NEW! DN SERIES
DEDICATED OUTDOOR AIR SYSTEM CATALOG

AUGUST 2019
RENEWAIRE.COM | 800.627.4499
As buildings become more airtight due to better construction methodologies, the need for increased and balanced ventilation is critical. Without it, internally generated contaminants accumulate and cause **deficient indoor air quality** (IAQ), which leads to significant health and cognitive problems for occupants. Industry standards are changing to combat deficient IAQ, and codes that adopt these new standards are driving the application of Energy Recovery in ventilation strategies. Deficient IAQ is a serious problem, especially considering:

- On average, Americans spend 90% of their time indoors
- The EPA found that indoor air may be 2-5 times—and occasionally greater than 100 times—more polluted than outdoor air
- The EPA ranks indoor air pollutants as a top-five environmental health risk to occupants

### AVERSE EFFECTS OF DEFICIENT IAQ

Deficient IAQ has numerous adverse effects on the health and cognitive function of building occupants.

**Health problems:** Acute allergies, headaches, coughs, asthma, skin irritations and breathing difficulties, as well as chronic illnesses such as cancer, liver disease, kidney damage and nervous-system failure.

**Cognitive impairment:** Studies by the Harvard School of Public Health and the Lawrence Berkeley National Laboratory found that carbon dioxide (CO₂)—an indoor air contaminant—negatively impacted thinking and decision-making at levels commonly found inside homes and buildings.

### ABOUT RENEWAIRE

For over 30 years, RenewAire has been a pioneer in enhancing IAQ in commercial and residential buildings of every size. This is achieved while maximizing sustainability through our fifth-generation, enthalpic-core, static-plate Energy Recovery Ventilators (ERVs) & Dedicated Outdoor Air Systems (DOAS) that optimize energy efficiency, lower capital costs and decrease operational expenses by reducing HVAC loads therefore minimizing equipment needs, resulting in significant energy savings. Our ERVs/DOAS are competitively priced, simple to install, easy to use and maintain, have a quick payback and enjoy the industry’s best warranty with the lowest claims due to long-term reliability. In 2010, RenewAire joined the Soler & Palau (S&P) Ventilation Group, providing direct access to the latest in energy-efficient air-moving technologies. For more information, visit: renewaire.com.
# TABLE OF CONTENTS

## DN SERIES - DOAS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>TYPE</th>
<th>CFM RANGE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN2IN - STANDARD</td>
<td>Indoor</td>
<td>375-1,650 CFM</td>
<td>4-7</td>
</tr>
<tr>
<td>DN2RT - STANDARD</td>
<td>Rooftop</td>
<td>375-1,650 CFM</td>
<td>8-12</td>
</tr>
<tr>
<td>DN3IN - STANDARD</td>
<td>Indoor</td>
<td>750-3,300 CFM</td>
<td>14-17</td>
</tr>
<tr>
<td>DN3RT - STANDARD</td>
<td>Rooftop</td>
<td>750-3,300 CFM</td>
<td>18-22</td>
</tr>
<tr>
<td>DN5IN - STANDARD</td>
<td>Indoor</td>
<td>1,125-4,950 CFM</td>
<td>24-27</td>
</tr>
<tr>
<td>DN5RT - STANDARD</td>
<td>Rooftop</td>
<td>1,125-4,950 CFM</td>
<td>28-32</td>
</tr>
</tbody>
</table>

- **ABOUT RENEWAIRE** 2-3
- **SPECIFICATIONS & DIMENSIONS** 4-32
- **OPTIONS & ACCESSORIES** 34-40
- **ORDERING & SUPPORT** 42-44
RenewAire is a pioneer in enhancing IAQ while maximizing sustainability through enthalpic-core, static-plate Energy Recovery Ventilators (ERVs) that optimize energy efficiency, lower costs by reducing HVAC loads and therefore reduce environmental footprints. Our ERV technology preconditions incoming air with the otherwise-wasted energy (heat and humidity) of the exhaust air going out—all while the airstreams are kept physically separate as certified by the Air Conditioning, Heating and Refrigeration Institute (AHRI) for low-to-zero Exhaust Air Transfer Ratio (EATR) at typical static pressure differentials. As the pioneer of static-plate core technology in North America, RenewAire is the largest ERV producer in the USA.

**OPTIMIZING ENERGY EFFICIENCY**

Energy efficiency is optimized by preconditioning the outside air coming in with the otherwise-wasted heat and humidity of the exhaust air going out. This exchange of energy moderates temperatures and moisture, decreases HVAC equipment needs, drives operational efficiencies and conserves energy.

**REDUCING HVAC LOADS**

RenewAire technology reduces HVAC loads during both winter and summer. In turn, HVAC equipment size and needs can be decreased and furnaces and air conditioners can be smaller. This process ensures efficient operations and keeps both energy use and costs low, while at the same time maintaining high-level IAQ.

**MINIMIZING ENVIRONMENTAL IMPACT**

The combination of less energy used and HVAC loads being reduced conserves resources. Further, our Madison, WI plant is 100% powered by renewable wind energy, and is one of the few buildings worldwide to be LEED and Green Globes certified, as well as having achieved ENERGY STAR Building status. This commitment to sustainable manufacturing minimizes our overall production and distribution environmental footprint.
WHY RENEWAIRE IS PREFERRED

BEST VALUE
- Priced competitively against other ERV models
- Due to competitive pricing and decreased costs, payback is short and ROI is maximized
- Contractors can pass these significant savings along to their customers

RELIABLE OPERATION
- Built-to-last ERVs have lifespans of 25+ years and operate consistently year-round in every extreme, including frost-free performance in all but the most severe winter climates
- High-efficiency core operates dry in all conditions, meaning no condensate pans
- An industry-leading ten-year warranty for the static-plate core, two-year warranty for commercial products and a five-year warranty for residential products
- Superior product quality results in paramount reliability and longevity

HIGHEST-QUALITY INDOOR AIR
- Stale indoor air is replaced with fresh, conditioned and filtered air from the outside, resulting in Enhanced IAQ by removing harmful contaminants
- Airstreams do not mix and pollutants are not transferred across partition plates
- No biocide used; material does not promote biological growth
- Moderated temperatures and humidity maintain a comfortable indoor environment

OPTIMIZED ENERGY EFFICIENCY
- Efficient heat and humidity transfer recaptures up to 70-80% of the energy exhausted in the airstream
- Energy that’s otherwise wasted by conventional ventilation systems (such as bath fans) is reused, thus dramatically reducing monthly operation costs
- Energy-efficient operation decreases HVAC loads, which cuts down on energy use and costs
- The hotter or colder the climate, the more energy is recovered

HIGHLY CERTIFIED
- See individual catalog submittal for certification details:
  - UL
  - cUL
  - ETL
  - HVI
  - AHRI
# SPECIFICATIONS & DIMENSIONS

## INDOOR UNIT
Dedicated Outside Air System
Unit with Energy Recovery

![Image](image.png)

**Renewaire.com/specifications**

Download specification at:
renewaire.com/specifications

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### SPECIFICATIONS

**Energy Recovery Type:** Static plate total energy transfer

**Typical Airflow Range:** 375-1,650 CFM

**AHRI 1060 Certified Core:**
One L-62-G5 and one L-125 G5

**Standard Features:**
- EC Motors for both airstreams
- Direct Drive backward inclined plenum
- Higher ESP of up to 2" w.g. at 1,500 CFM
- Integrated programmable controls
- True 100% Face and bypass enthalpy based modulating economizer
- Class 1 low leakage motorized isolation dampers
- Stainless steel double-sloped drain pan with cooling option
- 1” Double wall foam injected 20 gauge galvanized panel construction with R6.5 insulation

**Inlets/Outlets:**
- OA & RA Inlets: 24” x 16”
- SA Outlet: 24” x 16”
- EA Outlet: 20” x 16”

**Filters:**
- Total qty. 4, MERV 8:
  - 16" x 20" x 2"

**Unit Dimensions & Weight for 1” Cabinets:**
- 126” L x 60 3/4” W x 71 7/8” H
- 1250-2425 lbs.

**Max. Shipping Dimensions & Weight for 1” Cabinets (on pallet):**
- 140” L x 90” W x 77” H
- 1450-2625 lbs.

**Unit Dimensions & Weight for 2” Cabinets:**
- 126” L x 62 3/4” W x 73 7/8” H
- 1350-2550 lbs.

**Max. Shipping Dimensions & Weight for 2” Cabinets (on pallet):**
- 140” L x 90” W x 79” H
- 1550-2750 lbs.

### INTERNAL OPTIONS FOR HEATING AND COOLING

- **ERV** - Energy Recovery Ventilator
- **EH** - Electric Heater
- **CC** - Cooling Coil
- **HC** - Heating Coil
- **GH** - Gas Heat Module
- **HGRH** - Hot Gas Reheat Coil
- **BT** - Blow Thru
- **DT** - Draw Thru

### SPECIFICATIONS & DIMENSIONS

**Motor(s):**
- Qty. 2, Direct drive motorized impeller packages

**Options:**
- DX, heat pump, or chilled water cooling coil
- Modulating hot gas reheat
- Steam or hot water coil, gas heat module or electric heater
- Onboard variable frequency drives (VFDs) - both airstreams
- Fused disconnect
- Spring isolators (VFDs only)
- 2” Double wall foam injected 20 gauge galvanized panel construction with R13.0 insulation
- Exterior paint - grey, white, custom color
- BACNET factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Electrostatic coating for coils

**Accessories:**
- Filters - MERV 13, 2” and 4” (shipped loose), MERV 14, 2” and 4” (shipped loose)
- Additional filters available upon request
- Duct mounted electric pre-heater (separately powered)
- Carbon dioxide sensor/control - wall mount (CO2-W), duct mount (CO2-D)
- IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)
- Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)
- Smoke detector
- Room temperature and humidity sensor
- Duct static pressure sensor with display to 10";
  - without display 0-2"
- Room pressure sensor with display to 1”;
  - without display 0-1"
- Waterless trap negative pressure
- Waterless trap positive pressure
- Remote display

### Specifications may be subject to change without notice.
ELECTRICAL DATA

<table>
<thead>
<tr>
<th>Motor Qty/kW or HP</th>
<th>EC</th>
<th>Volts</th>
<th>Frequency</th>
<th>Phase</th>
<th>Min. Cir. Amps.</th>
<th>Max. Overcurrent Protection Device</th>
<th>FLA per motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 @ 1.35 kW ea.</td>
<td>2</td>
<td>200-277</td>
<td>50/60 Hz</td>
<td>Single</td>
<td>15.1</td>
<td>20</td>
<td>6.7-4.8</td>
</tr>
<tr>
<td>2 @ 2.70 kW ea.</td>
<td>2</td>
<td>380-480</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>19.4</td>
<td>25</td>
<td>8.6-7.2</td>
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<tr>
<td>2 @ 3.70 kW ea.</td>
<td>2</td>
<td>208-230</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>13.5</td>
<td>15</td>
<td>5.0-4.6</td>
</tr>
</tbody>
</table>

Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE

- **DN-2 200-277V 1P EC**
- **DN-2 200-240V 3P EC**
- **DN-2 230/460/575V 3P AC**
- **DN-2 380-480V 3P EC**
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.
## Dedicated Outdoor Air System

### Standard Specifications

**Energy Recovery Type:**
Static plate total energy transfer

**Typical Airflow Range:** 375-1,650 CFM

**AHRI 1060 Certified Core:**
One L-62-GS and one L-125-G5

**Standard Features:**
- EC Motors for both airstreams
- Direct Drive backward inclined plenum
- Higher ESP of up to 2" w.g. at 1,500 CFM
- Integrated programmable controls
- True 100% Face and bypass enthalpy based modulating economizer
- Class 1 low leakage motorized isolation dampers
- Stainless steel double-sloped drain pan with cooling option
- 1" Double wall foam injected 20 gauge galvanized panel construction with R6.5 insulation

**Inlets/Outlets:**
- EA & RA Inlets: 24" x 16"
- SA Outlet: 24" x 16"
- EA Outlet: 20" x 16"

**Filters:**
Total qty. 4, MERV 8:
- 16" x 20" x 2"

**Unit Dimensions & Weight for 1st Cabinets:**
- 151 5/8" L x 76 3/4" W x 73 1/8" H
- 1500-2700 lbs.

**Max. Shipping Dimensions & Weight for 1st Cabinets (on pallet):**
- 140" L x 90" W x 79" H
- 1700-2900 lbs.

**Unit Dimensions & Weight for 2nd Cabinets:**
- 154 1/8" L x 78 5/8" W x 75 1/8" H
- 1600-2825 lbs.

**Max. Shipping Dimensions & Weight for 2nd Cabinets (on pallet):**
- 140" L x 90" W x 81" H
- 1800-3025 lbs.

### Motors:
- Qty. 2, Direct drive motorized impeller packages

**Options:**
- DX, heat pump, or chilled water cooling coil
- Modulating hot gas reheat
- Steam or hot water coil, gas heat module or electric heater
- Onboard variable frequency drives (VFDs) - both airstreams
- Fused disconnect
- Spring isolators (VFDs only)
- 2" Double wall foam injected 20 gauge galvanized panel construction with R13.0 insulation
- Exterior paint - grey, white, custom color
- Salt spray - 2500 hour
- BACNET factory activation
- Smoke detector
- Motion occupancy sensor/control - duct mount (IAQ-D)
- Carbon dioxide sensor/control - duct mount (IAQ-D)
- rooftop curb - standard 14"/360°
- Air curtain - standard 360°
- Curb clip kit
- Carbon dioxide sensor/control - ceiling mount (MC-C)
- Smoke detector
- Room temperature and humidity sensor
- Duct static pressure sensor with display to 10", without display 0-2'
- Room pressure sensor with display to 1", without display 0-1" Waterless trap negative pressure
- Waterless trap positive pressure
- Remote display

### Internal Options for Heating and Cooling

<table>
<thead>
<tr>
<th>ERV only</th>
<th>ERV + EH (BT)</th>
<th>ERV + GH (BT)</th>
<th>ERV + CC + GH (BT)</th>
<th>ERV + CC + HGRH + GH (BT)</th>
<th>ERV + CC + HC (BT)</th>
<th>ERV + CC + HGRH + HC (BT)</th>
</tr>
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<tbody>
<tr>
<td>ERV + CC + EH (BT)</td>
<td>ERV + CC + HGRH + EH (BT)</td>
<td>ERV + CC + HGRH + GH (BT)</td>
<td>ERV + CC + HGRH + HC (BT)</td>
<td>ERV + CC + HGRH + HC (BT)</td>
<td>ERV + CC + HGRH + HC (BT)</td>
<td>ERV + CC + HGRH + HC (BT)</td>
</tr>
</tbody>
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Specifications may be subject to change without notice.
DN 2RT
Dedicated Outdoor Air System
Standard

ELECTRICAL DATA

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<thead>
<tr>
<th>Motor Qty/kW or HP</th>
<th>Volts</th>
<th>Frequency</th>
<th>Phase</th>
<th>Min. Cir. Amps.</th>
<th>Max. Overcurrent Protection Device</th>
<th>FLA per motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC 2 @ 1.35 kW ea.</td>
<td>200-277</td>
<td>50/60 Hz</td>
<td>Single</td>
<td>15.1</td>
<td>20</td>
<td>6.7-4.8</td>
</tr>
<tr>
<td>2 @ 2.70 kW ea.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 @ 3.70 kW ea.</td>
<td>380-480</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>13.5</td>
<td>15</td>
<td>6.0-4.6</td>
</tr>
<tr>
<td>VFD 2 @ 3HP ea.</td>
<td>208-230</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>9.5</td>
<td>15</td>
<td>4.2</td>
</tr>
<tr>
<td>2 @ 3HP ea.</td>
<td>460</td>
<td>50/60 Hz</td>
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<td></td>
<td></td>
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</tr>
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<td>2 @ 3HP ea.</td>
<td>575</td>
<td>50/60 Hz</td>
<td></td>
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<td>3.3</td>
</tr>
</tbody>
</table>

Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE

DN-2 200-277V 1P EC

DN-2 200-240V 3P EC

DN-2 230/460/575V 3P AC

DN-2 380-480V 3P EC

Specifications may be subject to change without notice.
DN2RT Dedicated Outdoor Air System Standard 1" Cabinet

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
SA: Supply Air to inside

INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams cannot be switched. Duct configuration is field convertible.

Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.
DN2RT Dedicated Outdoor Air System Standard 2" Cabinet

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
SA: Supply Air to inside

INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.

<table>
<thead>
<tr>
<th>AIRFLOW ORIENTATION</th>
<th>LEFT VIEW</th>
<th>FRONT VIEW</th>
<th>RIGHT VIEW</th>
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<tbody>
<tr>
<td>Available as shown:</td>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
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<table>
<thead>
<tr>
<th>UNIT SPECIFICATIONS &amp; DIMENSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="image">Diagram</a></td>
</tr>
</tbody>
</table>
DN2RT Dedicated Outdoor Air System Curbs

DUCT SUPPORT DIMENSIONS
WIDTH: 1 1/2" DEPTH: 3"

DN2RT CURB DN2-ERV+C+H

RA: Room Air to be exhausted
SA: Supply Air to inside

END VIEW

TOP VIEW

END VIEW

CURB CROSS-SECTION A-A (TYP.)

FRONT VIEW

SECTION A-A

AIRFLOW ORIENTATION
Available as shown:

UNIT MOUNTING & APPLICATION
This universal DN Series curb can be used in conjunction with RTF, RTH, RTV and RTR models.

DUCT SUPPORT DIMENSIONS
WIDTH: 1 1/2" DEPTH: 3"

RA: Room Air to be exhausted
SA: Supply Air to inside

TOP VIEW

CURB CROSS-SECTION A-A (TYP.)

FRONT VIEW

SECTION A-A

UNIT MOUNTING & APPLICATION
This universal DN Series curb can be used in conjunction with RTF, RTH, RTV and RTR models.
Dedicated Outdoor Air System

Standard

**SPECIFICATIONS**

- **Energy Recovery Type:** Static plate total energy transfer
- **Typical Airflow Range:** 750-3,300 CFM
- **AHRI 1060 Certified Core:** Three L-125 GS
- **Standard Features:**
  - EC Motors for both airstreams
  - Direct Drive backward inclined plenum
  - Higher ESP of up to 2.5" w.g. at 3,000 CFM
  - Integrated programmable controls
  - True 100% Face and bypass enthalpy based modulating economizer
  - Class 1 low leakage motorized isolation dampers
  - Stainless steel double-sloped drain pan with cooling option
  - 1" Double wall foam injected 20 gauge galvanized panel construction with R6.5 insulation

- **Inlets/Outlets:**
  - OA & RA Inlets: 36" x 16"
  - SA Outlet: 24" x 16"
  - EA Outlet: 20" x 16"

- **Filters:**
  - Total qty. 6, MERV 8:
    - 20" x 20" x 2"

- **Unit Dimensions & Weight for 1" Cabinets:**
  - 147 7/8" L x 90 1/8" W x 71 7/8" H
  - 1800-3475 lbs.

- **Max. Shipping Dimensions & Weight for 1" Cabinets (on pallet):**
  - 160" L x 90" W x 77" H
  - 1825-3700 lbs.

- **Max. Shipping Dimensions & Weight for 2" Cabinets (on pallet):**
  - 160" L x 90" W x 79" H
  - 1950-3900 lbs.

**Motor(s):**
- Qty. 2, Direct drive motorized impeller packages

**Options:**
- DX, heat pump, or chilled water cooling coil
- Modulating hot gas reheat
- Steam or hot water coil, gas heat module or electric heater
- Onboard variable frequency drives (VFDs) - both airstreams
- Fused disconnect
- Spring isolators (VFDs only)
- 2" Double wall foam injected 20 gauge galvanized panel construction with R13.0 insulation
- Exterior paint - grey, white, custom color
- HVAC factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Electrofin coating for coils

**Accessories:**
- Filters - MERV 13, 2" and 4" (shipped loose), MERV 14, 2" and 4" (shipped loose)
- Additional filters available upon request
- Duct mounted electric pre-heater (separately powered)
- Carbon dioxide sensor/control - wall mount (CO2-W), duct mount (CO2-D)
- IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)
- Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)
- Smoke detector
- Room temperature and humidity sensor
- Duct static pressure sensor with display to 10", without display 0-2"
- Room pressure sensor with display to 1", without display 0-1"
- Waterless trap negative pressure
- Waterless trap positive pressure
- Remote display

**INTERNAL OPTIONS FOR HEATING AND COOLING**

- ERV only
- ERV + EH (BT)
- ERV + GH (BT)
- ERV + CC/HG (BT)
- ERV + CC/HG + HGRH (BT)
- ERV + CC/HG + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)
- ERV + CC/HG + HGRH + HC (BT)

Specifications may be subject to change without notice.
## ELECTRICAL DATA

<table>
<thead>
<tr>
<th>Motor Qty/kW or HP</th>
<th>Volts</th>
<th>Frequency</th>
<th>Phase</th>
<th>Min. Cir. Amps.</th>
<th>Max. Overcurrent Protection Device</th>
<th>FLA per motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>2 @ 2.70 kW ea.</td>
<td>200-240</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>19.4</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>2 @ 3.70 kW ea.</td>
<td>380-480</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>13.5</td>
<td>15</td>
</tr>
<tr>
<td>VFD</td>
<td>2 @ SHP ea.</td>
<td>208-230</td>
<td>50/60 Hz</td>
<td>Three</td>
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<td>460</td>
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</tbody>
</table>

Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

## AIRFLOW PERFORMANCE

### DN-3 200-240V 3P EC

![Graph](image)

### DN-3 200/240V/480V 3P EC

![Graph](image)

### DN-3 200/240V/575V 3P AC

![Graph](image)

### DN-3 230/460/575V 3P AC

![Graph](image)

Specifications may be subject to change without notice.
DN3IN Dedicated Outdoor Air System  Standard 1" Cabinet

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
SA: Supply Air to inside

INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.

AIRFLOW ORIENTATION
Available as shown:

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.

Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.
Dedicated Outdoor Air System
Standard

**SPECIFICATIONS**

**Energy Recovery Type:**
Static plate total energy transfer

**Typical Airflow Range:** 750-3,300 CFM

**AHRI 1060 Certified Core:**
Three L-125 G5

**Standard Features:**
EC Motors for both airstreams
Direct Drive backward inclined plenum
Higher ESP of up to 2.5” w.g. at 3,000 CFM
Integrated programmable controls
True 100% Face and bypass enthalpy based modulating economizer
Class 1 low leakage motorized isolation dampers
Stainless steel double-sloped drain pan with cooling option

1" Double wall foam injected 20 gauge galvanized panel construction with R6.5 insulation

**Inlets/Outlets:**
OA & RA Inlets: 36” x 16”
SA Outlet: 24” x 16”
EA Outlet: 20” x 16”

**Filters:**
Total qty. 6, MERV 8:
20” x 20” x 2”

**Unit Dimensions & Weight for 1st Cabinets:**
174 7/8” L x 106 1/8” W x 75 1/8” H
2000-3850 lbs.

**Max. Shipping Dimensions & Weight for 1st Cabinets (on pallet):**
160” L x 90” W x 81” H
2225-4175 lbs.

**Unit Dimensions & Weight for 2nd Cabinets:**
176 7/8” L x 108 3/4” W x 77 1/8” H
2125-4150 lbs.

**Max. Shipping Dimensions & Weight for 2nd Cabinets (on pallet):**
160” L x 90” W x 83” H
2350-4375 lbs.

**Motor(s):**
Qty. 2, Direct drive motorized impeller packages

**Options:**
DX, heat pump, or chilled water cooling coil
Modulating hot gas reheat
Steam or hot water coil, gas heat module or electric heater
Onboard variable frequency drives (VFDs) - both airstreams
Fused disconnect
Spring isolators (VFDs only)
2" Double wall foam injected 20 gauge galvanized panel construction with R13.0 insulation
Exterior paint - grey, white, custom color
Salt spray - 2500 hour
BACNET factory activation
GFCI convenience outlet
Recirculation damper
Drain overflow switch
Mist eliminator
Ecrofin coating for coils

**Accessories:**
Filters - MERV 13, 2" and 4" (shipped loose), MERV 14, 2", and 4" (shipped loose)
Additional filters available upon request
Roof curb - standard 14"
Hurricane or seismic rated curbs
Curb clip kit
Carbon dioxide sensor/control - wall mount (CO2-W), duct mount (CO2-D)
IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)
Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)
Smoke detector
Room temperature and humidity sensor
Duct static pressure sensor with display to 10", without display 0-2"
Room pressure sensor with display to 1", without display 0-1"
Waterless trap negative pressure
Waterless trap positive pressure
Remote display

**INTERNAL OPTIONS FOR HEATING AND COOLING**

- ERV only
- ERV + EH (BT)
- ERV + CC (BT)
- ERV + CC/HC (BT)
- ERV + CC/HC (DT)
- ERV + CC/HGRH (BT)
- ERV + CC/HGRH (DT)
- ERV + CC/HGRH + GH (BT)
- ERV + CC/HGRH + GH (DT)
- ERV + CC/HGRH + HC (BT)
- ERV + CC/HGRH + HC (DT)

Specifications may be subject to change without notice.
### ELECTRICAL DATA

#### Electrical Specifications

<table>
<thead>
<tr>
<th>Motor Qty/kW or HP</th>
<th>Volts</th>
<th>Frequency</th>
<th>Phase</th>
<th>Min. Cir. Amps.</th>
<th>Max. Overcurrent Protection Device</th>
<th>FLA per motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC 2 @ 2.70 kW ea.</td>
<td>200-240</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>19.4</td>
<td>25</td>
<td>8.6-7.2</td>
</tr>
<tr>
<td>EC 2 @ 3.70 kW ea.</td>
<td>380-480</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>13.5</td>
<td>15</td>
<td>6.0-4.6</td>
</tr>
<tr>
<td>VFD 2 @ SHP ea.</td>
<td>208-230</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>31.3</td>
<td>45</td>
<td>13.9-13.4/6.7</td>
</tr>
<tr>
<td>VFD 2 @ SHP ea.</td>
<td>460</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>15.1</td>
<td>20</td>
<td>6.7</td>
</tr>
<tr>
<td>VFD 2 @ SHP ea.</td>
<td>575</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>11.9</td>
<td>15</td>
<td>5.3</td>
</tr>
</tbody>
</table>

**Note:** Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

### AIRFLOW PERFORMANCE

#### DN-3 200-240V 3P EC

#### DN-3 230/460/575V 3P AC

#### DN-3 380-480V 3P EC
DN3RT Dedicated Outdoor Air System Standard 1" Cabinet

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
SA: Supply Air to inside

INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR Pipe CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.

AIRFLOW ORIENTATION
Available as shown:

[Diagram showing airflow orientations]

SPECIFICATIONS & DIMENSIONS

Model: DN-3JRT ERV+COIL+HEAT 1"
Drawing Type: Unit Dimension
Version: NOV18

Coil Options: DX, CW, HGRH
Heat Options: HW, Electric, Gas, Steam

Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.
DN3RT Dedicated Outdoor Air System  Standard 2” Cabinet

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
SA: Supply Air to inside

INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.

AIRFLOW ORIENTATION
Available as shown:

COIL OPTIONS
DX, CW, HGRH

HEAT OPTIONS
HW, Electric, Gas, Steam

TOP VIEW
96” Minimum Service Area
36” Minimum Service Area

96” Minimum Service Area
36” Minimum Service Area

108 3/4” Overall
83 1/2” Roof
41 7/8”

17 1/8”
75” Minimum Service Area

176 7/8” Overall
147 5/8” Roof

27 3/4”
143 3/4” Minimum Service Area

84 3/8” Case

24” x 16” (opt)

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.
DN3RT Dedicated Outdoor Air System Curbs

DUCT SUPPORT DIMENSIONS
WIDTH: 1 1/2" DEPTH: 3"

RA: Room Air to be exhausted
SA: Supply Air to inside

DEDICATED OUTDOOR AIR SYSTEM CURBS
CURB DN3-ERV+C+H

UNIT MOUNTING & APPLICATION
This universal DN Series curb can be used in conjunction with RTF, RTH, RTV and RTR models.

DIMENSIONS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>Depth</td>
<td>3&quot;</td>
</tr>
<tr>
<td>I.D.</td>
<td>132 3/8&quot;</td>
</tr>
<tr>
<td>O.D.</td>
<td>136 1/8&quot;</td>
</tr>
<tr>
<td>Front View Width</td>
<td>20&quot;</td>
</tr>
<tr>
<td>Front View Depth</td>
<td>20&quot;</td>
</tr>
<tr>
<td>Top View Width</td>
<td>10 5/8&quot;</td>
</tr>
<tr>
<td>Top View Depth</td>
<td>10 5/8&quot;</td>
</tr>
<tr>
<td>Front View Width</td>
<td>65 1/8&quot;</td>
</tr>
<tr>
<td>Front View Depth</td>
<td>16 5/8&quot;</td>
</tr>
</tbody>
</table>

AIRFLOW ORIENTATION
Available as shown:

1. 1 1/2" x 1/4" Neoprene Gasket
2. 1 1/2" x 3 1/2" Wooden Nailer
THIS PAGE IS INTENTIONALLY LEFT BLANK.
**DN5IN**

**INDOOR UNIT**
Dedicated Outside Air System Unit with Energy Recovery

**NEW**

**Download specification at:** renewaire.com/specifications

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**Dedicated Outdoor Air System Standard**

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Energy Recovery Type:</th>
<th>Static plate total energy transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Airflow Range:</td>
<td>1,125-4,950 CFM</td>
</tr>
<tr>
<td>AHRI 1060 Certified Core:</td>
<td>One L-62-GS and four L-125-G5</td>
</tr>
<tr>
<td>Standard Features:</td>
<td>EC Motors for both airstreams Direct Drive backward inclined plenum Higher ESP of up to 3&quot; w.g. at 4,500 CFM Integrated programmable controls True 100% Face and bypass enthalpy based modulating economizer Class 1 low leakage motorized isolation dampers Stainless steel double-sloped drain pan with cooling option 1&quot; Double wall foam injected 20 gauge galvanized panel construction with R6.5 insulation</td>
</tr>
</tbody>
</table>

**Inlets/Outlets:**
- OA & RA Inlets: 60" x 16"
- SA Outlet: 24" x 16"
- EA Outlet: 20" x 32"

**Filters:**
- Total qty. 10, MERV 8: 16" x 20" x 2"
- Bypass Filters:
- Total qty. 4, MERV 8: 16" x 20" x 2"

**Unit Dimensions & Weight for 1" Cabinets:**
- 174" L x 103 3/4" W x 88 7/8" H
- 2600-4850 lbs.

**Max. Shipping Dimensions & Weight for 1" Cabinets (on pallet):**
- 180" L x 101 1/2" W x 94" H
- 2850-5100 lbs.

**Unit Dimensions & Weight for 2" Cabinets:**
- 176" L x 105 5/8" W x 90 7/8" H
- 2725-5050 lbs.

**Max. Shipping Dimensions & Weight for 2" Cabinets (on pallet):**
- 180" L x 101 1/2" W x 96" H
- 2975-5300 lbs.

**Motor(s):**
- Qty. 4, Direct drive motorized impeller packages

**Options:**
- DX, heat pump, or chilled water cooling coil Modulating hot gas reheat Steam or hot water coil, gas heat module or electric heater Onboard variable frequency drives (VFDs) - both airstreams Fused disconnect Spring isolators (VFDs only)

**2" Double wall foam injected 20 gauge galvanized panel construction with R13.0 insulation**
- Exterior paint - grey, white, custom color
- BACNET factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Electrofilm coating for coils

**Accessories:**
- Filters - MERV 13, 2" and 4" (shipped loose), MERV 14, 2" and 4" (shipped loose)
- Additional filters available upon request
- Duct mounted electric pre-heater (separately powered)
- Carbon dioxide sensor/control - wall mount (CO2-W), duct mount (CO2-D)
- IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)
- Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)
- Smoke detector
- Room temperature and humidity sensor
- Duct static pressure sensor with display to 10", without display 0-2"
- Room pressure sensor with display to 1", without display 0-1"
- Waterless trap negative pressure
- Waterless trap positive pressure
- Remote display

**INTERNAL OPTIONS FOR HEATING AND COOLING**

- ERV only
- ERV + EH (BT)
- ERV + GH (BT)
- ERV + CC/HC (BT)
- ERV + CC/HC + GH (BT)
- ERV + CC/HC (BT)
- ERV + CC/HC + GH (BT)

**Specifications may be subject to change without notice.**
DN 5IN
Dedicated Outdoor Air System
Standard

ELECTRICAL DATA

<table>
<thead>
<tr>
<th>Motor Qty/kW or HP</th>
<th>Volts</th>
<th>Frequency</th>
<th>Phase</th>
<th>Min. Circ. Amps.</th>
<th>Max. Overcurrent Protection Device</th>
<th>FLA per motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC 4 @ 2.70 kW ea.</td>
<td>200-240</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>36.6</td>
<td>45</td>
<td>8.6-7.2</td>
</tr>
<tr>
<td>4 @ 3.70 kW ea.</td>
<td>380-480</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>25.5</td>
<td>30</td>
<td>6.0-4.6</td>
</tr>
<tr>
<td>VFD 4 @ 5HP ea.</td>
<td>208-230</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>59.1</td>
<td>70</td>
<td>13.9-13.4/6.7</td>
</tr>
<tr>
<td>4 @ 5HP ea.</td>
<td>460</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>28.5</td>
<td>35</td>
<td>6.7</td>
</tr>
<tr>
<td>4 @ 5HP ea.</td>
<td>575</td>
<td>50/60 Hz</td>
<td>Three</td>
<td>22.5</td>
<td>25</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE

DN-5 200-240V 3P EC

DN-5 230/460/575V 3P AC

DN-5 380-480V 3P EC

Specifications may be subject to change without notice.
### DN5N Dedicated Outdoor Air System Standard 1" Cabinet

**SPECIFICATIONS & DIMENSIONS**

- **Model:** DN5N
- **Drawing Type:** Unit Dimension
- **Version:** NOV18

**ABBREVIATIONS**

- EA: Exhaust Air to outside
- OA: Outside Air intake
- RA: Room Air to be exhausted
- SA: Supply Air to inside

**INSTALLATION ORIENTATION**

Unit must be installed in orientation shown.

**NOTE**

1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

**UNIT MOUNTING & APPLICATION**

Must be mounted as shown. Airstreams cannot be switched. Duct configuration is field convertible.

**AIRFLOW ORIENTATION**

Available as shown:

- **AO**
- **SA**
- **RA**
- **AE**
- **TOP**
- **DN**
- **IN**
- **E**

**Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.**
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

**DN5N**
Dedicated Outdoor Air System
Standard 2" Cabinet

**DN-SERIES**
**SPECIFICATIONS & DIMENSIONS**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cabinet</strong></td>
<td></td>
</tr>
<tr>
<td><strong>7 7/8&quot;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>176&quot; Overall</strong></td>
<td></td>
</tr>
<tr>
<td><strong>170&quot; Case</strong></td>
<td></td>
</tr>
</tbody>
</table>

**FRONT VIEW**

- **1" NPT Condensate Drain** (opt)
- **Disconnect Switch** and EBOX
- **Coil Connections** locations vary
- **Gas Heat Connections** locations vary

**RIGHT VIEW**

- **RA Duct Flange** 60" x 16"
- **OA Damper** 60" x 16" Duct Flange

**LEFT VIEW**

- **EA (2) 7/8" Holes for Power and Controls** Field Wiring
- **SA Duct Flange** 24" x 16"
- **Gas Heat Combustion Air Intake**
- **Gas Heat Exhaust Connection** 90 7/8" Overall

**BACK VIEW**

- **EA Damper** 32" x 20" Duct Flange
- **32 1/2" Minimum Service Area**
- **168" Minimum Service Area**
- **80" Minimum Service Area**
- **22 3/4" Minimum Service Area**

**TOP VIEW**

- **OA Damper (Roof; Optional)** 60" x 16" Duct Flange
- **SA (Floor; Optional)** 24" x 16" Duct Flange
- **RA (Floor; Optional)** 60" x 16" Duct Flange
- **EA Damper (Roof; Optional)** 32" x 20" Duct Flange

**INSTALLATION ORIENTATION**

- Unit must be installed in orientation shown.

**NOTE**

1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

**Airflow Orientation**

- Available as shown:

**UNIT MOUNTING & APPLICATION**

- Must be mounted as shown. Airstreams cannot be switched. Duct configuration is field convertible.

**Coil Options:** DX, CW, HGRH

**Heat Options:** HW, Electric, Gas, Steam

**RENEWAIRE.COM**
FOR THE MOST COMPLETE AND CURRENT INFORMATION VISIT RENEWAIRE.COM
DN3IN, ERV + CC + HGRH + GH (BT) shown

Download specification at: renewaire.com/specifications

<table>
<thead>
<tr>
<th>ERV - Energy Recovery Ventilator</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH - Electric Heater</td>
</tr>
<tr>
<td>CC - Cooling Coil</td>
</tr>
<tr>
<td>HC - Heating Coil</td>
</tr>
<tr>
<td>GH - Gas Heat Module</td>
</tr>
<tr>
<td>HGRH - Hot Gas Reheat Coil</td>
</tr>
<tr>
<td>BT - Blow Thru</td>
</tr>
<tr>
<td>DT - Draw Thru</td>
</tr>
</tbody>
</table>

**Dedicated Outdoor Air System**

**Standard**

**SPECIFICATIONS**

**Energy Recovery Type:**
Static plate total energy transfer

**Typical Airflow Range:**
1,125-4,950 CFM

**AHRI 1060 Certified Core:**
One L-62-G5 and four L-125 G5

**Standard Features:**
- EC Motors for both airstreams
- Direct Drive backward inclined plenum
- Higher ESP of up to 3" w.g. at 4,500 CFM
- Integrated programmable controls
- True 100% Face and bypass enthalpy based modulating economizer
- Class 1 low leakage motorized isolation dampers
- Stainless steel double-sloped drain pan with cooling option
- 1" Double wall foam injected 20 gauge galvanized panel construction with R6.5 insulation

**Inlets/Outlets:**
- OA & RA Inlets: 60" x 16"
- SA Outlet: 24" x 16"
- EA Outlet: 20" x 32"

**Filters:**
- Total qty. 10, MERV 8:
  - 16" x 20" x 2"
- Bypass Filters:
  - Total qty. 4, MERV 8:
  - 16" x 20" x 2"

**Unit Dimensions & Weight for 1" Cabinets:**
- 205 1/8" L x 126 3/8" W x 92 1/8" H
- 2975-5500 lbs.

**Max. Shipping Dimensions & Weight for 1" Cabinets (on pallet):**
- 180" L x 101 1/2" W x 98" H
- 3225-5750 lbs.

**Unit Dimensions & Weight for 2" Cabinets:**
- 207 1/8" L x 128 3/8" W x 94 1/8" H
- 3100-5700 lbs.

**Max. Shipping Dimensions & Weight for 2" Cabinets (on pallet):**
- 180" L x 101 1/2" W x 100" H
- 3350-5950 lbs.

**Motor(s):**
- Qty. 4, Direct drive motorized impeller packages

**Options:**
- DX, heat pump, or chilled water cooling coil
- Modulating hot gas reheat
- Steam or hot water coil, gas heat module or electric heater
- Onboard variable frequency drives (VFDs) - both airstreams
- Fused disconnect
- Spring isolators (VFDs only)

**2" Double wall foam injected 20 gauge galvanized panel construction with R13.0 insulation**

**Other Variables:**
- H, L, M, R

**Internal Options for Heating and Cooling**

Specifications may be subject to change without notice.
ELECTRICAL DATA

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<tr>
<th>Motor Qty/kW or HP</th>
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Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE

DN-5 200-240V 3P EC

DN-5 230/460/575V 3P AC

DN-5 380-480V 3P EC

Specifications may be subject to change without notice.
DN5RT Dedicated Outdoor Air System Standard 1" Cabinet

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
SA: Supply Air to inside

INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.

AIRFLOW ORIENTATION
Available as shown:

COIL CONNECTIONS
Locations Vary

118" Minimum Service Area
36" Minimum Service Area
95 1/8" Roof
126 3/8" Overall
47 1/2"
17"
16" Door Swing
80" Minimum Service Area
168" Minimum Service Area

TOP VIEW

BACK VIEW

LEFT VIEW

FRONT VIEW

RIGHT VIEW
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

DN-SERIES

DN5

RT

Dedicated Outdoor Air System
Standard 2" Cabinet

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front View</td>
<td>207 1/8&quot; Overall</td>
</tr>
<tr>
<td>Top View</td>
<td>174&quot; Roof</td>
</tr>
<tr>
<td>Right View</td>
<td>15 1/4&quot;</td>
</tr>
<tr>
<td>Left View</td>
<td>15 1/8&quot;</td>
</tr>
<tr>
<td>Back View</td>
<td>128 3/8&quot; Overall</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condensate Drain</td>
<td>(opt)</td>
</tr>
<tr>
<td>Disconnect Switch</td>
<td>(opt)</td>
</tr>
<tr>
<td>Gas Heat Connections</td>
<td>Locations Vary</td>
</tr>
<tr>
<td>Coil Connections</td>
<td>Locations Vary</td>
</tr>
<tr>
<td>Exhaust Air to outside</td>
<td>EA (Floor; Optional) 24&quot; x 16&quot;</td>
</tr>
<tr>
<td>Outside Air intake</td>
<td>OA (Floor; Optional) 24&quot; x 16&quot;</td>
</tr>
<tr>
<td>Room Air to be exhausted</td>
<td>RA (Floor; Optional) 60&quot; x 16&quot;</td>
</tr>
<tr>
<td>Supply Air to inside</td>
<td>SA (Floor; Optional) 24&quot; x 16&quot;</td>
</tr>
</tbody>
</table>

**ABBREVIATIONS**

EA: Exhaust Air to outside
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RA: Room Air to be exhausted
SA: Supply Air to inside

**INSTALLATION ORIENTATION**

Must be mounted as shown. Airstreams cannot be switched. Duct configuration is field convertible.

**NOTE**

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5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

**AIRFLOW ORIENTATION**

Available as shown.

**UNIT MOUNTING & APPLICATION**

Must be mounted in orientation shown. Duct configuration is field convertible.

**ALTERNATE WIRING OPTIONS**

Available as shown.

**UNIT MOUNTING & APPLICATION**

Must be mounted as shown. Airstreams cannot be switched. Duct configuration is field convertible.

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**AIRFLOW ORIENTATION**

Available as shown.

**UNIT MOUNTING & APPLICATION**

Must be mounted in orientation shown. Duct configuration is field convertible.

**ALTERNATE WIRING OPTIONS**

Available as shown.

**UNIT MOUNTING & APPLICATION**

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**AIRFLOW ORIENTATION**

Available as shown.

**UNIT MOUNTING & APPLICATION**

Must be mounted in orientation shown. Duct configuration is field convertible.

**ALTERNATE WIRING OPTIONS**

Available as shown.

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**AIRFLOW ORIENTATION**

Available as shown.

**UNIT MOUNTING & APPLICATION**

Must be mounted in orientation shown. Duct configuration is field convertible.

**ALTERNATE WIRING OPTIONS**

Available as shown.

**UNIT MOUNTING & APPLICATION**

Must be mounted as shown. Airstreams cannot be switched. Duct configuration is field convertible.
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

UNIT MOUNTING & APPLICATION
This universal DN Series curb can be used in conjunction with RTF, RTH, RTV and RTR models.

AIRFLOW ORIENTATION
Available as shown.

UNIT MOUNTING & APPLICATION
This universal DN Series curb can be used in conjunction with RTF, RTH, RTV and RTR models.

UNIT MOUNTING & APPLICATION
This universal DN Series curb can be used in conjunction with RTF, RTH, RTV and RTR models.
THIS PAGE IS INTENTIONALLY LEFT BLANK.
OPTIONS

See individual submittal pages for availability by model.

ELECTRICAL

- Fused disconnect

VARIABLE FREQUENCY DRIVE

- Factory supplied and mounted variable frequency drives (VFDs)
  - both airstreams
- Separate VFD for each airstream
- Display/control in electrical box - can be remotely mounted
- Pre-programmed speeds or variable speed
- Shaft grounding ring on motors with VFDs

EXTERIOR PAINT 2500 HR. SALT SPRAY RATED

- White, grey and custom colors available

BACNET FACTORY ACTIVATION

- Allows for communication to a BAS via Bacnet MS/TP
- Factory programmed and tested
OPTIONS

See individual submittal pages for availability by model.

**GFCI CONVENIENCE OUTLET**
- 120 VAC GFCI outlet
- Requires a field provided dedicated 120V single phase electric circuit

**RECIRCULATION DAMPER**
- For unoccupied mode operation
- Internal to unit
- Unit mounted controls actuator

**DRAIN OVERFLOW SWITCH**
- For condensate overflow prevention
- A pull-to-test level for verifying correct installation

**MIST ELIMINATOR**
- 3/8” bonded aluminum mesh screen
- Removes moisture from mist

Specifications may be subject to change without notice.
DN SERIES CONTROLS

Integrated Programmable Controls

RenewAire’s INTEGRATED PROGRAMMABLE CONTROLS optimize the usability and performance of our commercial DOAS units by improving functionality, enabling intelligent controls, streamlining operations and boosting efficiencies. This is accomplished via sophisticated factory-installed microprocessor controls and sensors that provide stand-alone DOAS units with Direct Digital Control (DDC) and/or Building Management System (BMS) control interface.

KEY BENEFITS

Optimize usability:
- Maximize DOAS functionality and intelligent control via remote Ethernet accessibility and BMS connectivity without third-party interface.
- Streamline operations by easily managing and changing DOAS control parameters via an advanced user interface.
- Increase uptime reliability through constant system monitoring.
- Achieve cleaner and healthier indoor air via IAQ-based DOAS control.

Improve performance:
- Support effective and efficient DOAS performance with real-time data trending and logging capabilities.
- Enhance DOAS control via access to real-time airflow rates, airstream temperature and airstream humidity.
- Facilitate fast and easy DOAS upkeep and maintenance with real-time fan, filter and bypass status.

Increase capabilities:
- Expand DOAS connectivity via access to a wide range of open standard protocols, including BACnet and Modbus.
- Broaden DOAS interoperability by connecting to third-party equipment and receiving third-party signals for unit control.
- Expand DOAS-application scope by meeting new code requirements and the needs of institutional customers requiring DDC controls in mechanical equipment.

Simplify operations:
- Achieve easier DOAS setup, commissioning and balancing via simple-to-install controls.
- Improve operational efficiencies by easily communicating DOAS status, airflows, temperatures and humidity.
- Allow for more flexible installations by enabling DOAS units to be interconnected with a BMS, operated independently or run in concert with other DOAS units.

OPTIONS & ACCESSORIES

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 sensor</td>
<td>(wall or duct mount)*</td>
</tr>
<tr>
<td>IAQ sensor</td>
<td>(wall or duct mount)*</td>
</tr>
<tr>
<td>Occupancy sensor</td>
<td>(ceiling or wall mount)</td>
</tr>
<tr>
<td>Smoke detector</td>
<td>(duct mount)</td>
</tr>
<tr>
<td>BACnet factory activation</td>
<td>(MS/TP or TCP/IP)</td>
</tr>
<tr>
<td>Remote display</td>
<td>(handheld or wall mount)</td>
</tr>
<tr>
<td>Room Pressure Sensor</td>
<td>(with or without display)</td>
</tr>
<tr>
<td>Duct Static Pressure Sensor</td>
<td>(with or without display)</td>
</tr>
<tr>
<td>Temperature Sensor Kit</td>
<td>(duct mount)**</td>
</tr>
</tbody>
</table>

NOTES

*Sensor output is 0-10 vdc, for use as on/off or modulating control.
**Temperature Sensor Kit is for use with non-integrated heating.

Specifications may be subject to change without notice.
# DN SERIES CONTROLS

## Integrated Programmable Controls Continued

### MODEL

**PREMIUM CONTROLS**

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

Premium controls include all functionality of Enhanced-controls capabilities, as well as airflow and IAQ monitoring, demand control, electric or gas heating options, as well as DN-Series cooling and heating control.

### FEATURES

| Ability to automatically enable and disable unit |
| Enable the exhaust fan only |
| Filter alarm for both sets of filters |
| Bypass controls |
| Control isolation dampers |
| Supply fan modulation for EC or VFD |
| Exhaust fan modulation for EC or VFD |
| Internal time clock |
| Defrost controls - Canada only |
| Smoke detection - sensor required |
| Demand control ventilation using CO2 - sensor required |
| Occupancy-based ventilation - sensor required |
| IAQ control ventilation using VOC - sensor required |
| Microprocessor controller |
| Provide supply and exhaust air temperatures |
| Provide outside and return air temperature and humidity |
| Fan status on both fans |
| Enable the supply fan only |
| Enable the exhaust fan only |
| Micro USB port |
| BACnet MS/TP or BACnet TCP/IP - activation required |
| RTU or Modbus TCP |
| Data trending |
| Outside airflow rate |
| Exhaust airflow rate |
| Duct pressure control |
| Unit supply air temp |
| Heating enable |
| Heating modulation - staged or modulating |
| Cooling modulation - staged or modulating |
| Recirculation |

Specifications may be subject to change without notice.
OPTIONS & ACCESSORIES

ACCESSORIES

Controls
All DN models come complete with Carel Integrated Programmable Controls with BMS connectivity allowing for automated control of the unit, including temperature/humidity, airflow, IAQ monitoring, CO2 demand control, cooling/dehumidification control and various heating options.

CO2 SENSORS
- Adjustable control from 400-2000 PPM
- Digital display
- 24 VAC power requirement
- Computer/BAS interface for information and control
- Self calibrates during periods of low occupancy
- Wall mount or add duct mount accessory

IAQ SENSORS
- Measures TVOC
- Direct correlation to CO2 levels
- 0-2000 ppm CO2 equivalent output signal
- Digital display on wall mount
- Selectable 0-5 or 0-10V dc signal
- 24 VAC power required
- Internal menu for easy set-up

MOTION OCCUPANCY SENSORS
- Passive infrared sensor
- Adjustable time-off delay to 30 minutes
- 24 VAC power requirement
- Ceiling mount or directable wall mount
- Coverage floor space
  - Ceiling mount: 1500 sq. ft.
  - Wall mount: 2500 sq. ft.
- Major motion area
  - Ceiling mount: 50 ft. diameter
  - Wall mount: 68 x 50 ft.

SMOKE DETECTOR
- Photoelectric type detector
- Plug-in sensor
- Round, square or rectangular duct mounting options
- Easy access test/reset button and LED display
- For 100-4000 fpm duct air velocity applications
- 24 VAC power requirement
- Interconnect feature for multi-fan shutdown
- Built-in short circuit protection

Specifications may be subject to change without notice.
ACCESSORIES

Controls Continued

ROOM TEMPERATURE AND HUMIDITY SENSOR

- Ultra fast response cross-linked bulk polymer capacitive sensing element
- NIST traceable ± 2% RH and ± 0.1% RTD accuracy
- Proprietary hydrophobic & oleophobic ePTFE filter to protect the sensing element from condensation, fog, salt, air, pollutants other contaminants

REMOTE DISPLAY

- Hand held or wall mount
- LED display
- Keypad for easy programming

PRESSURE SENSORS (DUCT MOUNT ONLY)

- With or without display
- Differential pressure transmitter
- 4-20 mA or field selectable 0-10 & 0.5V output signal
- Integral barbed tubing connections that fit 1/8" and 3/16" ID tubing

TEMPERATURE SENSOR KIT

- Duct temperature sensors
- Hermetically sealed 304SS probe
- Operating range -40°F to 210°F
- Easy installation with integral mounting plate

Specifications may be subject to change without notice.
OPTIONS & ACCESSORIES

ACCESSORIES

See individual submittal pages for availability by model.

MERV13 FILTERS

- Extended-surface pleated media filter
- Electrostatically-charged 100% synthetic media
- 2” and 4” depths
- Heavy-duty moisture-resistant construction

MERV14 FILTERS

- Extended-surface pleated media filter
- Electrostatically-charged 100% synthetic media
- 2” and 4” depths
- Heavy-duty moisture-resistant construction

HURRICANE OR SEISMIC RATED CURBS

- Unit to curb attachment brackets
- Stamped/Signed curb calculations by State Licensed PE

CURB CLIP KIT

- Engineered, convenient and weather tight method to attach unit to roof curb
- Suitable for most applications in all climates with basic wind speeds up to 90 MPH

WATERLESS TRAP NEGATIVE PRESSURE

- For condensate drain lines under negative pressure
- Allows liquid condensate to drain from unit while simultaneously preventing air from entering or escaping the unit
- Allows centerline distance between unit drain connection and trap to be the same
- Installs horizontally

WATERLESS TRAP POSITIVE PRESSURE

- For condensate drain lines under positive pressure
- Prevents air from entering or escaping the unit
- Allows water to drain from the unit
- Trap operates dry when no water removal required and wet when required
- Installs vertically

Specifications may be subject to change without notice.
**DN SERIES MODEL CONFIGURATION GUIDE**

Note: Not all options are available on every model.

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>-</th>
<th>-</th>
<th>J</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
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<th>-</th>
<th>-</th>
</tr>
</thead>
</table>

**Ordering & Support**

For Technical Support E-mail: RenewaireSupport@renewaire.com

To Place an Order E-mail: RenewaireOrders@renewaire.com
DN SERIES MODEL
CONFIGURATION GUIDE

Note: Not all options are available on every model.

Configuration Guide Continued

<table>
<thead>
<tr>
<th>kW for EC Motors (see Restrictions 1, 6, 7 &amp; 8)</th>
<th>Coil Pins Per Inch (answer for each coil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.35 kW</td>
<td>8, 9, 10, 11, 12, 13, 14</td>
</tr>
<tr>
<td>2.70 kW</td>
<td></td>
</tr>
<tr>
<td>3.70 kW</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fan Horsepower for VFD (see Restrictions 2, 4 &amp; 5)</th>
<th>Coil Coating (answer for each coil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 HP</td>
<td>None</td>
</tr>
<tr>
<td>5 HP</td>
<td>Electrofin UV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vibration Isolation for VFD (see Restriction 3)</th>
<th>Coil Position (answer for each coil) (see Restrictions 11, 12, 13, 14 &amp; 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>Position 1 (First in direction of Airflow after fan/core)</td>
</tr>
<tr>
<td>Neoprene (Standard)</td>
<td>Position 2 (Second in direction of Airflow after fan/core)</td>
</tr>
<tr>
<td></td>
<td>Position 3 (Third in direction of Airflow after fan/core)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QFCI Convenience Outlet</th>
<th>Coil Mode (Water Coil Only) (see Restriction 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Cooling</td>
</tr>
<tr>
<td>No</td>
<td>Heating &amp; Heating (Seasonal Changeover)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drain Overflow Switch</th>
<th>Cool Style (Evaporator Coil Only) (see Restriction 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Standard</td>
</tr>
<tr>
<td>No</td>
<td>Interlaced 2 Circuits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paint</th>
<th>Element Material (Electric Heaters) (see Restriction 16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (Standard)</td>
<td>Natural Gas (Standard)</td>
</tr>
<tr>
<td>2500 Hour Salt Spray</td>
<td>Propane</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paint Color:</th>
<th>Fuel Type (Gas Heat Module) (see Restriction 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Natural Gas (Standard)</td>
</tr>
<tr>
<td>Grey</td>
<td>Propane</td>
</tr>
<tr>
<td>Custom</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outside Air Hood Moisture Eliminator (see Restriction 18)</th>
<th>Elevation Range (Gas Heat Module)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0-2000'</td>
</tr>
<tr>
<td>No</td>
<td>2001'-2999'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recirculation Damper:</th>
<th>Control Type (Gas Heat Module)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Modulating 5:1 (Natural Gas/3.1 (Propane) (Standard)</td>
</tr>
<tr>
<td>No</td>
<td>Modulating 10:1 (Natural Gas/6.1 (Propane)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coil Tube Geometry (answered for each coil)</th>
<th>Gas Derated (Gas Heat Module) (see Restriction 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; x 1.00&quot; x 0.806&quot;</td>
<td></td>
</tr>
<tr>
<td>3/8&quot; x 1.250&quot; x 1.0825&quot;</td>
<td></td>
</tr>
<tr>
<td>1/2&quot; x 1.250&quot; x 1.0825&quot;</td>
<td></td>
</tr>
<tr>
<td>5/8&quot; x 1.500&quot; x 1.299&quot;</td>
<td></td>
</tr>
<tr>
<td>5/8&quot; x 1.500&quot; x 1.500&quot;</td>
<td></td>
</tr>
<tr>
<td>1.0&quot; x 3.000&quot; x 2.000&quot;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coil Rows (answered for each coil)</th>
<th>Separated Combustion (Separate combustion air intake and flue exhaust)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exhaust flue venting only (Combustion air intake via intake louver on unit)</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Restrictions:
1. Fan kW only available with Fan Control Code “E”.
2. Fan Horsepower only available with Fan Control Code “V”.
3. Vibration Isolation only available with Fan Control Code “V”.
4. Fan Horsepower 3 only available in Model Code “DN-2-”.
5. Fan Horsepower 5 only available in Model Codes “DN-2-” & “DN-5-”.
6. 1.35 kW only available in Model Codes “DN-2-” & “DN-5-” & “Y”.
7. 2.70 kW only available in Phase Code “3” and Voltage Code “3” or “5”.
8. 3.70 kW only available in Phase Code “3” and Voltage Code “4”.
9. Gas derating question only applies for elevations above 2000’.
10. Interlaced 2 Circuits Coil Style only available with Direct Expansion Coil or Heat Pump Coil.
11. If only one coil is selected, it must be placed in position 1.
12. Coil Position 2 only available when 2 or 3 coils have been specified.
13. Coil Position 3 only available when 3 coils have been specified.
14. For Cooling Codes “P” & “R”, the Hot Gas Reheat Coil must be in the position directly following the cooling coil.
15. For Combustion Inlet Type “G” & “W”, the Direct Expansion coil must be placed in position 1.
16. One coil may be specified to act as both a hot water and chilled water coil. Only available when Cooling Code is C and Heating Code is H.
17. Combustion Inlet Type Separated Combustion only applies for Location Code “IN”.
18. Outside Air Hood Moisture Eliminator only available in Location Code “RT”.

DN-Series Configuration Code Chart

For Technical Support E-mail: RenewaireSupport@renewaire.com
To Place an Order E-mail: RenewaireOrders@renewaire.com
INDOOR AIR QUALITY MATTERS

- Deficient IAQ is an EPA top-five health risk
- People spend 90% of their time indoors
- Indoor air can be 2-5 times and up to 100 times more polluted than outdoor air

BENEFITS OF INCREASED VENTILATION

- Better health
- Improved cognitive function
- Increased productivity

TECHNICAL/APPLICATIONS SUPPORT

The goal of our technical-support team is to provide the best customer service in the HVAC industry. You can count on our knowledgeable and seasoned staff for all your technical, application and service needs, and we’ll respond quickly and effectively to answer any of your questions.

CONTACT RENEAIRE

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FOR TECHNICAL SUPPORT: RenewaireSupport@renewaire.com
TO PLACE AN ORDER: RenewaireOrders@renewaire.com
EVERY GEOGRAPHIC REGION
Our ERVs function perfectly across the world in every geographic region.

EVERY CLIMATE
Our ERVs operate in every climate—from Alaska to Florida, and everywhere in between.

EVERY PROJECT
From massive skyscrapers to cozy residential homes, our ERVs can be used in every size project and in every code jurisdiction.

RELEVANT EVERYWHERE

EVERYWHERE
Our ERVs moderate the extremes of outdoor supply-air temperature and humidity year-round, providing a sustainable solution for fresh air that feels like a perfect spring day.

APPLIED EVERYWHERE

When indoor occupants breathe in unclean air, this harms their health and causes cognitive impairment. Our ERVs can provide cleaner and healthier indoor air for every type of building in the world, thus improving occupants’ wellbeing, while also reducing energy costs.

RESIDENTIAL
The increased airtightness of newer and remodeled homes is causing deficient IAQ, resulting in more health problems for indoor occupants.

COMMERCIAL
As commercial buildings become more airtight, deficient IAQ is increasing and causing sickness, absenteeism and decreased productivity.

HEALTHCARE
The high occupant density of hospitals, nursing homes and other healthcare facilities results in deficient IAQ and ensuing health problems for patients and staff alike.

RESTAURANTS/COFFEE SHOPS
The large volume of indoor occupants in restaurants and coffee shops causes deficient IAQ and subsequent health problems.

RETAIL
The high level of foot traffic in retail stores leads to deficient IAQ and the potential sickness of shoppers, which can negatively impact sales.

DAYCARE
Crowded daycare facilities breed deficient IAQ, thus causing health problems for everyone—especially children who are more vulnerable.

EDUCATION (LOWER AND HIGHER)
With students and teachers packed into tight classrooms, instances of deficient IAQ go up, resulting in academic performance and test scores going down.

GOVERNMENT
Aging and crowded government buildings result in deficient IAQ, which can impair worker performance and productivity.

EVERY TYPE OF BUILDING
Every type of building can benefit from the enhanced IAQ generated by RenewAire ERVs, including veterinary clinics, nail salons and manufacturing facilities, among others.
RenewAire ERVs can be applied everywhere across all commercial, educational, institutional, light industrial and residential buildings. Our technology excels in every geographic region, every climate, and every size project.