

DN 3IN

Dedicated Outdoor Air System Standard



INDOOR UNIT

Dedicated Outside Air System Unit with Energy Recovery

NEW



DN3IN, ERV + CC + HGRH + GH (BT) shown

Download specification at: renewaire.com/specifications

- 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

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 1" Cabinets

- 147 7/8" L x 90 1/8" W x 71 7/8" H
- 1600-3475 lbs.

Max. Shipping Dimensions & Weight for 1" Cabinets (on pallet):

- 160" L x 90" W x 77" H
- 1825-3700 lbs.

Unit Dimensions & Weight for 2" Cabinets

- 149 7/8" L x 92 1/8" W x 73 7/8" H
- 1725-3675 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

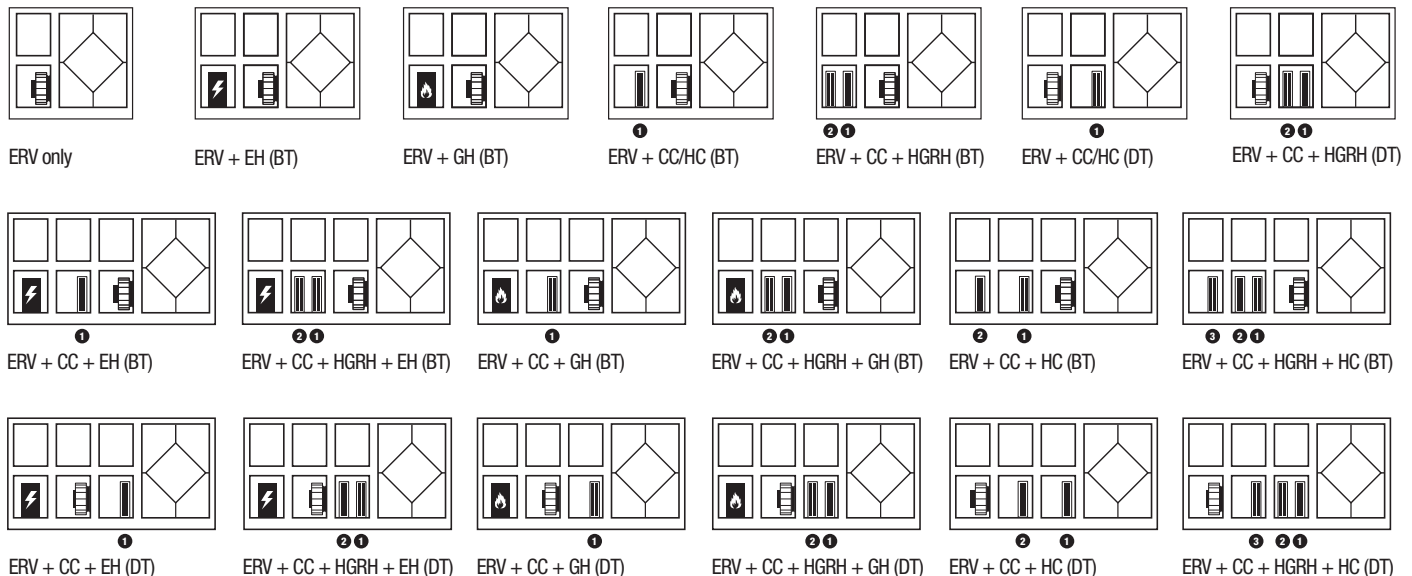
Options:

- 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
- BACNET 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



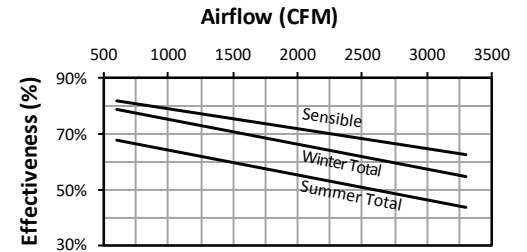
Specifications may be subject to change without notice.

ELECTRICAL DATA

Electrical Specifications							
	Motor Qty/kW or HP	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	FLA per motor
EC	2 @ 2.70 kW ea.	200-240	50/60 Hz	Three	19.4	25	8.6-7.2
	2 @ 3.70 kW ea.	380-480	50/60 Hz	Three	13.5	15	6.0-4.6
VFD	2 @ 5HP ea.	208-230	50/60 Hz	Three	31.3	45	13.9-13.4/6.7
	2 @ 5HP ea.	460	50/60 Hz	Three	15.1	20	6.7
	2 @ 5HP ea.	575	50/60 Hz	Three	11.9	15	5.3

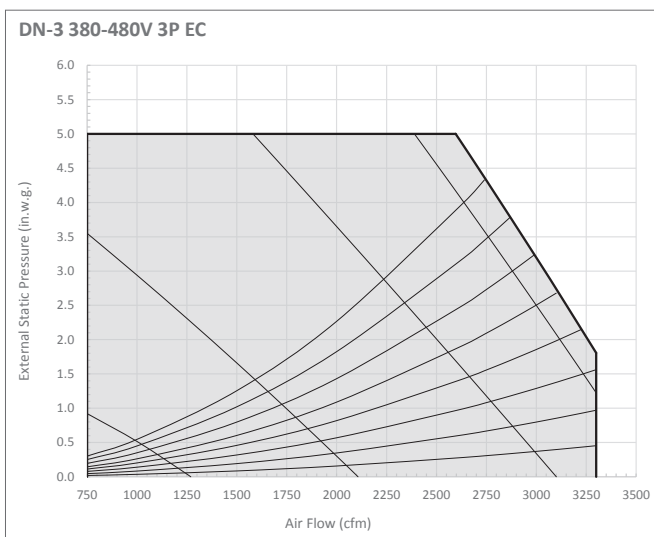
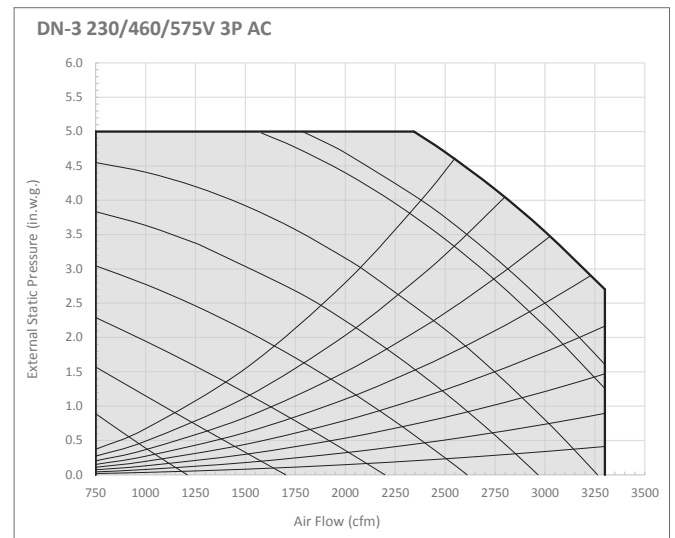
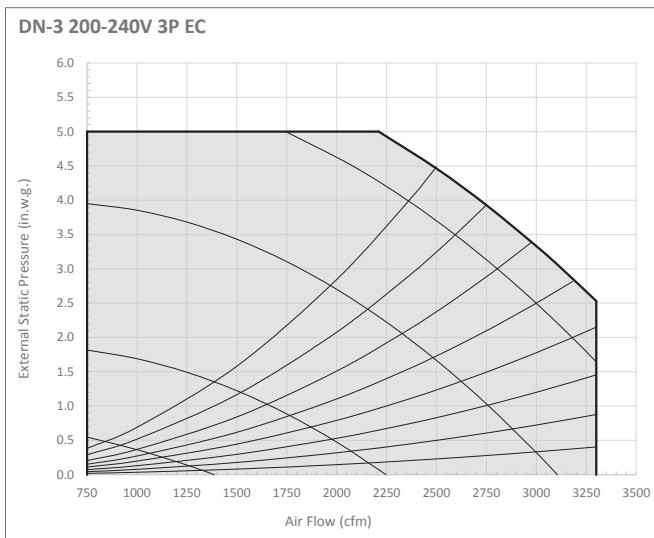
Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

CORE PERFORMANCE



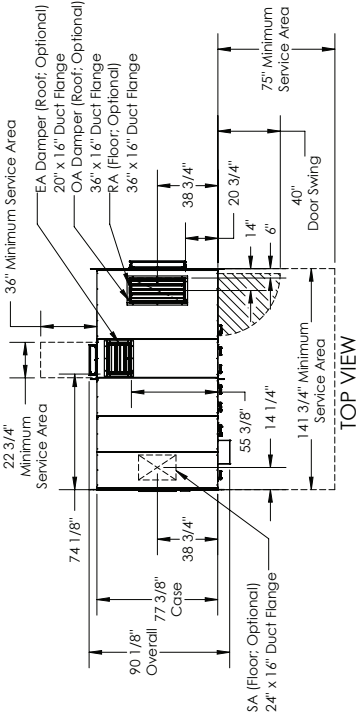
At AHRI 1060 standard conditions.
See all AHRI certified ratings at www.ahrinet.org.

AIRFLOW PERFORMANCE

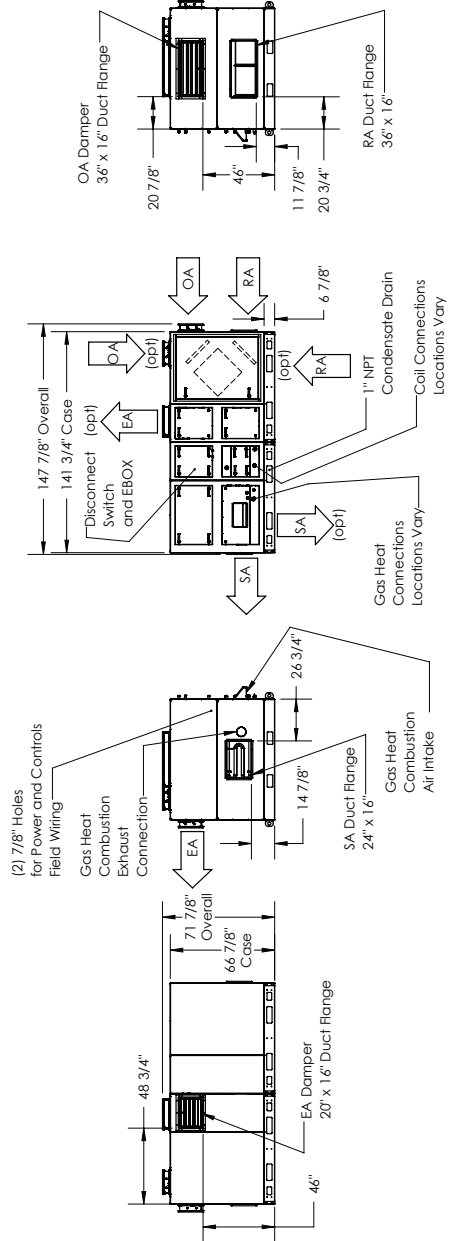


DN3IN Dedicated Outdoor Air System Standard 1" Cabinet

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



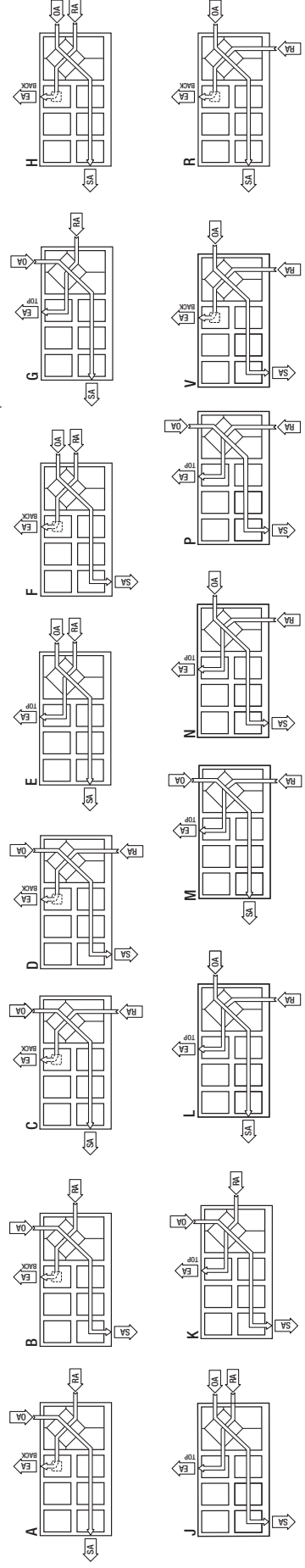
- ABBREVIATIONS**
- EA: Exhaust to outside
 - OA: Outside Air Intake
 - RA: Room Air to be exhausted
 - SA: Supply Air to inside
- INSTALLATION ORIENTATION**
- Unit must be installed in orientation shown.
- NOTE**
- UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
 - SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
 - FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
 - UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORRED.
 - FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.



AIRFLOW CONFIGURATION
Available as shown:

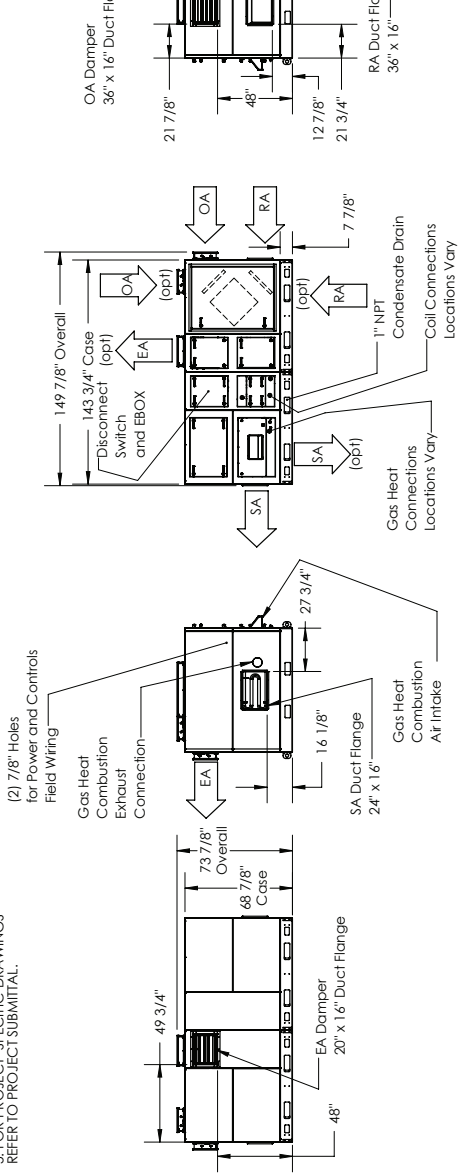
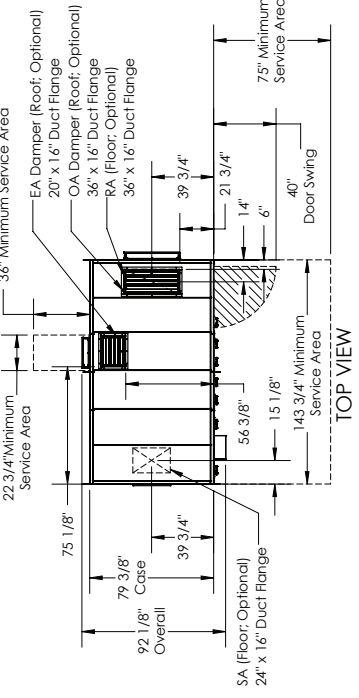


UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.



DN3IN Dedicated Outdoor Air System Standard 2" Cabinet

- ABBREVIATIONS**
 EA: Exhaust Air to outside
 OA: Outside Air Intake to unrecirculated
 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.



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.



RIGHT VIEW

FRONT VIEW

LEFT VIEW

BACK VIEW

AIRFLOW CONFIGURATION
 Available as shown:

