

Bring the fresh in.

DEDICATED OUTSIDE AIR SYSTEM

 **YORK**[®]
INSTALL CONFIDENCE



Johnson
Controls 

Breathe easier.

On average, we breathe in 3,400 gallons of air each day. Ambient indoor air pollution is a major problem, affecting health and productivity in the workplace. Bringing in fresh, outside air is absolutely critical to maintain indoor air quality. US companies lose billions annually because of sick employees. Fresh air results in fewer sick days and fewer sick kids, providing greater productivity.

Indoor air quality can affect long- and short-term health problems, including headaches, eye irritation, cough, allergic reactions, and even carbon monoxide poisoning.

A dedicated outside air system (DOAS) from YORK® delivers clean, dehumidified outside air in all weather and climate conditions. New standards for efficiency and high-performance green buildings continue to evolve. With a YORK® DOAS, you can meet ASHRAE requirements for fresh air and energy efficiency.

- Up to 100% of outside air
- Continuous conditioning of outside air
- Ability to control supply air temperature to room neutral with reheat option
- Precise unit CFM delivery for optimal performance
- Energy recovery wheel for reduced utility costs



Fresh choices.

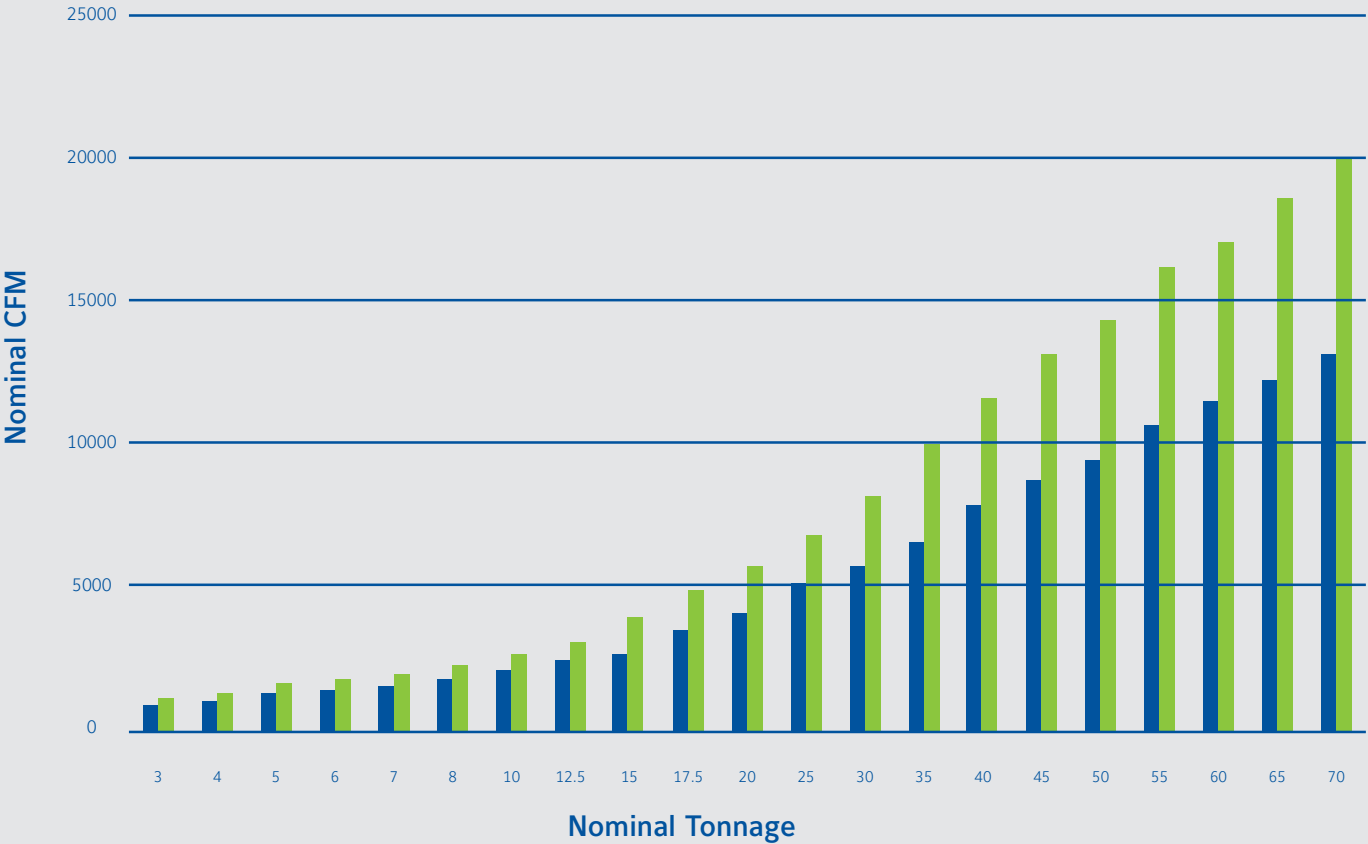
YORK® DOAS Applications

Model	Airflow Configurations	Source Configurations
JROA	100% Outside Air	Air Source
JROW	100% Outside Air	Water Source
JROH	100% Outside Air	Air Source Heat Pump
JRMA	Mixed Air	Air Source
JRMW	Mixed Air	Water Source
JRMH	Mixed Air	Air Source Heat Pump

YORK® DOAS Tonnage and CFM

■ **100% OA**
JROA, JROW, JROH

■ **Mixed Air**
JRMA, JRMW, JRMH





Designed to meet your needs.

YORK® provides not just product that conditions up to 100% outside air but is a supplier of air management systems that addresses the needs of building owners and consulting engineers.

Flexible Options

YORK® DOAS is designed for more combinations of heating and cooling than other units. Northern climates require extra heat and southern climates need more cooling. As standards and guidelines continue to evolve, you have the flexibility to easily adapt.

The integration of an energy recovery module to pre-condition fresh air with energy from the exhaust air allows for greater application flexibility.

You can also improve energy efficiency with direct-drive supply, exhaust and condenser fans that employ high-efficiency, ODP or TEFC fan motors (optional ECM) and variable frequency drives (VFD).

Multiple Factory-Installed Options

- Modulating or Staged Gas Heat, Modulating Electric Heat or Hydronic Heat Option – Meet outside air heating requirements
- Optional Six Row Evaporator Coil – Maximum capacity and moisture removal
- Optional On/Off or Modulating Hot Gas Reheat – Dehumidify air to a neutral discharge temperature for accurate humidity control
- Optional Switchable Sub-Cooling – Increase system latent capacity with no increase in compressor power consumption

Reduced Heat Transfer Loss – Double wall construction of 2" thick, R-13 insulation

Multiple Filtration Options – Improves indoor air quality including 2" or 4" MERV 14 pleated filters

Multiple Cabinet Sizes – Optimize performance of operating components

Flexible Factory Configurable Airflow – Vertical and/or horizontal configurations

Modulating Compressors – Reduce overcooling or icing of evaporator coil during times when light load conditions are present with optional digital scroll compressor or hot gas bypass

Ease of Maintenance

Hinged Access Door – Easy access to evaporator, hot gas reheat and sub-cooling coils through hinged access door; liquid, suction and discharge line service ports provide access when charging refrigerant or monitoring system

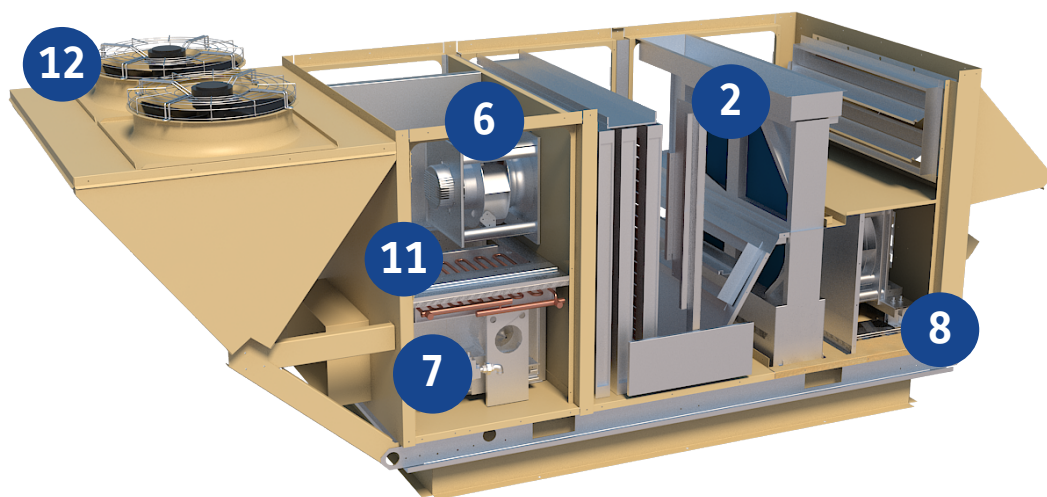
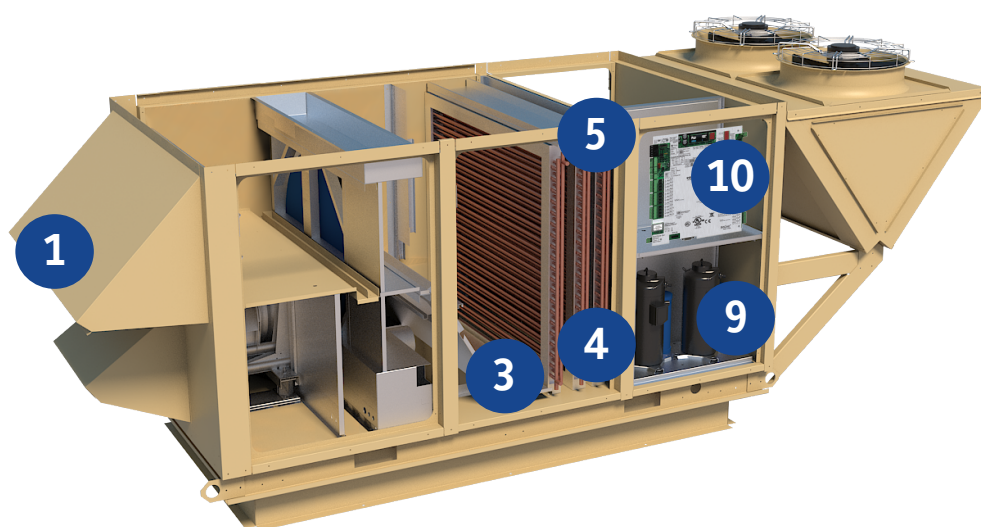
Touch-Safe Controls Panel – Protects technician; optional 115V GFCI electric receptacles available

Long-Lasting Construction

Count on constant comfort in all weather conditions, thanks to a robust design built for extended use and reliability that delivers clean, dehumidified outside air and energy savings in every season.

Long-Lasting Heavy Duty Construction – Two-coat, primer-paint finish on exterior of galvanized steel cabinet panels meet 1000-hour salt spray test as described in ASTM B117

Bring the fresh in.



1. Outside Air Damper
Provides up to 100% Outside Air
2. Integral Energy Recovery Wheel
3. Fully Intertwined DX Coil
4. Sub-cooling Coil
Increased Efficiency and Capacity
5. Single or Dual Modulating
Reheat Circuits
6. Direct Drive Plenum Fan
7. Heat Section
Gas or Electric Heat
Modulating or Staged Control
8. ECM Power Exhaust
9. Energy Efficient Compressors
Digital and Standard Scroll Options
10. DDC Unit Controller and Multiple
Communication Options
11. Double-Wall R-13 Foam Panel
Construction
12. Direct Drive Condenser Fans
ODP and TEFC Motors with Optional
ECM VFD Motor Control

Innovation that works for you.

Controls

Humidity control is essential for working comfort. High humidity levels can cause people to feel uncomfortable and sticky. Too much humidity results in the growth of mold and bacteria, causing respiratory and/or allergic reactions and odors. The YORK® DOAS unit features a control system specifically designed to tackle these difficult situations.

Easy-to-Use Advanced Controls – Easily condition large amounts of air, and the right amount of air, for your building space

Greater Control of Equipment – Monitor and change set points for room temperature, humidity and leaving air temperature

Detect Problems Earlier – View status of compressor(s), supply fan and exhaust fan (as applicable depending on equipment type and application)

Design Flexibility – The controller can operate in stand-alone capacity or in conjunction with a building management system via BACnet, Modbus, Lonworks and N2 protocols

Modern buildings are relying more on building-wide automation systems to maintain proper facility control. The native BACnet control system has been specifically designed for integration with building automation systems.



The one-stop shop.

Seamlessly Pair with Another HVAC Bundled System

Johnson Controls offers one of the most extensive product portfolios in the industry. Design your HVAC system with the ease of bundled solutions for one-stop-shopping; one point-of-contact, and one price. A Dedicated Outside Air System from YORK® can seamlessly pair with another HVAC system to remove ventilation latent load and maintain indoor air quality.

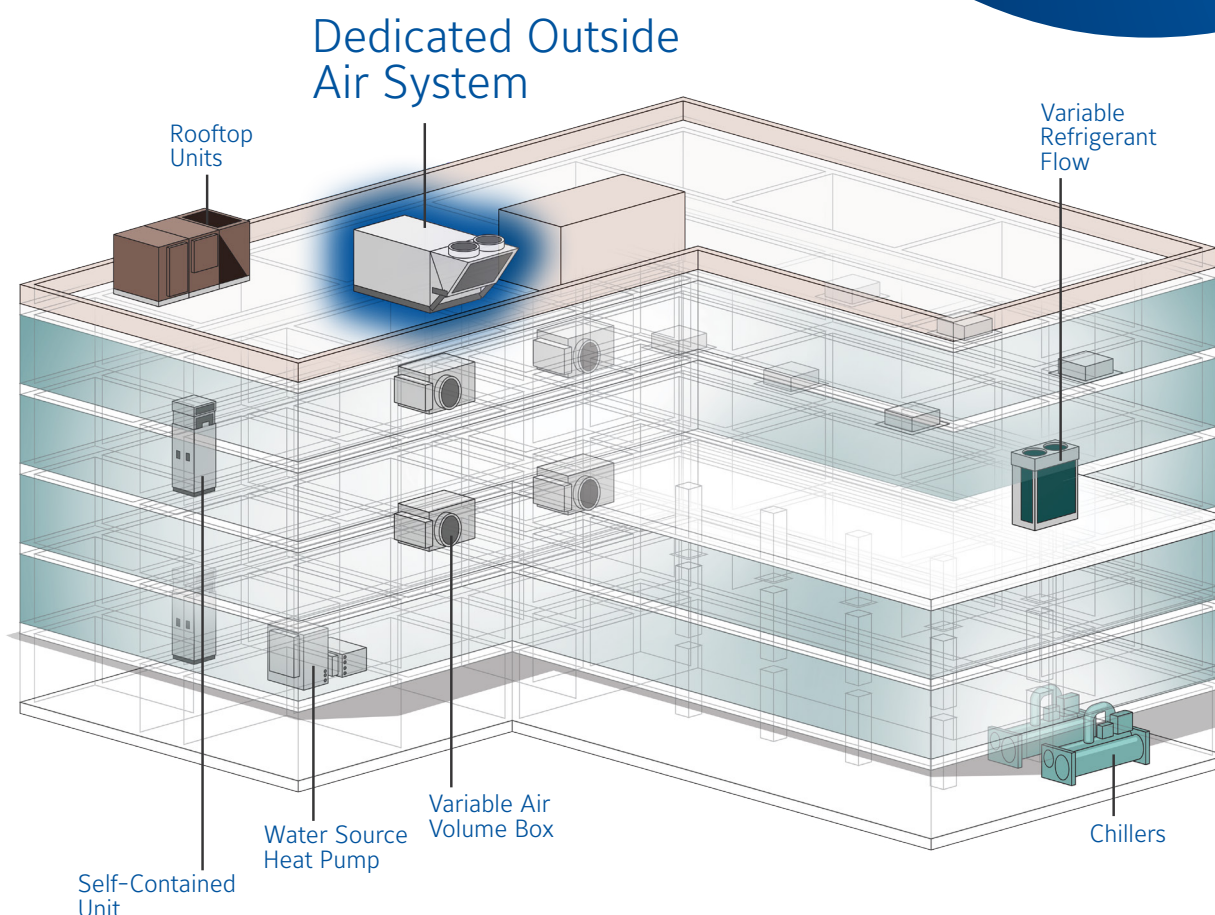
BENEFITS OF BUNDLING

Primary HVAC System

- Satisfies sensible load
- Provides comfort cooling
- Controlled by thermostat sensor

With a DOAS

- Meets outdoor air requirements under all conditions
- Removes ventilation latent load
- Maintains high indoor air quality
- Controlled by discharge air sensor



Breathable air you can count on.

DEDICATED OUTSIDE AIR SYSTEM

Count on high efficiency and proven performance in both heating and cooling conditions. Get the quality performance you expect from YORK® equipment, including:

- Energy savings in every season
- Robust construction for reliability and long life
- More factory-installed options for easy installation

It's critical to bring in fresh, outside air to maintain indoor air quality. With a proven YORK® DOAS you can count on proven heating and cooling performance in even the most extreme weather and climate conditions.

For more information on **Dedicated Outside Air Systems**, call your sales representative or visit **YORK.com**.



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