

RENEW



DN SERIES

DEDICATED OUTDOOR AIR
SYSTEM CATALOG

BECAUSE INDOOR AIR QUALITY MATTERS

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



ADVERSE 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.

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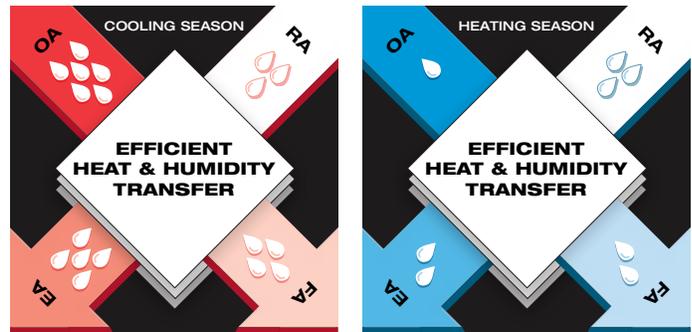


RENEWAIRE ERVs ACHIEVE SUSTAINABLE IAQ

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.

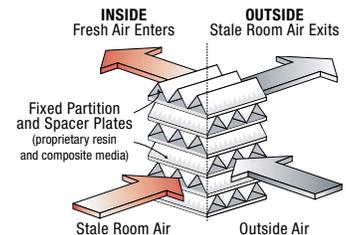
OPTIMIZING ENERGY EFFICIENCY

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 capacities can be decreased, thus furnaces and air conditioners can be smaller. This process ensures efficient operations and keeps both energy use and costs low, while 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® Gold 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 energy recovery ventilation technology
- Due to competitive pricing and decreased costs, payback is short and ROI is maximized
- Contractors and OEMs can pass these significant savings along to their customers
- End users can benefit from a significantly reduced operating cost



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

- RenewAire products are highly certified. See individual catalog submittal for certification details:
 - UL
 - cUL
 - ETL
 - HVI
 - AHRI



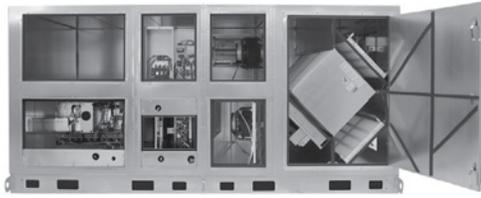
DN 2IN

Dedicated Outdoor Air System Standard



INDOOR UNIT

Dedicated Outside Air System
Unit with Energy Recovery



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

Energy Recovery Core is AHRI Certified®



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: 375-1,650 CFM

AHRI 1060 Certified Core:

One L-62-G5 and one L-125-G5

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

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 Weight for 1" Cabinets: 1250-2425 lbs.

Max. Shipping Dimensions & Weight for 1"

Cabinets (on pallet):
140" L x 90" W x 77" H
1450-2625 lbs.

Unit Weight for 2" Cabinets: 1350-2550 lbs.

Max. Shipping Dimensions & Weight for 2"

Cabinets (on pallet):
140" L x 90" W x 79" H
1550-2750 lbs.

Motor(s):

Qty. 2, Direct drive motorized impeller packages

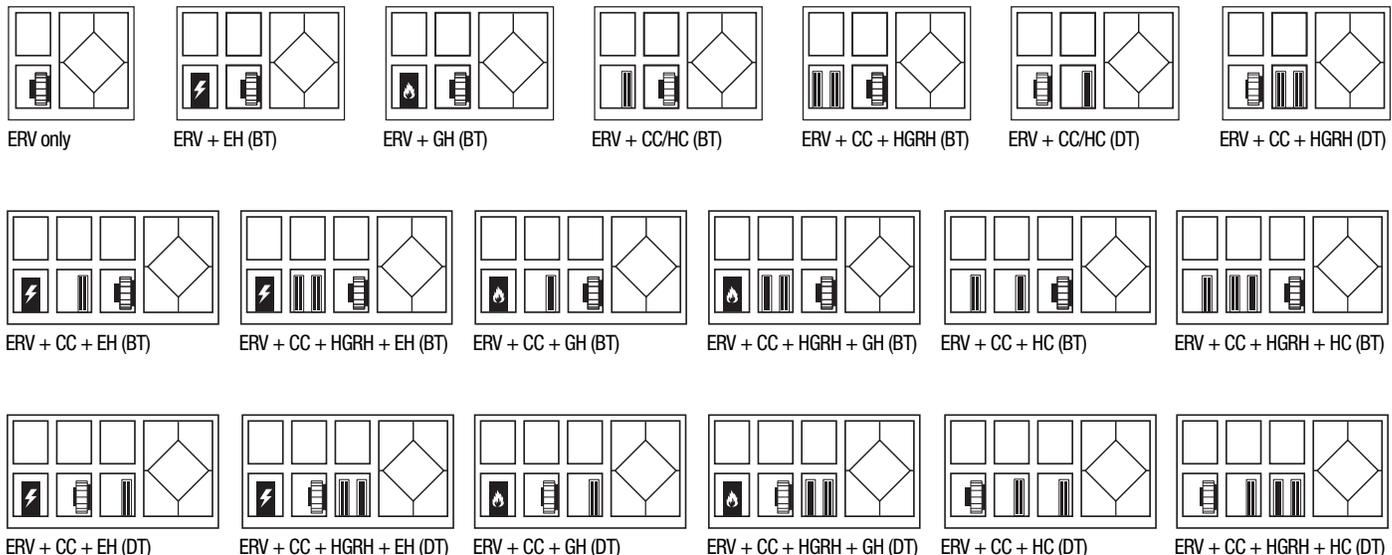
Options:

- 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- 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





Dedicated Outdoor Air System
Standard

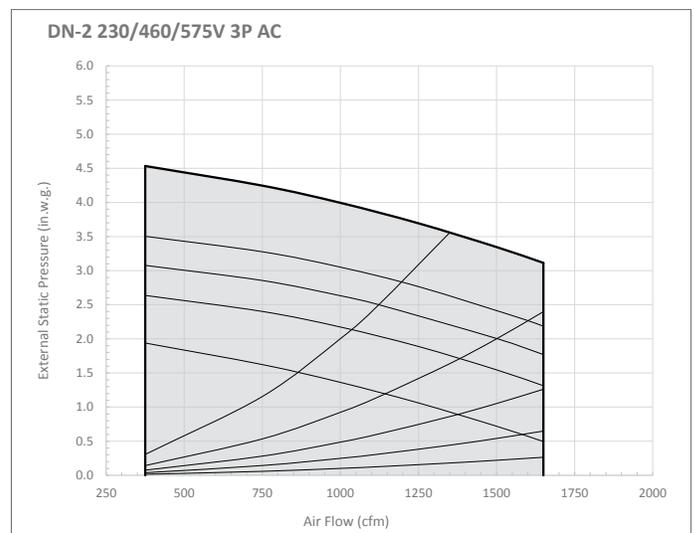
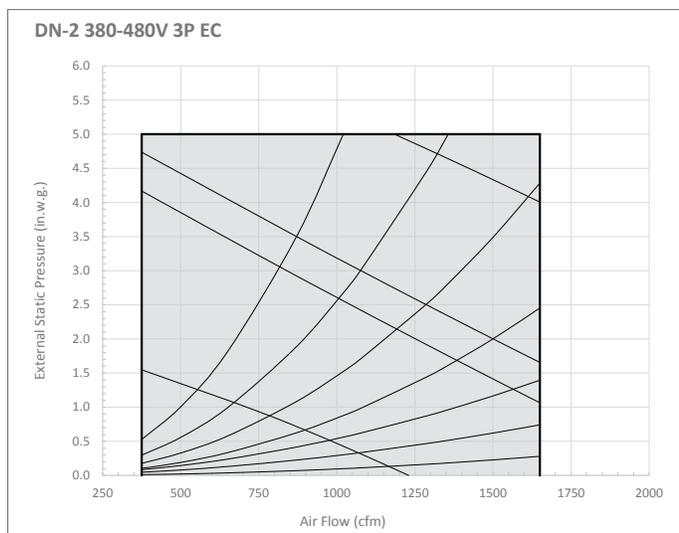
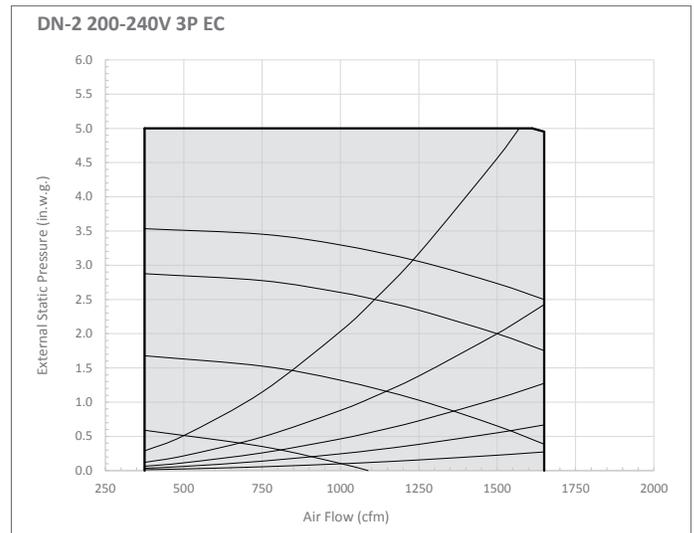
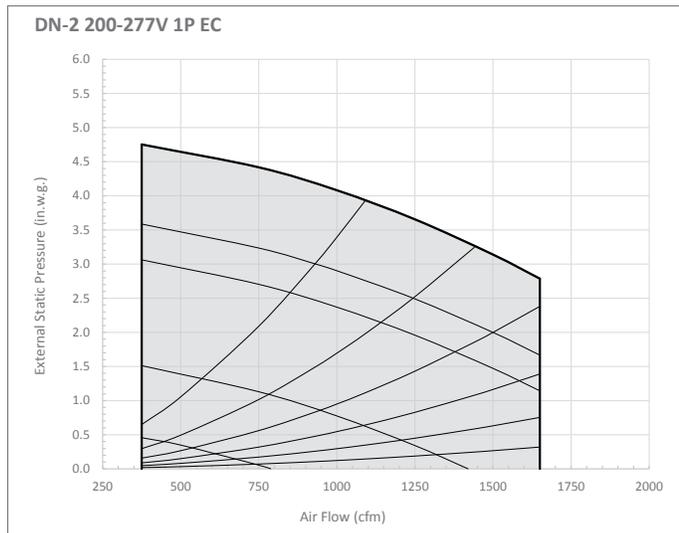


ELECTRICAL DATA

Electrical Specifications							
	Motor Qty/kW or HP	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	FLA per motor
EC	2 @ 1.35 kW ea.	200-277	50/60 Hz	Single	15.1	20	6.7-4.8
	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 @ 3HP ea.	208-230	50/60 Hz	Three	20.3	25	9-8.4/4.2
	2 @ 3HP ea.	460	50/60 Hz	Three	9.5	15	4.2
	2 @ 3HP ea.	575	50/60 Hz	Three	7.4	15	3.3

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.

AIRFLOW PERFORMANCE



DN2IN Dedicated Outdoor Air System Standard 1" Cabinet

ABBREVIATIONS

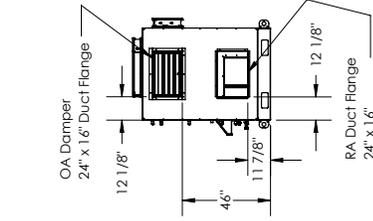
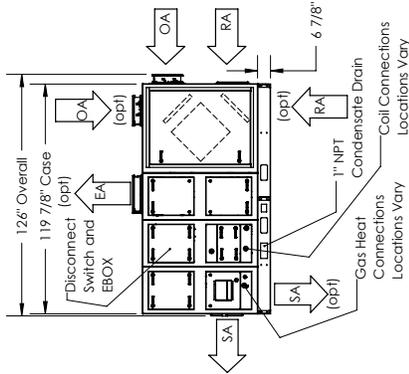
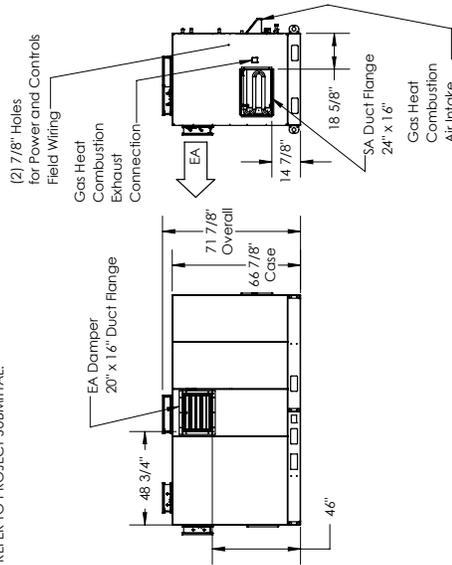
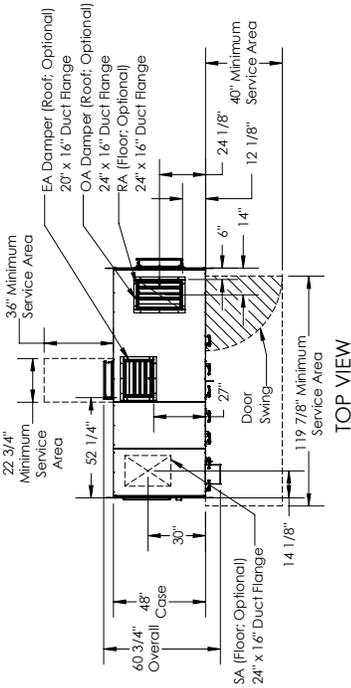
- OA: Outside Air to outside
- RA: Room Air to be exhausted
- SA: Supply Air to inside

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 MIRRORRED.
5. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.



BACK VIEW

FRONT VIEW

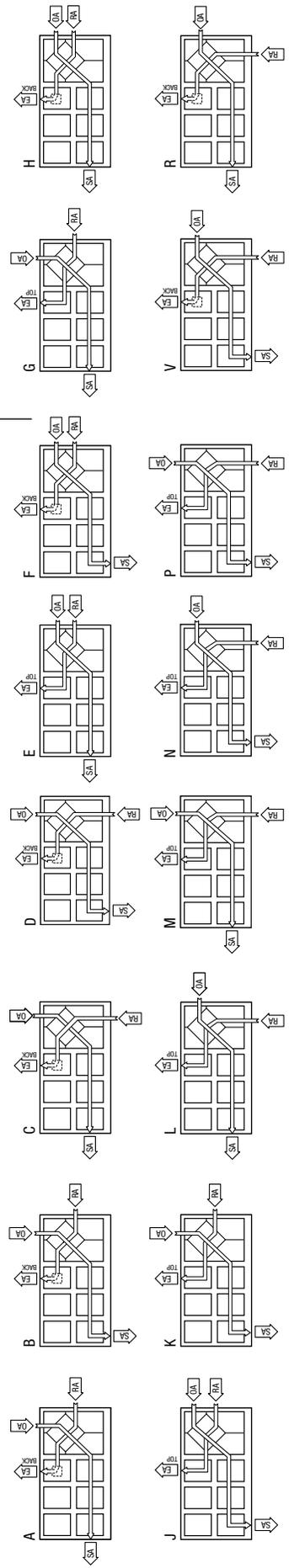
RIGHT VIEW

AIRFLOW ORIENTATION

Available as shown:



UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.



DN2IN Dedicated Outdoor Air System Standard 2" Cabinet

ABBREVIATIONS

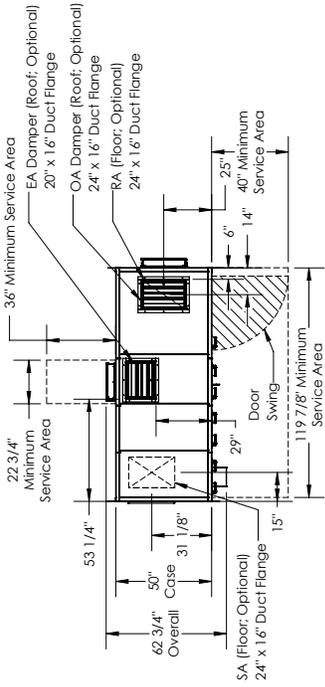
- EA: Exhaust Air to outside
- RA: Return Air to be exhausted
- SA: Supply Air to inside

INSTALLATION ORIENTATION

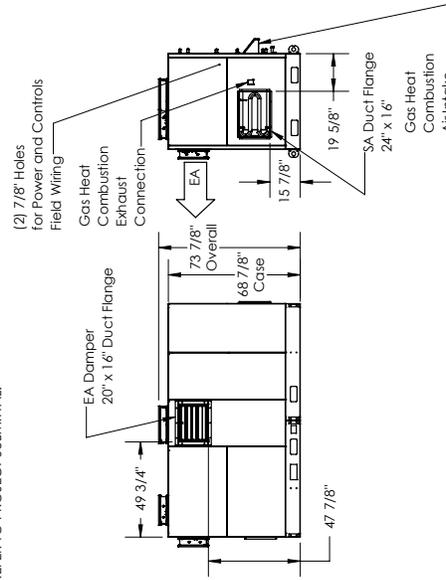
Unit must be installed in orientation shown.

NOTE

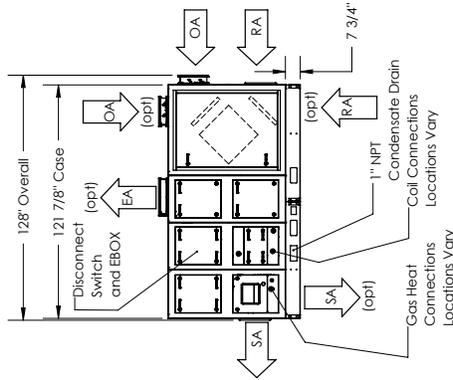
- UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
- SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
- FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
- UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORRED.
- FOR PROJECT SPECIFIC DRAWINGS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



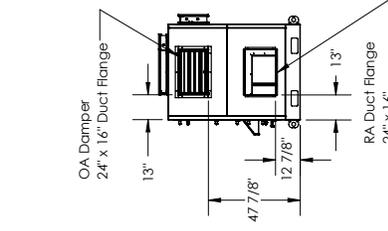
TOP VIEW



BACK VIEW



FRONT VIEW



RIGHT VIEW

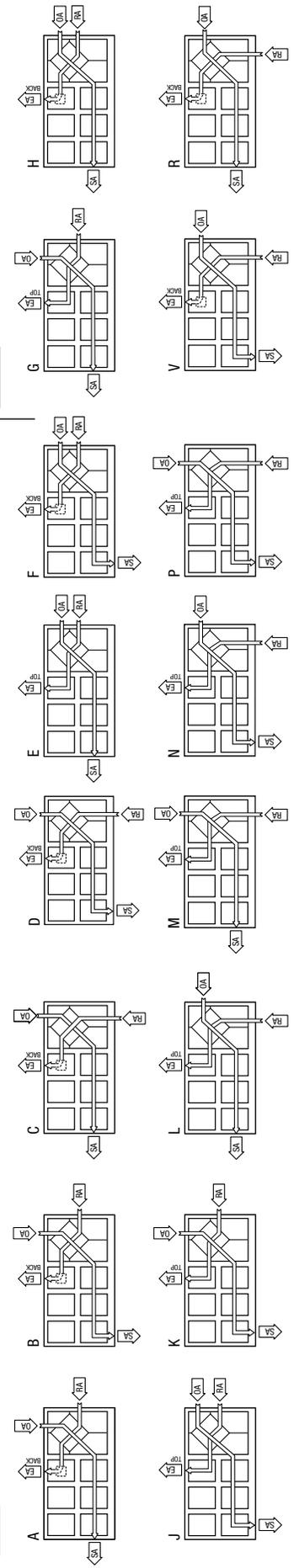
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

AIRFLOW ORIENTATION

Available as shown:



UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.



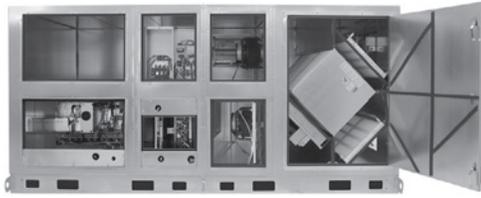
DN 2RT

Dedicated Outdoor Air System Standard



ROOFTOP UNIT

Dedicated Outside Air System
Unit with Energy Recovery



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

Energy Recovery Core is AHRI Certified®



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: 375-1,650 CFM

AHRI 1060 Certified Core:

One L-62-G5 and one L-125-G5

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

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 Weight for 1" Cabinets: 1500-2700 lbs.

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

- 140" L x 90" W x 79" H
- 1700-2900 lbs.

Unit Weight for 2" Cabinets: 1600-2825 lbs.

Max. Shipping Dimensions & Weight for 2" Cabinets (on pallet):

- 140" L x 90" W x 81" H
- 1800-3025 lbs.

Motor(s):

Qty. 2, Direct drive motorized impeller packages

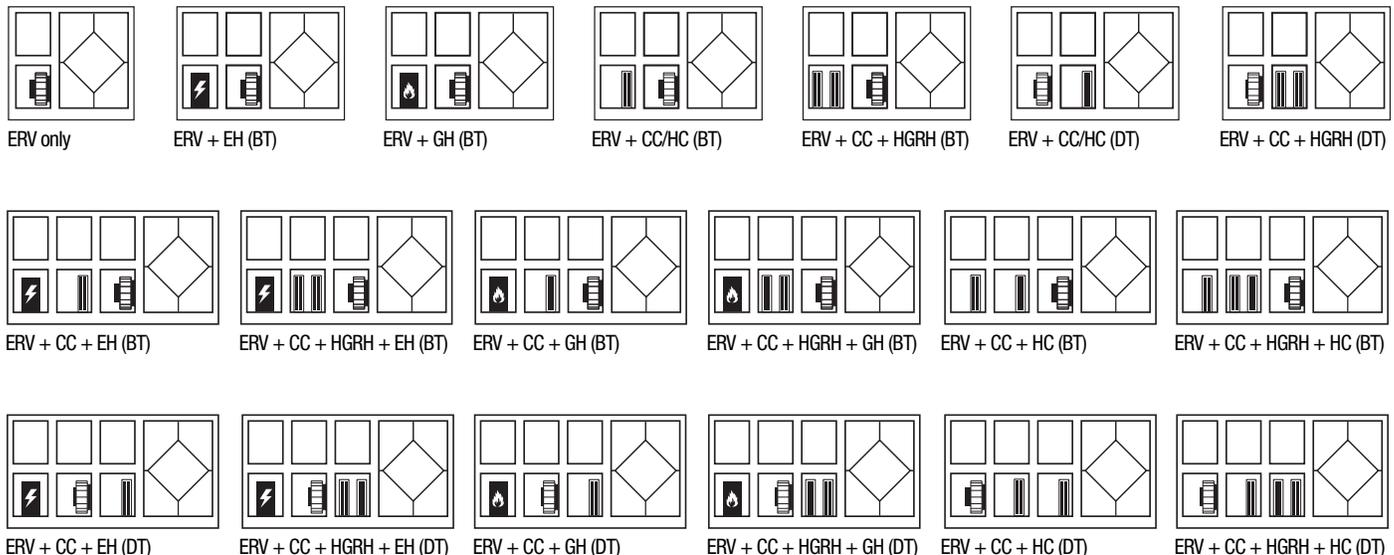
Options:

- 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- Exterior paint - grey, white, custom color
- Salt spray - 2500 hour
- BACNET factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Mist eliminator
- 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
- Roof curb - standard 14"
- Custom 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





Dedicated Outdoor Air System
Standard

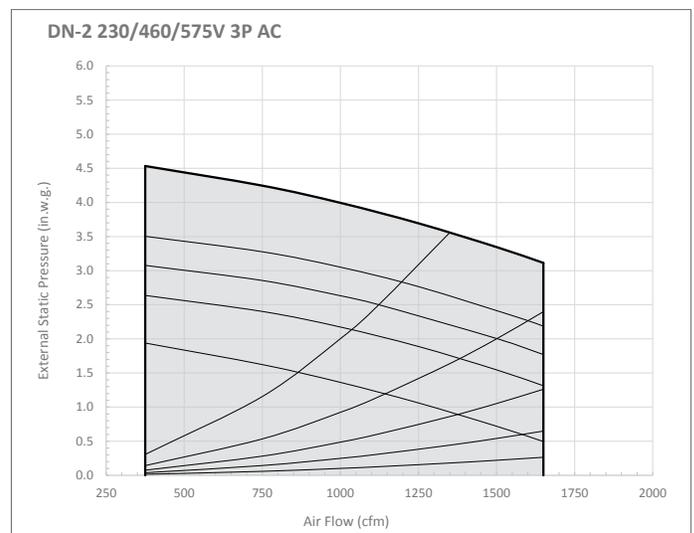
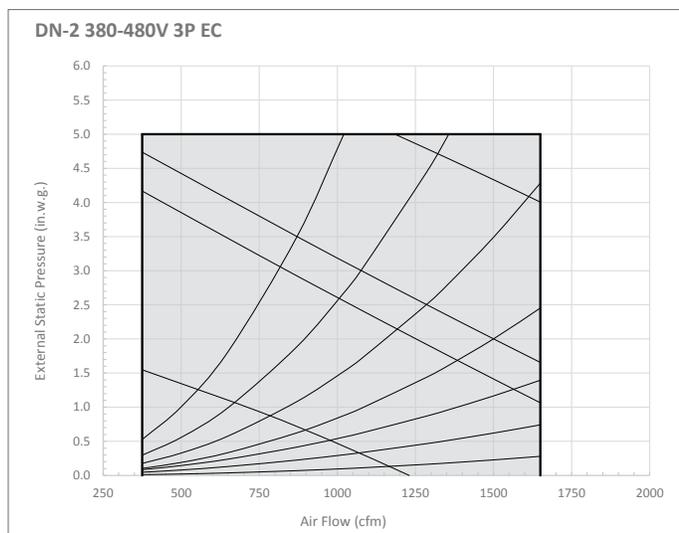
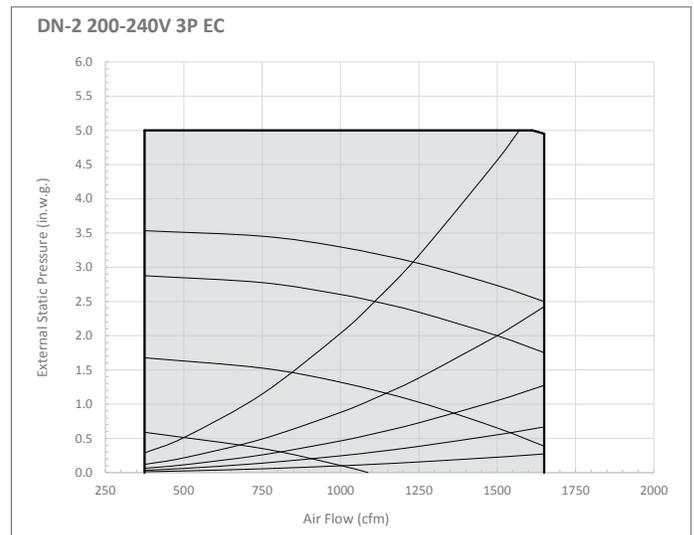
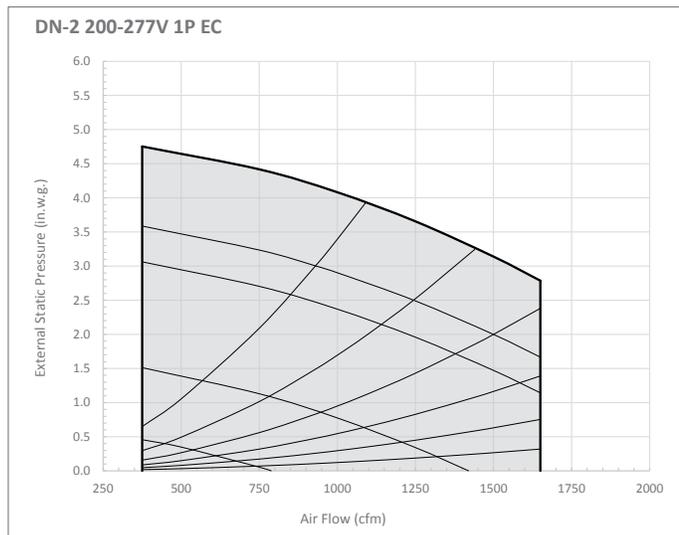


ELECTRICAL DATA

Electrical Specifications							
	Motor Qty/kW or HP	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	FLA per motor
EC	2 @ 1.35 kW ea.	200-277	50/60 Hz	Single	15.1	20	6.7-4.8
	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 @ 3HP ea.	208-230	50/60 Hz	Three	20.3	25	9-8.4/4.2
	2 @ 3HP ea.	460	50/60 Hz	Three	9.5	15	4.2
	2 @ 3HP ea.	575	50/60 Hz	Three	7.4	15	3.3

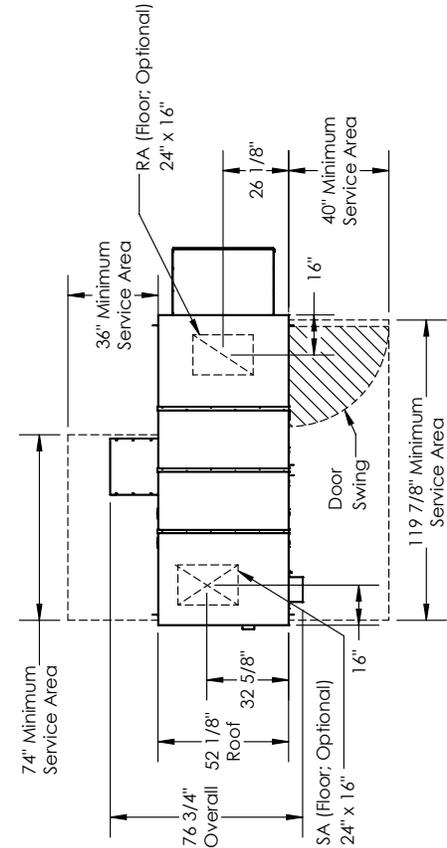
Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE

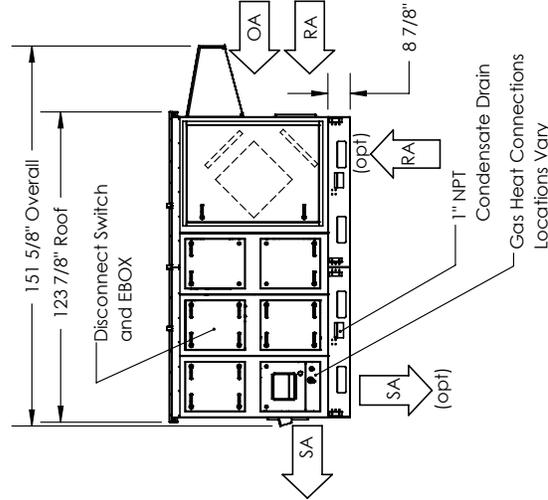


DN2RT Dedicated Outdoor Air System Standard 1" Cabinet

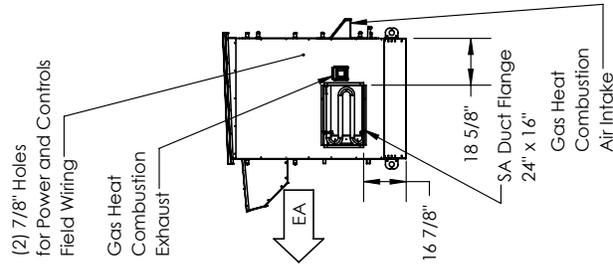
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.



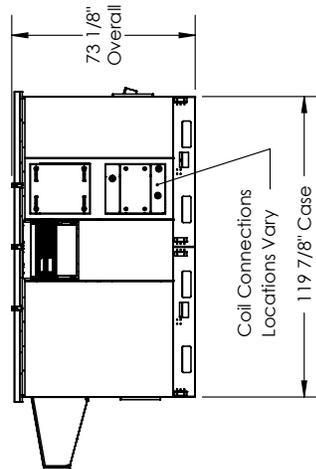
TOP VIEW



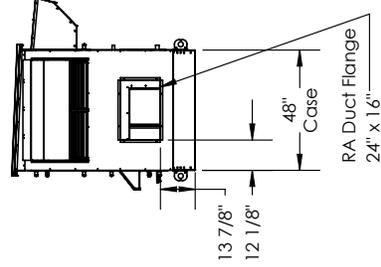
FRONT VIEW



LEFT VIEW



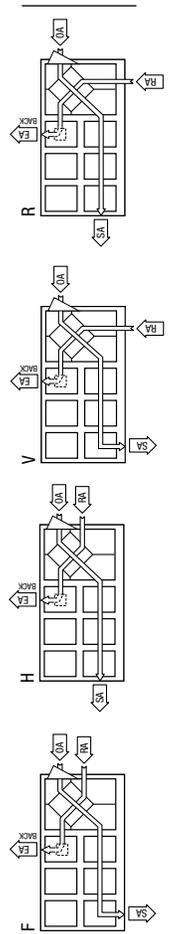
BACK VIEW



RIGHT VIEW

- 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.

AIRFLOW ORIENTATION
 Available as shown:



UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



DN2RT Dedicated Outdoor Air System Standard 2" Cabinet

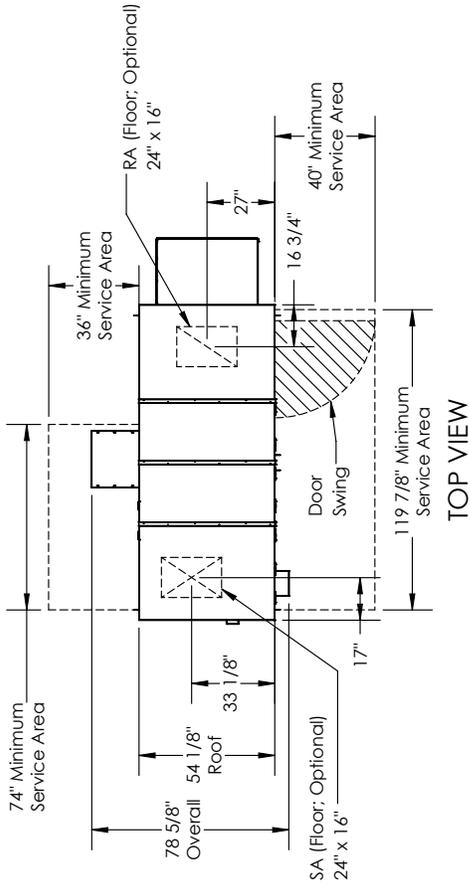
ABBREVIATIONS

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

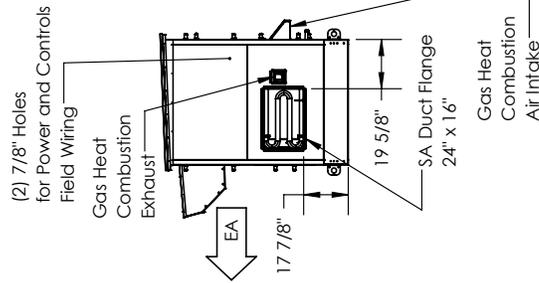
INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE

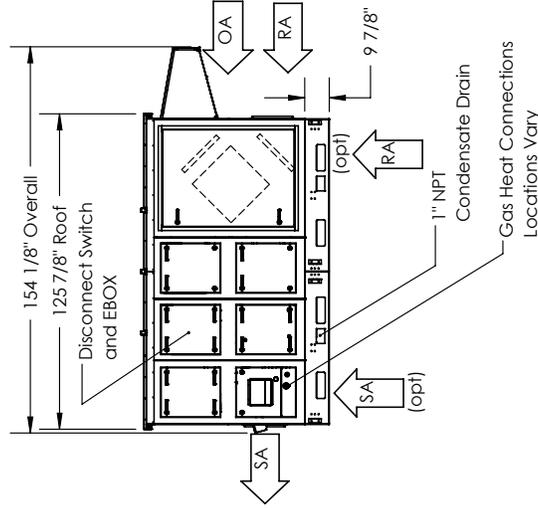
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORRED.
5. FOR CURB DETAILS REFER TO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



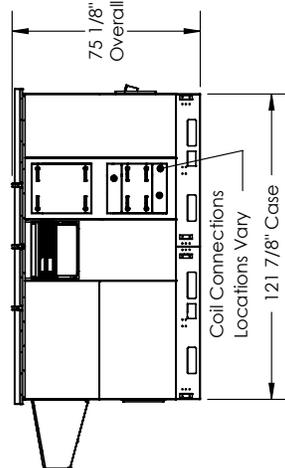
TOP VIEW



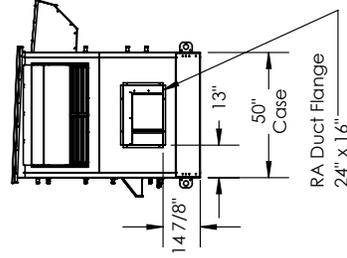
LEFT VIEW



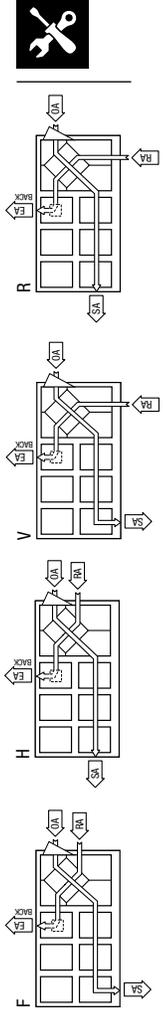
FRONT VIEW



BACK VIEW



RIGHT VIEW



AIRFLOW ORIENTATION
Available as shown:



UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.

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

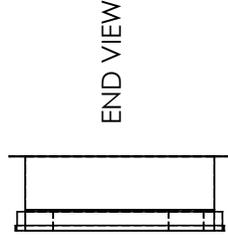
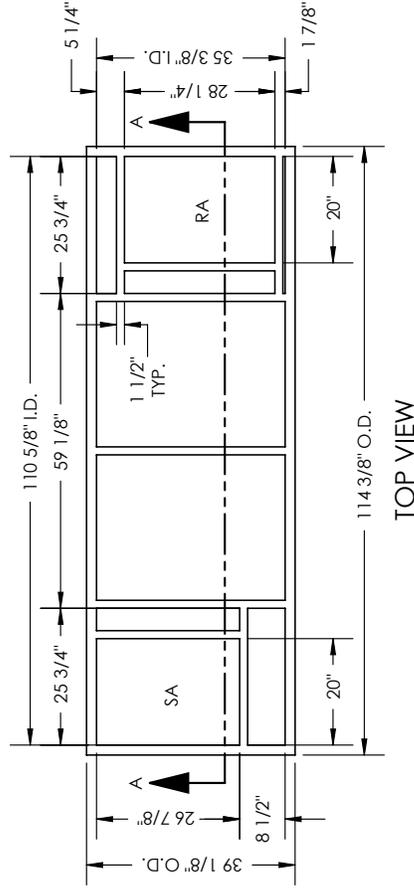
DN2RT Dedicated Outdoor Air System Curbs

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

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

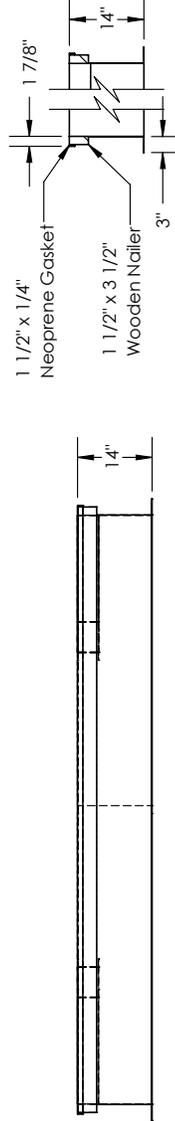
DN2RT
CURB DN2-ERV+C+H

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



TOP VIEW

CURB CROSS-SECTION A-A (TYP.)

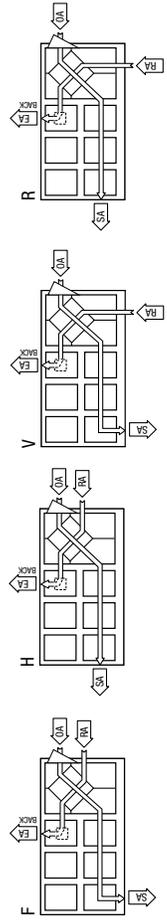


FRONT VIEW

SECTION A-A



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



AIRFLOW ORIENTATION
Available as shown:



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DN 2RT

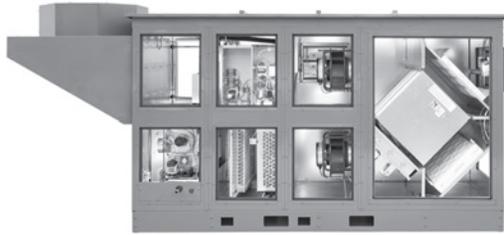
Dedicated Outdoor Air System Packaged Refrigeration



ROOFTOP UNIT

Dedicated Outside Air System
Unit with Energy Recovery

NEW



DN2RT, ERV + DX + HGRH + GH (BT) shown

Energy Recovery Core is AHRI Certified®



ERV - Energy Recovery Ventilator

EH - Electric Heater

HC - Heating Coil

GH - Gas Heat Module

HGRH - Hot Gas Reheat Coil

DX - Direct Expansion (for DOAS units with Packaged Refrigeration)

BT - Blow Thru

DT - Draw Thru

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

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

Packaged Refrigeration Features:

- EC motor for condenser fan (with the exception of 575V models, which are VFD driven)
- DX cooling coil
- Packaged refrigeration controls
- BLDC scroll compressor
- Condensing coil

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 Weight for 1" Cabinets: 2450-3150 lbs.

Max. Shipping Dimensions & Weight for 1" Cabinets:

- 165 3/4" L x 90" W x 81 3/4" H
- 2625-3375 lbs.

Unit Weight for 2" Cabinets: 2550-3275 lbs.

Max. Shipping Dimensions & Weight for 2" Cabinets:

- 167 3/4" L x 90" W x 82 3/4" H
- 2725-3500 lbs.

Motor(s):

Qty. 2, Direct drive motorized impeller packages

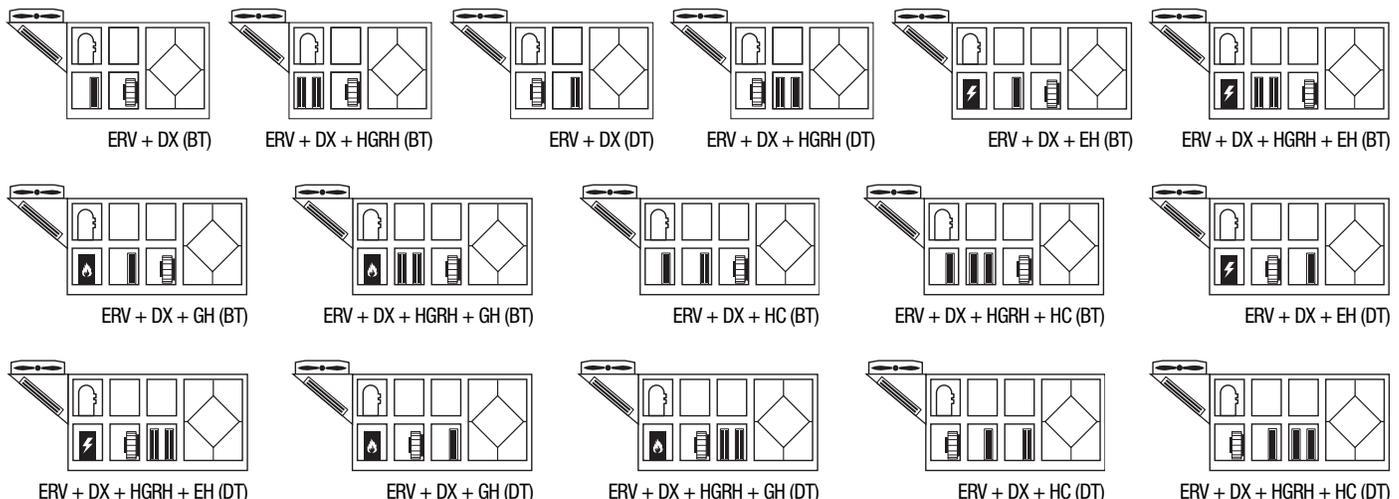
Options:

- 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- Exterior paint - grey, white, custom color
- Salt spray - 2500 hour
- BACNET factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Mist eliminator
- 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
- Roof curb - standard 14"
- Custom 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





Dedicated Outdoor Air System
Packaged Refrigeration

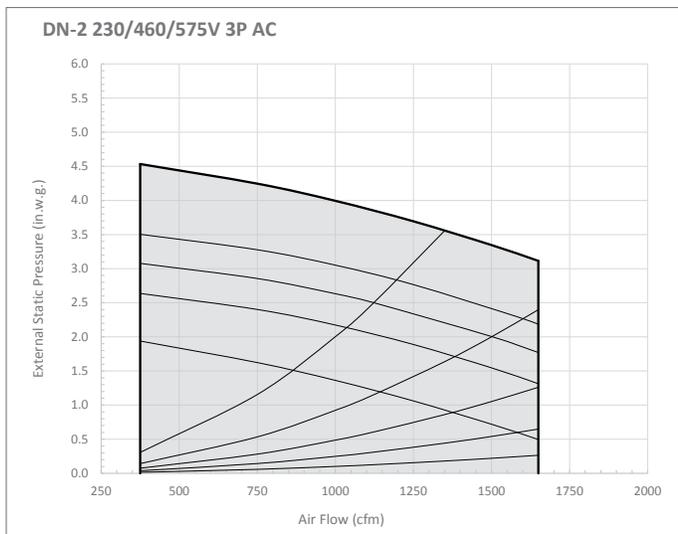
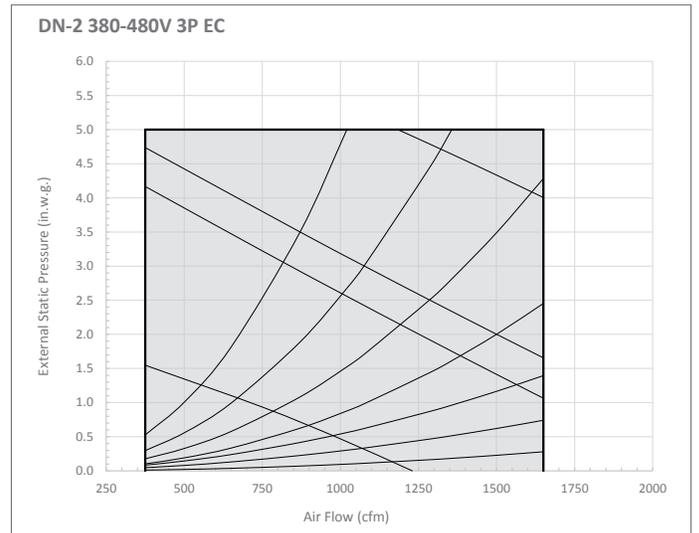
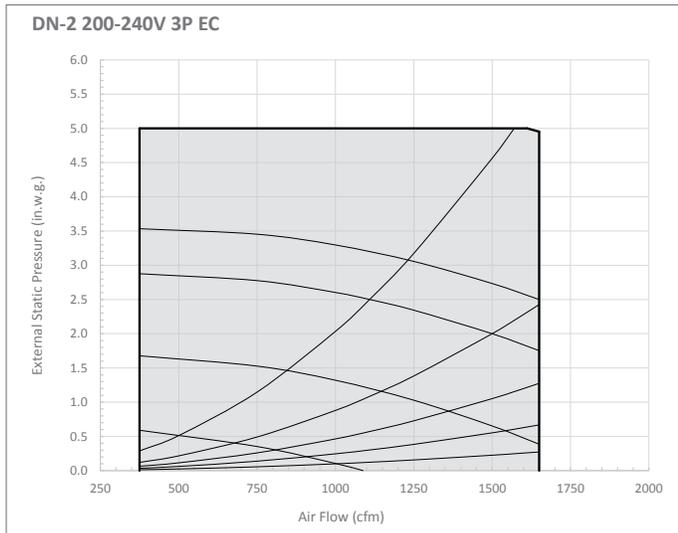


ELECTRICAL DATA

Electrical Specifications											
Spd Ctl	Unit					Supply Air & Exhaust Air Fan		Condenser Fan		Compressors	
	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	Motor Qty/kW or HP	FLA per motor	Motor Qty/kW or HP	FLA per motor	Variable Speed Compressor Drive Amps	Fixed Speed Compressor MCC
EC	200-240	50/60 Hz	Three	78.2	110	2 @ 2.70 kW ea.	8.6-7.2	1 @ 3.60 kW ea.	11.0-9.2	40.0	n/a
	380-480	50/60 Hz	Three	68.0	100	2 @ 3.70 kW ea.	6.0-4.6	1 @ 3.70 kW ea.	6.0-4.7	40.0	n/a
VFD	208-230	50/60 Hz	Three	79.0	110	2 @ 3HP ea.	9-8.4/4.2	1 @ 3.60 kW ea.	11.0-9.2	40.0	n/a
	460	50/60 Hz	Three	64.4	100	2 @ 3HP ea.	4.2	1 @ 3.70 kW ea.	6.0-4.7	40.0	n/a
	575	50/60 Hz	Three	42.6	60	2 @ 3HP ea.	3.3	1 @ 2.8 kW ea.	3.7	26.3	n/a

Note: Electrical data shown is for a standard unit with largest compressor available, but without heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE



DN2RT Dedicated Outdoor Air System Packaged Refrigeration 1" Cabinet

ABBREVIATIONS

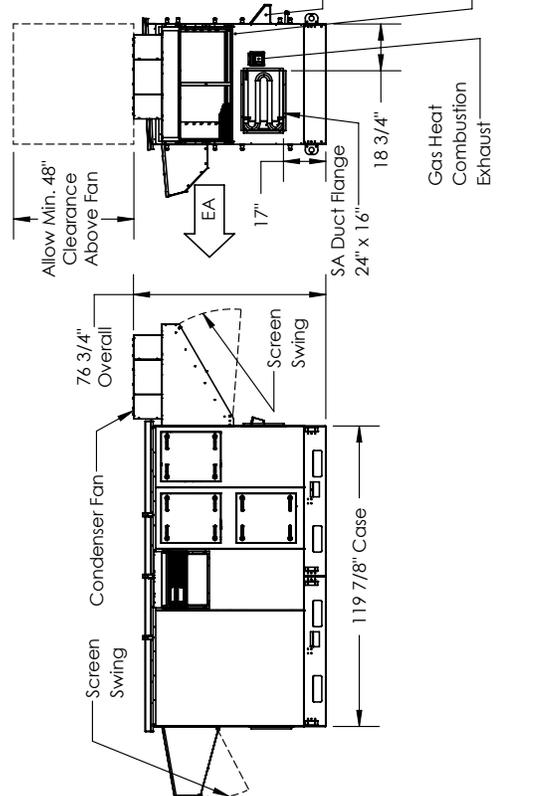
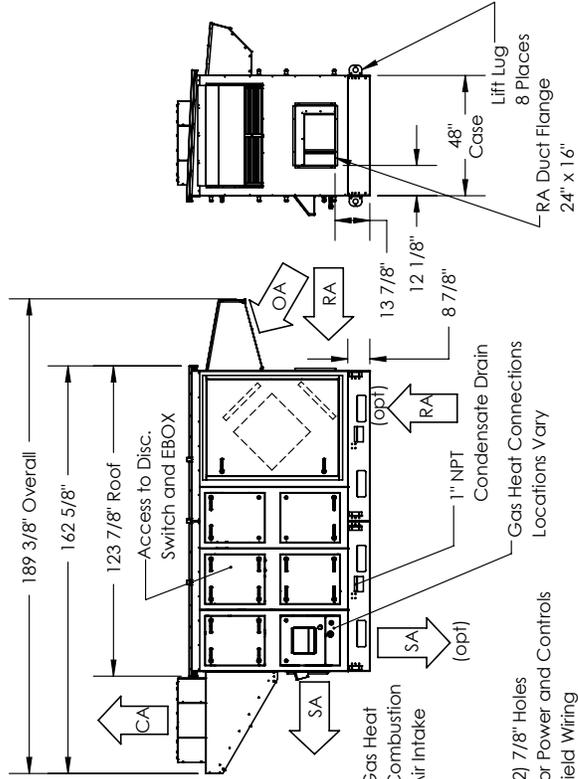
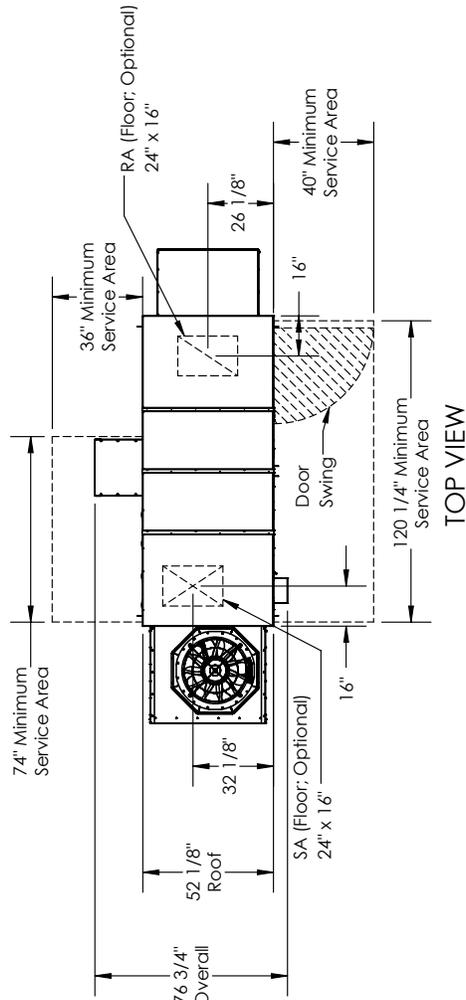
- EA: Exhaust Air to outside
- OA: Outside Air intake
- RA: Room Air to be exhausted
- SA: Supply Air to inside
- CA: Condenser Air

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.
7. SCREEN SWING AREA VARIES DEPENDING ON HORIZONTAL OR VERTICAL DUCT CONNECTIONS.



RIGHT VIEW

FRONT VIEW

LEFT VIEW

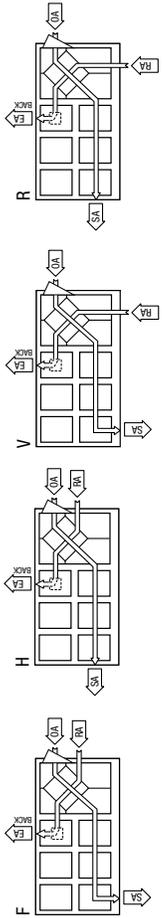
BACK VIEW

AIRFLOW ORIENTATION

Available as shown:



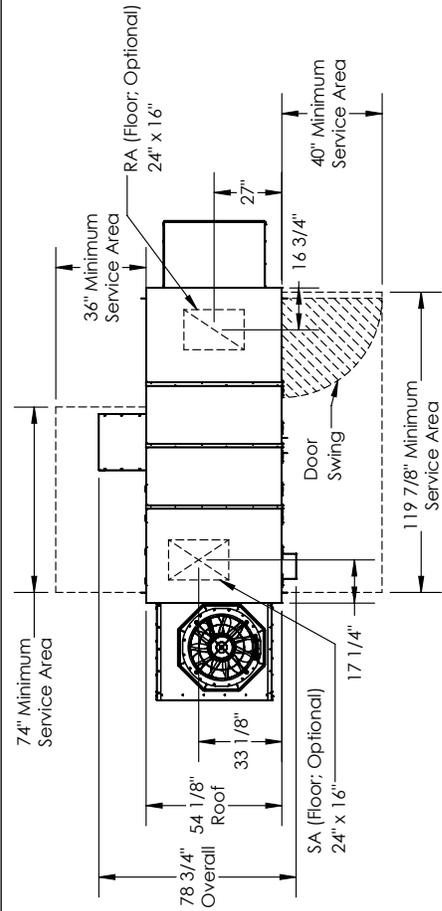
UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.



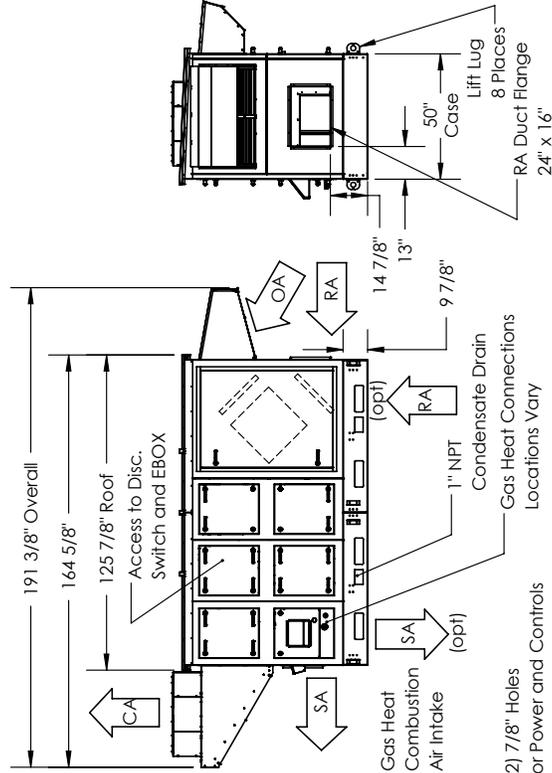
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

DN2RT Dedicated Outdoor Air System Packaged Refrigeration Standard 2" Cabinet

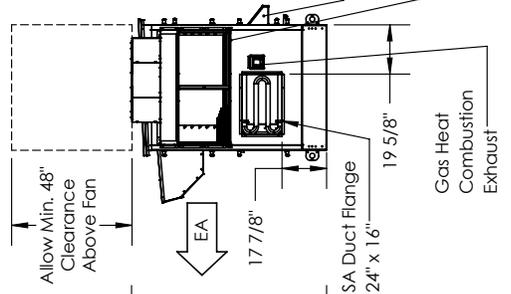
Dimension drawings for the DN depict largest cabinet size available.
Refer to CORES.RenewAire.com for project specific unit drawings.



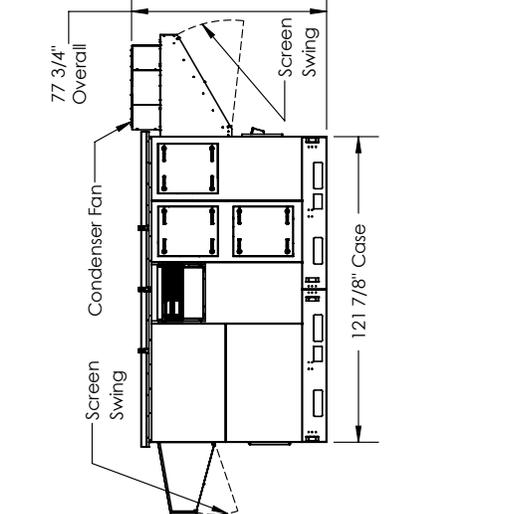
TOP VIEW



RIGHT VIEW



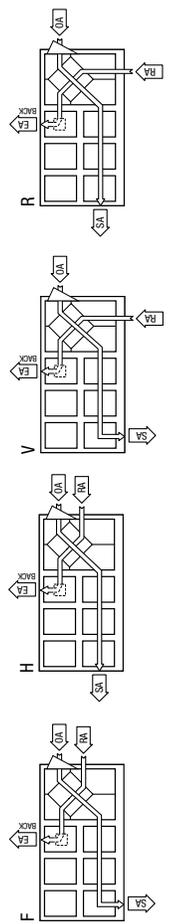
LEFT VIEW



BACK VIEW

- ABBREVIATIONS**
 EA: Exhaust Air to outside
 OA: Outside Air intake
 RA: Room Air to be exhausted
 SA: Supply Air to inside
 CA: Condenser Air
- 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.
 7. SCREEN SWING AREA VARIES DEPENDING ON HORIZONTAL OR VERTICAL DUCT CONNECTIONS.

UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



AIRFLOW ORIENTATION
 Available as shown:



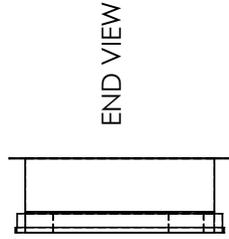
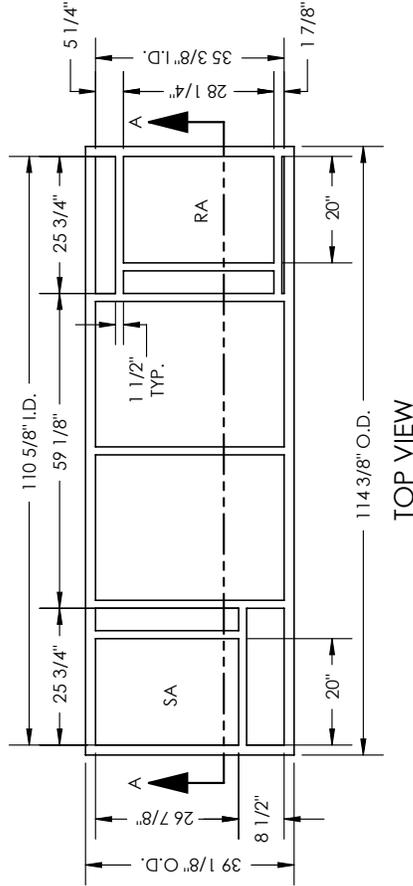
DN2RT Dedicated Outdoor Air System Packaged Refrigeration Curbs

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

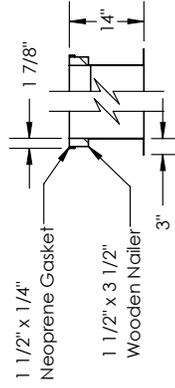
RA: Room Air to be exhausted
SA: Supply Air to inside

DN2RT
CURB DN2-ERV+C+H

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



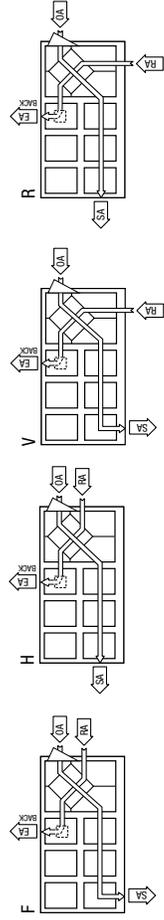
CURB CROSS-SECTION A-A (TYP.)



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.

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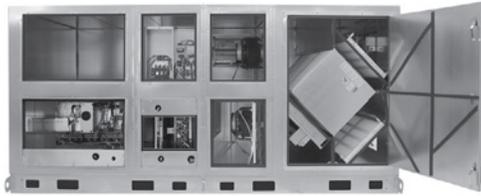
DN 3IN

Dedicated Outdoor Air System Standard



INDOOR UNIT

Dedicated Outside Air System
Unit with Energy Recovery



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

Energy Recovery Core is AHRI Certified®



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

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

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 Weight for 1" Cabinets: 1600-3475 lbs.

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

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

Unit Weight for 2" Cabinets: 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

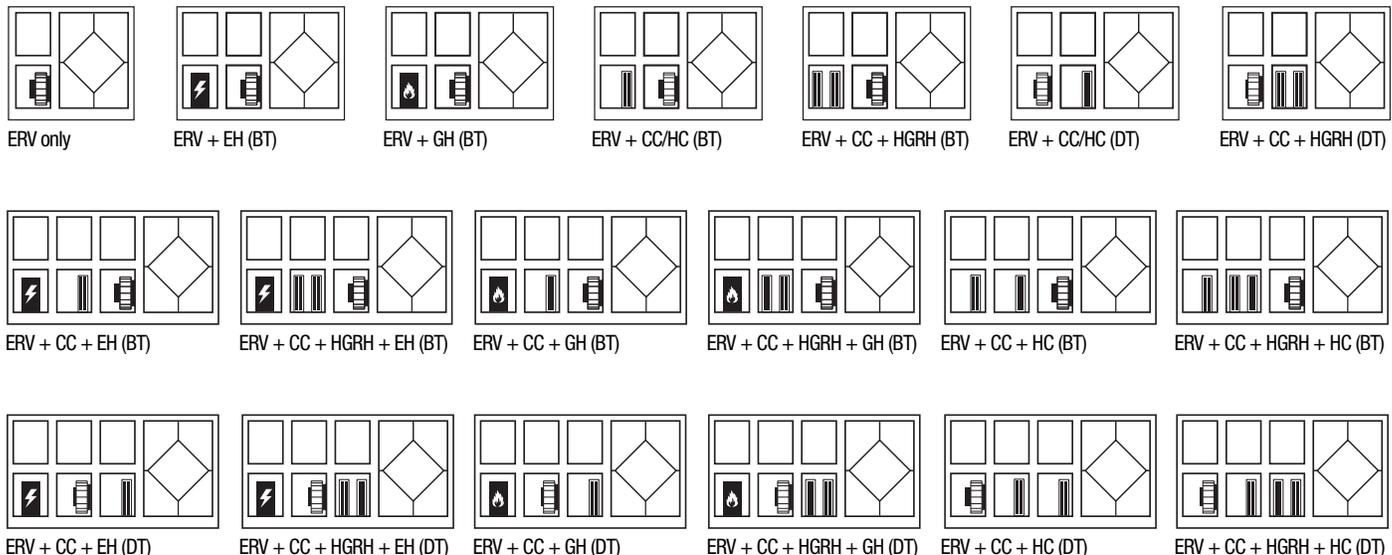
Options:

- 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- 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





Dedicated Outdoor Air System
Standard

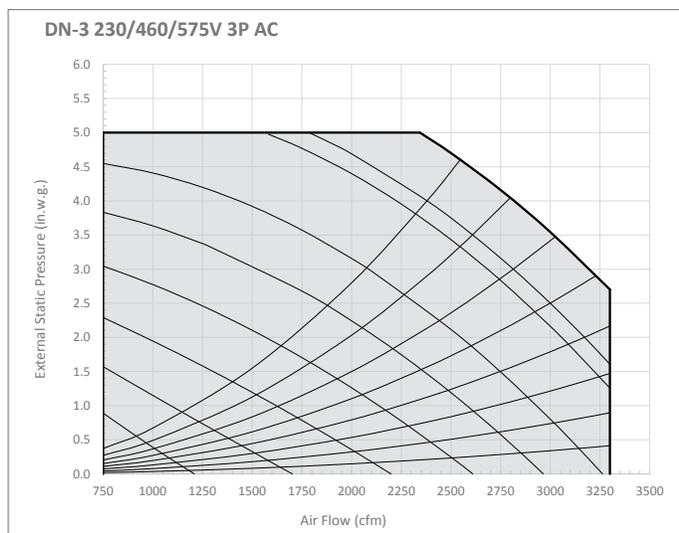
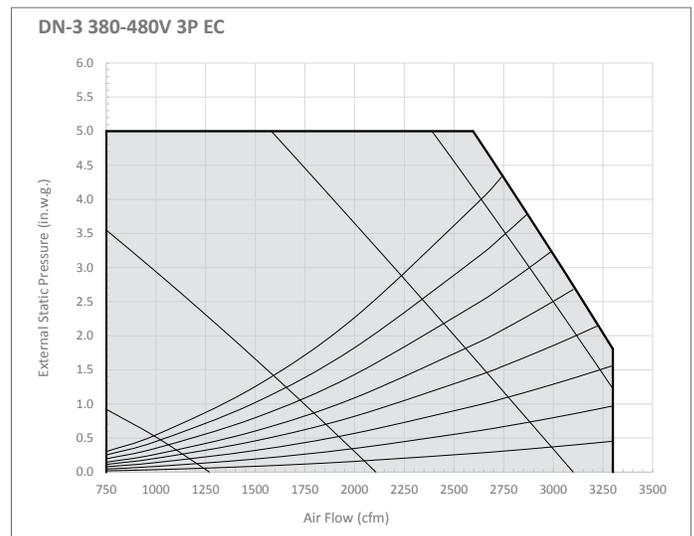
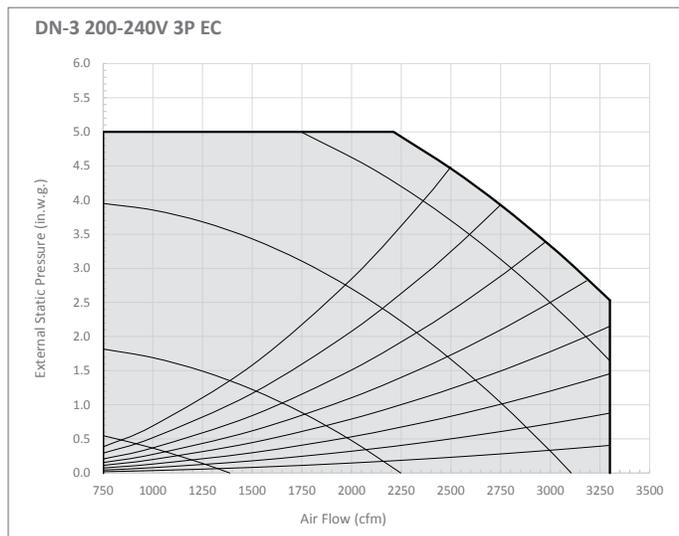


ELECTRICAL DATA

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

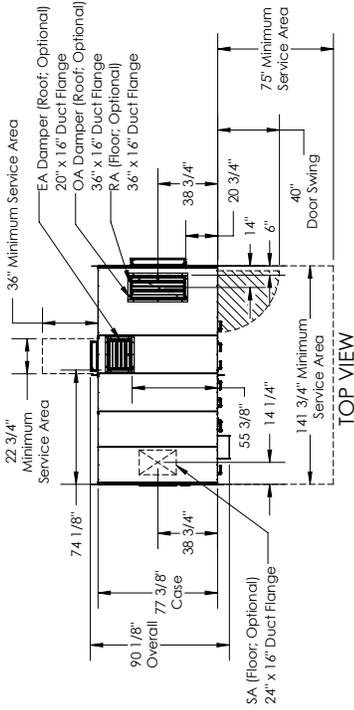
Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE

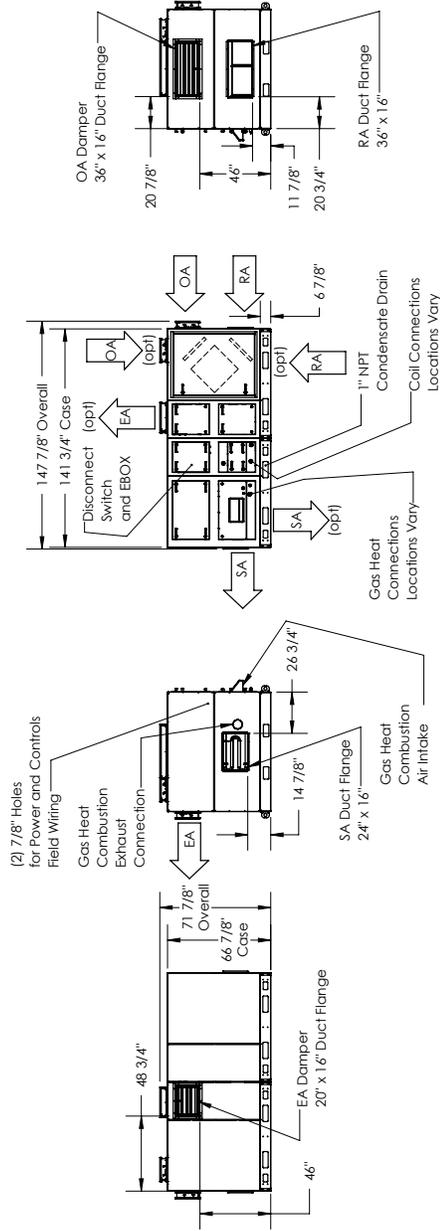


DN3IN Dedicated Outdoor Air System Standard 1" Cabinet

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



- ABBREVIATIONS**
 EA: Exhaust 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 MIRRORRED.
 5. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.



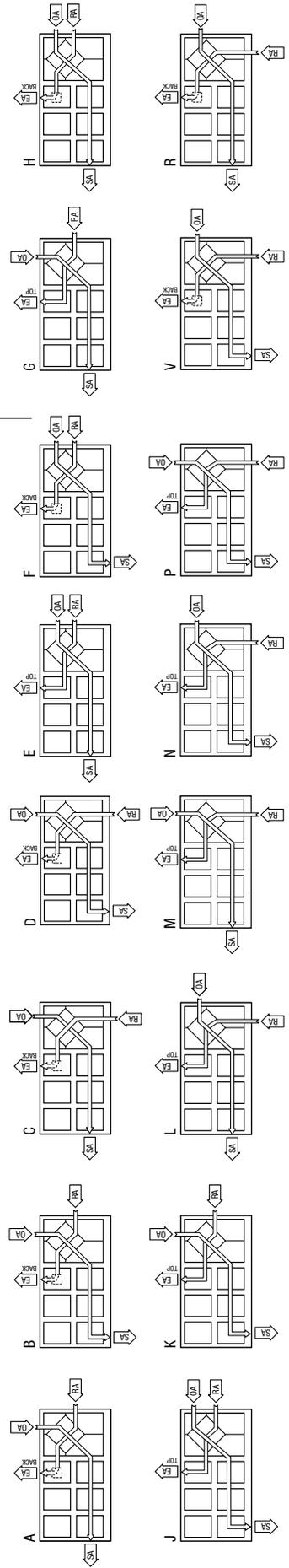
BACK VIEW LEFT VIEW FRONT VIEW RIGHT VIEW

AIRFLOW ORIENTATION

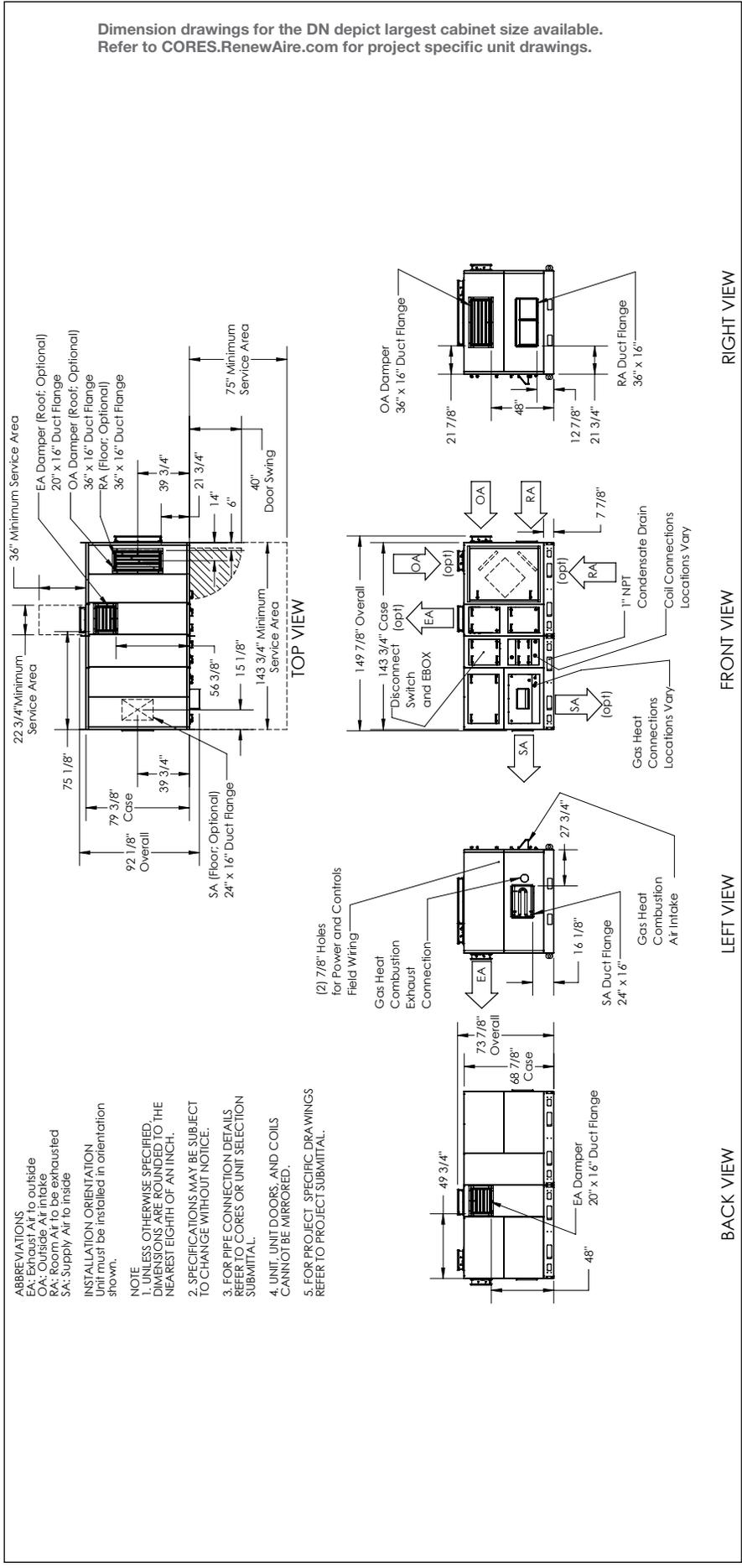
Available as shown:



UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



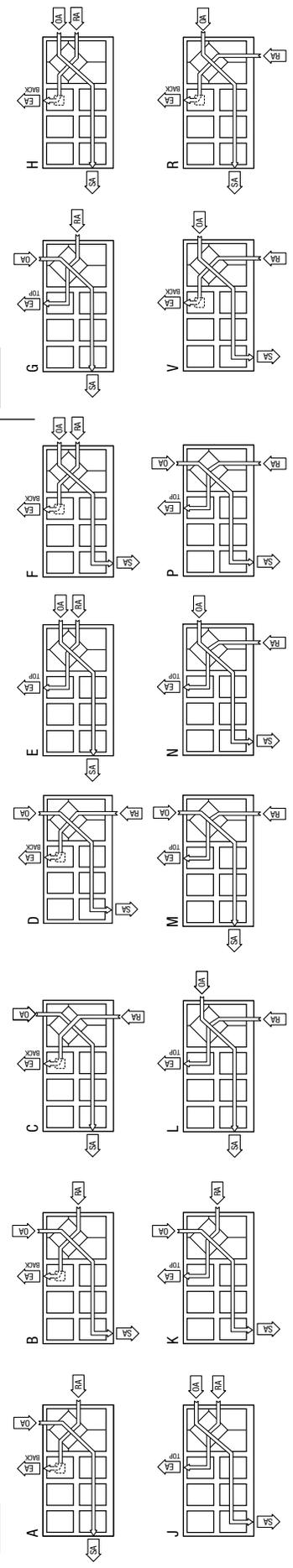
DN3IN Dedicated Outdoor Air System Standard 2" Cabinet



AIRFLOW ORIENTATION
 Available as shown:



UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



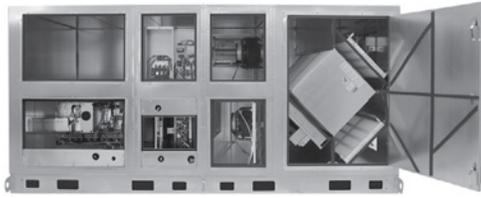
DN 3RT

Dedicated Outdoor Air System Standard



ROOFTOP UNIT

Dedicated Outside Air System
Unit with Energy Recovery



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

Energy Recovery Core is AHRI Certified®



SPECIFICATIONS

Energy Recovery Type:
Static plate total energy transfer

Typical Airflow Range: 750-3,300 CFM

AHRI 1060 Certified Core:
Three L-125-G5

ETL Certification:
Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
Modbus RTU or IP Integration

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 Weight for 1" Cabinets: 2000-3950 lbs.

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

Unit Weight for 2" Cabinets: 2125-4150 lbs.

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

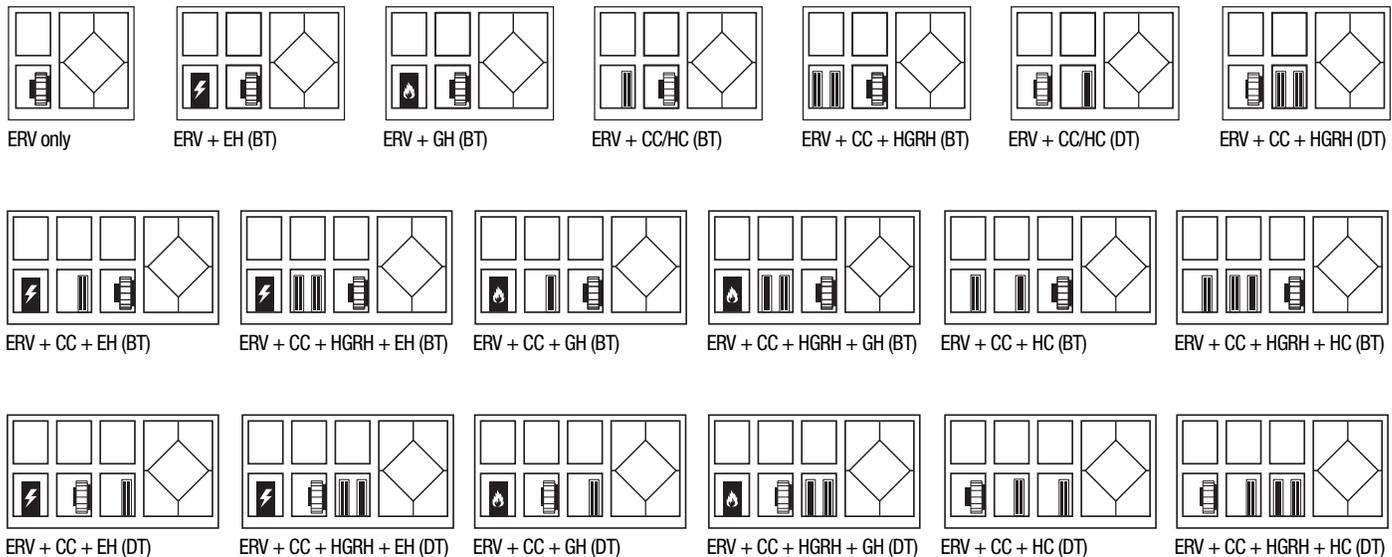
Motor(s):
Qty. 2, Direct drive motorized impeller packages

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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
Exterior paint - grey, white, custom color
Salt spray - 2500 hour
BACNET factory activation
GFCI convenience outlet
Recirculation damper
Drain overflow switch
Mist eliminator
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
Roof curb - standard 14"
Custom 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

- 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

INTERNAL OPTIONS FOR HEATING AND COOLING





Dedicated Outdoor Air System
Standard

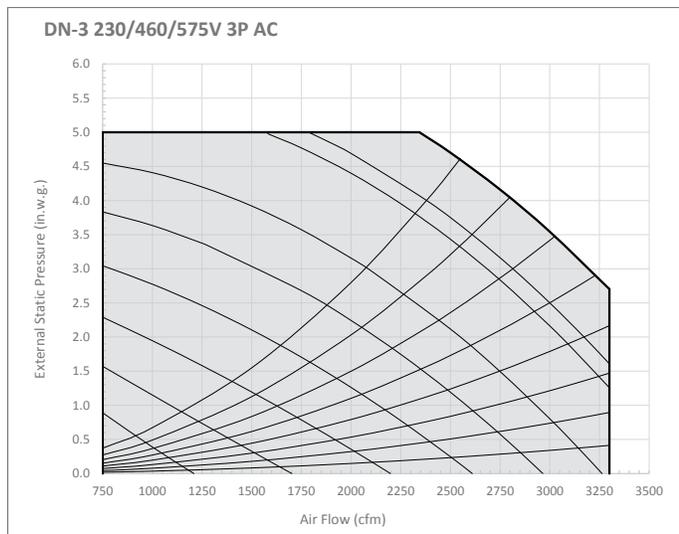
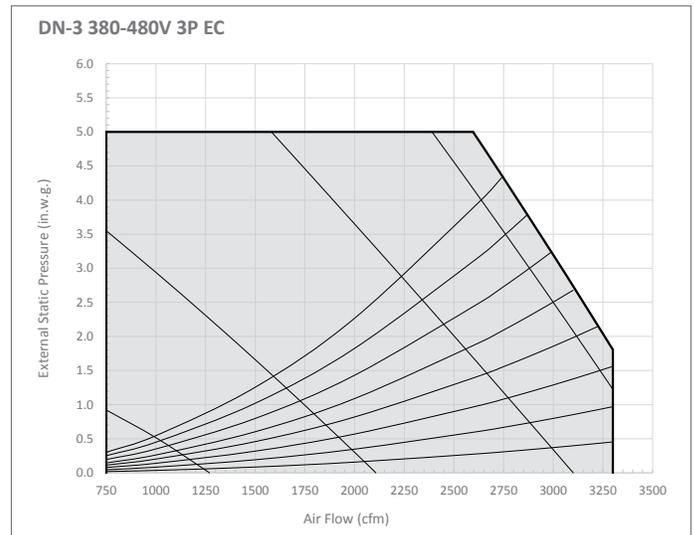
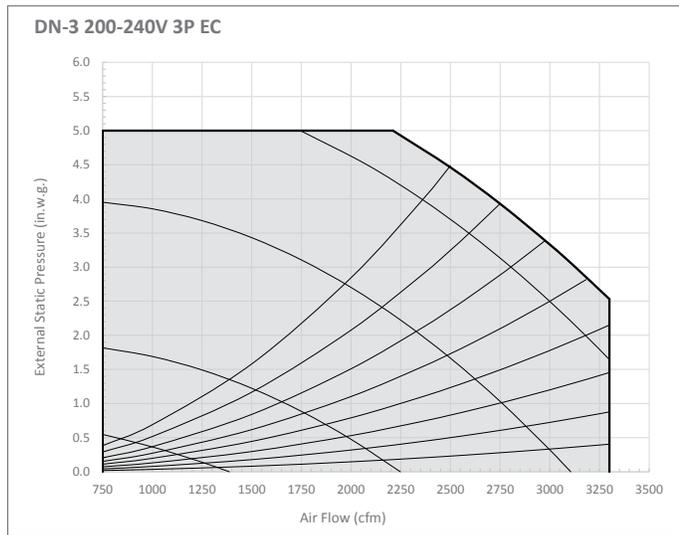


ELECTRICAL DATA

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

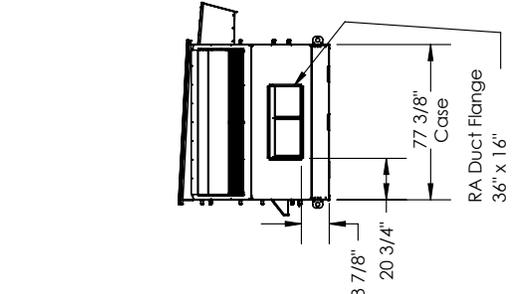
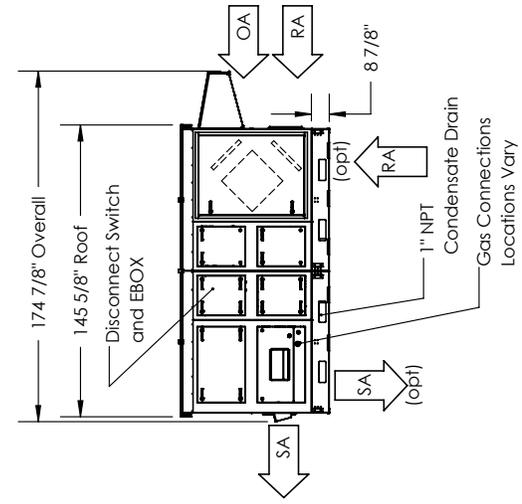
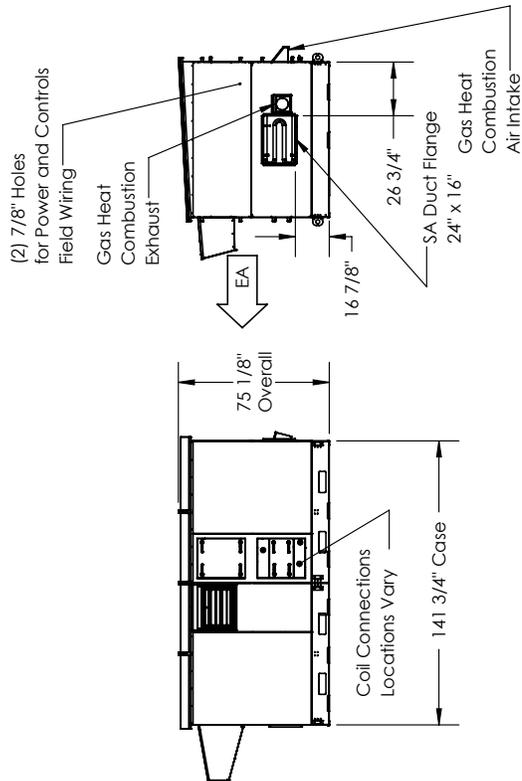
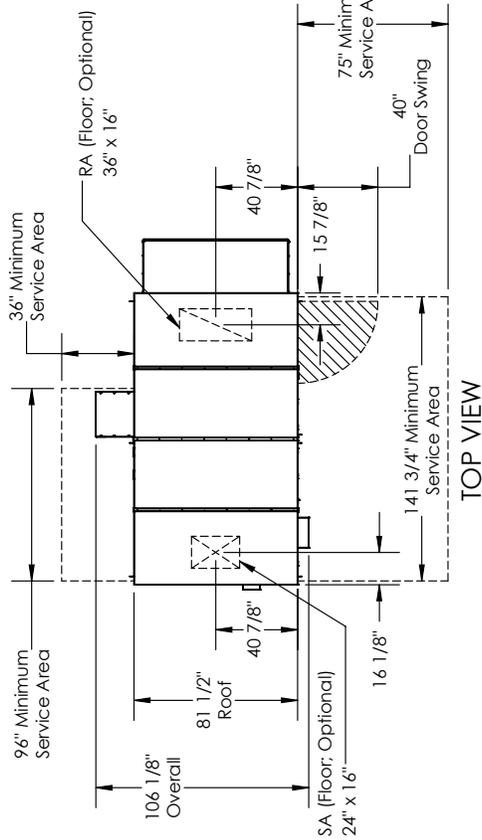
Note: Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE



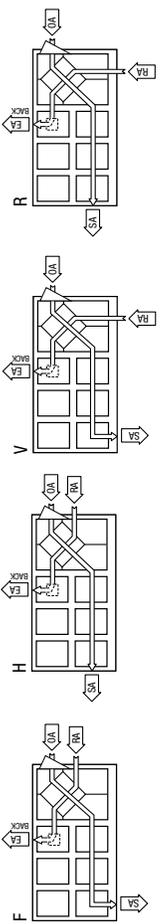
DN3RT Dedicated Outdoor Air System Standard 1" Cabinet

- 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.



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

AIRFLOW ORIENTATION
 Available as shown:



UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



RIGHT VIEW

FRONT VIEW

LEFT VIEW

BACK VIEW

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.

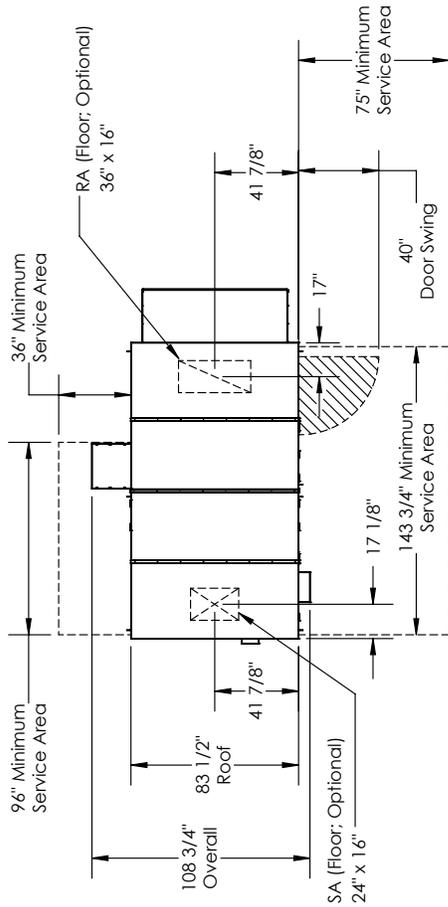
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.

4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORRED.

5. FOR CURB DETAILS REFER TO CURB DRAWING.

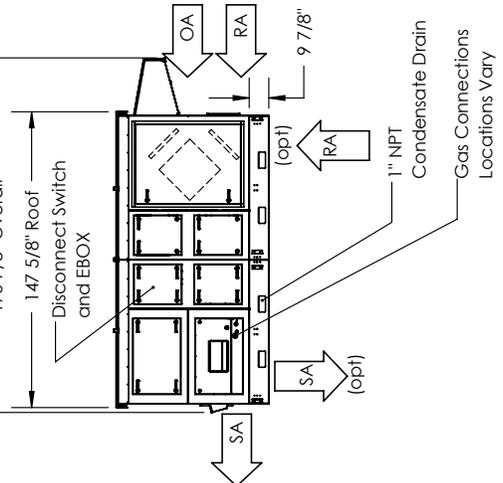
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

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

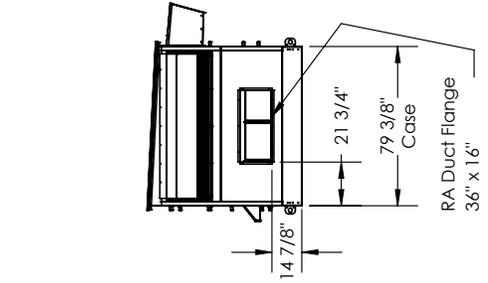


TOP VIEW

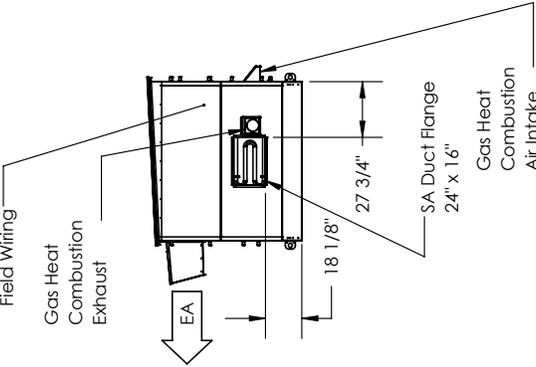
(2) 7/8" Holes for Power and Controls Field Wiring



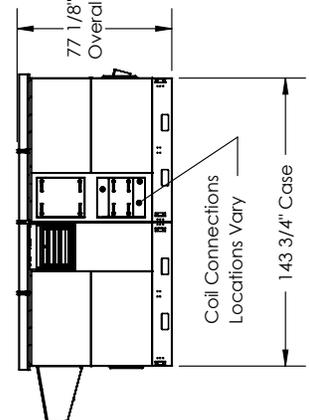
FRONT VIEW



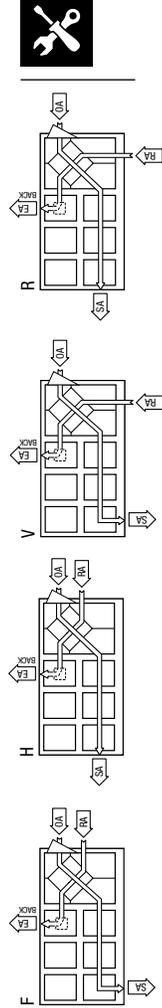
RIGHT VIEW



LEFT VIEW



BACK VIEW



AIRFLOW ORIENTATION
 Available as shown:

UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.

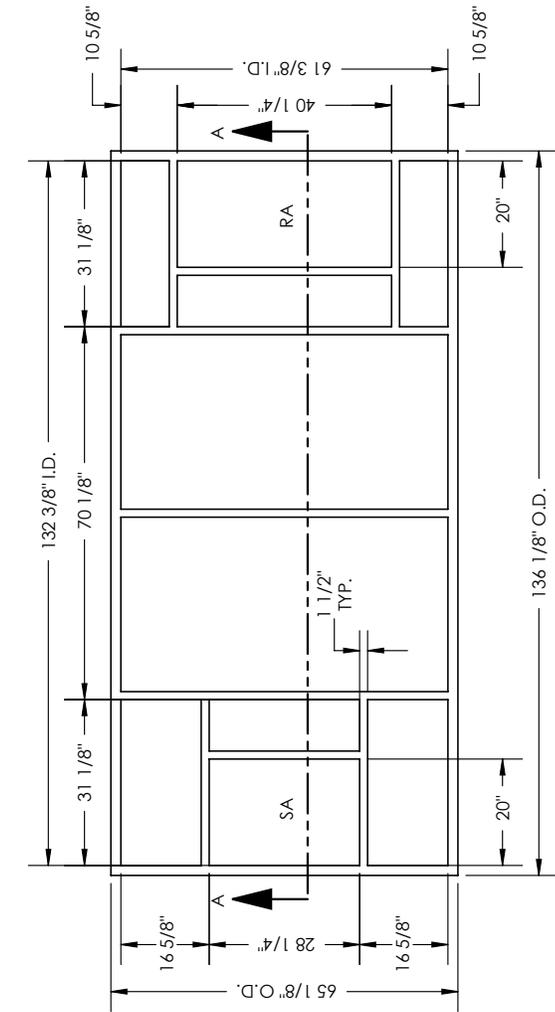


DN3RT Dedicated Outdoor Air System Curbs

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

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

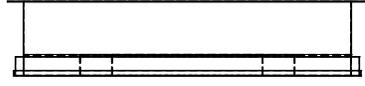
DN3RT
CURB DN3-ERV+C+H



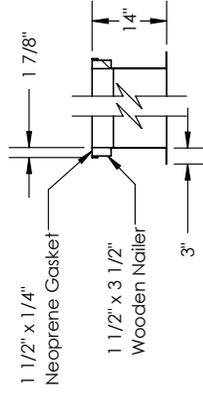
TOP VIEW

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

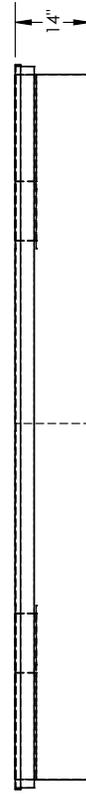
END VIEW



CURB CROSS-SECTION A-A (TYP.)

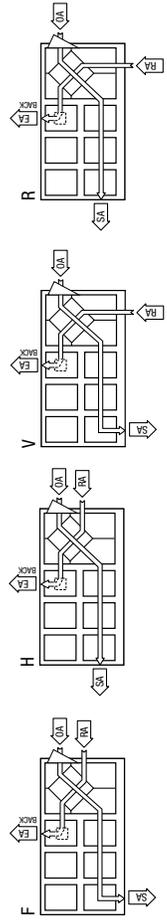


SECTION A-A



FRONT VIEW

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.

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DN 3RT

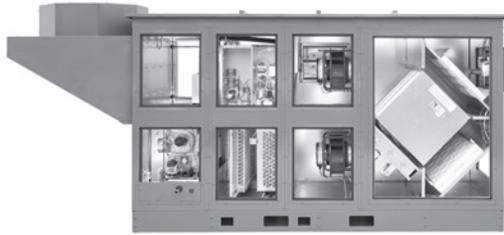
Dedicated Outdoor Air System Packaged Refrigeration



ROOFTOP UNIT

Dedicated Outside Air System
Unit with Energy Recovery

NEW



DN2RT, ERV + DX + HGRH + GH (BT) shown

Energy Recovery Core is AHRI Certified®



SPECIFICATIONS

Energy Recovery Type:

Static plate total energy transfer

Typical Airflow Range: 750-3,300 CFM

AHRI 1060 Certified Core:

Three L-125-G5

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

Packaged Refrigeration Features:

- EC motor for condenser fan (with the exception of 575V models, which are VFD driven)
- DX cooling coil
- Packaged refrigeration controls
- BLDC scroll compressor(s)
- Condensing coil

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 Weight for 1" Cabinets: 3400 - 4900 lbs.

Max. Shipping Dimensions & Weight for 1" Cabinets:

- 187 1/8" L x 90" W x 83 1/2" H
- 3575 - 5175 lbs.

Unit Weight for 2" Cabinets: 3525-5100 lbs.

Max. Shipping Dimensions & Weight for 2" Cabinets:

- 189 1/8" L x 90" W x 84 1/2" H
- 3700-5375 lbs.

Motor(s):

Qty. 2, Direct drive motorized impeller packages

Options:

- 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- Exterior paint - grey, white, custom color
- Salt spray - 2500 hour
- BACNET factory activation
- GFCI insulation with thermal break construction
- Recirculation damper
- Drain overflow switch
- Mist eliminator
- 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
- Roof curb - standard 14"
- Custom 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

ERV - Energy Recovery Ventilator

EH - Electric Heater

HC - Heating Coil

GH - Gas Heat Module

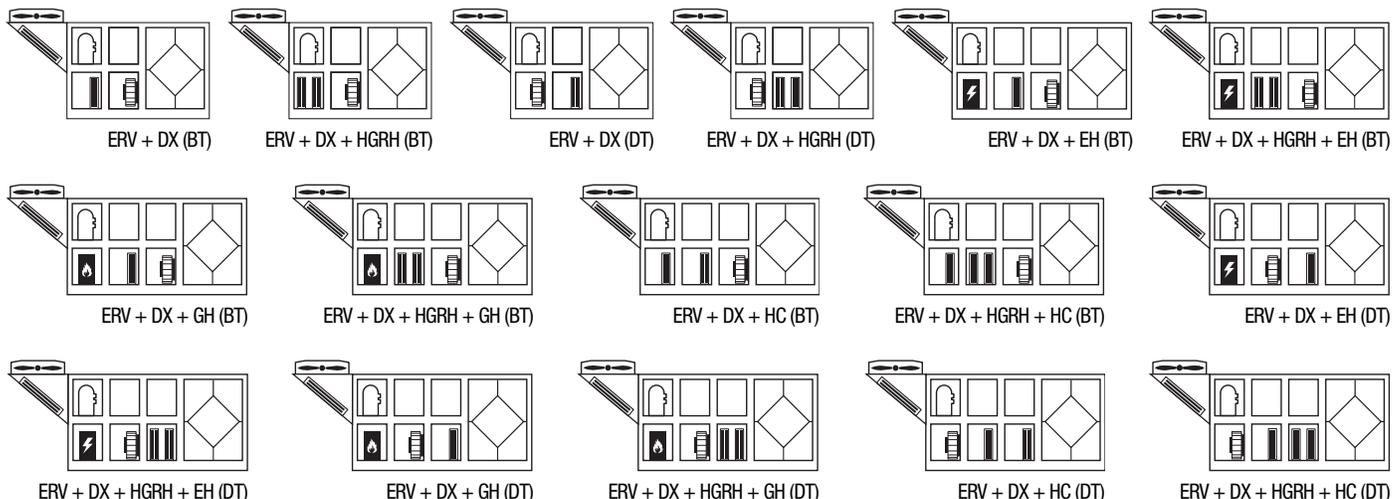
HGRH - Hot Gas Reheat Coil

DX - Direct Expansion (for DOAS units with Packaged Refrigeration)

BT - Blow Thru

DT - Draw Thru

INTERNAL OPTIONS FOR HEATING AND COOLING





Dedicated Outdoor Air System
Packaged Refrigeration

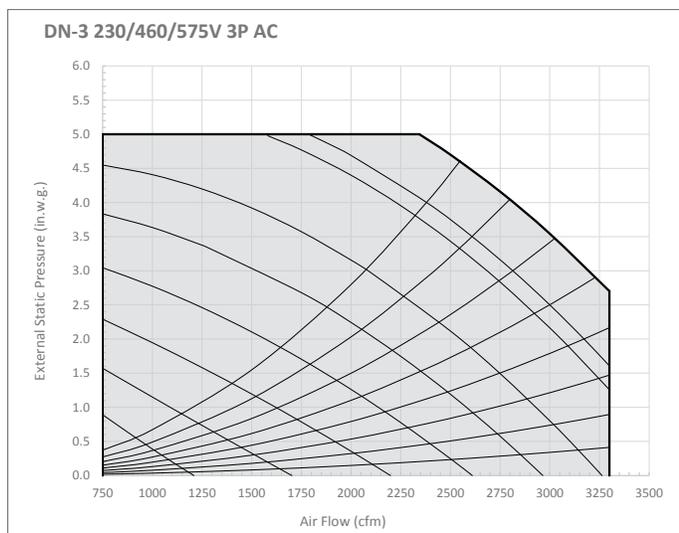
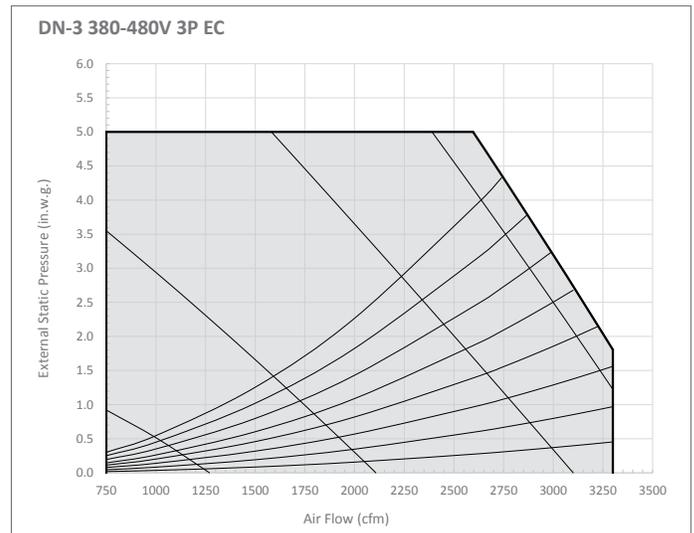
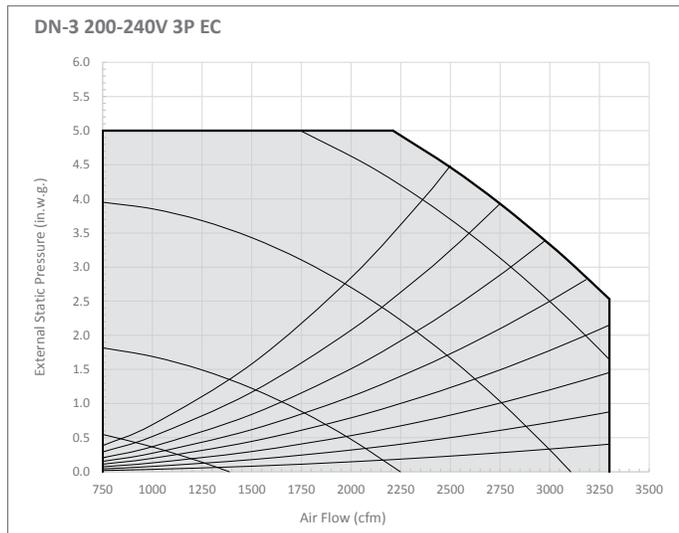


ELECTRICAL DATA

Electrical Specifications											
Spd Ctl	Unit					Supply Air & Exhaust Air Fan		Condenser Fan		Compressors	
	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	Motor Qty/kW or HP	FLA per motor	Motor Qty/kW or HP	FLA per motor	Variable Speed Compressor Drive Amps	Fixed Speed Compressor MCC
EC	200-240	50/60 Hz	Three	155.9	200	2 @ 2.70 kW ea.	8.6-7.2	2 @ 3.60 kW ea.	11.0-9.2	50.4	53
	380-480	50/60 Hz	Three	79.8	100	2 @ 3.70 kW ea.	6.0-4.6	2 @ 3.70 kW ea.	6.0-4.7	24.5	25
VFD	208-230	50/60 Hz	Three	166.5	200	2 @ 5HP ea.	13.9-13.4/6.7	2 @ 3.60 kW ea.	11.0-9.2	50.4	53
	460	50/60 Hz	Three	81.2	100	2 @ 5HP ea.	6.7	2 @ 3.70 kW ea.	6.0-4.7	24.5	25
	575	50/60 Hz	Three	71.1	90	2 @ 5HP ea.	5.3	2 @ 2.8 kW ea.	3.7	26.3	20.2

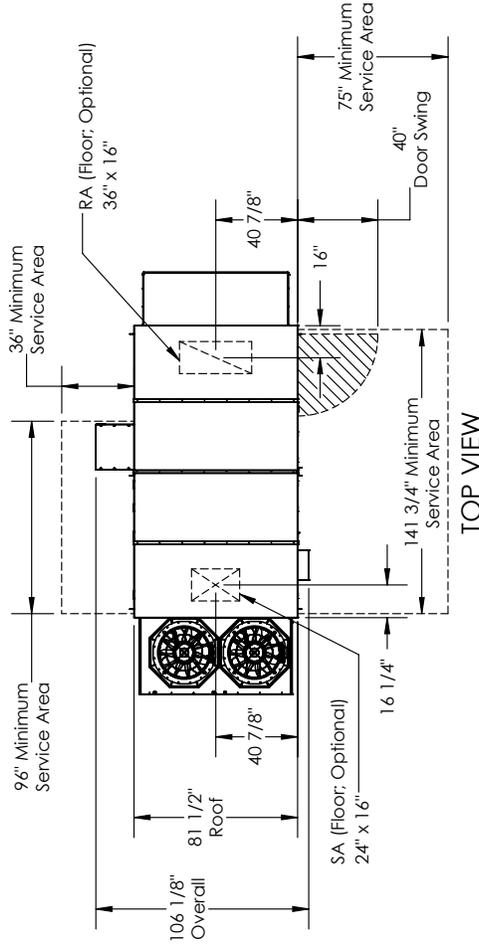
Note: Electrical data shown is for a standard unit with largest compressor available, but without heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE

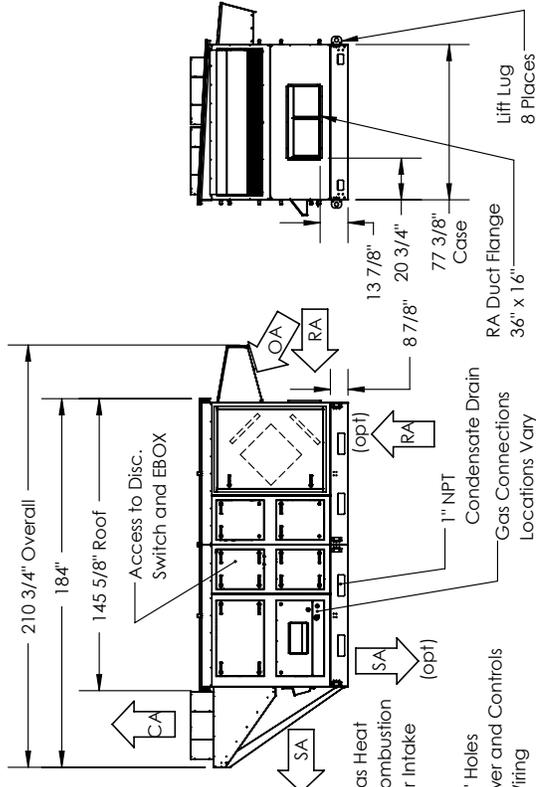


DN3RT Dedicated Outdoor Air System Packaged Refrigeration Standard 1" Cabinet

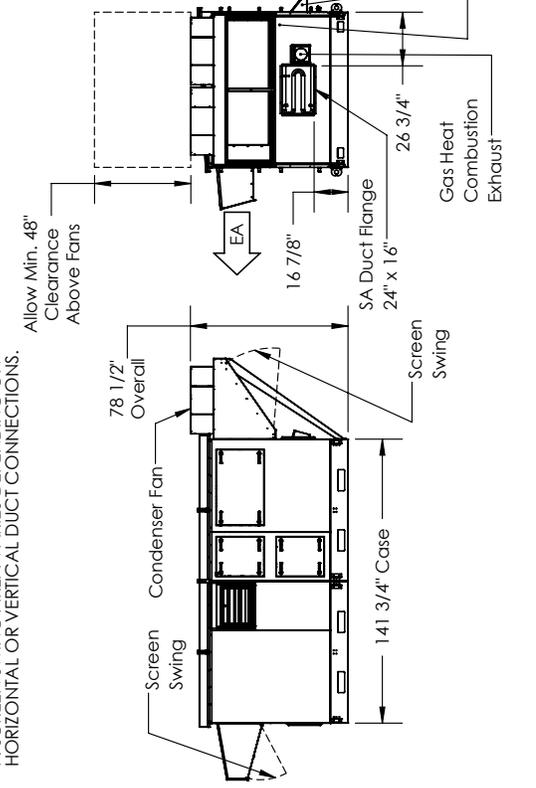
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.



TOP VIEW



FRONT VIEW



LEFT VIEW



RIGHT VIEW

- ABBREVIATIONS**
 EA: Exhaust Air to outside
 OA: Outside Air intake
 RA: Room Air to be exhausted
 SA: Supply Air to inside
 CA: Condenser Air
- 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 MIRRORRED.
 5. FOR CURB DETAILS REFER TO CURB DRAWING.
 6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.
 7. SCREEN SWING AREA VARIES DEPENDING ON HORIZONTAL OR VERTICAL DUCT CONNECTIONS.

Allow Min. 48" Clearance Above Fans

Screen Swing

Condenser Fan

SA Duct Flange 24" x 16"

Gas Heat Combustion Exhaust

26 3/4"

78 1/2" Overall

16 7/8"

EA

SA

RA

OA

(2) 7/8" Holes for Power and Controls Field Wiring

1" NPT Condensate Drain Gas Connections Locations Vary

Access to Disc. Switch and EBOX

8 7/8"

13 7/8"

20 3/4"

Gas Heat Combustion Air Intake (opt)

SA (opt)

RA (opt)

OA

CA

1" NPT Condensate Drain Gas Connections Locations Vary

Access to Disc. Switch and EBOX

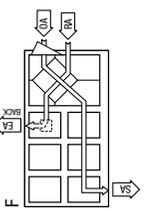
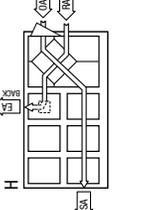
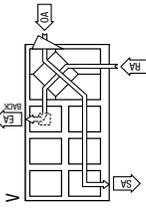
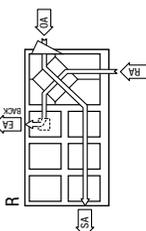
8 7/8"

13 7/8"

20 3/4"



UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



AIRFLOW ORIENTATION
 Available as shown:



DN3RT Dedicated Outdoor Air System Packaged Refrigeration Standard 2" Cabinet

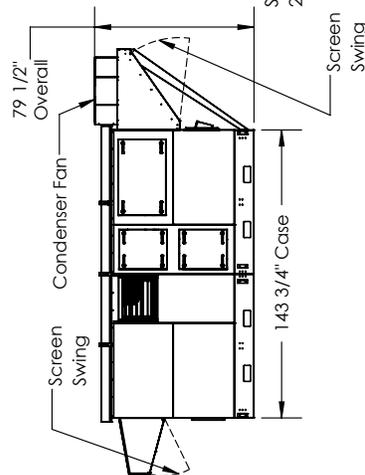
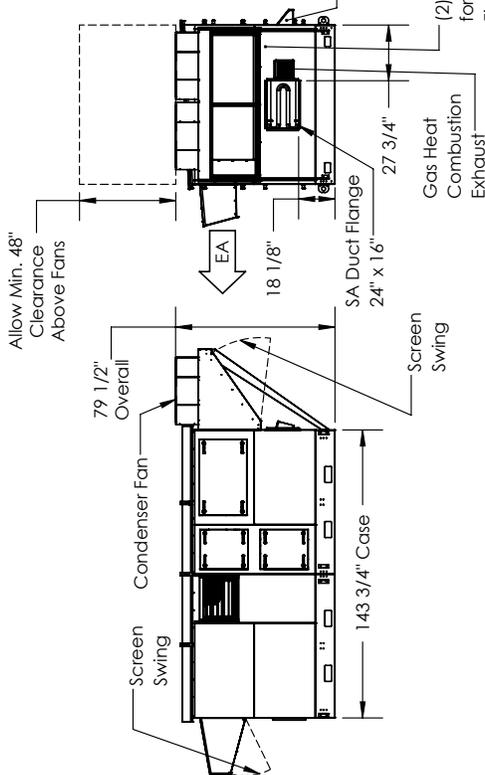
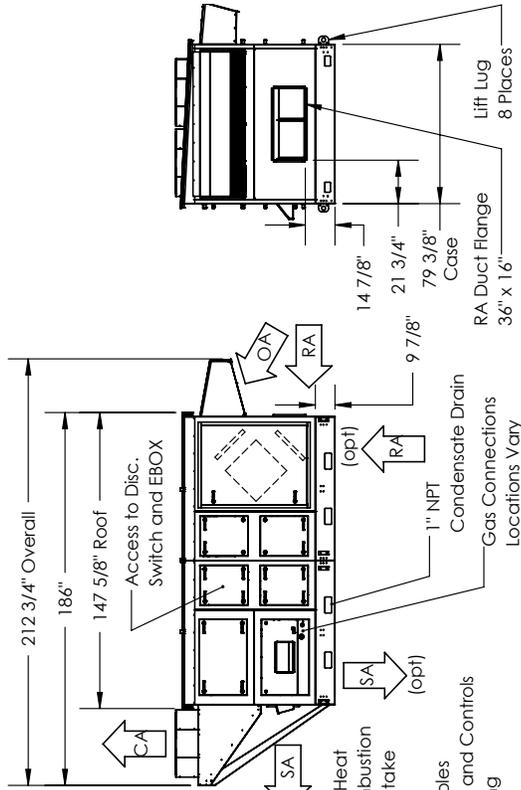
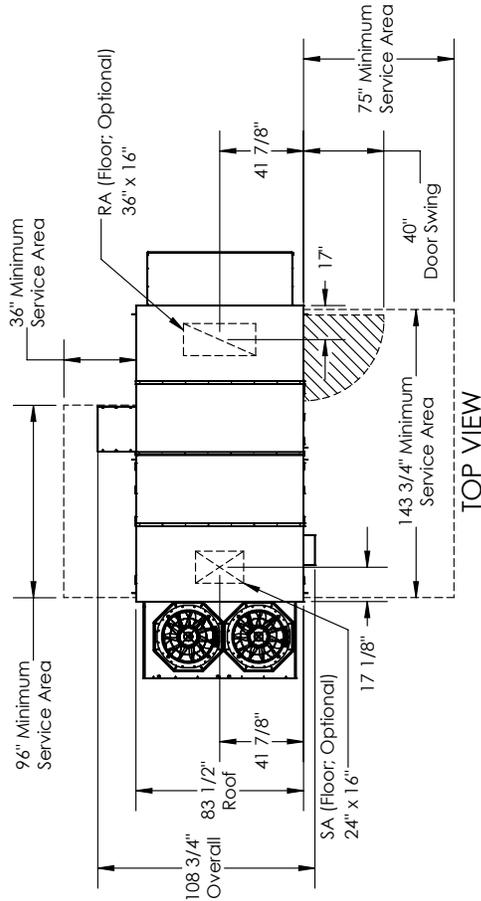
ABBREVIATIONS

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

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 MIRRORRED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.
7. SCREEN SWING AREA VARIES DEPENDING ON HORIZONTAL OR VERTICAL DUCT CONNECTIONS.



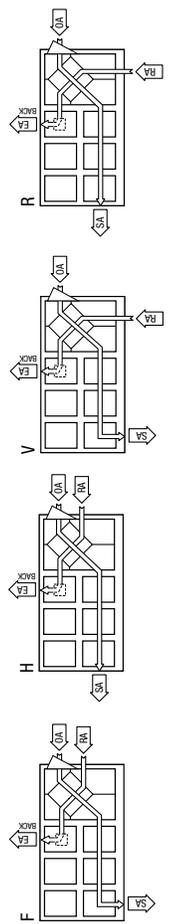
RIGHT VIEW

FRONT VIEW

LEFT VIEW

BACK VIEW

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.



AIRFLOW ORIENTATION
Available as shown:



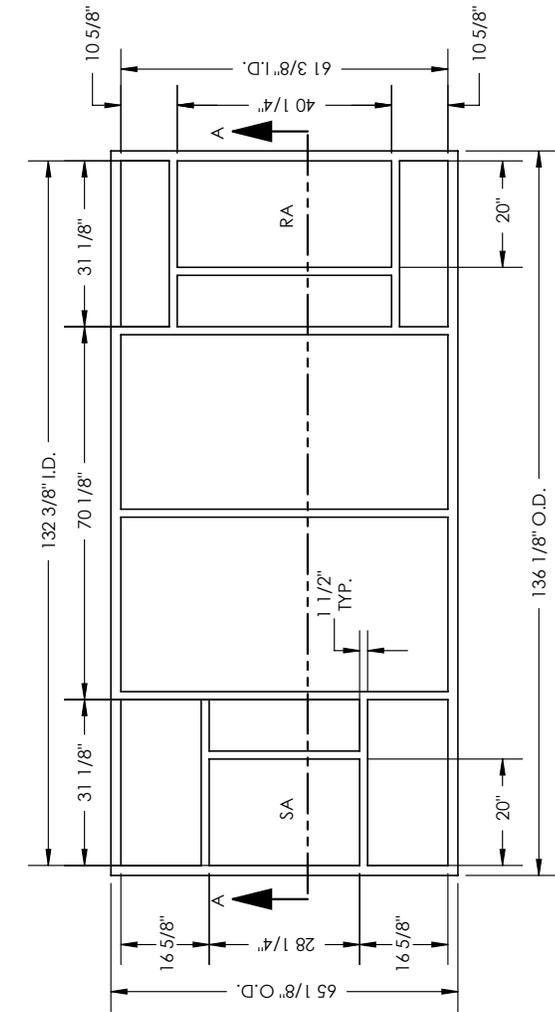
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

DN3RT Dedicated Outdoor Air System Packaged Refrigeration Curbs

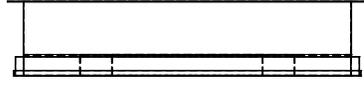
DUCT SUPPORT DIMENSIONS
WIDTH: 1 1/2" DEPTH: 3"

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

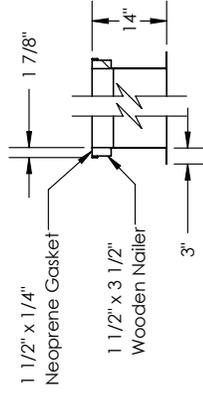
DN3RT
CURB DN3-ERV+C+H



END VIEW



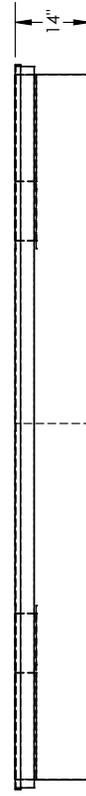
CURB CROSS-SECTION A-A (TYP.)



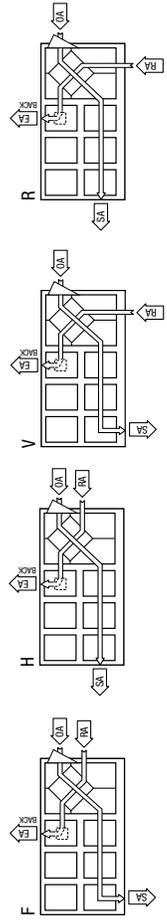
SECTION A-A

TOP VIEW

FRONT VIEW



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.

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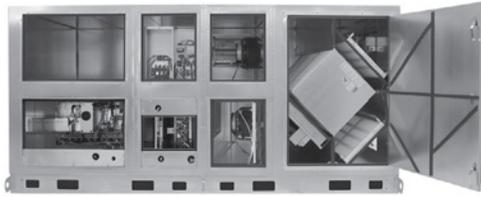
DN 5IN

Dedicated Outdoor Air System Standard



INDOOR UNIT

Dedicated Outside Air System
Unit with Energy Recovery



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

Energy Recovery Core is AHRI Certified®



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

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

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 Weight for 1" Cabinets: 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 Weight for 2" Cabinets: 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- 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

ERV - Energy Recovery Ventilator

EH - Electric Heater

CC - Cooling Coil

HC - Heating Coil

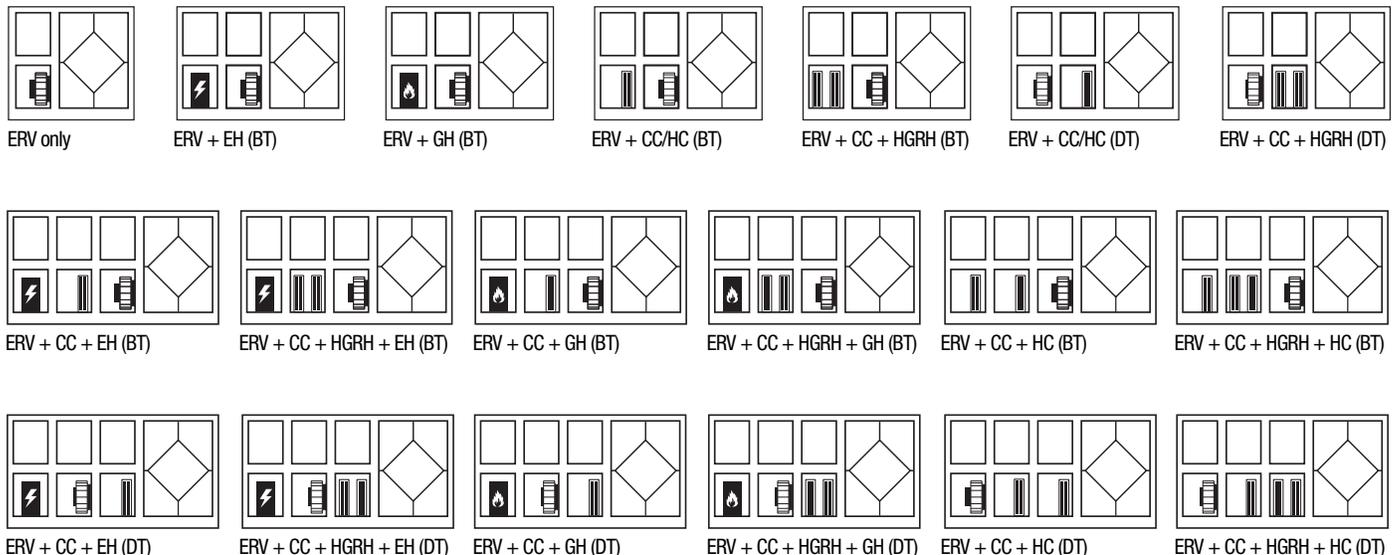
GH - Gas Heat Module

HGRH - Hot Gas Reheat Coil

BT - Blow Thru

DT - Draw Thru

INTERNAL OPTIONS FOR HEATING AND COOLING





Dedicated Outdoor Air System
Standard

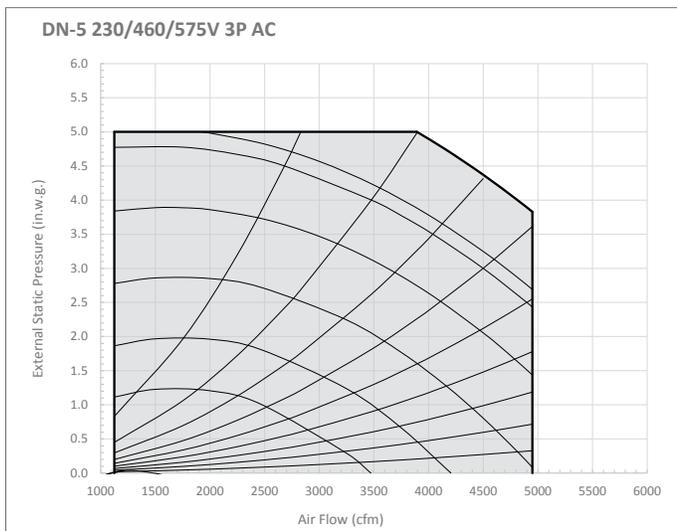
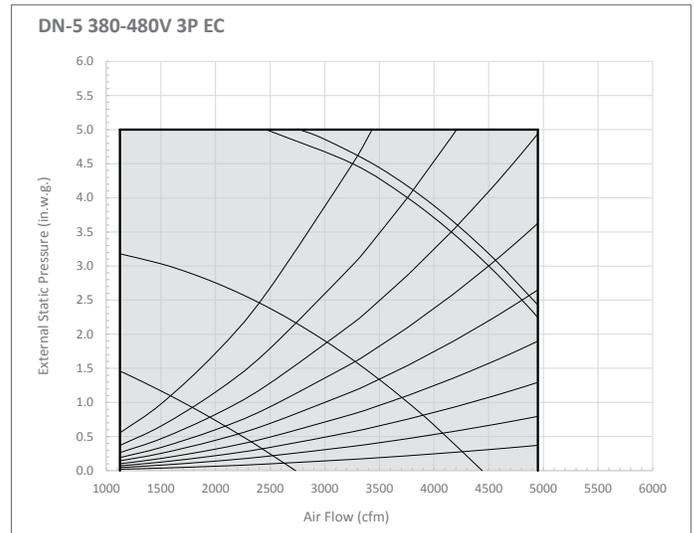
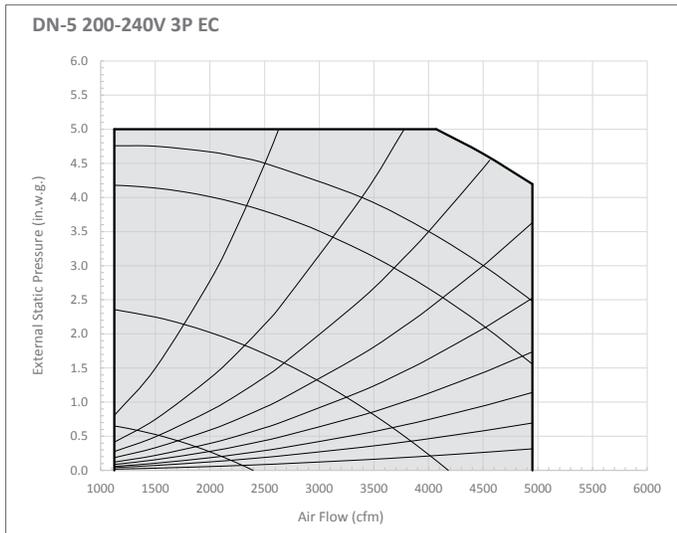


ELECTRICAL DATA

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

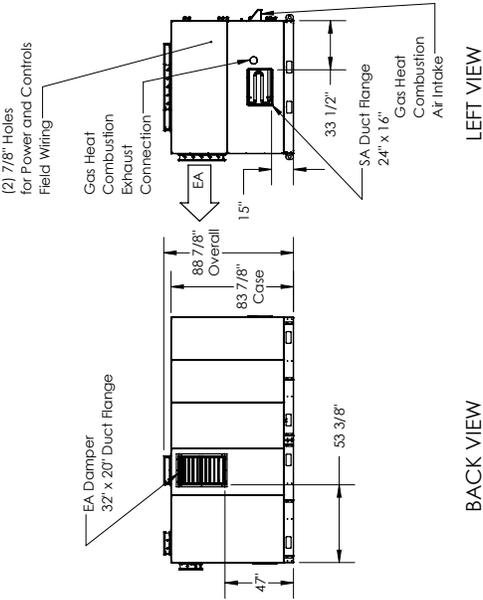
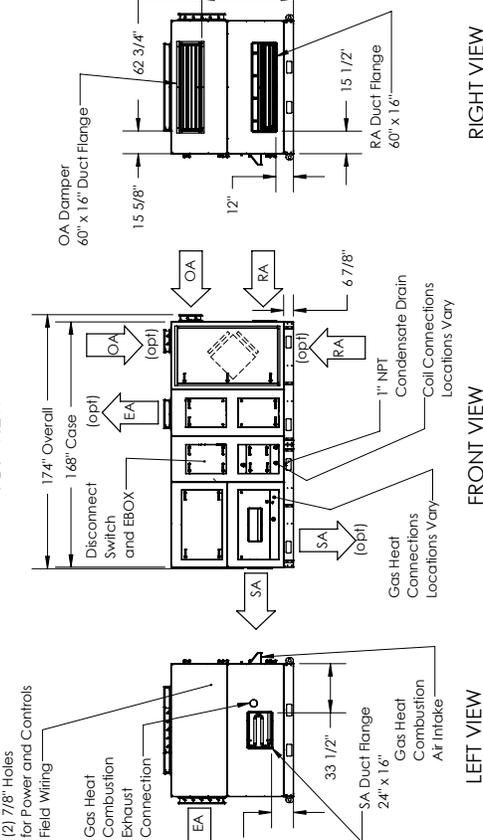
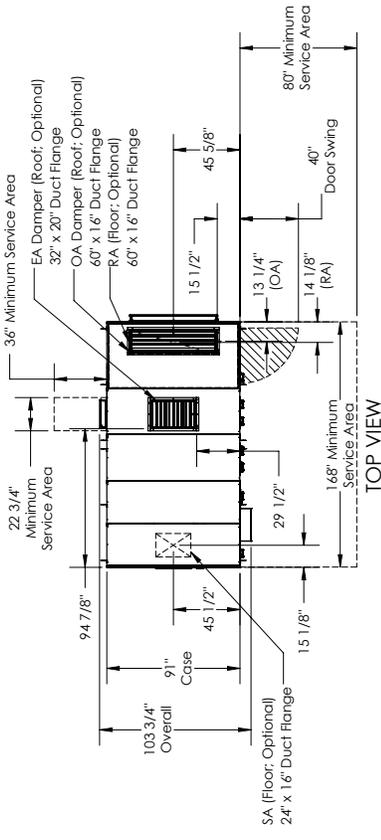
AIRFLOW PERFORMANCE



DN5IN 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 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 MIRRORRED.
 5. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.



RIGHT VIEW

FRONT VIEW

LEFT VIEW

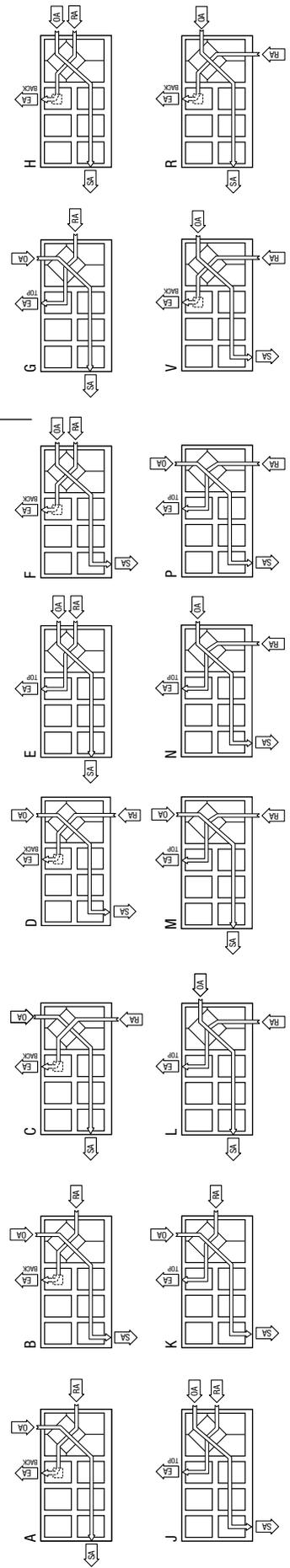
BACK VIEW

AIRFLOW ORIENTATION

Available as shown:



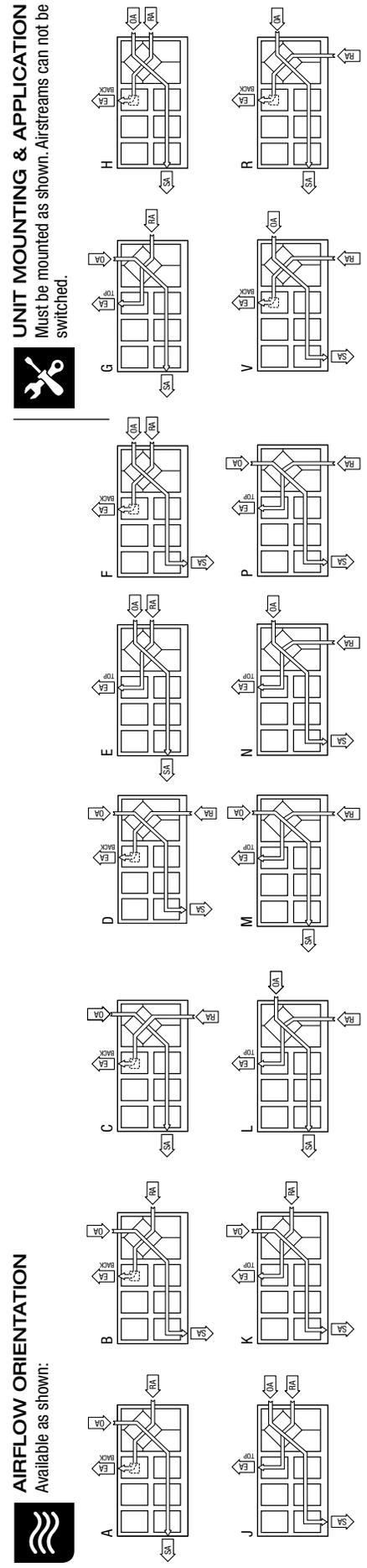
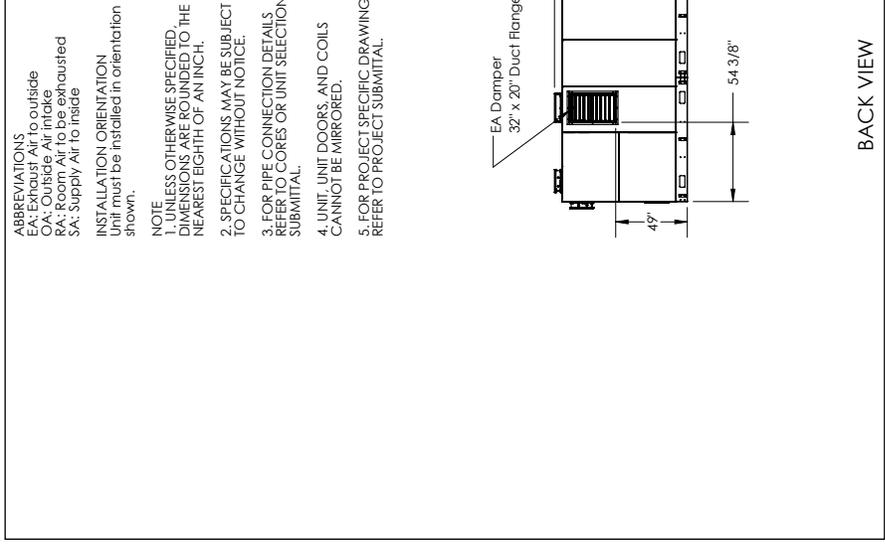
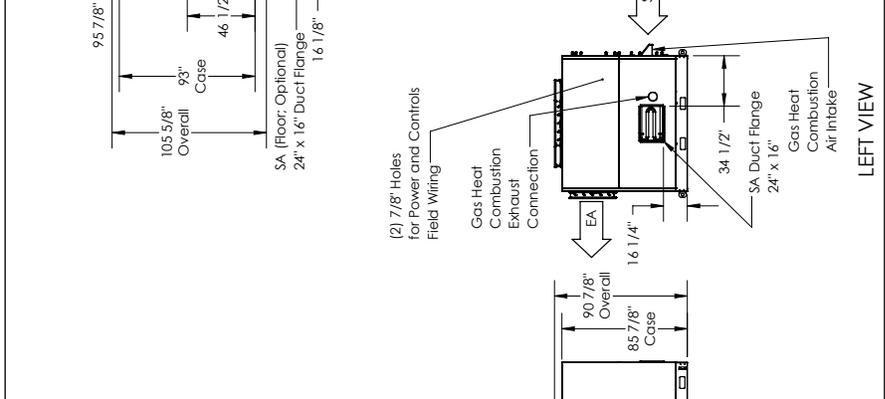
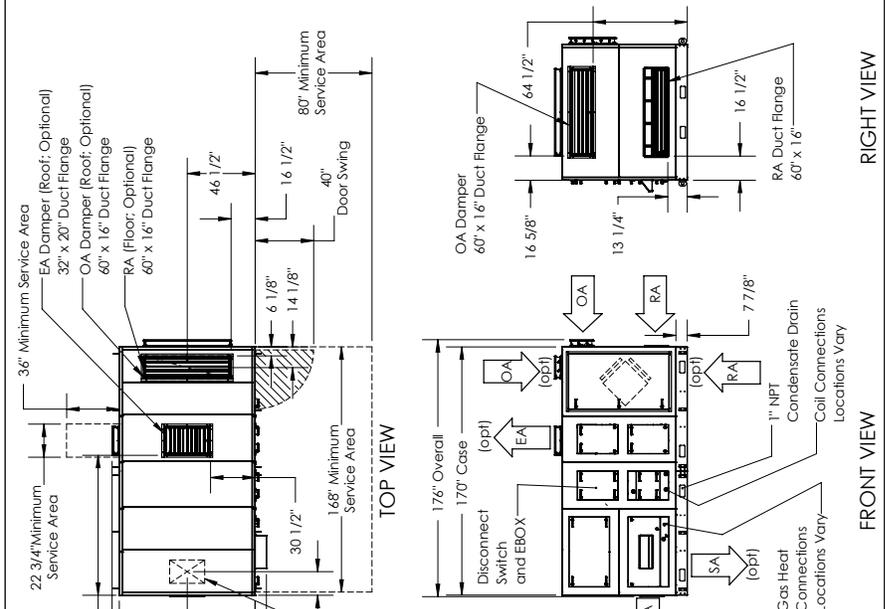
UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



DN51N Dedicated Outdoor Air System Standard 2" Cabinet

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

- 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.



AIRFLOW ORIENTATION
 Available as shown:

UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.

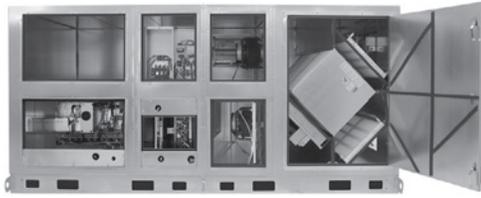
DN 5RT

Dedicated Outdoor Air System Standard



ROOFTOP UNIT

Dedicated Outside Air System
Unit with Energy Recovery



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

Energy Recovery Core is AHRI Certified®



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: 1,125-4,950 CFM

AHRI 1060 Certified Core:

One L-62-G5 and four L-125-G5

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

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 Weight for 1" Cabinets: 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 Weight for 2" Cabinets: 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

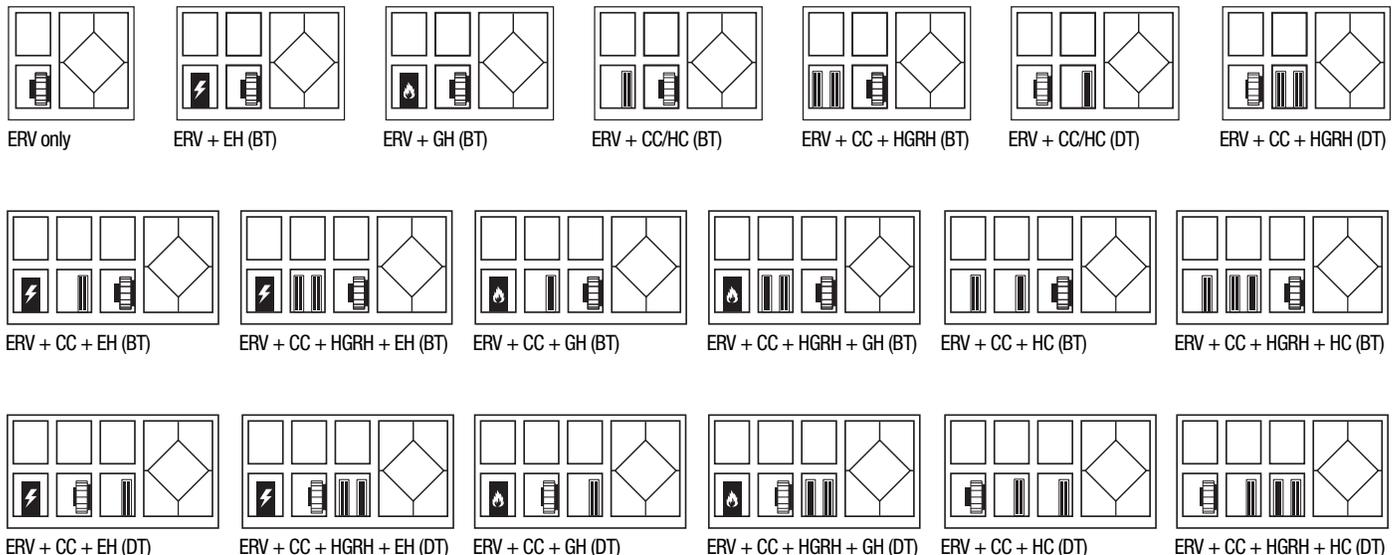
Options:

- 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- Exterior paint - grey, white, custom color
- Salt spray - 2500 hour
- BACNET factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Mist eliminator
- 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
- Roof curb - standard 14"
- Custom 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





Dedicated Outdoor Air System
Standard

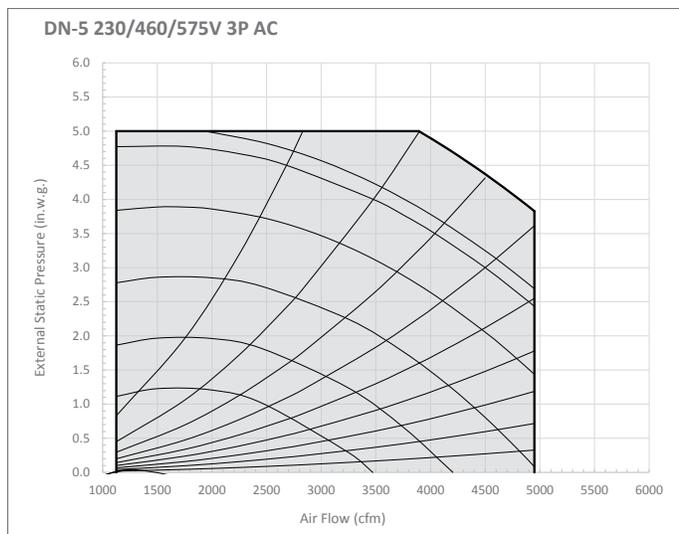
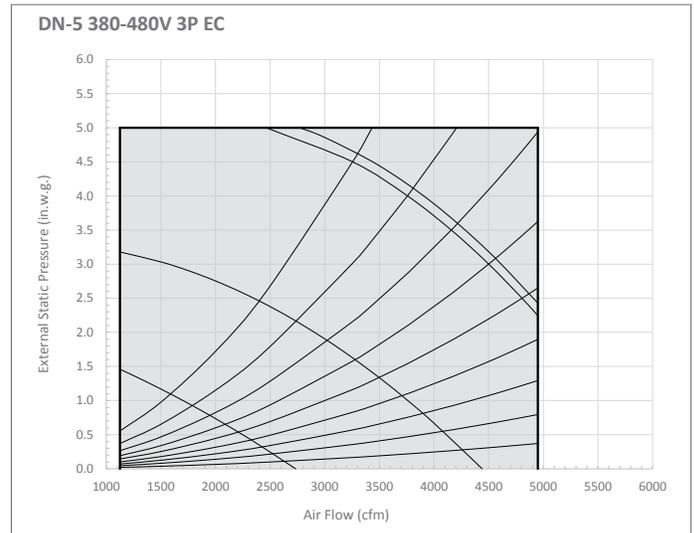
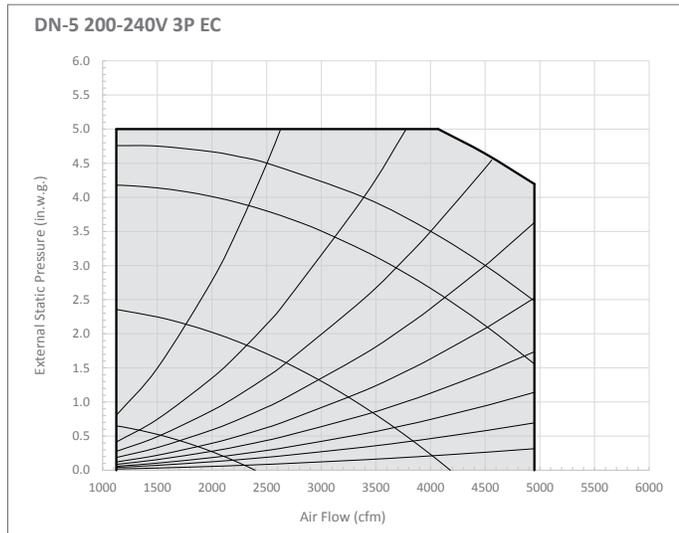


ELECTRICAL DATA

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

AIRFLOW PERFORMANCE



DN55RT Dedicated Outdoor Air System Standard 1" Cabinet

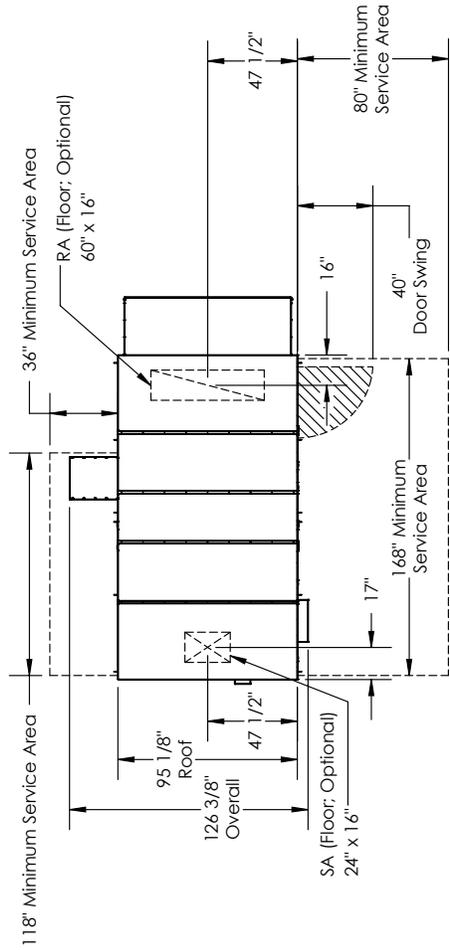
ABBREVIATIONS

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

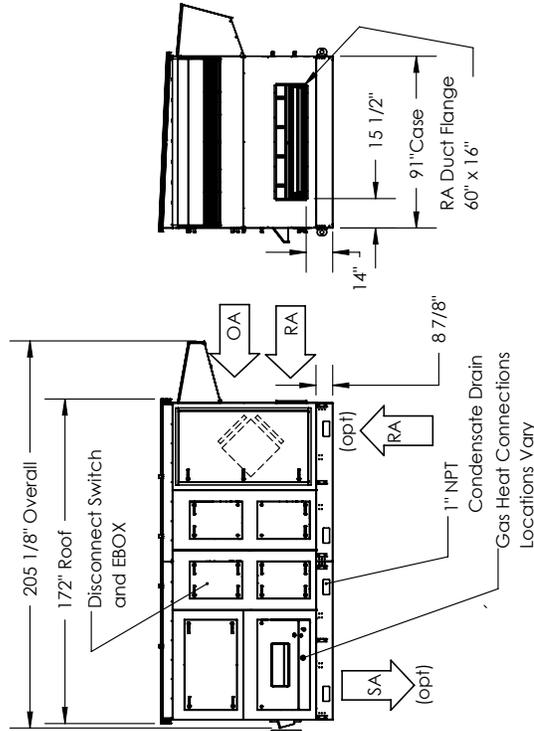
INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

NOTE

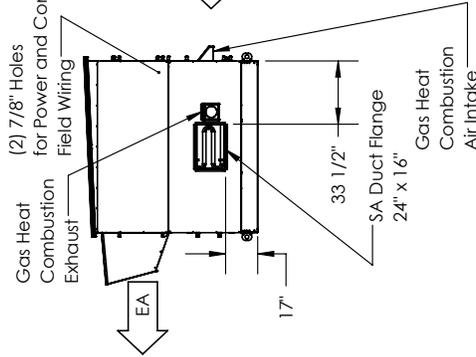
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR CURB DETAILS REFER TO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



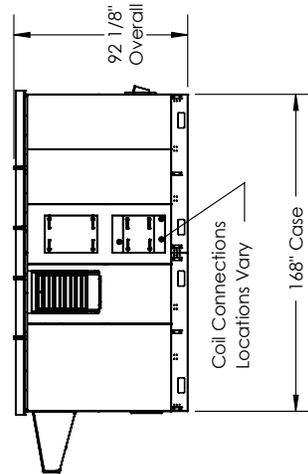
TOP VIEW



FRONT VIEW

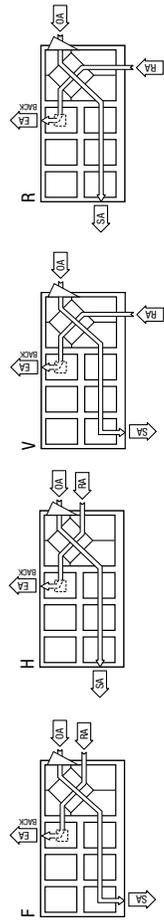


LEFT VIEW



BACK VIEW

UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.

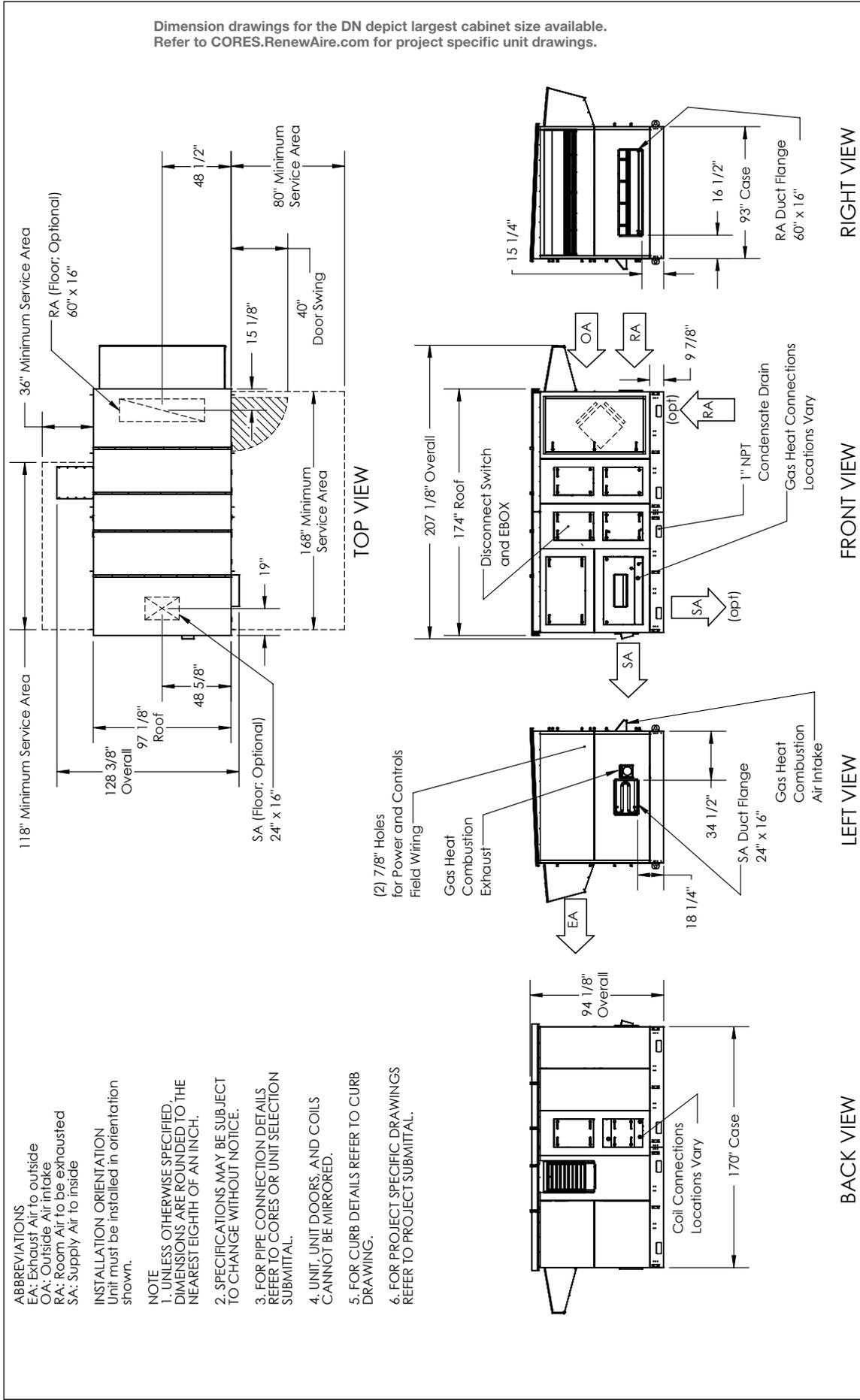


AIRFLOW ORIENTATION
Available as shown:



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

DN5RT 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 MIRRORRED.
 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 as shown. Airstreams can not be switched.

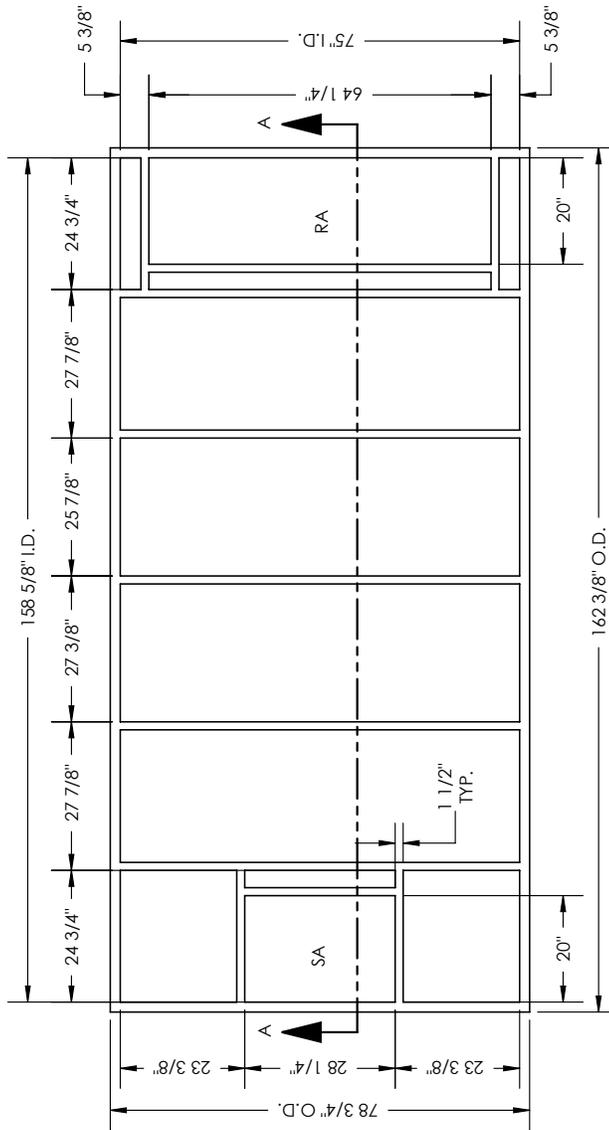
DN5RT Dedicated Outdoor Air System Curbs

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

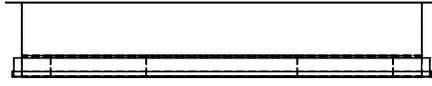
DN5RT
CURB DN5-ERV+C+H

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

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

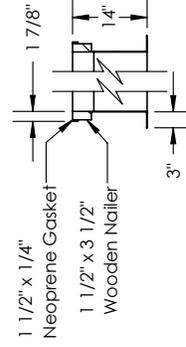


END VIEW

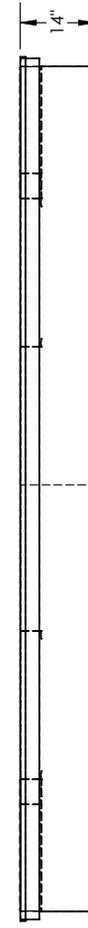


TOP VIEW

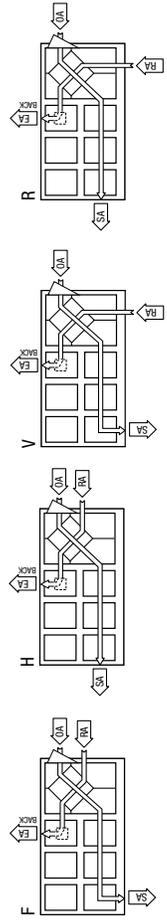
CURB CROSS-SECTION A-A (TYP.)



SECTION A-A



FRONT VIEW



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.

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DN 5RT

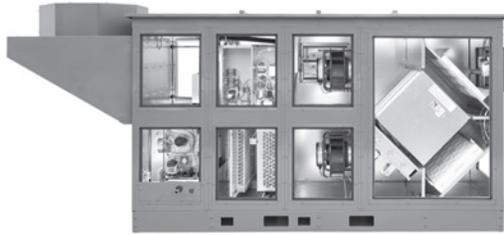
Dedicated Outdoor Air System Packaged Refrigeration



ROOFTOP UNIT

Dedicated Outside Air System
Unit with Energy Recovery

NEW



DN2RT, ERV + DX + HGRH + GH (BT) shown

Energy Recovery Core is AHRI Certified®



ERV - Energy Recovery Ventilator

EH - Electric Heater

HC - Heating Coil

GH - Gas Heat Module

HGRH - Hot Gas Reheat Coil

DX - Direct Expansion (for DOAS units
with Packaged Refrigeration)

BT - Blow Thru

DT - Draw Thru

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

ETL Certification:

Tested to UL standards 1812 and 1995

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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

Packaged Refrigeration Features:

- EC motor for condenser fan (with the exception of 575V models, which are VFD driven)
- DX cooling coil
- Packaged refrigeration controls
- BLDC scroll compressor(s)
- Condensing coil

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 Weight for 1" Cabinets: 4825-6600 lbs.

Max. Shipping Dimensions & Weight for 1" Cabinets:

- 219 3/4" L x 100 1/4" W x 100" H
- 5050-6950 lbs.

Unit Weight for 2" Cabinets: 5000-6800 lbs.

Max. Shipping Dimensions & Weight for 2" Cabinets:

- Cabinets:**
- 221 3/4" L x 101 1/4" W x 101 1/4" H
- 5225-7150 lbs.

Motor(s):

Qty. 4, Direct drive motorized impeller packages

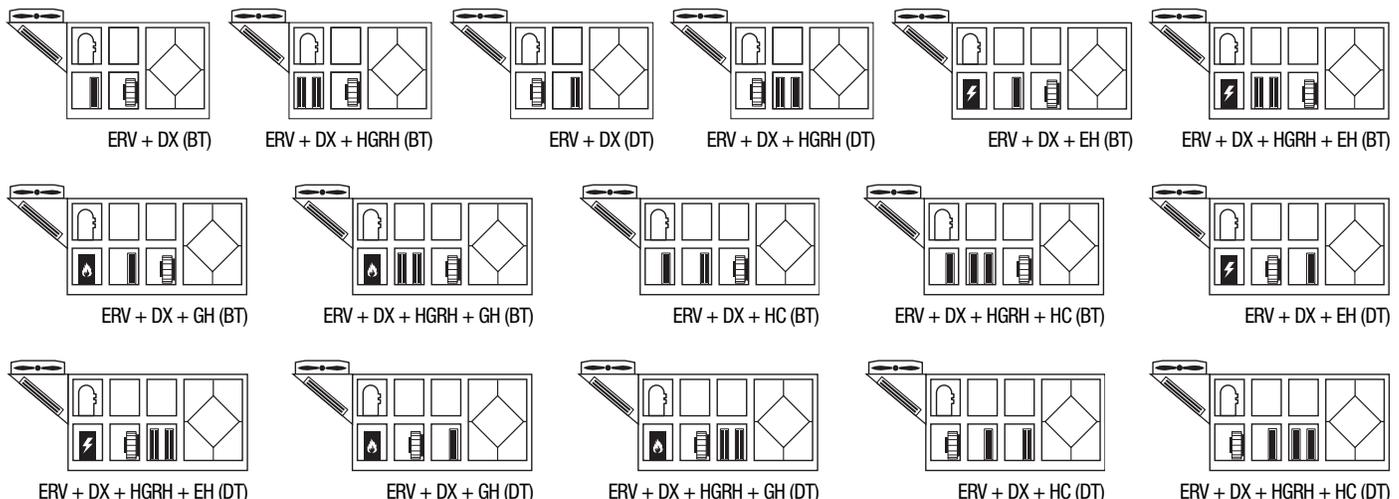
Options:

- 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
- Exterior paint - grey, white, custom color
- Salt spray - 2500 hour
- BACNET factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Mist eliminator
- 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
- Roof curb - standard 14"
- Custom 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





Dedicated Outdoor Air System
Packaged Refrigeration

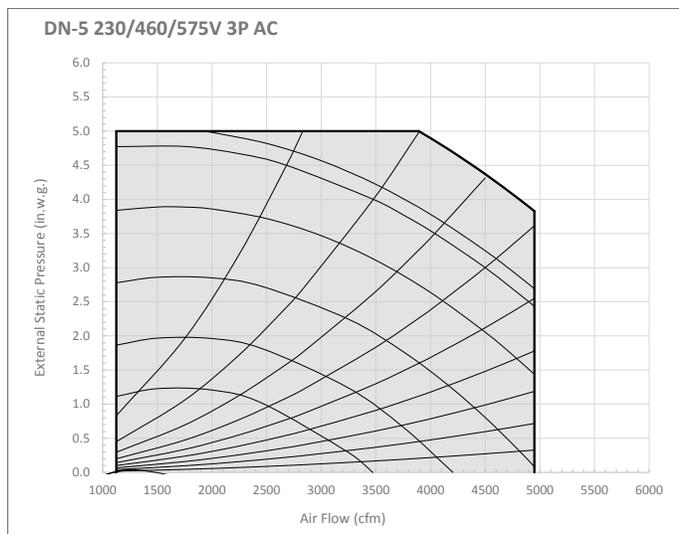
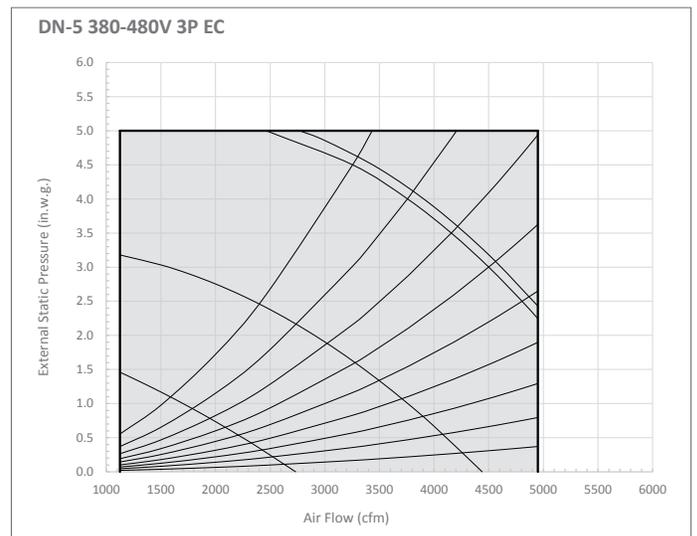
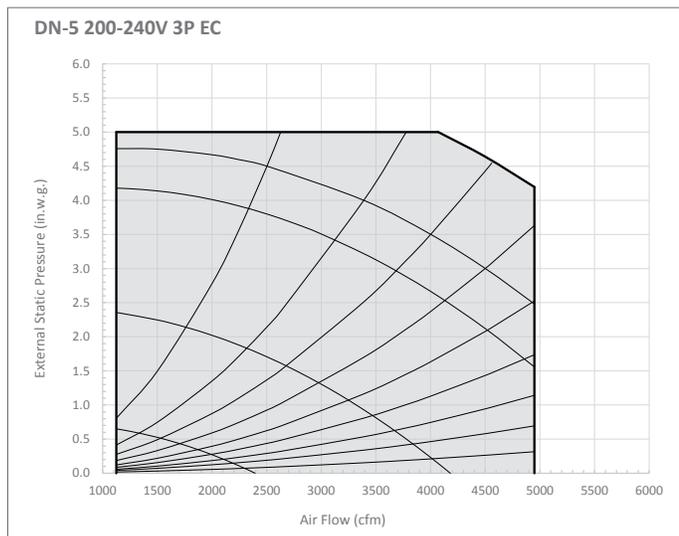


ELECTRICAL DATA

Electrical Specifications											
Spd Ctl	Unit					Supply Air & Exhaust Air Fan		Condenser Fan		Compressors	
	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	Motor Qty/kW or HP	FLA per motor	Motor Qty/kW or HP	FLA per motor	Variable Speed Compressor Drive Amps	Fixed Speed Compressor MCC
EC	200-240	50/60 Hz	Three	163.4	200	4 @ 2.70 kW ea.	8.6-7.2	2 @ 3.60 kW ea.	11.0-9.2	50.4	44
	380-480	50/60 Hz	Three	140.4	175	4 @ 3.70 kW ea.	6.0-4.6	2 @ 3.70 kW ea.	6.0-4.7	49.9	42
VFD	208-230	50/60 Hz	Three	140.6	175	4 @ 5HP ea.	13.9-13.4/6.7	2 @ 3.60 kW ea.	11.0-9.2	50.4	n/a
	460	50/60 Hz	Three	143.2	175	4 @ 5HP ea.	6.7	2 @ 3.70 kW ea.	6.0-4.7	49.9	42
	575	50/60 Hz	Three	112.6	150	4 @ 5HP ea.	5.3	2 @ 2.8 kW ea.	3.7	37.6	37

Note: Electrical data shown is for a standard unit with largest compressor available, but without heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE



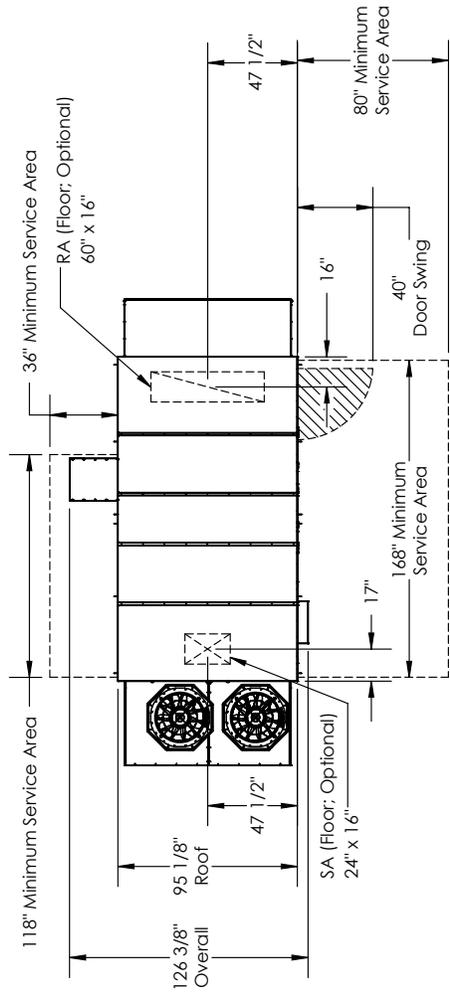
DN5RT Dedicated Outdoor Air System Packaged Refrigeration Standard 1" Cabinet

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

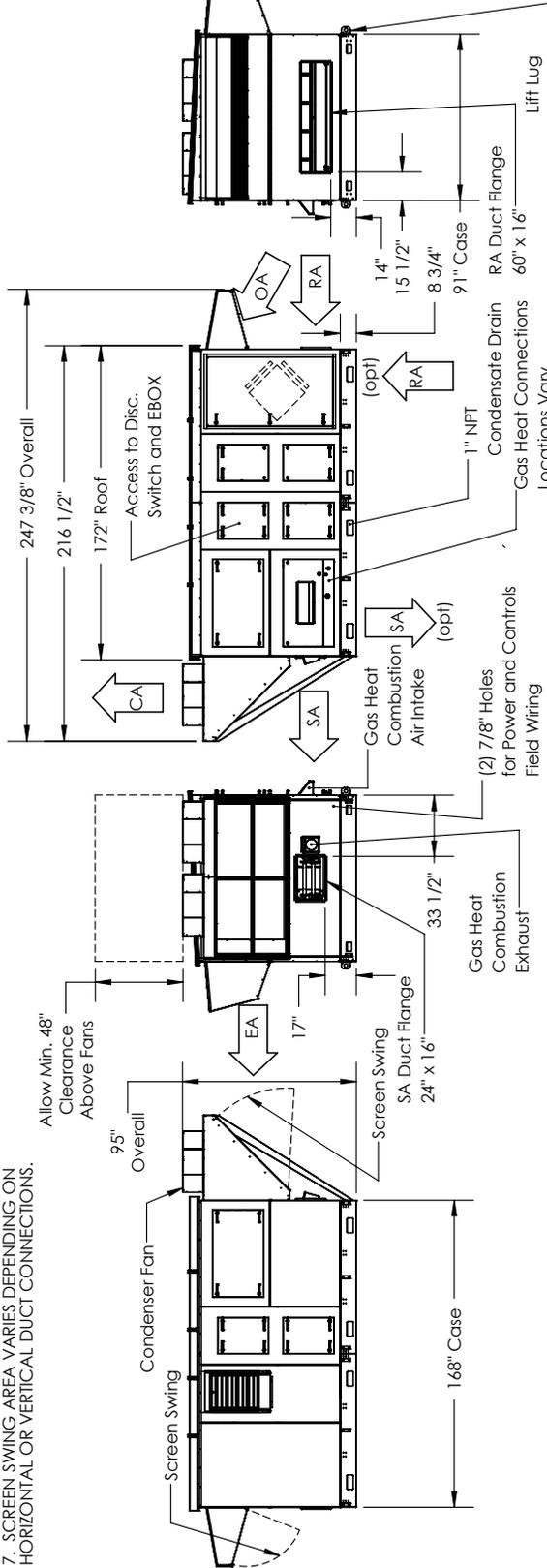
INSTALLATION ORIENTATION
 Unit must be installed in orientation shown.

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 MIRRORRED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.
7. SCREEN SWING AREA VARIES DEPENDING ON HORIZONTAL OR VERTICAL DUCT CONNECTIONS.



TOP VIEW



RIGHT VIEW

FRONT VIEW

LEFT VIEW

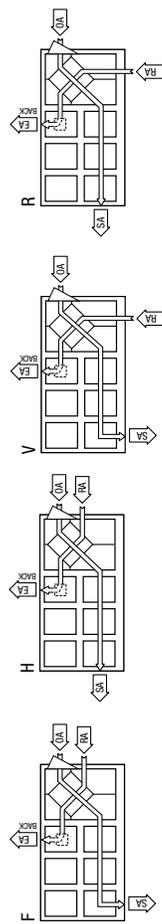
BACK VIEW

AIRFLOW ORIENTATION

Available as shown:



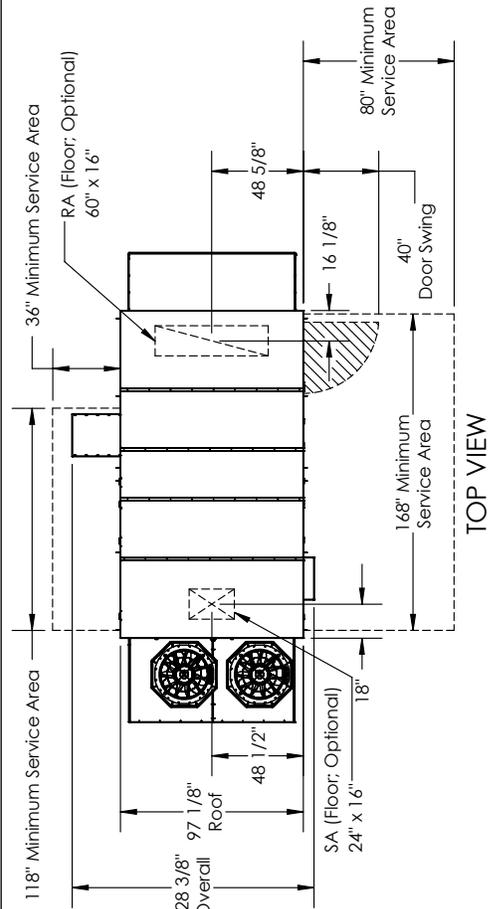
UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



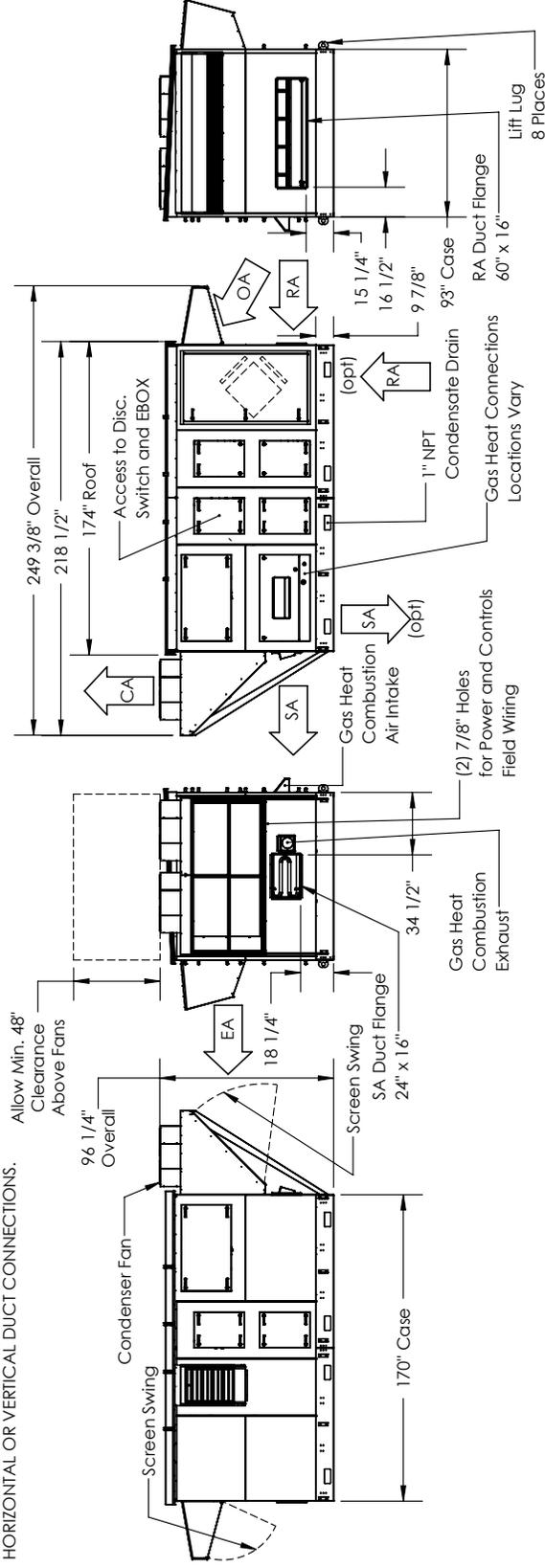
Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.

DN5RT Dedicated Outdoor Air System Packaged Refrigeration Standard 2" Cabinet

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



TOP VIEW



RIGHT VIEW

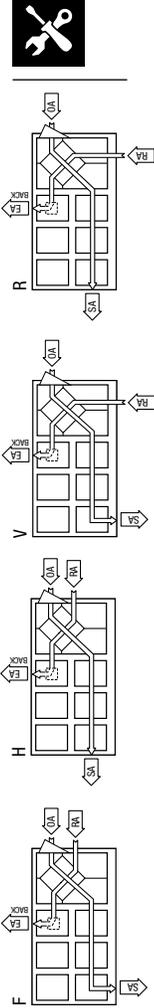
FRONT VIEW

LEFT VIEW

BACK VIEW

- ABBREVIATIONS**
 EA: Exhaust Air to outside
 OA: Outside Air Intake
 RA: Room Air to be exhausted
 SA: Supply Air to inside
 CA: Condenser Air
- 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 MIRRORRED.
 5. FOR CURB DETAILS REFER TO CURB DRAWING.
 6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.
 7. SCREEN SWING AREA VARIES DEPENDING ON HORIZONTAL OR VERTICAL DUCT CONNECTIONS.

UNIT MOUNTING & APPLICATION
 Must be mounted as shown. Airstreams can not be switched.



AIRFLOW ORIENTATION
 Available as shown:



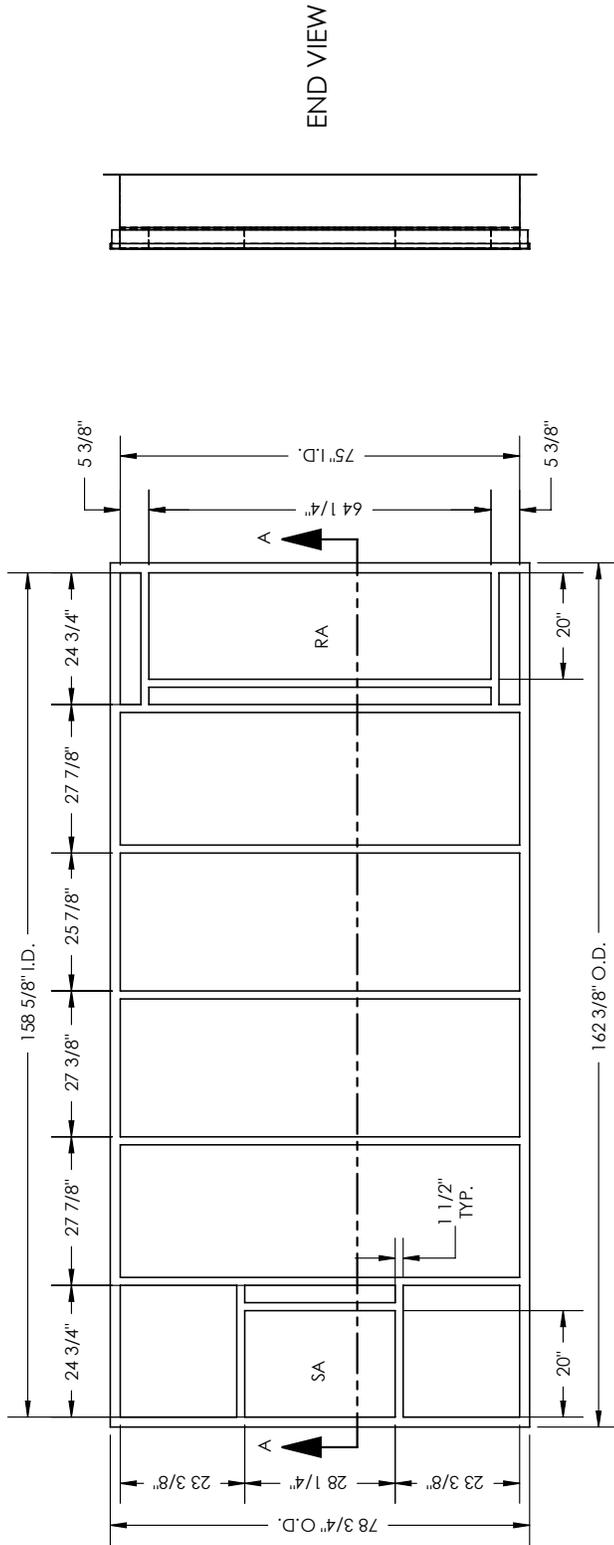
DN5RT Dedicated Outdoor Air System Packaged Refrigeration Curbs

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

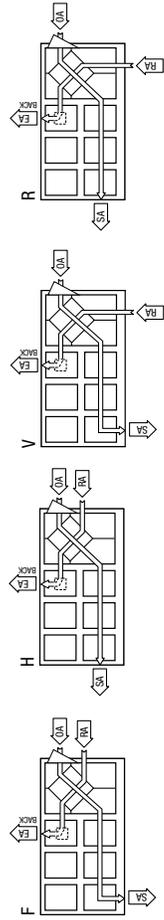
DN5RT
CURB DN5-ERV+C+H

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

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



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.

FRONT VIEW

SECTION A-A

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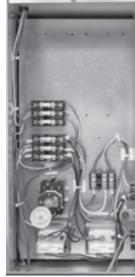


OPTIONS

See individual submittal pages for availability by model.

ELECTRICAL

- ♦ Fused disconnect



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



VFD all voltage except 575V



VFD 575V only

EXTERIOR PAINT 2500 HR. SALT SPRAY RATED

- ♦ White, grey and custom colors available



Painted cabinet

BACNET FACTORY ACTIVATION

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



BN-A



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



GFCI Indoor



GFCI Outdoor

RECIRCULATION DAMPER

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



Recirculation damper

DRAIN OVERFLOW SWITCH

- For condensate overflow prevention
- A pull-to-test level for verifying correct installation



Drain overflow switch

MIST ELIMINATOR

- 3/8" bonded aluminum mesh screen
- Removes moisture from mist



Mist eliminator



DN SERIES FEATURES INTEGRATED PROGRAMMABLE CONTROLS

With Options & Accessories

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

CO2 sensor (wall or duct mount)*
IAQ sensor (wall or duct mount)*
Occupancy sensor (ceiling or wall mount)
Smoke detector (duct mount)
BACnet factory activation (MS/TP or TCP/IP)
Remote display (handheld or wall mount)
Room Pressure Sensor (with or without display)
Duct Static Pressure Sensor (with or without display)
Temperature Sensor Kit (duct mount)**

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.

DN SERIES FEATURES INTEGRATED PROGRAMMABLE CONTROLS

With Options & Accessories 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

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. See individual submittal pages for availability by model.

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



CO2-W Wall Mount

CO2-D Duct Mount

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



IAQ-W Wall Mount

IAQ-D Duct Mount

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.



MC-C Ceiling Mount

MC-W Wall Mount

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



SD-D Duct Mount



ACCESSORIES

Controls Continued

See individual submittal pages for availability by model.

ROOM TEMPERATURE AND HUMIDITY SENSOR

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



Room temperature and humidity sensor

REMOTE DISPLAY

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



RD-M
Handheld or Wall Mount

TEMPERATURE SENSOR KIT

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



TS Duct Mount

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



RPS-WOD/DPS-WOD
Wall/Duct Mount
without Display



RPS-WD/DPS-WD
Wall/Duct Mount
with Display



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
- ♦ Shipped loose



2" & 4" MERV13 Filters

MERV14 FILTERS

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



2" & 4" MERV14 Filters

ROOF CURBS

- ♦ Unit to curb attachment brackets
- ♦ Optional application specific hurricane and seismic custom curbs with 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



Curb Clip Kit

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



Negative

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



Positive

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DN SERIES MODEL CONFIGURATION GUIDE

Note: Not all options are available on every model.

MODEL NUMBER		-		-	J											-				-	-				
DIGIT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Digits 1-5:	Model
"DN-2-" = 1,650 CFM "DN-3-" = 3,300 CFM "DN-5-" = 4,950 CFM	

Digit 6:	Exchanger Type
"J" = G5 Core	

Digits 7-8:	Location (see Restriction 1)
"IN" = Indoor "RT" = Rooftop	

Digit 9:	SA Fan Location (See Restrictions 17 & 18)
"B" = Before Coil (Standard) "A" = After Coil	

Digit 10:	Orientation
"A", "B", "C", "D", "E", "F", "G", "H", "J", "K", "L", "M", "N", "P", "R", "V"	

Digit 11:	Insulation
"1" = 1 inch "2" = 2 inch with Thermal Break	

Digit 12:	Phase (see Restriction 15)
"1" = Single Phase "3" = Three Phase	

Digit 13:	Voltage (see Restrictions 2 & 7)
"3" = 208V "4" = 460V "5" = 230V "8" = 575V	

Digit 14:	Refrigeration Type (see Restriction 20)
"." = None "P" = Packaged	

Digit 16:	Cooling
"." = None "C" = Chilled Water "D" = Direct Expansion "H" = Heat Pump "P" = Heat Pump + Hot Gas Reheat (HGRH) "R" = Direct Expansion + Hot Gas Reheat (HGRH)	

Digit 17:	Heating (see Restrictions 3 & 21)
"." = None "E" = Electric Heater "G" = Gas Heat Module "P" = Heat Pump "S" = Steam "H" = Hot Water	

Digit 18:	Heater Size (see Restrictions 4, 8, 9, 10, 11, 12 & 13)
"." = None "1" = Gas 50 MBH or Electric 5kW "2" = Gas 75 MBH or Electric 10kW "3" = Gas 100 MBH or Electric 15kW "4" = Gas 125 MBH or Electric 20kW "5" = Gas 150 MBH or Electric 25kW "6" = Gas 200 MBH or Electric 30kW "7" = Gas 250 MBH or Electric 40kW "8" = Gas 300 MBH or Electric 50kW "9" = Gas 350 MBH or Electric 60kW	

Digit 19:	Fan Control (see Restrictions 5 & 6)
"E" = ECM "V" = VFD	

Digit 20:	Unit Fusing
"N" = Non-Fused (Standard) "F" = Fused	

Digit 21:	Unit Control Enhancements
"2" = Premium Controls without BacNet "4" = Premium Controls with BacNet	

Digit 24:	Customization
"." = None "P" = Standard Paint, No Customization "X" = Custom Unit, No Paint "Z" = Custom Unit and Paint	

Digit 25:	Safety Listing (see Restriction 16)
"L" = Listed "N" = Non-Listed	

***NOTES:**
Digits 3, 5, 15, 22 & 23 are unused in this model.

Restrictions:
<p>1: Location Code "RT" only available with Orientation Codes "H", "V", "R" & "F". 2: Voltage Code "4" & "8" only available with Phase Code "3". 3: Heating Code "P" only available with Cooling Codes "H" or "P". 4: Heater Size Option only available with Heating Codes "E" & "G". 5: Fan Control Code "E" only available with Voltage Codes "3", "4" and "5". 6: Fan Control Code "V" only available with Phase Code "3". 7: Voltage Code "8" only available with Fan Control "V". 8: Heater Size Codes "8" and "9" are not available when Model Code is "DN-2-" and Heating Code is "E". 9: Heater Size Codes "8" and "9" are not available when Model Code is "DN-3-" or "DN-5-" and Unit Voltage Code is "3" or "5" and Fan Control Code is "V" and Heating Code is "E". 10: Heater Size Code "8" is not available when Model Code is "DN-5-" and Unit Voltage Code is "3" and Fan Control Code is "E" and Heating Code is "E". 11: Heater Size Code "9" is not available when Model Code is "DN-3-" or "DN-5-" and Unit Voltage Code is "3" or "5" and Fan Control Code is "E" and Heating Code is "E". 12: Heater Size Code "7" is not available when Model Code is "DN-5-" and Unit Voltage Code is "3" or "5" and Fan Control Code is "V" and Heating Code is "E". 13: Heater Size Codes "5", "6", and "7" are not available when Model Code is "DN-2-" and Heating Code is "G". 14: Heater Size Codes "8" and "9" are not available when Model Code is "DN-2-" or "DN-3-" and Heating Code is "G". 15: Phase Code "1" only available with Model Code "DN-2-". 16: Heating Code "E" not available with Phase Code "1". 17: Some units with Customization Code "X" are not Safety Listed. 18: SA Fan Location Code "A" is not available when no coils are selected. 19: SA Fan Location Code "B" is not available when only coils are selected for Heating and Cooling and Orientation Codes are "B", "D", "F", "J", "K", "N", "P" or "V". 20: Refrigeration Type Code "P" is only available with Location Code "RT" and Cooling Codes "D" and "R" and Phase Code "3". 21. Heating Codes "H" and "S" are not available with Cooling Codes "H" or "P".</p>

DN-Series Configuration Code Chart

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

kW for EC Motors (see Restrictions 1, 6, 7 & 8)
1.35 kW
2.70 kW
3.70 kW

Fan Horsepower for VFD (see Restrictions 2, 4 & 5)
3 HP
5 HP

Vibration Isolation for VFD (see Restriction 3)
Spring
Neoprene (Standard)

GFCI Convenience Outlet
Yes
No

Drain Overflow Switch
Yes
No

Paint
None (Standard)
2500 Hour Salt Spray

Paint Color
White
Grey
Custom

Outside Air Hood Moisture Eliminator (See Restriction 18)
Yes
No

Recirculation Damper
Yes
No

Coil Tube Geometry (answered for each coil)
3/8" 1.000" x 0.866"
3/8" 1.250" x 1.0825"
1/2" 1.250" x 1.0825"
5/8" 1.500" x 1.259"
5/8" 1.500" x 1.500"
1.0" 3.000" x 2.000"

Coil Rows (answered for each coil)
1
2
3
4
5
6

Coil Fins Per Inch (answer for each coil)
6, 7, 8, 9, 10, 11, 12, 13, 14

Coil Coating (answer for each coil)
None
Electrofin UV

Coil Position (answer for each coil) (see Restrictions 11, 12, 13, 14, 15 & 28)
Position 1 (First in direction of Airflow after fan/core)
Position 2 (Second in direction of Airflow after fan/core)
Position 3 (Third in direction of Airflow after fan/core)
Position 4 (Condenser Coil only)

Coil Mode (Water Coil Only) (see Restriction 16)
Cooling
Heating
Cooling & Heating (Seasonal Changeover)

Coil Style (Evaporator Coil Only) (see Restriction 10)
Standard
Interlaced 2 Circuits

Element Material (Electric Heater)
60-20-20 Ni-Cr-Fe with Nickel-Plate Terminal Pins (Standard)
80-20 Ni-Cr with Stainless Steel Terminal Pins (Corrosion Resistant)

Fuel Type (Gas Heat Module)
Natural Gas (Standard)
Propane

Tube Material (Gas Heat Module)
409 Stainless Steel (Standard)
304 Stainless Steel

Elevation Range (Gas Heat Module)
0-2000'
2001'-2999'
3000'-3999'
4000'-4999'
5000'-5999'
6000'-6999'
7000' and above

Control Type (Gas Heat Module)
Modulating 5:1 (Natural Gas)/3:1 (Propane) (Standard)
Modulating 10:1 (Natural Gas)/6:1 (Propane)

Gas Derated (Gas Heat Module) (see Restriction 9)
Yes
No

Combustion Inlet Type (Gas Heat Module) (see Restriction 17)
Separated Combustion (Separate combustion air intake and flue exhaust)
Exhaust flue venting only (Combustion air intake via intake louver on unit)

Compressor (see Restrictions 19 & 20)
1-Circuit: Qty. (1) Variable Speed
2-Circuit: Qty. (1) Variable Speed
Qty. (1) Fixed Speed

Hot Gas Reheat (see Restrictions 19 & 21)
Yes, with Suction Line Accumulator
No

Valves (see Restrictions 19, 22 & 23)
1-Circuit: Qty. (1) Electronic Expansion Valve
2-Circuit: Qty. (2) Electronic Expansion Valves

Condensing Fan (see Restrictions 19, 24, 25, 26 & 27)
EC Axial Fan: Qty. (1) or (2)
AC Axial Fan with VFD: Qty. (1) or (2)

Condenser Coil Style (see Restriction 29)
Standard
Face Split 2-Circuits

*NOTE: Packaged Refrigeration components are dependent on operating conditions and are automatically selected.

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-3" & "DN-5".
6: 1.35 kW only available in Model Codes "DN-2" & with Phase Code "1".
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 Cooling Codes "D" & "R", 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 "N".
18: Outside Air Hood Moisture Eliminator only available in Location Code "RT".
19: Compressors, Hot Gas Reheat with Suction Line Accumulator, Valves, and Condensing Fans options only available with Refrigeration Type Code "P".
20: 2-Circuit only available with Model Codes "DN-3" & "DN-5", when 1-Circuit cannot meet required capacity.
21: Hot Gas Reheat with Suction Line Accumulator only available with Cooling Code "R".
22: Qty. (1) Electronic Expansion Valve only available with 1-Circuit.
23: Qty. (2) Electronic Expansion Valves only available with 2-Circuits.
24: Qty. (1) Condensing Fan only available with Model Code "DN-2".
25: Qty. (2) Condensing Fans only available with Model Codes "DN-3" & "DN-5".
26: EC Axial Condensing Fans only available with Voltage Codes "3", "4" & "5".
27: AC Axial Condensing Fans with VFD only available with Voltage Code "8".
28: Coil Position 4 only available with Refrigeration Type Code "P".
29: Face Split 2-Circuits Coil Style only available with Condenser Coil & 2-Circuits.

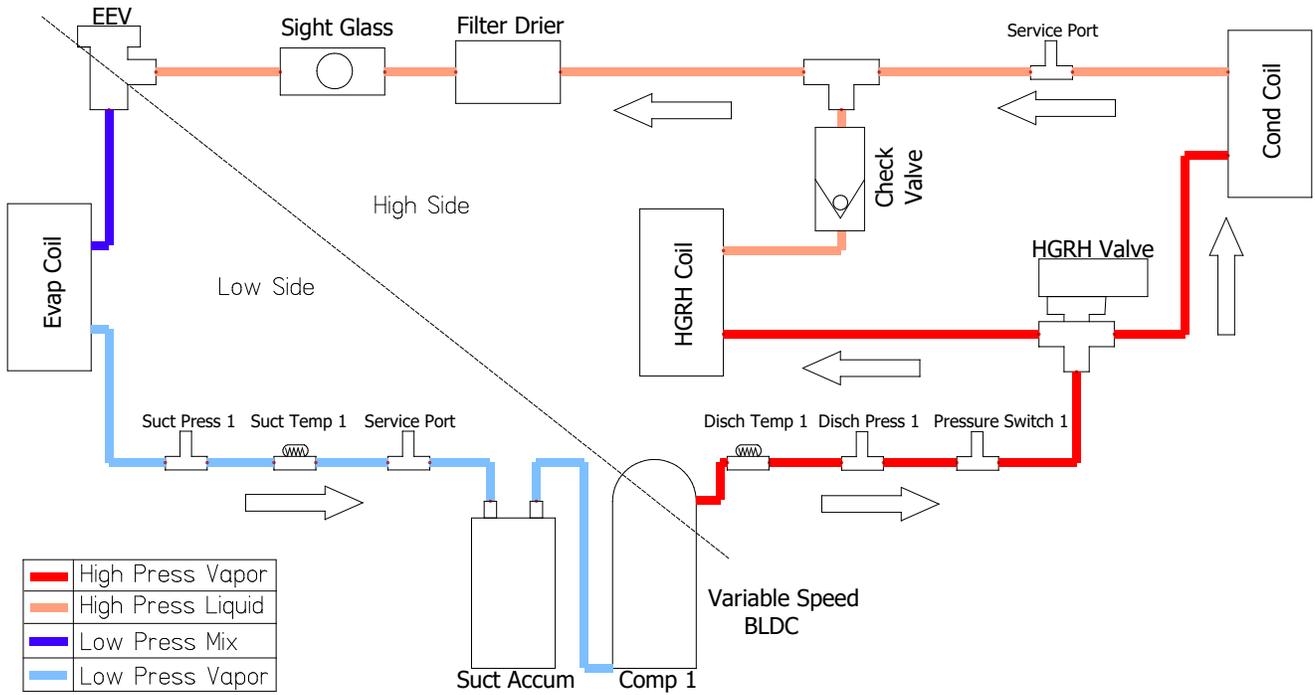
DN-Series Configuration Code Chart

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

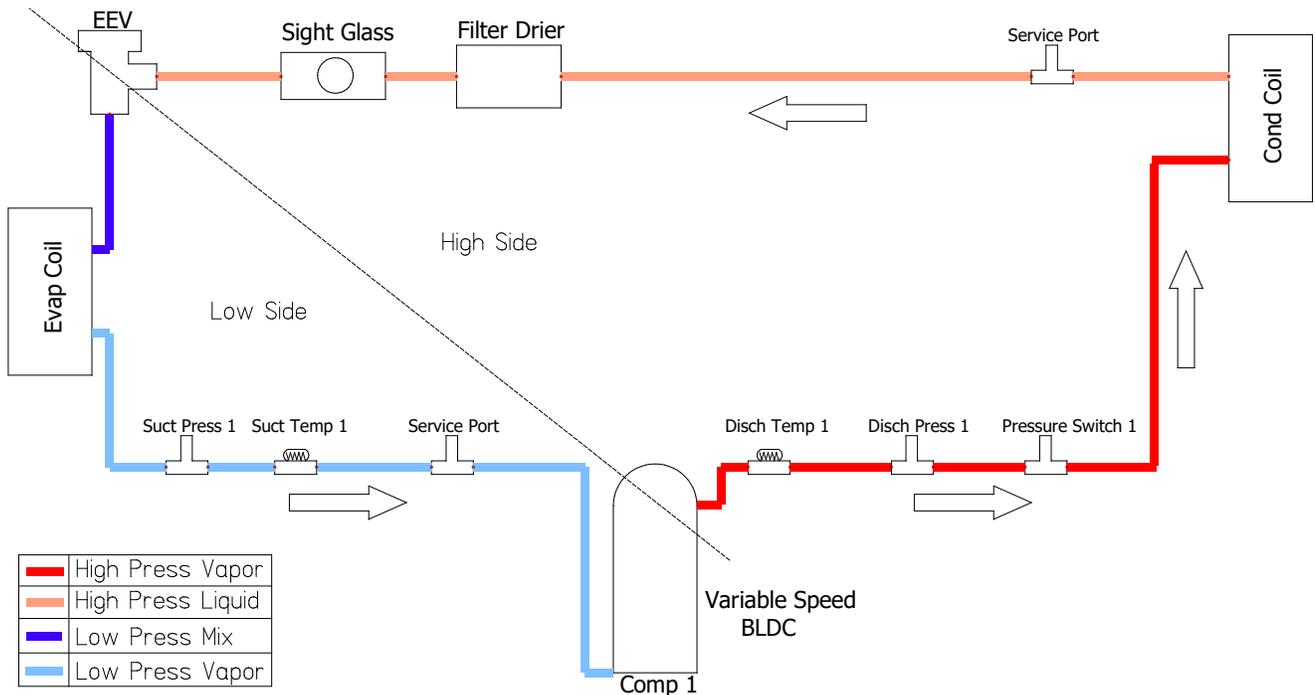


REFRIGERATION COMPONENTS

SINGLE CIRCUIT WITH HOT-GAS REHEAT

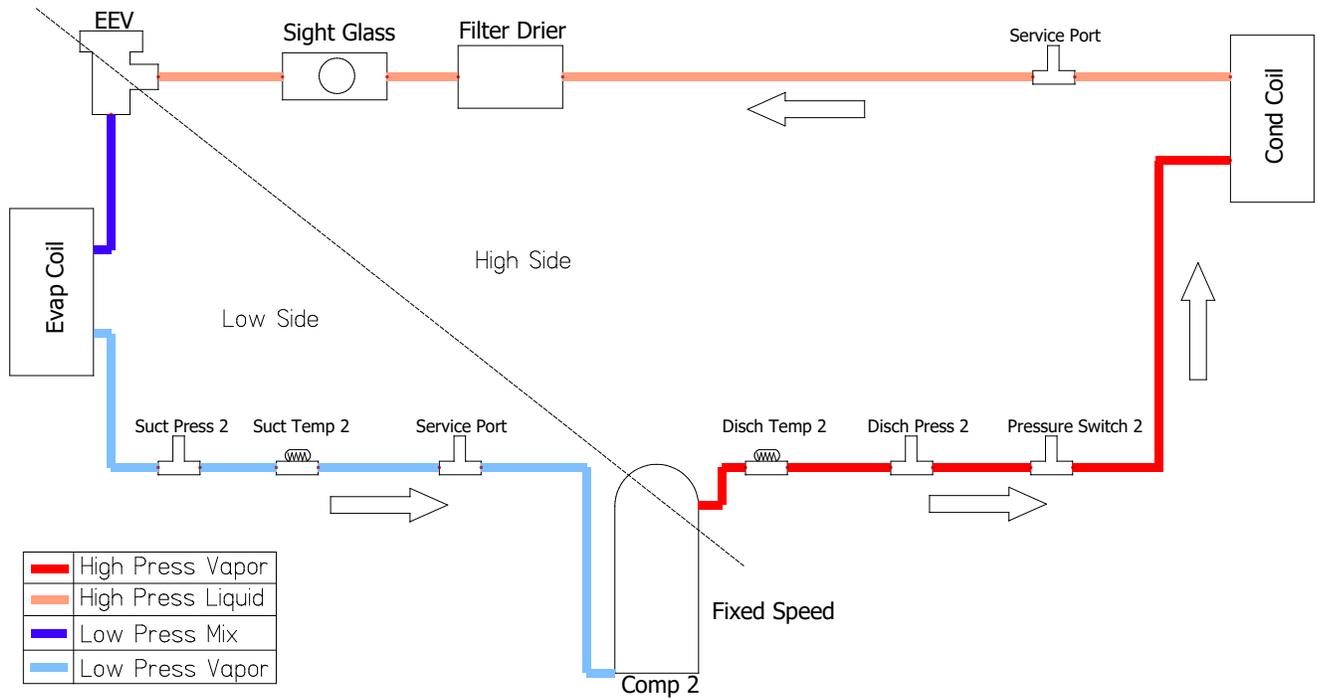


SINGLE CIRCUIT WITHOUT HOT-GAS REHEAT



REFRIGERATION COMPONENTS

SECOND CIRCUIT IN A TWO CIRCUIT ARRANGEMENT



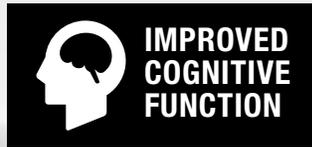
COMPONENTS

- ◆ Filter Drier
- ◆ Sight Glass
- ◆ Electronic Expansion Valve (EEV)
- ◆ Service Ports
- ◆ Suction Accumulator (HGRH option)
- ◆ 3-Way Modulating Valve (HGRH option)
- ◆ Check Valve (HGRH option)

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



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 RENEWAIRE



FOR TECHNICAL SUPPORT:

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PHONE:

1.800.627.4499

FAX:

608.221.2824



TO PLACE AN ORDER:

CORES.renewaire.com

or

RenewaيرةOrders@renewaire.com



RELEVANT EVERYWHERE

EVERY GEOGRAPHIC REGION

Our ERVs excel 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.

RENEWAIRE
TEMPERS THE AIR



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.

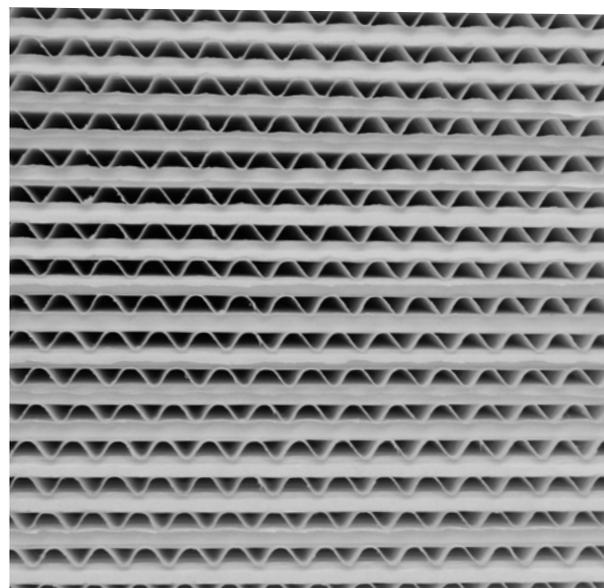
GOVERNMENT

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 EVERYWHERE

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.



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 **RenewAire**[®]
Energy Recovery Ventilation



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