



Uniflair Small Room Cooling

High-Performance Cooling
Units for Small Technological
Rooms and Edge Cooling
Applications (5-20 kW)



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Schneider Electric: Your Partner in Sustainable Data Center Cooling

At Schneider Electric, we are committed to providing innovative and sustainable solutions that help organizations reduce their environmental impact and operational costs.

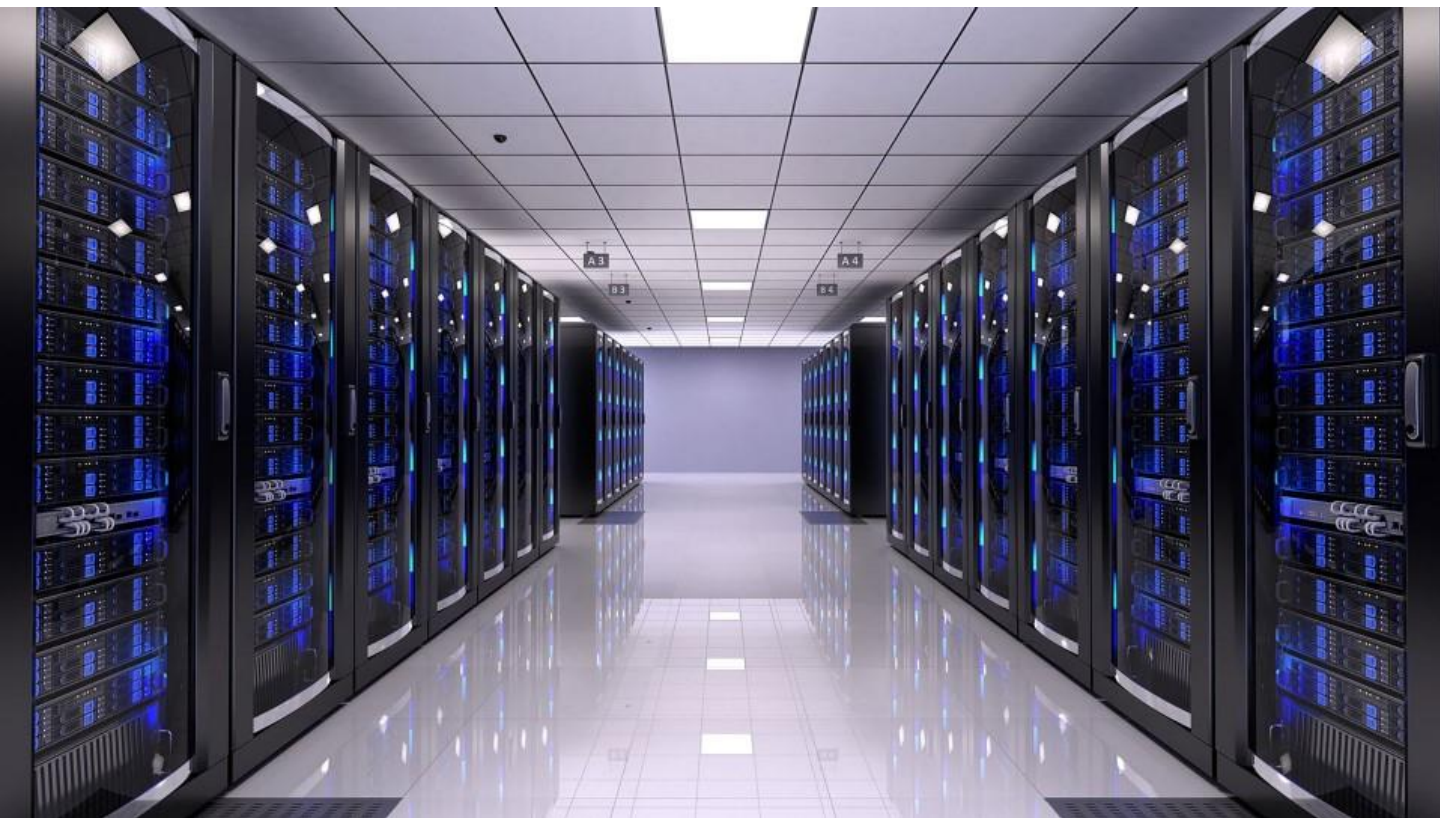
Our Uniflair Room Cooling units are designed with eco-efficiency in mind, utilizing advanced technologies to minimize energy consumption while maintaining peak performance.

Choose Your Cooling Technology

Schneider Electric offers a variety of cooling technologies to suit your specific needs:

Direct Expansion Air Cooled units (SDAV-SUAV): Highly efficient mechanical cooling systems, ideal for small and medium-sized data centers. The units can be coupled with wide range of remote air-cooled condensers (CAP) and employ to the latest generation of compressors.

Chilled Water units (SDCV-SUCV): Designed to work with a centralized chilled water plant, offering efficient and scalable cooling solutions for large data centers and facilities.



Compact, Efficient, Reliable Cooling Solutions

FLEXIBLE SOLUTIONS FOR ANY ENVIRONMENT

Uniflair Small Room Cooling provides a wide range of air intake and delivery configurations to suit different needs:

Raised Floor Environments: The downflow configuration efficiently distributes cold air into the floor void, while hot air can be drawn from the bottom or the front.

Server Rooms Without Raised Floors: The upflow configuration is ideal, drawing in hot air from the front and delivering cold air upwards, either directly into the room or through the false ceiling.



MAXIMIZE IT LOAD AND SAVE SPACE

In critical and edge applications, our cooling system is designed to **minimize power consumption** dedicated to cooling the IT load. By optimizing floor space, Uniflair Small Room Cooling units allow for maximum power allocation to IT equipment and ample room for IT racks.

With **full frontal accessibility** and **no need for lateral clearance**, these units can be installed in close proximity to each other, reducing the space required for cooling and expanding the area available for your IT equipment.



SAVE MAINTENANCE AND SHUTDOWN TIME

Uniflair Small Room Cooling units are designed to prioritize **continuous availability**, a critical factor for data processing companies.

Our units undergo rigorous testing to ensure **reliability and minimize system failures**. With full frontal access, maintenance operations are simplified and can often be performed without shutting down the unit entirely.



Intelligent Control, Optimal Performance

Uniflair Small Room Cooling units are equipped with advanced control and management software developed by **Schneider Electric**, ensuring **optimal performance and reliability**. Every component is monitored in real-time, allowing for proactive maintenance and efficient operation.

- **Intuitive Touchscreen Interface:** Easily navigate and control complex operations with simple commands.
- **Intelligent Monitoring:** Real-time tracking of system status and performance for optimal efficiency.
- **Predictive Maintenance:** Leverage advanced analytics to schedule maintenance and minimize downtime proactively.
- **EcoStruxure™ Integration:** Benefit from continuous monitoring, remote problem-solving, and predictive analytics for enhanced system management.



Connect



Connect everything from shop floor to top floor



Collect



Capture critical data at every level, from sensor to cloud



Convert data into meaningful analytics



Drive action through real-time information and business logic



Close the loop

A Closer Look at Small Room Cooling Units Components

FRAME

- Self-supporting frame in galvanized steel with panels finished in epoxy powders (color RAL9003).
- Unit access panels equipped with handles and stainless steel quarter-turn screws.

COOLING COIL

- Designed for high sensible heat ratio (SHR) and reduced pressure drops.
- Made from copper tubes mechanically expanded on aluminum fins
- Located upstream from the fans and has a stainless steel condensate drain tray with a flexible drainage tube and an integrated siphon.

CONTROL AND CONNECTIVITY

- 4.3-inch touch-screen connected to the main board and M172P PLC through an intermediate device with integrated RJ45 connector.
- Up to 15 units can be linked to each other through the local LAN network, optimizing the operation of the units that are rotated on a time basis.
- Integrated TCP/IP serial card for BMS connection (SNMP, Modbus TCP/IP or BACNet/IP)
- Native communication with EcoStruxure

ELECTRONICALLY COMMUTED EC FANS

- High-tech compound material impellers with optimized flow control
- High-efficiency EC motors
- Low power consumption
- High part-load efficiency

AIR FILTERS

- High efficiency, EU4 pleated air filters are contained in a metal frame
- Dirty filter differential pressure switch
- Low airflow differential pressure switch



Customize Your Cooling Solution Optional Features

Uniflair Small Room Cooling units offer a wide range of configurable options to meet your specific needs.

CONFIGURATION OPTIONS

- A wide range of cooling configurations to give maximum design freedom and precise control of temperature and humidity
- Immersed electrode humidifier for modulating steam production managed by the unit's microprocessor
- Electrical heaters for a tight control of temperature during the dehumidification cycle or to bring air temperature up to set point
- For Chilled Water units , 3 or 2 way valves to guarantee the value of the air temperature at the condenser outlets is maintained.

Additional Accessories

- Fire and smoke sensors
- Water leak detector
- Ambient temperature sensor

AIR FLOW CONFIGURATION ACCESSORIES

- Suction/discharge plenums to make the airflow pattern suitable with different site configurations
- Adjustable base frame(200–600mm)for installation with raised floor
- Bi-directional air discharge grille to be used for upflow units with non-ducted discharge from above
- Motorized damper (downflow units) to prevent a reverse flow of air when the unit is not operating
- Active Flow Controller (AFC) Automatically adjusts fan speed to maintain temperature setpoint by monitoring underfloor static pressure.



Uniflair Small Room Cooling

Direct Expansion Air Cooled

SDAV-SUAV

Technical Data

SDAV / SUAV models		0251A1*	0351A1	0601A1
EC fans		1	2	2
Power supply	V/ph/Hz	400/3/50Hz		
Air flow	m3/h	1650	3300	4500
Net Sensible Cooling Capacity ¹	kW	7,7	13,3	19,6
Net Sensible EER ²		3,1	3,4	3,9
Humidification Capacity (Optional)	Kg/h	2	2	3
Electric Heaters Absorbed Power (Optional)	kW	2	3	6

*Not available for European market due to F-Gas regulation

¹Data refers to nominal conditions , R410A refrigerant with Return air temperature 30°C - 30% RH, Outdoor 35°C

²EER= Net sensible cooling capacity / Room unit absorbed power

Dimensions

SDAV / SUAV models		0251A*	0351A	0601A
Height	mm	1740	1740	1740
Length	mm	550	850	1200
Depth	mm	450	450	450

Coupled with wide range of Remote Air-Cooled Condenser (CAP):

- Efficient heat exchange in a single circuit with copper tubes and aluminum fins.
- Equipped with high-performance AC fans for effective heat rejection.
- Designed for outdoor installation with horizontal or vertical airflow options.
- Operates reliably in outdoor temperatures from +50°C down to -40°C, with dedicated low temperature kit available for the coldest environments.

Uniflair Small Room Cooling Chilled Water SDCV-SUCV

Technical Data

SDCV / SDCV models		0200A1	0400A1	0600A1
EC fans		1	2	2
Power supply	V/ph/Hz	400/3/50		
Air flow	m3/h	1900	3300	4000
Net Sensible Cooling Capacity ¹	kW	7	12	16
Net Sensible Cooling Capacity ²	kW	11	19	25
Humidification Capacity (Optional)	Kg/h	2	2	3
Electric Heaters Absorbed Power*	kW	4	6	6

¹Data refers to nominal conditions at Return air temperature 24°C - 50% RH, Water temperature 7/12°C

²Data refers to nominal conditions at Return air temperature 35°C - 30% RH, Water temperature 10/15°C

*Electric Heaters already integrated in the units

Dimensions

SDCV / SUCV models		0200A1	0400A1	0600A1
Height	mm	1740	1740	1740
Length	mm	550	850	1200
Depth	mm	450	450	450

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To learn more about Uniflair Room Cooling Solutions contact your Schneider Electric representative or visit se.com/cooling

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