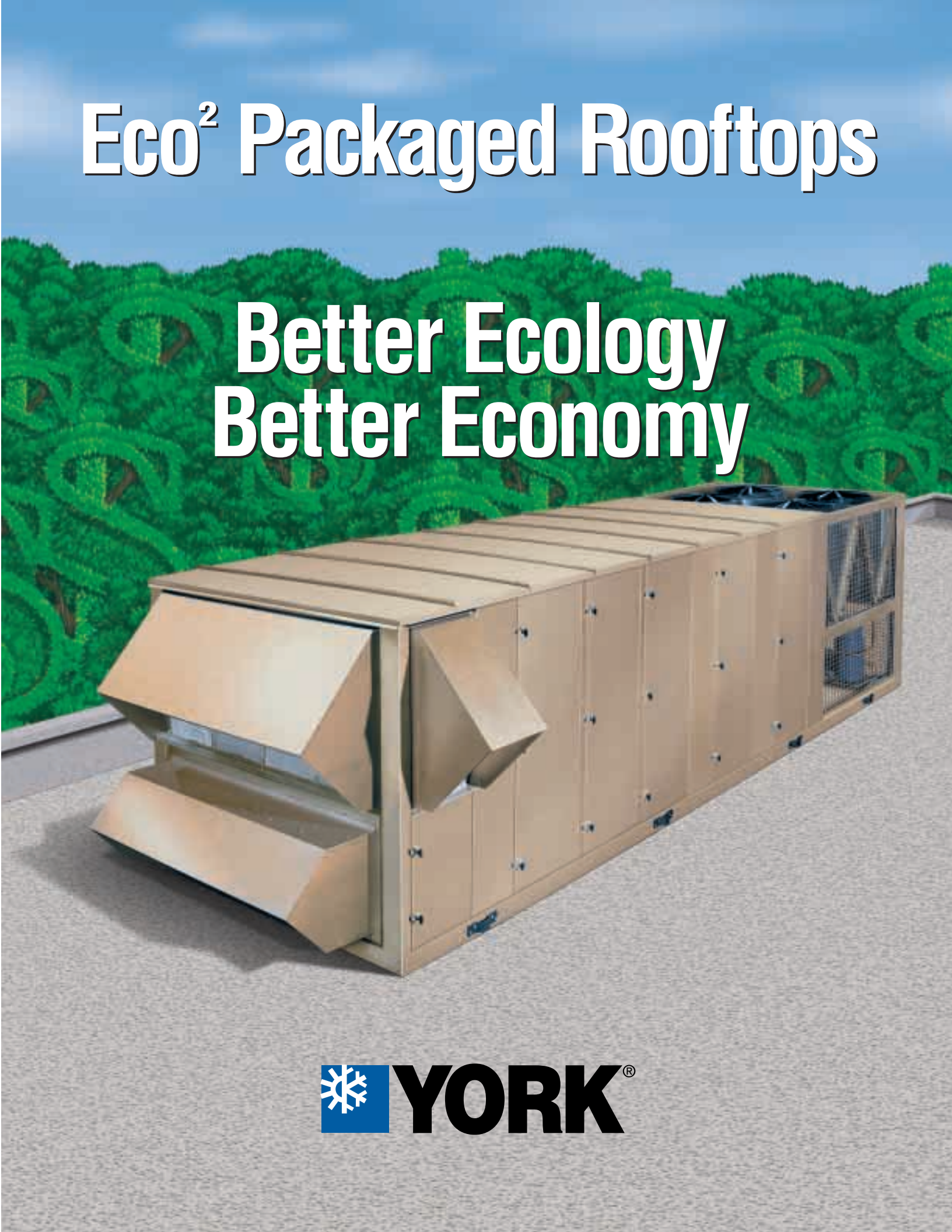
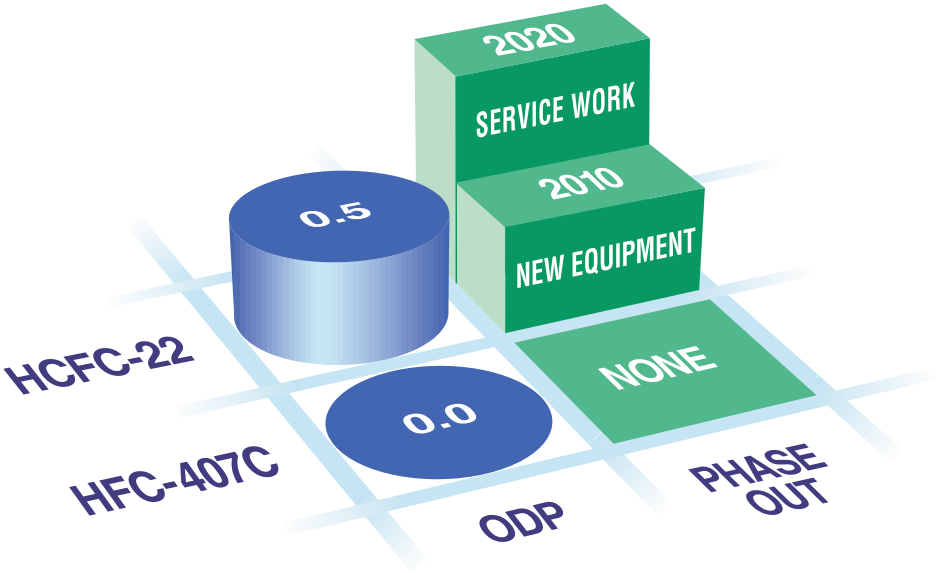
Eco^2 Packaged Rooftops

Better Ecology
Better Economy



YORK®

Better Ecology…



HFC-407C refrigerant for the global environment

- Eco² rooftop units improve the global environment by using HFC-407C refrigerant—the chlorine-free alternative to HCFC-22. HFC-407C gives designers a zero Ozone Depletion Potential (ODP) option.
- Equipment owners avoid refrigerant obsolescence by using HFC-407C, which is not subject to regulatory phase-out. HCFC-22 cannot be used in new equipment after 2010, and all service work will require reclaimed refrigerant after 2020.
- Eco² units also respond to environmental concerns with their energy-efficient operation. Lower kW consumption means carbon-fuel power plants produce less CO_2, a greenhouse gas that contributes to global-warming.

Air quality features for the indoor environment

- Rainwater inside a rooftop unit is a potential bacterial breeding-ground. YORK Eco² units come with full-sized rainhoods, which provide superior protection compared to the less-effective louvers on competitive units.
- The OptiLogic™ Control Center uses microprocessor logic to analyze and optimize ventilation decisions.
- A true airflow-measurement station can be supplied, to ensure the proper ventilation at all supply-air volumes.
- An available sensor can monitor the CO_2 level within the building and adjust the ventilation rate on-demand, to maintain the air quality at a healthy level.
- A full range of filter types and efficiencies gives designers the flexibility to meet almost any filtration need.
- Lower air velocity through the cooling coil, coupled with an intermediate drain pan, reduce the possibility of condensate carrying past the drain pan and collecting inside the unit, fostering bacterial growth.
- A double-sloped design ensures that all condensate is voided from the drain pan. The drain pan is also visible and accessible for the periodic inspection and cleaning required by IAQ standards.
- Double-wall construction of the roof, floor, doors, and walls prevents insulation fiber from entering the supply air. The inner liner also facilitates periodic cleaning of the unit to prevent harmful build-up of bacteria or contaminants.

The OptiLogic™ Control Center uses microprocessor logic to optimize operation of the Eco² rooftop unit.

Better Economy…

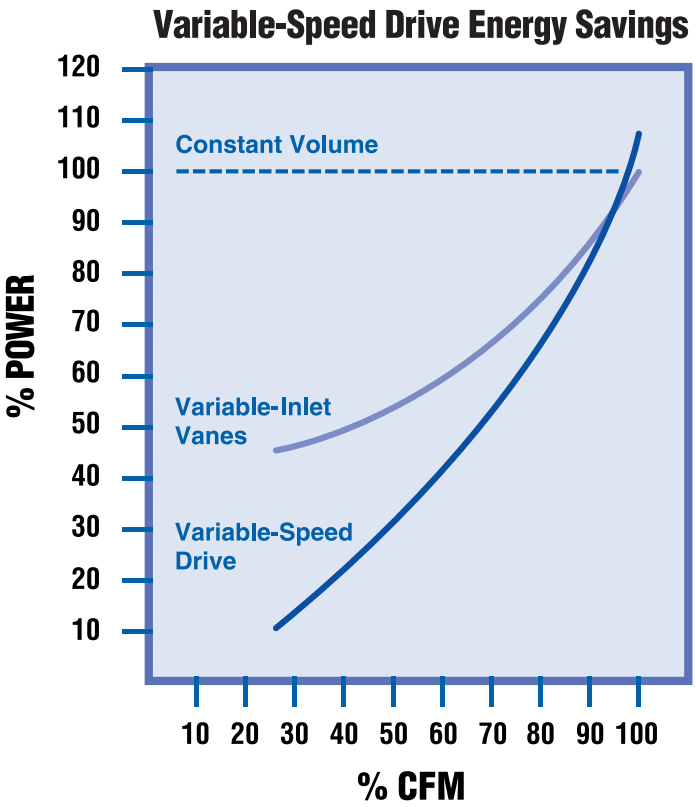
Reduce compressor energy

- High-efficiency Eco² rooftop units are optimized for HFC-407C refrigerant, and are the first environmentally responsible rooftop units that meet the upcoming ASHRAE 90.1 efficiency standards. In fact, they are up to 20% more efficient than competitive HCFC-22 units retrofitted with an HFC refrigerant.

- Multiple steps of capacity-control offer superior off-design energy performance, while maintaining better control of occupant comfort.
- The OptiLogic™ Control Center ensures that no more than the proper amount of ventilation air is utilized, avoiding the energy cost of conditioning excess air.
- An outdoor-air economizer permits “free cooling,” with the compressors turned off, when the ambient air is sufficiently cool and dry to air-condition the building.

Reduce fan energy

- Variable-speed drives can slash energy costs as much as 40% compared to the inlet-guide vanes offered on competitive units. They are available for variable-air-volume control of the supply fan, modulating control of the exhaust fan and fan-speed control of condenser fans for low-ambient operation. An additional benefit is that slower fan speeds reduce sound levels during 95% of operating hours.
- Because the fans operate whenever the unit operates, even during free-cooling operation, high- and premium-efficiency motors are available.



And Much More…

Easy to operate

- A variety of control/communication interfaces are available: choose between BACnet Ethernet, BACnet RS-485, or LON communications, or control the unit with a zone sensor or thermostat for stand-alone operation.
- With a finger's touch, the OptiLogic™ Control Center provides all unit information in plain language on a 4x20 character LCD display; inputs are programmed with a simple push-button menu.

Easy to install

- Eco² rooftop-unit controls are mounted, wired, tested, and configured in the factory.
- Units are factory run-tested, so jobsite start-up is quick and easy.
- One-piece shipment eliminates the need for any reconnection of piping or wiring.
- Units are shrink-wrapped to ensure they arrive in factory-fresh condition.
- A footprint up to 20% smaller than competitive designs makes rigging easier.
- Single-point power connection reduces field wiring costs.
- "Tilt-out" side rainhoods assemble more quickly than "shipped-loose" hoods.

Easy to maintain

- Eco² units feature double-wall construction and a high-quality finish, resulting in a durable cabinet.
- Scroll compressors have fewer moving parts than reciprocating compressors, reducing maintenance.
- Fewer moving parts is also a benefit of variable-speed drives, compared to the mechanical linkages and actuators of inlet-guide vanes.
- A variety of features and options can help maintenance efforts: access doors on both sides of the unit, a convenience outlet, a disconnect switch, refrigerant service and isolation valves, replaceable-core filter-driers, an air-filter-maintenance alarm, and a double-wall floor that can support a technician's weight.
- Historical data stored in the OptiLogic™ Control Center can speed troubleshooting.
- If desired, Eco² units can be configured to enable YORK Service to remotely monitor them, and even dispatch a technician automatically if a problem is detected.

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