

AB ECM Series

Shop Drawing RHRV-AB150PECM

INTRODUCING OUR NEW AUTO BALANCE ECM SERIES WITH CONSTANT AIR FLOW TECHNOLOGY



Features:

- Power ratings: 120V / 1 / 60 Hz, 1.60 Amp, Standby current is 9W only
- High efficiency energy saving permanently lubricated ECM motors (Thermally protected) for continuous operation
- Washable Polypropylene core (up to -40°C)
- Tilted core design for maximum efficiency
- Fully automatic re-circulating defrost (below -5°C)
- Adjustable 10-Normal(Low Speed) and 10-High Speed operation for constant flow application
- Ideal for horizontal and vertical installations
- Air flow: 30 125 CFM (normal operation), maximum158 CFM
- For homes and suites up to 2000 sq. ft.
- · Meets all standards and building codes requirements
- Unique electronic control board allows the unit to return to the last memory mode when power restores afterfailure
- Furnace / Fan-coil / Heat Pump Interlock
- Dual Protection: If for any reason HRV fan failure is detected, the outside fresh-air supply will be closed and interlocking relay contact will be opened. Fan Coil/Furnace low speed will be stopped and at normal operation no air will enter into the system
- · App. Weight 50 lbs.
- 2 years warranty on parts

Accessories (Included):

• Mounting brackets (4 Pcs.)

• MERV-4 Washable filters

· Drain plugs (2 sets)

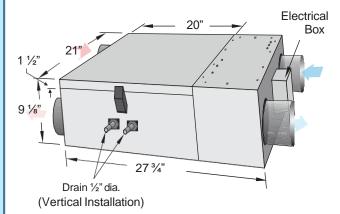
Washable filters

Optional:

- Timer switches 5VDC (Wallmount, up to 4 pcs. max)
- Intermittent Switch 5VDC (Wallmount,1pc.only)
- 2 sets (Webbing/Brackets/Ladder lock)
- Pipe and "T" connector

· MERV- 8&13 filters

HRV (Polypropylene Core)



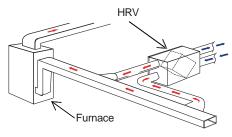




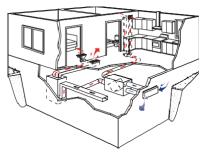




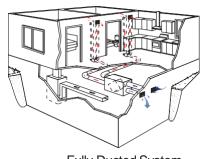
Installation Options for house



Furnace Return Air-duct Connection



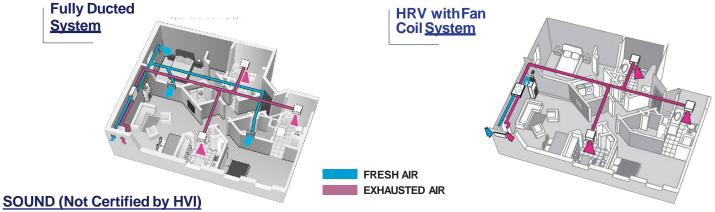
Semi Ducted System



Fully Ducted System

AB ECM SERIES

Installation Options for High-Rise Condominium



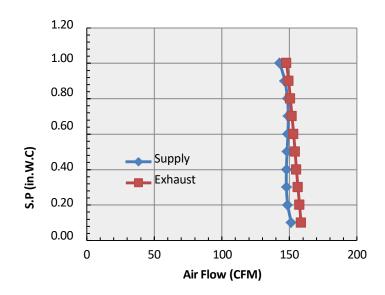
30 (L/s) @0.2 1.0 Sones (IN. W.G.) S.P. (@50Pa)

Note:

- HRV must be connected to drain.

VENTILATION PERFORMANCE

| Exhaust static | | Net Supply | | (| Power | | | |
|----------------|----------|------------|------|--------|-------|---------|------|-------|
| pressure | | air flow | | Supply | | Exhaust | | |
| Pa | in. W.C. | L/s | Scfm | L/s | Scfm | L/s | scfm | Watts |
| 25 | 0.1 | 71 | 150 | 71 | 150 | 74 | 157 | 130 |
| 50 | 0.2 | 70 | 148 | 70 | 148 | 74 | 157 | 139 |
| 75 | 0.3 | 69 | 146 | 69 | 146 | 73 | 155 | 144 |
| 100 | 0.4 | 69 | 146 | 69 | 146 | 73 | 155 | 149 |
| 125 | 0.5 | 69 | 146 | 69 | 146 | 72 | 153 | 153 |
| 150 | 0.6 | 70 | 148 | 70 | 148 | 72 | 153 | 164 |
| 175 | 0.7 | 70 | 148 | 70 | 148 | 72 | 153 | 166 |
| 200 | 0.8 | 70 | 148 | 70 | 148 | 71 | 150 | 175 |
| 225 | 0.9 | 69 | 148 | 69 | 146 | 70 | 148 | 178 |
| 250 | 1.0 | 67 | 142 | 67 | 142 | 69 | 146 | 182 |
| 300 | 1.2 | 60 | 127 | 60 | 127 | 68 | 144 | 172 |



ENERGY PERFORMANCE

| RHRV- AB150PECM | | Sup _l Temper | | Net / | Airflow scfm | Supply/ Exhaust Flow Ratio | Average power (Watts) | Sensible Recovery Efficiency | Adjusted Sensible Efficiency | Net Moisture Transfer (%) |
|--------------------|-----|----------------------------|-----|-------|-----------------|----------------------------------|-----------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1 | 0 | 32 | 30 | 64 | 0.99 | 30.0 | 70.0 | 73.0 | 0.01 |
| Heating | II | 0 | 32 | 34 | 72 | 1.00 | 33.0 | 70.0 | 74.0 | 0.00 |
| | III | 0 | 32 | 45 | 95 | 1.00 | 50.0 | 66.0 | 70.0 | 0.00 |
| | IV | 0 | 32 | 58 | 123 | 1.01 | 81.0 | 62.0 | 66.0 | 0.00 |
| | V | -25 | -13 | 34 | 72 | 0.97* | 52.0 | 65.0 | 67.0 | 0.12 |

* The Supply / Exhaust Flow Ratio at 22°C to the start of the 72 Hour Cold Weather Test

| Contractor: | RHRV-AB150PECM | | | |
|-------------|-----------------|------------|-------------|-------------|
| Architect: | Job: | Date | Superse.des | Drawing No. |
| Engineer: | Date Submitted: | 04/05/2023 | | |



