

— INTEGRATED PROGRAMMABLE —
CONTROLS



— **RENEWAIRE EVERYWHERE** —
EVERY GEOGRAPHY, EVERY CLIMATE, EVERY HOME,
EVERY BUILDING AND EVERY APPLICATION

INTEGRATED PROGRAMMABLE CONTROLS



RenewAire's Integrated Programmable Controls (IPC) **IMPROVE FUNCTIONALITY, STREAMLINE OPERATIONS**, and **BOOST EFFICIENCIES** of our energy recovery ventilators (ERVs). These factory-installed controls and sensors provide ERVs with direct digital control (DDC) and enable connectivity with building management systems (BMS).

APPLICATIONS

The Integrated Programmable Controls are available as either Enhanced or Premium options for ERV units. Premium Controls are standard on all dedicated outdoor air system (DOAS) units.

KEY BENEFITS

OPTIMIZE USABILITY

- ◆ **Streamline Management:** Easily adjust ERV parameters through an advanced and intuitive user interface.
- ◆ **Simplify Integration:** Seamlessly connect to existing building systems to centralize unit management.
- ◆ **Automate Sequences:** Execute sophisticated, factory-installed control logic for select controls like frost protection, fan tracking and duct static pressure control.

IMPROVE PERFORMANCE

- ◆ **Maximize Savings:** Reduce energy costs with advanced bypass economizer and demand-controlled ventilation options.
- ◆ **Increase Reliability:** Ensure maximum uptime with automated system monitoring.
- ◆ **Monitor Operations:** Access live updates on real-time airflow rates, temperatures, humidities, and status alerts.

INCREASE CAPABILITIES

- ◆ **Expand Connectivity:** Gain access to a wide range of open standard protocols, including BACnet and Modbus.
- ◆ **Broaden Interoperability:** Connect to third-party equipment and receive external signals for integrated unit control.
- ◆ **Utilize Flexible I/O Options:** Leverage versatile I/O points to integrate specialized components like smoke detectors, CO2 sensors, or occupancy overrides.

CONTROL OPTIONS

ENHANCED & PREMIUM FEATURES

Carel [c.pCOMini] with or without BACnet

- ◆ Temperature (T) sensors on all four sides of the core
- ◆ Relative humidity (RH) sensors for outdoor air and return air
- ◆ Bypass economizer control options
- ◆ Isolation damper control
- ◆ Frost control sequences for colder climates
- ◆ Audible alarm, alarm outputs, and BACnet alarms
- ◆ Filter pressure (PS) with adjustable alarm levels
- ◆ Independent fan speed control with fan proof
- ◆ Built in seven-day schedule with vacation and special days
- ◆ BMS integration via BACnet option or Modbus
- ◆ Ability to override inputs and outputs for testing
- ◆ Embedded web pages for PC access
- ◆ Optional remote display, smoke alarm input, smoke purge input, single fan mode, occupancy sensor, boost mode input

PREMIUM-ONLY FEATURES

Carel [c.pCOMini] with expansion module with or without BACnet

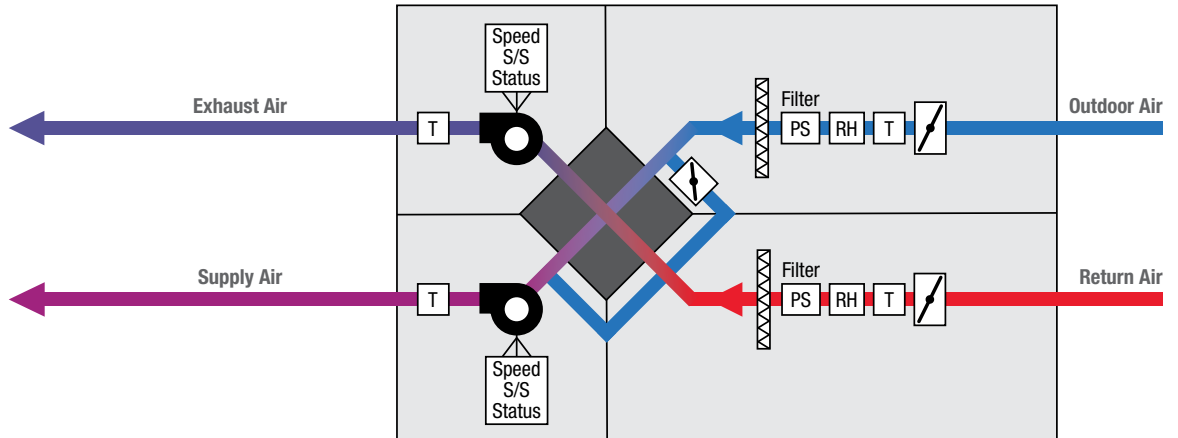
- ◆ Flow pressures (PS) in both airstreams for flow control
- ◆ Inputs for remote CO2 sensors (up to four) or VOC sensors for demand-controlled ventilation
- ◆ Inputs for remote duct pressure for VAV applications and/or space pressure for space pressurization applications
- ◆ Heating control for modulating gas or electric heat, and hot water valve
- ◆ Cooling control for DX coils, VRF systems, chilled water valve, and dual temperature coils
- ◆ Refrigerant leak mitigation sequence
- ◆ Modulating hot gas reheat (HGRH) control
- ◆ Preheater control for colder climates

ERV: ENHANCED CONTROLS

Optional Room Sensors

- Occupancy

Frost control by cycling the supply fan



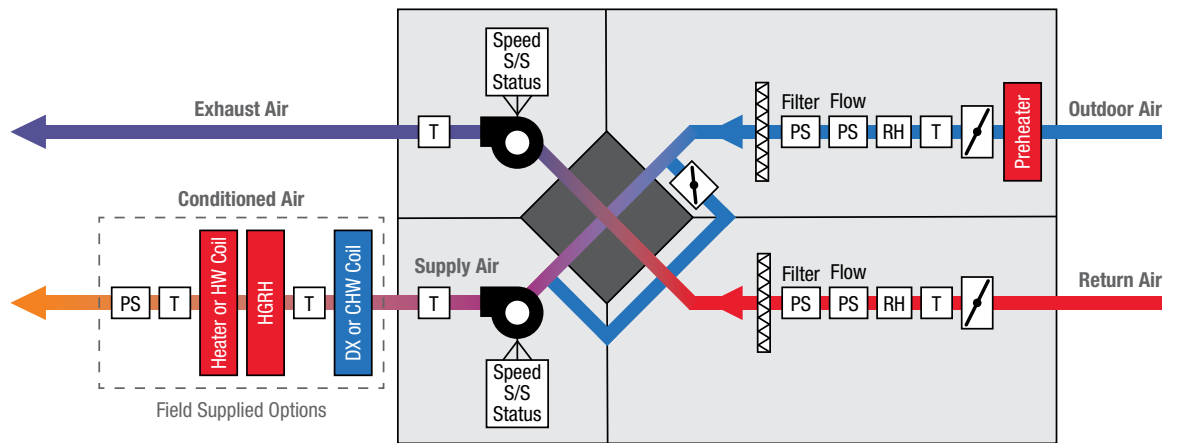
* Optional Two-Position Bypass

ERV: PREMIUM CONTROLS

Optional Room Sensors

- Occupancy
- Room Pressure
- CO2 (up to 4)
- VOC

Frost control by cycling the supply fan



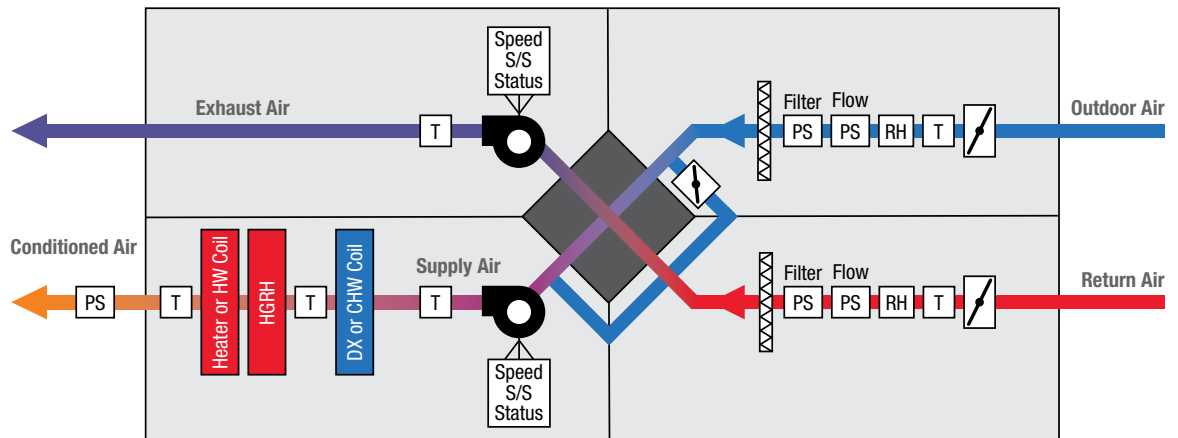
* Optional Two-Position Bypass

DOAS: PREMIUM CONTROLS

Optional Room Sensors

- Occupancy
- Room Pressure
- CO2 (up to 3)

Frost control via modulating the bypass damper



* Standard Modulating Bypass

ENHANCED OR PREMIUM ACCESSORIES

REMOTE DISPLAY



Handheld or Wall Mount

SMOKE DETECTOR



Duct Mount

OCCUPANCY SENSORS



Ceiling Mount



Wall Mount

PREMIUM-ONLY ACCESSORIES

TEMPERATURE SENSORS



Duct Mount
(for nonintegrated
heating/cooling)

PRESSURE SENSORS

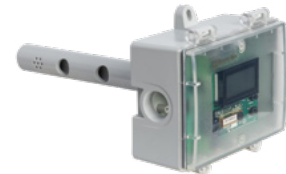


Wall/Duct Mount
with Display

CO2 AND VOC SENSORS



Wall Mount



Duct Mount