



INDOOR & ROOFTOP APPLICATIONS

FIELD ADJUSTABLE AIR FLOW FROM 0-1000 CFM

4 ECM SPEED-INPUT OPTIONS

SPECIFICATION

CORE: Static Plate, Crossflow. Certified to AHRI 1060

-HRV: Polypropylene, 2 x p/n *PC1414A* (AHRI Ref.# PC14)

-ERV: Enthalpic membrane, 2 x p/n *EC1414A* (AHRI Ref.# EC14)

-Core segment dimensions: 14" L x 14" W x 14" H ea.

CABINET/CONSTRUCTION

- Dimensions (incl. lifting frame): 52" L x 30" W x 37.5" H
- 2 doors for flexible component access and reversible field orientation of unit
- Door-mounted pressure ports for air flow balancing
- Single-wall 22 GA galvanized steel, 1" foil-faced rigid insulation
- Configurations A and E (see drawings) available
- Duct connections: 14" x 8". Weather hoods c/w bird screen.
- Drain connections (when used): 1/2"
- Unit Weight: 250 lbs (114 kg) Shipping Weight: 285 lbs (130 kg)

MOTORS - FANS - FILTERS

- 2 x 1/2 HP ECM, independently adjustable, p/n *50054*
- 2 x DWDI direct drive blowers, p/n *50778*
- 4 x MERV 8 FILTERS, 13.5" x 14" x 1", p/n *50810*

ELECTRICAL

| Voltage/Hz/Phase | 120/60/1 | 240/60/1 |
|---------------------------------------|----------|----------|
| Unit Full Load Amps (FLA) | 11.0 | 6.6 |
| Minimum Current Ampacity (MCA) | 13.4 | 8.4 |
| Maximum Overcurrent Protection (MOCP) | 15 | 15 |

Non-fused disconnect is standard.

ELECTRONICS

- 4 independently adjustable speeds pots to set and utilize 0-1000 cfm. Highest speed call takes priority.
- End switch: shipped dry, but can be made 24 VAC in the field for independent or remote control

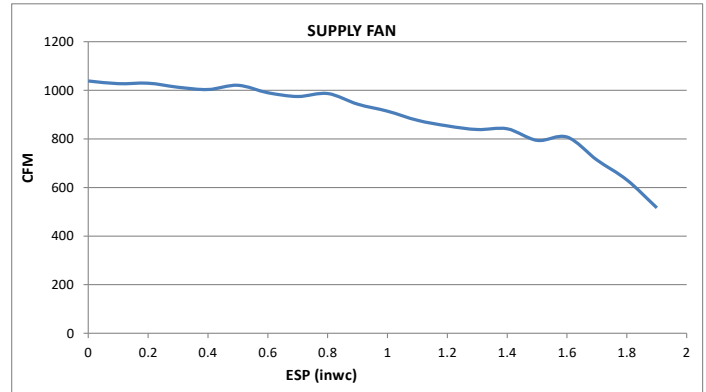
FROST CONTROL – 4 OPTIONS

- None
- Exhaust only (temperature ON/OFF)
- Timed exhaust (temperature ON/Timed OFF)
- Recirculation

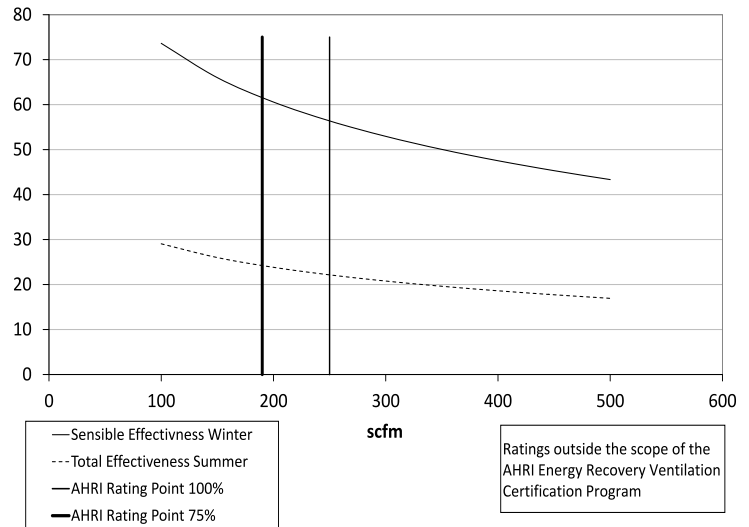
OPTIONS & ACCESSORIES

- MERV 13 filters, 13.5" x 14" x 1", p/n *50811*
- Dirty filter sensors
- Outside Air backdraft damper (motorized)
- Exhaust Air backdraft dampers (gravity, motorized)
- Non-insulated roof curb 14" (standard). Custom size 24"
- 7-Day programmable timer, p/n *50395*

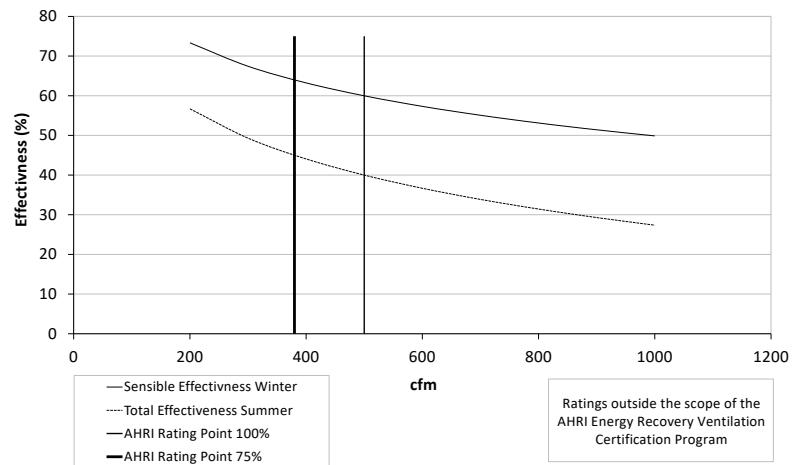
CONSTANT TORQUE FAN CURVE: HRV & ERV



EFFECTIVENESS ECM1000 HRV



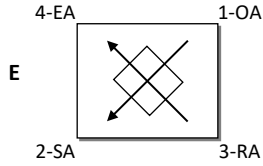
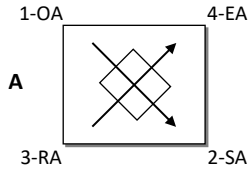
EFFECTIVENESS ECM1000 ERV



ECM1000 conforms to CSA SPE1000

Energy recovery component is certified by AHRI to AHRI Standard 1060. Actual performance in packaged equipment may vary.

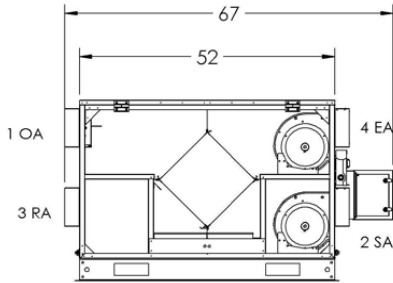
CONFIGURATIONS & CLEARANCES



| Service Clearances: ECM1000 | | | | | | |
|-----------------------------|---------|------|------|-------|------|--------|
| Front | | Back | Left | Right | Top | Bottom |
| RECOMMENDED | MINIMUM | | | | | |
| (in) | (in) | (in) | (in) | (in) | (in) | (in) |
| *23 | 18 | 0 | 0 | 0 | 0 | 0 |

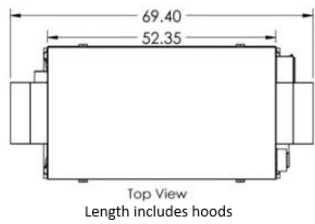
*Allows for optimal control box, disconnect access according to orientation of unit.

SHOP DRAWINGS – BASIC OPTIONS/CONFIGURATIONS SHOWN: CONFIGURATION A

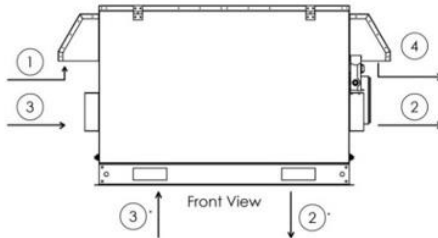


Front View: Control panel open

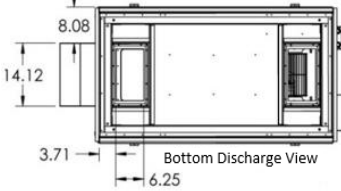
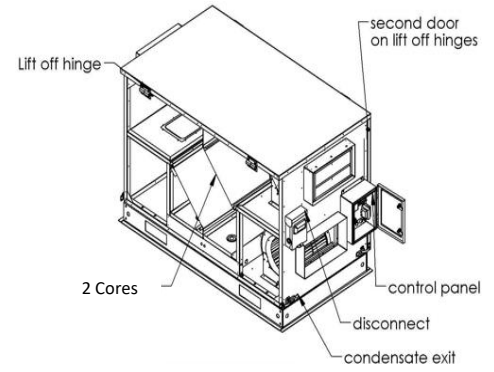
NOTE: All duct connections are 14" x 8"



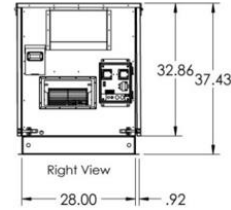
Top View
Length includes hoods



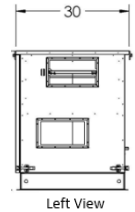
| Configuration Side & Down | Outside Air (OA) | Supply Air (SA) | Return Air (RA) | Exhaust Air (EA) |
|---------------------------|------------------|-----------------|-----------------|------------------|
| A-2-1-1-2 | 1 | 2° | 3° | 4 |
| A-2-2-1-2 | 1 | 2 | 3° | 4 |
| A-2-1-2-2 | 1 | 2° | 3 | 4 |
| A-2-2-2-2 | 1 | 2 | 3 | 4 |



Bottom Discharge View

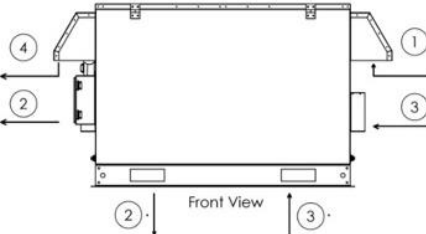
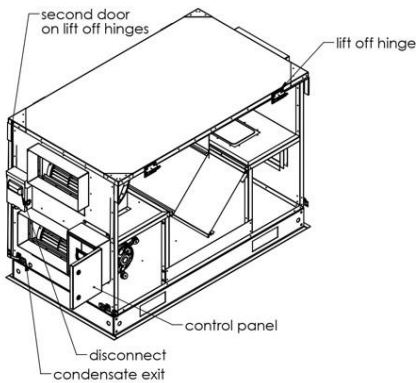


Right View

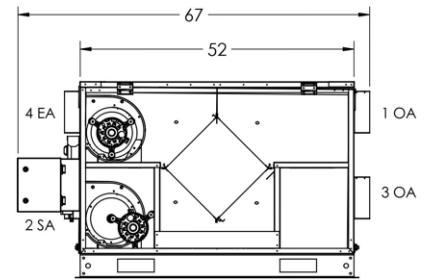


Left View

SHOP DRAWINGS – BASIC OPTIONS/CONFIGURATIONS SHOWN: CONFIGURATION E

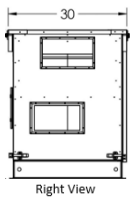


| Configuration Side & Down | Outside Air (OA) | Supply Air (SA) | Return Air (RA) | Exhaust Air (EA) |
|---------------------------|------------------|-----------------|-----------------|------------------|
| E-2-1-1-2 | 1 | 2° | 3° | 4 |
| E-2-2-1-2 | 1 | 2 | 3° | 4 |
| E-2-1-2-2 | 1 | 2° | 3 | 4 |
| E-2-2-2-2 | 1 | 2 | 3 | 4 |

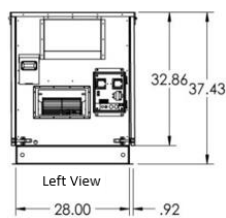


Front View: Control panel open

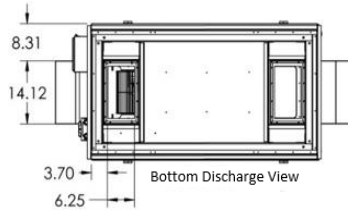
NOTE: All duct connections are 14" x 8"



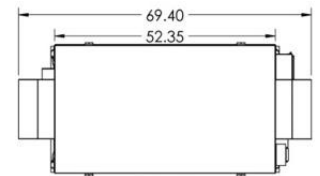
Right View



Left View

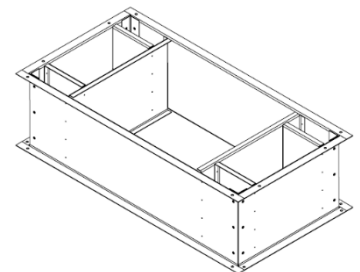
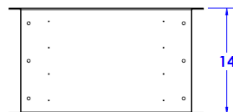
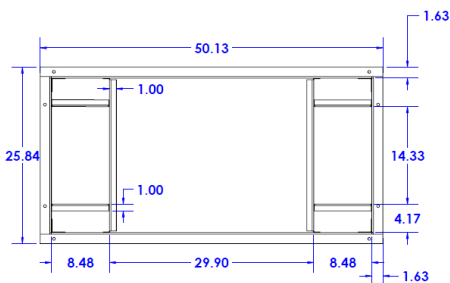


Bottom Discharge View

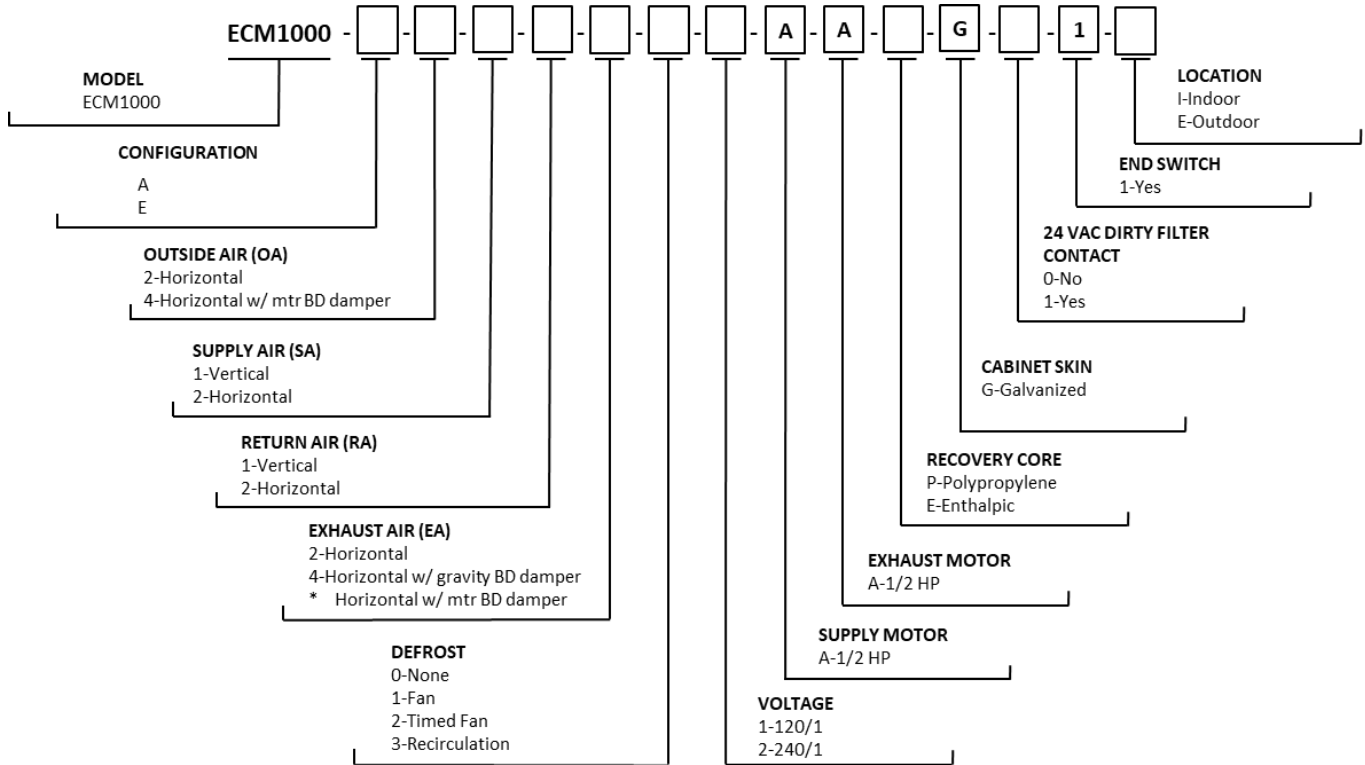


Top View
Length includes hoods

SHOP DRAWINGS – STANDARD 14-inch ROOF CURB, p/n RC1000A-14



PRODUCT ORDERING INFORMATION



ADD-ON OPTIONS/ACCESSORIES: ECM 1000

- Motorized Damper, Exhaust Air (EA)
- 1" MERV 13 Filters
- Filters, Extra Set (of 4), MERV 8
- Filters, Extra Set (of 4), MERV 13
- 7-Day Programmable
- Roof Curb, uninsulated, 14"
- Roof Curb, uninsulated, 24"

FROST CONTROL RECOMMENDATIONS*

| TYPE | WINTER DESIGN TEMP. | | FACTORY DEFAULT TIMING** | |
|-------------------------|---------------------|------|--------------------------|---------|
| | ° C | ° F | RUN | DEFROST |
| 0 – NONE | > -5 | > 23 | n/a | n/a |
| 1 – FAN SHUT-DOWN | > -10 | > 14 | | |
| 2 – TIMED FAN SHUT-DOWN | > -15 | > 5 | 60 min. | 10 min. |
| 3 – RECIRCULATION | > -15 | > 5 | 60 min. | 10 min. |

- 1 – Supply fan shuts off when EA 0C (32F). Normal operation resumes when EA is 8C (47F).
- 2 – Supply fan shuts off for defined time when OA is nominal 0C (32F).
- 3 – Non-negative pressure defrost when EA is nominal 0C (32F).

*notwithstanding other design considerations such as building pressure, preheat, delivered air temp., etc.
 **Field adjustable.



Robust Backdraft Damper Options



Optional Dirty Filter Contact



Accessory 7-Day Programmable Timer

DESIGN INFORMATION

| Air Stream | Airflow | ESP |
|--------------------|---------|--------|
| Supply | | |
| Exhaust | | |
| | | |
| Air Temp. (C or F) | Winter | Summer |
| RA, DB | | |
| RA, WB | | |
| OA, DB | | |
| OA, WB | | |

| | |
|-------------------------------|---------|
| Unit Designation (e.g. HRV1): | REMARKS |
| Project Tag: | |
| Project Location: | |
| Specified By: | |
| Version, Date: | |