# Vertical Stack Four-Pipe Fan Coils

**Model DSC** 



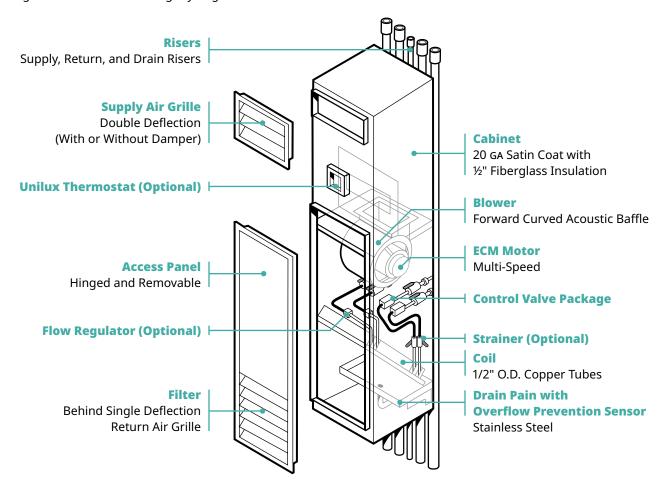


## Components

#### **Series DSC**

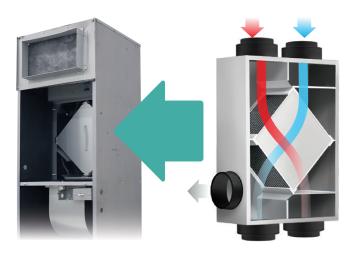
Series DSC is a four (4) pipe system complete with motorized control valves. Series DSC are also available with 3 way motorized valve piping arrangement. Available with an integrated ERV module in a slightly larger cabinet size.

Available CFM Range					
350	450	600	800	1,000	1,200



### **ERV Upgrade**

Unilux HVAC has developed a patented energy recovery ventilation system (ERV) that can be integrated with our full line of vertical stack fan coils. Our ERV cores further enhance comfort by transferring moisture between exhaust and fresh air, providing cost-effective moisture control. Our integrated ERV solutions include multiple dampers and temperature sensors to ensure cores do not freeze when outside temperatures drop below freezing, without the need for an electric heater.



### **Standard Features**

Unilux vertical stack fan coil units meet the requirements of UL 1995 / CSA22.2 #236 - Issue 2011 Standard for safety heating and cooling equipment.

#### **Cabinet**

20-Gauge satin coat steel. Cabinet is fully insulated with ½" fiberglass bonded with a thermosetting resin and coated on the air stream side with an acrylic facing without the use of flammable adhesives. Insulation inside the unit: Flame spread rating no more than 25; Smoke developed rating no more than 50.

#### **Coil Assembly**

Coils corrugated aluminum fins mechanically bonded to ½" op Copper tube. The number of rows and circuiting are selected to suit scheduled capacities. Coils are tested at 450 psig and are rated for a maximum working pressure of 300 psig.

#### **Motor/Blower Assembly**

A thermally-protected, multi-speed ECM motor is resiliently mounted to a centrifugal fan which has a galvanized steel forward curved DWDI wheel. Available CFM: 350, 450, 600, 800, 1000, and 1200.

#### **Stainless Steel Drain Pan**

Drain pan is one-piece stamped stainless steel product designed to slope in to directions to allow for complete drainage. The drain hose from the outlet to the condensate riser shall form a running P-trap. The underside of the drain pan is insulated with ½" thick thermal and sound insulation.

#### **The Piping Branches**

Are constructed with ½" type "L" copper, and stainless steel braided flex hoses to allow for movement due to expansion and contraction of risers; include shut-off ball valves with flare nuts in the supply and return branches for easy removal.

#### **Risers**

Supply and return risers are type 'L' copper and condensate risers are type 'DWV' copper. All have 75 mm (3") deep expanded ends to facilitate field installation. Supply & Return risers are insulated with 1" fiberglass covered with vapor barrier jacket, which complies with ASTM 84 for flame-spread and smoke-developed ratings. The insulation is continuous over the riser length within the height of the cabinet.

#### **Control Valve Package**

Provide a standard factory assembled 2-way control valve with motorized electrical "ON/OFF" controlling. Provide 3-way motorized valves on top and bottom of each riser to allow for continuous flow through riser system. Maximum entering water temperature on the control valve shall be 200°F, and maximum operating pressure shall be 300 psig.

#### **Access Panel**

Access panel assembly is constructed of 20 gauge steel complete with a durable baked enamel powder finish, with integral grille for the return air opening. The panel is hinged removable to allow for easy filter exchange. The integral core grille has fixed horizontal louvers.

#### **Grilles and Registers**

Double deflection supply grilles and registers have adjustable vertical or horizontal louvers. Registers constructed with light-gauge metal complete with adjustable opposed blade dampers.

#### **Filters**

MERV 8-13 filters available.

#### **Overflow Prevention Sensors**

Installed drain pan overflow sensor detects rising drain pan levels and turns off unit to prevent leaking. Anti-Freeze Temperature Sensor activates hot water connections when return air is below +4°C (40°F) to prevent freezing.

## **Optional Features**

#### **Cabinet**

A 2", 4" or 6" raised base.

#### **Coil and Piping assembly**

- Alternative control valve: 3-way control valve in lieu of 2-way control valve.
- Automatic balancing valve installed inside the fan coil.
- BTU thermal meter and thermal sensors installed inside the fan coil.
- Pressure independent control valve.
- · Flood Protection valve assembly.

#### **Electrical & Fan assembly**

- Alternative fan: ECM constant volume fan.
- Rating of motors: can be 115v or 208v

#### **Risers**

- Type "M" copper for drain risers.
- Drain risers insulated.
- Riser pipe insulation thickness can be from 1" to 1½".
- Alternative riser insulation material: closed-cell material.

#### Supply & Return air grilles, access panels, and filters

- Aluminum supply air grilles, return air grilles and access panel.
- Alternative filters: 1" pleated MERV-8 filter, 1" pleated MERV-11 filter, or 1" pleated MERV-13 filter.
- Supply air grilles integrated with manual-adjustable balancing damper.

#### **Unilux HVAC Thermostat with Wi-FI Connectivity**

Wi-Fi connectivity enables access to Unilux HVAC thermostat app for total HVAC control anytime at home or on the go through a mobile device.



Our state-of-the-art designs are demanded by today's best developers, engineers and owners. Contact us to learn why Unilux HVAC is the preferred choice of professionals throughout North America for vertical stack HVAC solutions.

