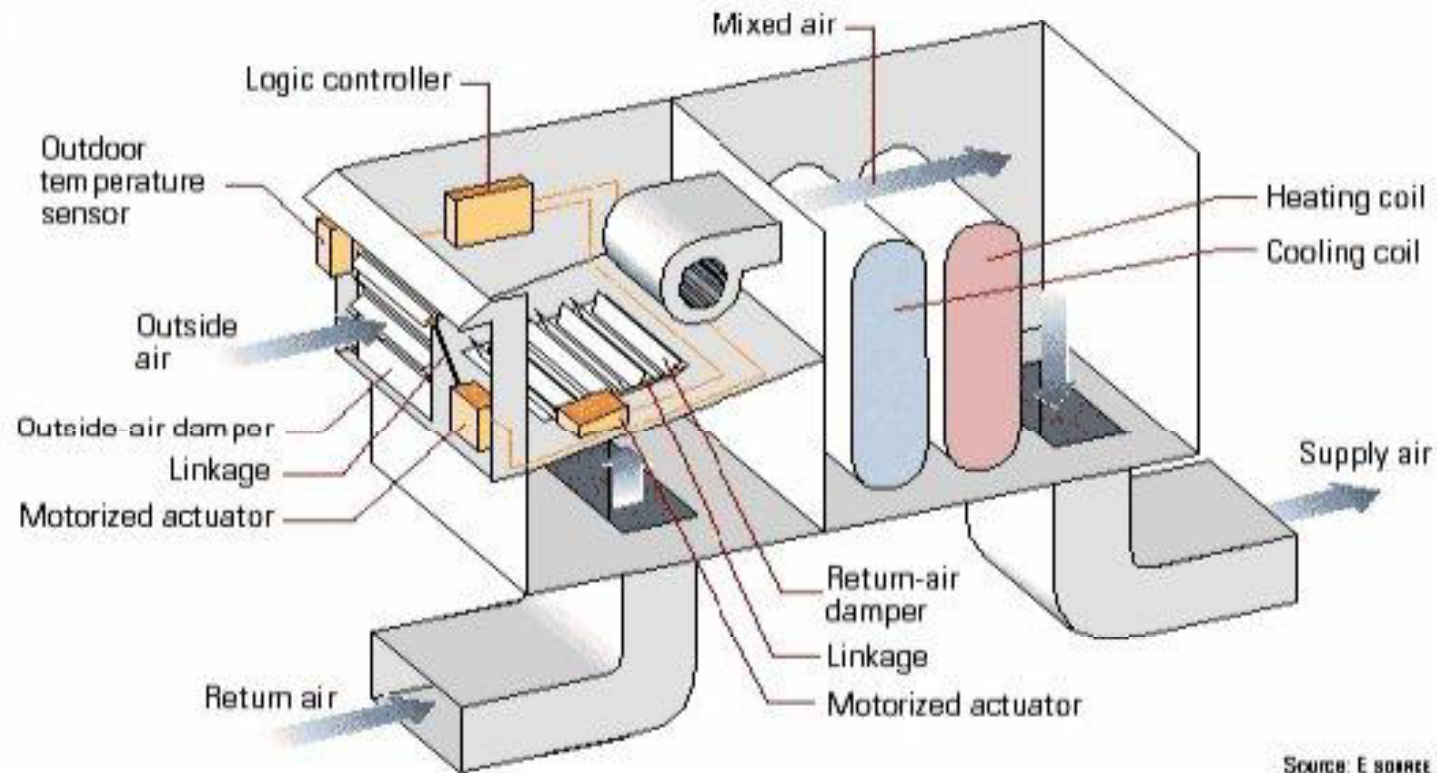


HVAC Economizers 101

Section #4

Economizers on Packaged Rooftop Units

Section #4-Economizers on Packaged Rooftop Units (RTU)



Source: Financial Times Energy

Small Packaged HVAC RTU Systems on Commercial Buildings

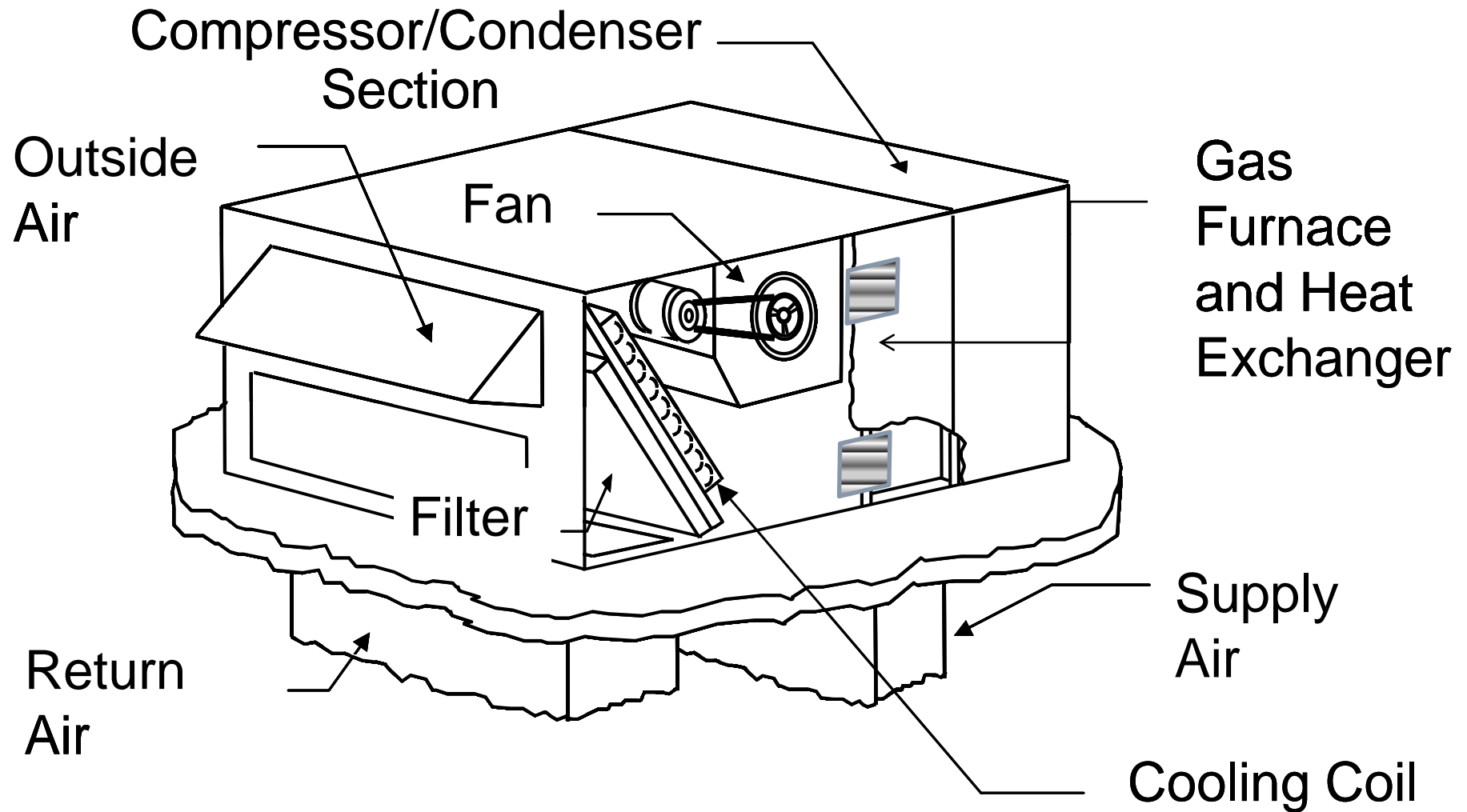


Packaged Rooftop Equipment is Available in Many Sizes and Configurations from Multiple Vendors



Source: York, Lennox, Trane

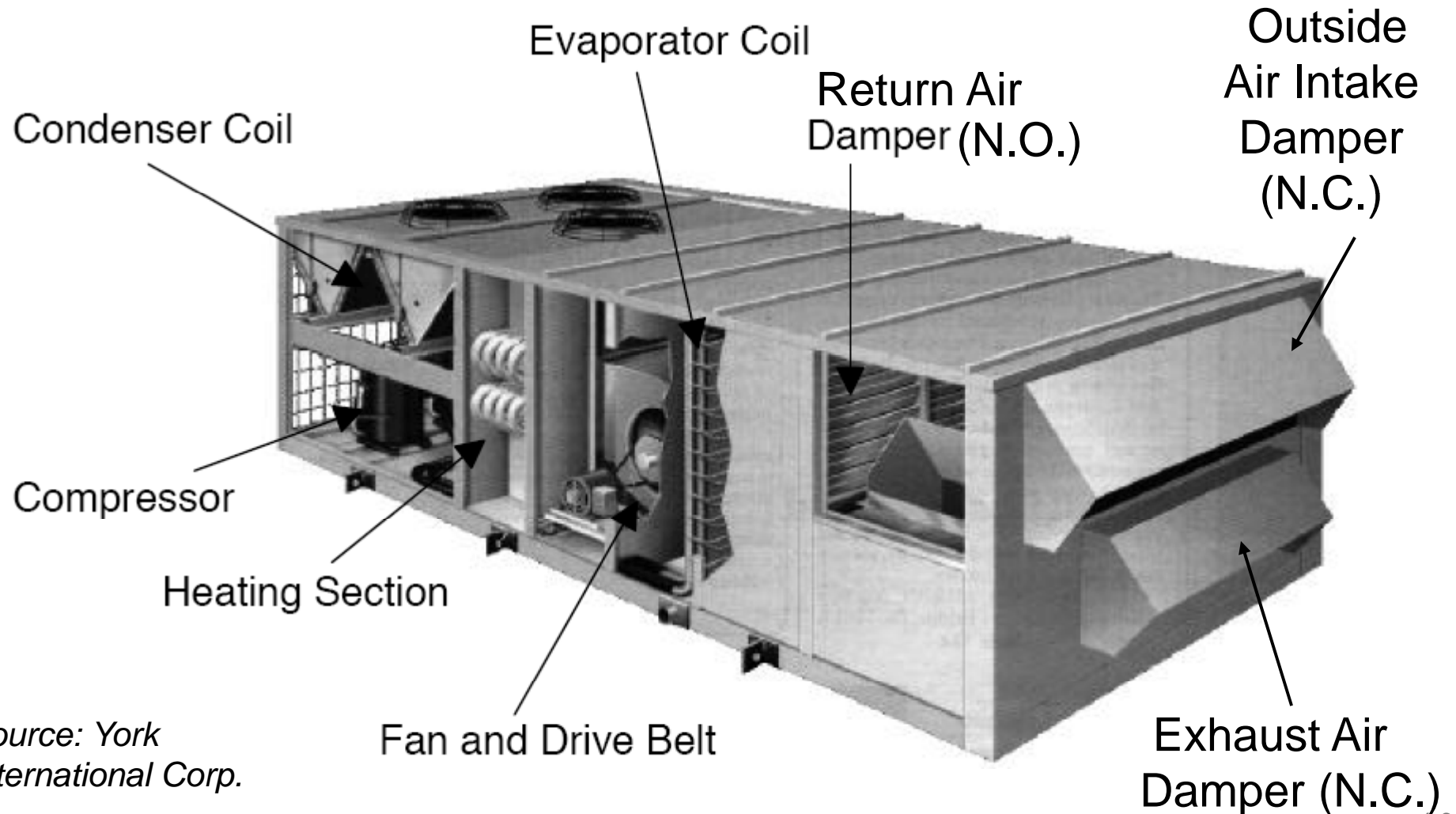
Typical Gas Rooftop Unit



Economizers on Rooftop Units

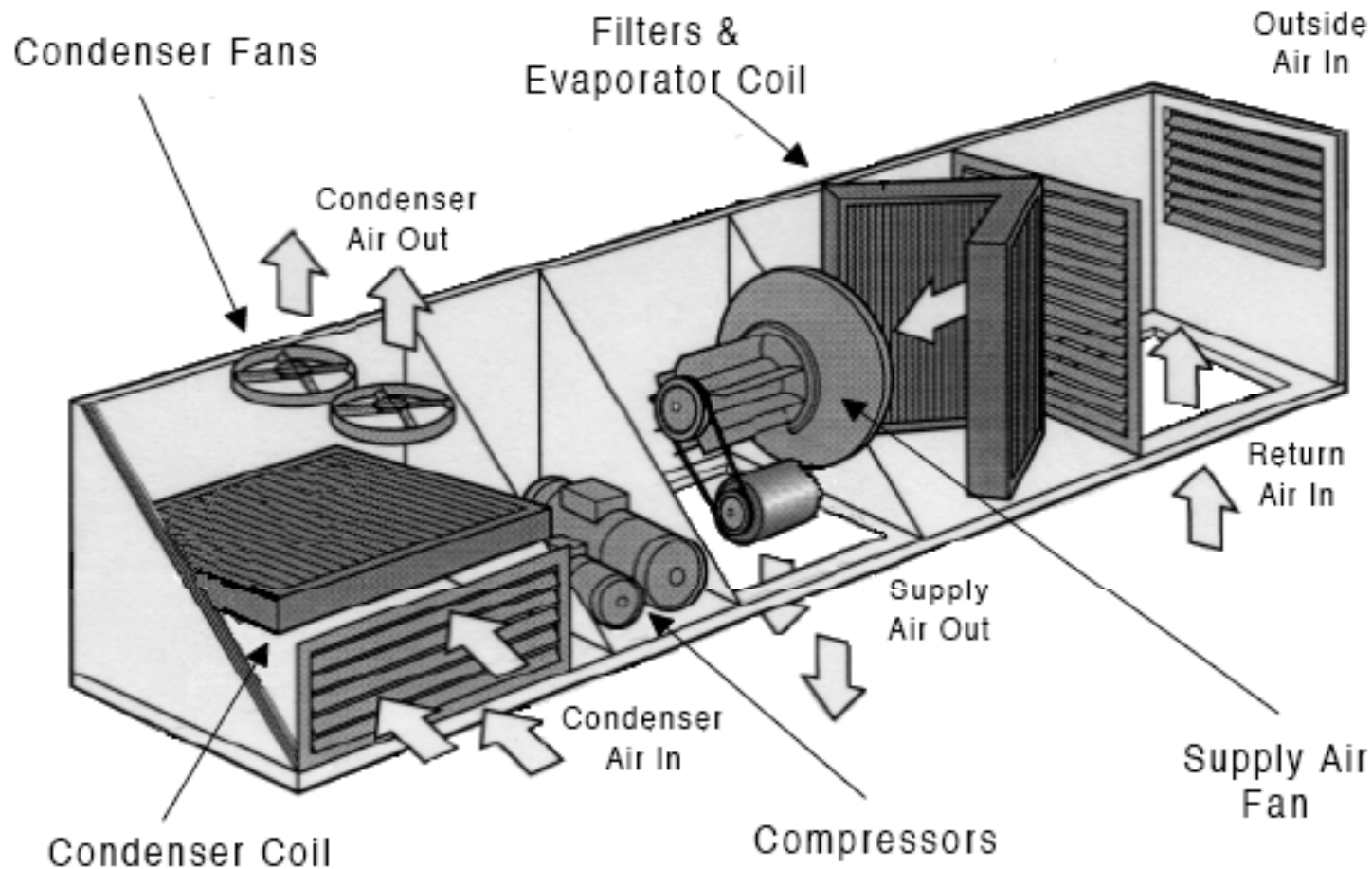
Identify the Major Components

Notice dampers are either normally open (N.O.) or normally closed (N.C.)



Source: York
International Corp.

Efficient Packaged Rooftop Equipment Will not Contaminate Fresh Air Intake with Exhaust Air from Building



Source: Platts

Economizers on Packaged RTU

Exercise #4

(Provide Answers below on notes page)

1. What is the position of the following air dampers on an economizer when the AHU is shut down?
 - a.) Exhaust Air
 - b.) Return Air
 - c.) Outside Air
2. T or F RTU units that are enclosed on a roof by walls restrict natural air patterns.
3. T or F Properly designed efficient rooftop units will not allow exhaust air or contaminated air to enter the outside air intake.
4. T or F The air conditioning compressor section is normally on the same side as the outside air economizer dampers.
5. T or F Many replacement rooftop units and new units are ordered without outside air economizers because it saves the customer money upfront during the installation.