

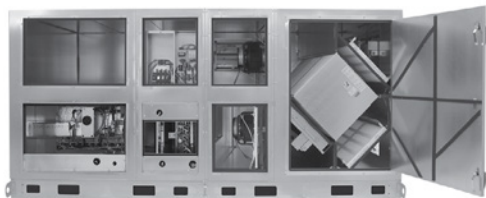


Dedicated Outdoor Air System Standard



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: 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"

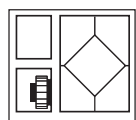
Room pressure sensor with display to 1", without display 0-1"

Waterless trap negative pressure

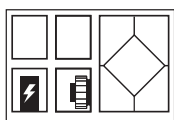
Waterless trap positive pressure

Remote display

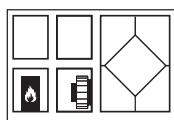
INTERNAL OPTIONS FOR HEATING AND COOLING



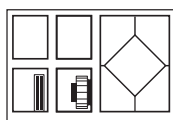
ERV only



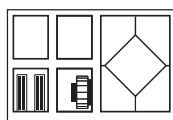
ERV + EH (BT)



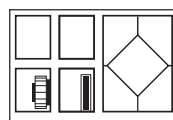
ERV + GH (BT)



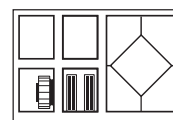
ERV + CC/HC (BT)



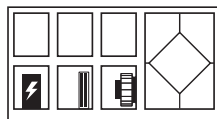
ERV + CC + HGRH (BT)



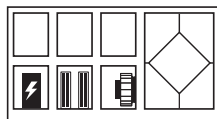
ERV + CC/HC (DT)



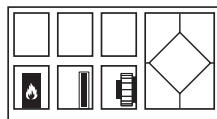
ERV + CC + HGRH (DT)



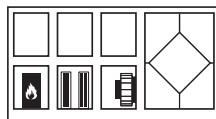
ERV + CC + EH (BT)



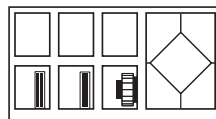
ERV + CC + HGRH + EH (BT)



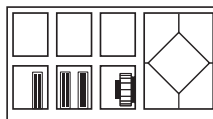
ERV + CC + GH (BT)



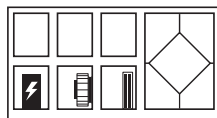
ERV + CC + HGRH + GH (BT)



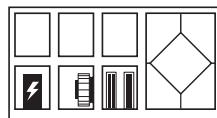
ERV + CC + HC (BT)



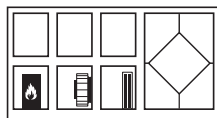
ERV + CC + HGRH + HC (BT)



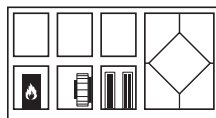
ERV + CC + EH (DT)



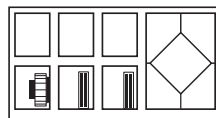
ERV + CC + HGRH + EH (DT)



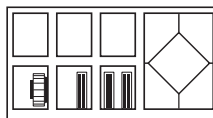
ERV + CC + GH (DT)



ERV + CC + HGRH + GH (DT)



ERV + CC + HC (DT)



ERV + CC + HGRH + HC (DT)



Dedicated Outdoor Air System Standard

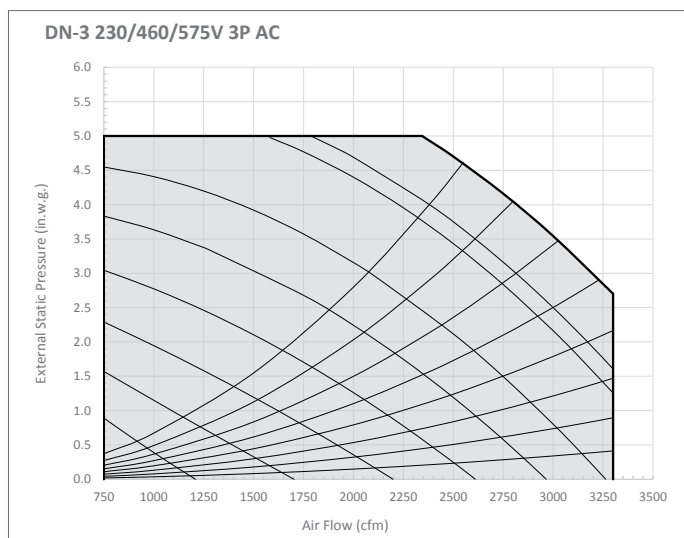
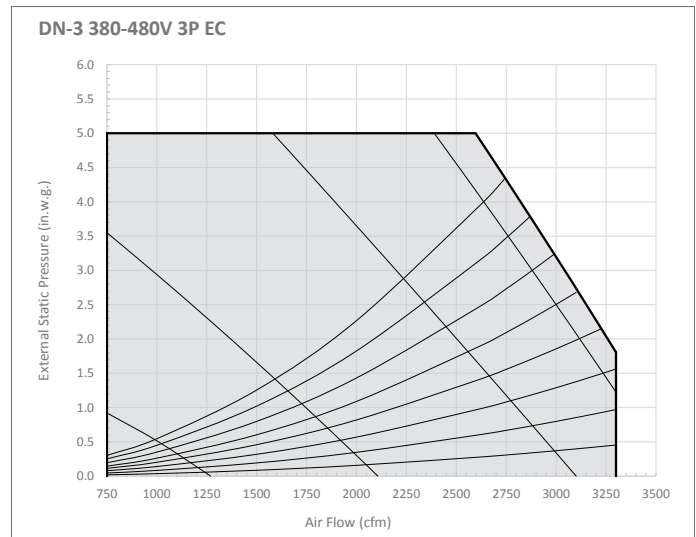
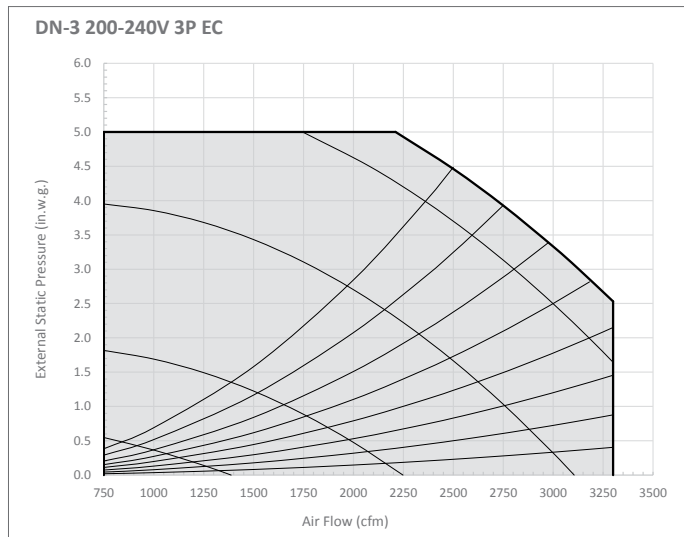


ELECTRICAL DATA

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

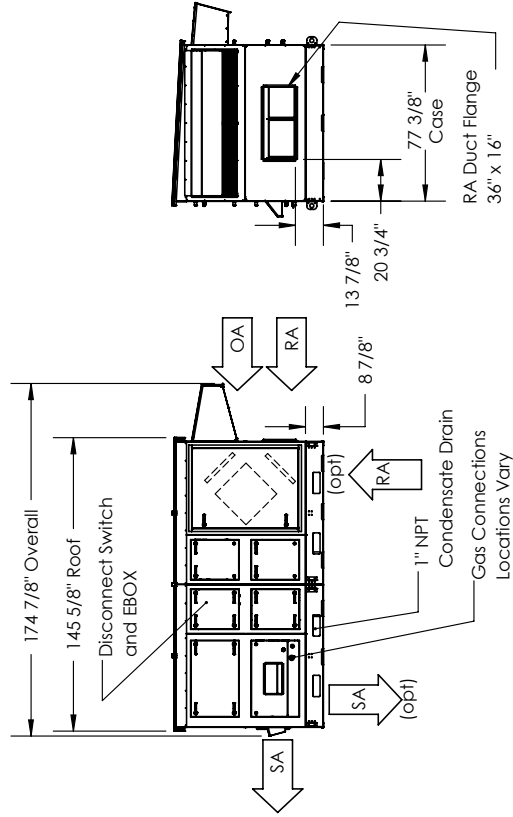
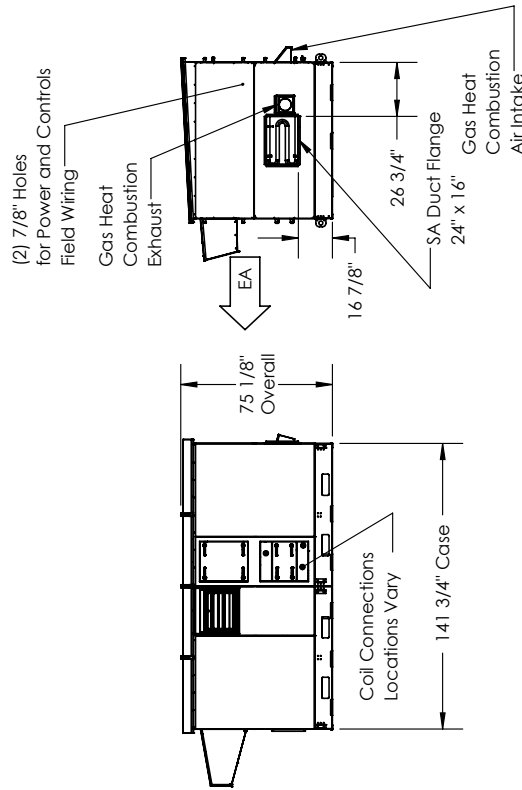
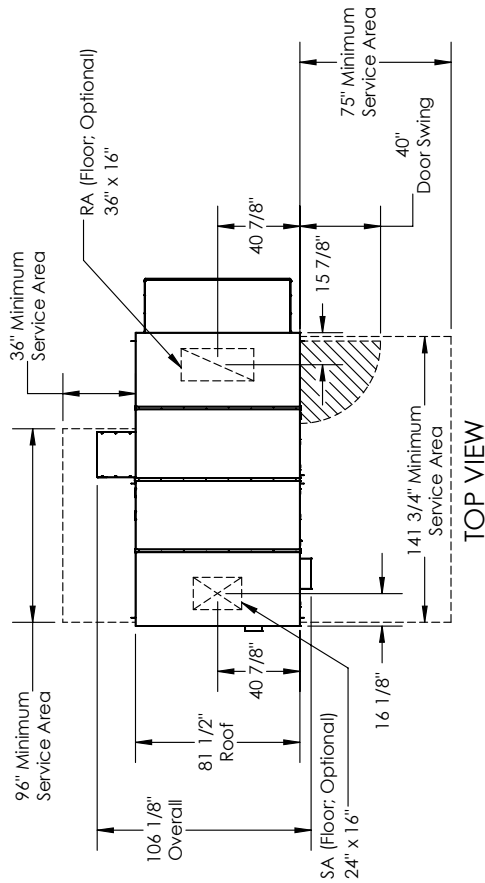
ABBREVIATIONS

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



RIGHT VIEW

FRONT VIEW

LEFT VIEW

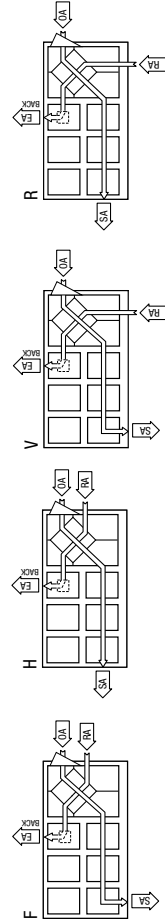
BACK VIEW

AIRFLOW ORIENTATION

Available as shown:



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



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

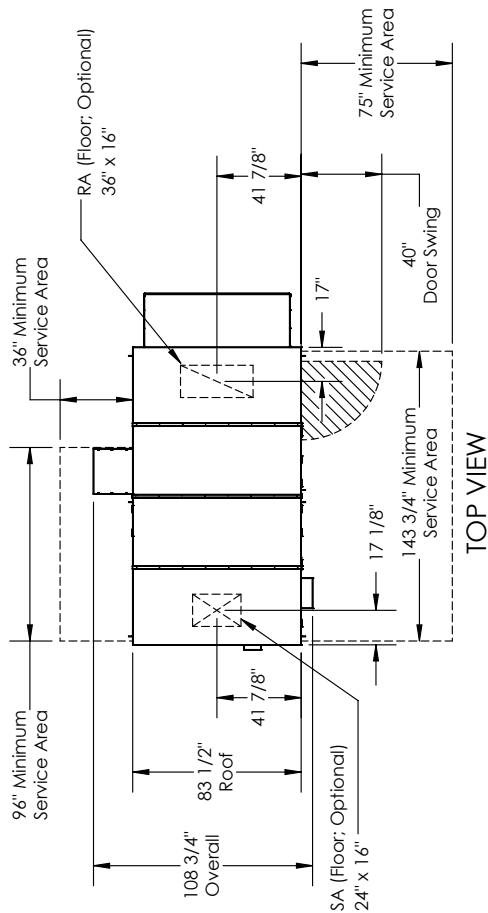
INSTALLATION ORIENTATION

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\"

for Power and Controls
Field Wiring

Gas Heat
Combustion
Exhaust

EA

18 1/8\"

27 3/4\"

SA Duct Flange
24\"

Gas Heat
Combustion
Air Intake

77 1/8\"

Overall

Coil Connections
Locations Vary

143 3/4\"

Case

SA

(opt)

SA

(opt)

RA

(opt)

OA

9 7/8\"

1\"

NPT

Condensate Drain

Gas Connections
Locations Vary

14 7/8\"

Case

79 3/8\"

21 3/4\"

RA Duct Flange
36\"

36\"

16\"

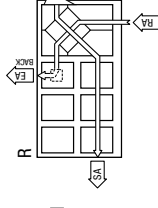
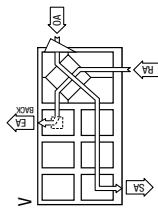
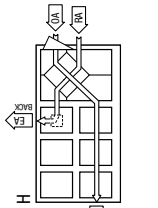
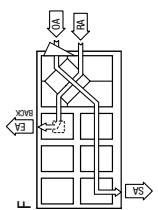
RIGHT VIEW

FRONT VIEW

LEFT VIEW

BACK VIEW

AIRFLOW ORIENTATION
Available as shown:



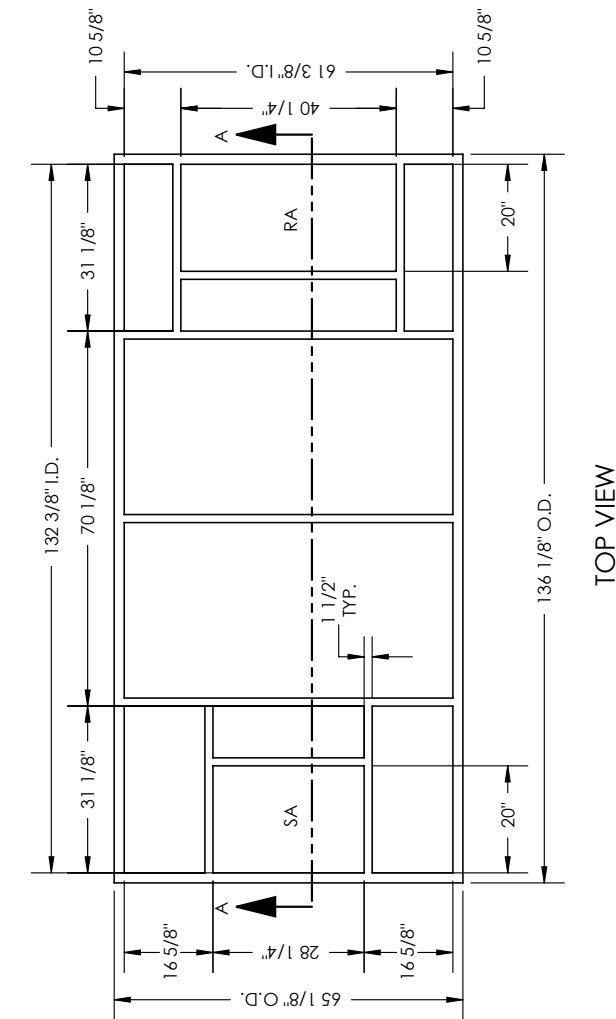
UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.

DN3RT Dedicated Outdoor Air System Curbs

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

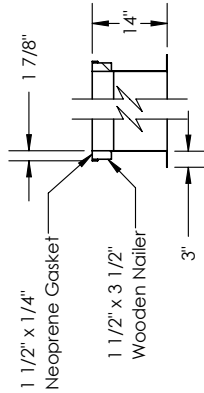
RA: Room Air to be exhausted
SA: Supply Air to inside

DN3RT **CURB DN3-ERV+C+H**



END VIEW

CURB CROSS-SECTION A-A (TYP.)

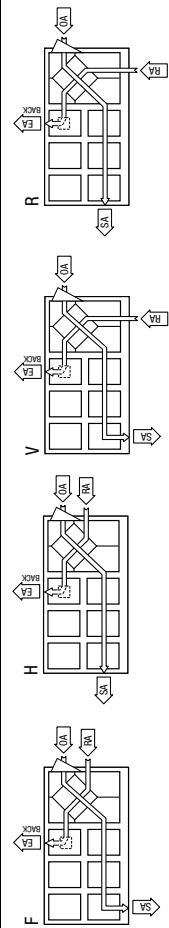


SECTION A-A

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.

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