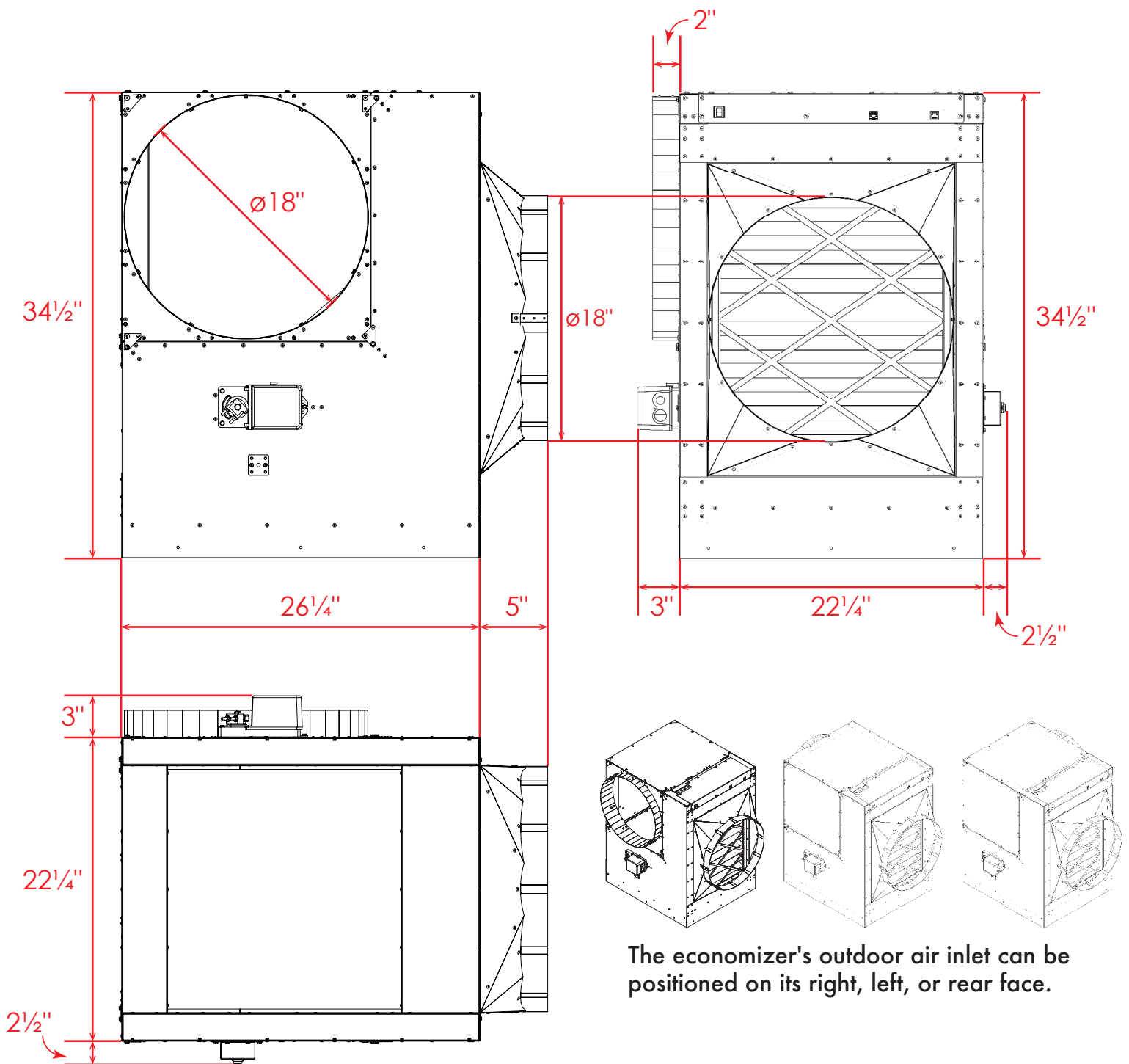
The economizer opens whenever the home's air conditioner is in operation and it is cooler outdoors than in. In the open position, cooler outdoor air is drawn into the air conditioner, improving its efficiency. A MERV-8 filter is integrated into the body of the economizer to ensure that only clean air enters the home, as is a barometric relief damper to allow indoor air to escape into the attic via the central return.



1. Economizer remains closed whenever the AC is *not* in operation or it is hotter outside than in (periods "A" & "C" at right).
2. The unit automatically opens whenever the *both* the A/C is running *and* it is cooler outside than indoors (period "B" at right).

- Air Conditioner Cooling
- A/C + Economizer Cooling
- No Cooling Required





The economizer's outdoor air inlet can be positioned on its right, left, or rear face.

Economizer Features

- Designed and manufactured in the USA! Ultra-low leakage, double-wall aluminum construction with R-8 EPS insulation; no further insulation required. Industrial-grade actuator and electronics for long-term reliability.
- Barometric relief damper, mounting flanges for $\text{Ø}18''$ duct connections, and an easily-accessed filter bay—sized to accept any standard 18"× 24"× 2" (nominal) filter cassette—have all been conveniently integrated into the design of the unit.
- MERV-8 filter included with every unit.
- Easy Installation! Fits between 24" on-center framing with a factory installed power cord for connecting to electricity and straightforward connections made to an outdoor and indoor temperature sensor, and the home's thermostat.
- **Compatible with any residential thermostat and central air conditioning system!**