Features
- New generation standardised air handling units for tertiary and commercial applications.
- Eurovent-certified performances.
- Standardised components for short delivery time (target 4 weeks) and competitive price positioning.
- “Clean concept” design with smooth internal surfaces for easy cleaning and better air quality.
- 60 mm double-skin construction for good thermal insulation and low-noise operation.
- Three basic configurations:
  - Exhaust unit
  - Supply unit with a single fan
  - Combined return and supply unit with two fans
- Eight sizes with air flows from 0.4 to 7.3 m³/s (1400 to 26300 m³/h).
- Galvanised steel frame and casing with large hinged access doors.
- Casing performance (EN1886): air leakage L1, thermal transmittance T3, thermal bridging TB3.
- Double or single mixing section.
- Pre-heating hot water coil.
- G4 pleated or and F7 bag filters.
- Hot water coil or electric heaters.
- Chilled water coil.
- Belt-driven forward/backward curved fans or direct-drive plug-in fans.

Options
- Outdoor installation
- Inspection section in between heating and cooling coils
- Reversed hot/chilled water coils
- Differential pressure gauges
- Differential pressure taps
- Direct-expansion R-410A refrigerant coil
- Lighting with switch
- Door safety screen
- Variable-speed drive with integrated disconnect switch
- Run-around coils for energy recovery
- Hygienic options for hospital/ laboratory applications: class 3 dampers, F9 fanal filter, inspection sections
- Empty section
## Physical data

**39SQ 0402 0404 0604 0606 0806 0808 1008 1010**

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1. **Exhaust unit**

   - **Air flow** m³/s: 0.58, 1.17, 1.75, 2.63, 3.5, 4.67, 5.83, 7.29
   - **Length** mm: 680, 820, 900, 1080, 1140, 1220, 1220, 1300
   - **Heating capacity** kW: 24.5, 48.5, 74.5, 112.3, 140.1, 188.5, 243.7, 304.4
   - **Cooling capacity** kW: 0, 0, 0, 0, 0, 0, 0, 0
   - **Length** mm: 1380, 1540, 1620, 1780, 1860, 1940, 2180

2. **Supply unit heating**

   - **Air flow** m³/s: 0.58, 1.17, 1.75, 2.63, 3.5, 4.67, 5.83, 7.29
   - **Heating capacity** kW: 22.5, 42.6, 73.3, 110, 132.7, 181.1, 241, 300.2
   - **Cooling capacity** kW: 0, 0, 0, 0, 0, 0, 0, 0
   - **Length** mm: 19.2, 33.1, 49.9, 63, 86.2, 112.3, 139.7

3. **Supply unit heating and cooling**

   - **Air flow** m³/s: 0.54, 1, 1.72, 2.58, 3.2, 4.36, 5.73, 7.1
   - **Heating capacity** kW: 22.5, 42.6, 73.3, 110, 132.7, 181.1, 241, 300.2
   - **Cooling capacity** kW: 10, 19.2, 33.1, 49.9, 63, 86.2, 112.3, 139.7
   - **Length** mm: 1860, 2020, 2100, 2260, 2340, 2420, 2660, 2820

4. **Supply unit: mixing/heating/cooling**

   - **Air flow** m³/s: 0.54, 1, 1.72, 2.58, 3.2, 4.36, 5.73, 7.1
   - **Heating capacity** kW: 22.5, 42.6, 73.3, 110, 132.7, 181.1, 241, 300.2
   - **Cooling capacity** kW: 10, 19.2, 33.1, 49.9, 63, 86.2, 112.3, 139.7
   - **Length** mm: 2180, 2340, 2420, 2660, 2740, 3060, 3220, 3460

5. **Combined exhaust and supply unit**

   - **Air flow** m³/s: 0.54, 1, 1.72, 2.58, 3.2, 4.36, 5.73, 7.1
   - **Heating capacity** kW: 22.5, 42.6, 73.3, 110, 132.7, 181.1, 241, 300.2
   - **Cooling capacity** kW: 10, 19.2, 33.1, 49.9, 63, 86.2, 112.3, 139.7
   - **Length total** mm: 3220, 3540, 3700, 4180, 4340, 4820, 5140, 5700
   - **Length section 1** mm: 2450, 2530, 2930
   - **Length section 2** mm: 2370, 2610, 2770

**Electric heater option**

- **Heating capacity 1** kW: 7.5, 7.5, 18, 27, 36, 36, 45, 60
- **Heating capacity 2** kW: 11.3, 15, 27, 36, 48, 60, 75, 90
- **Heating capacity 3** kW: 15, 22.5, 36, 54, 72, 96, 120, 150
- **Heating capacity 4** kW: 18.8, 30, 45, 63, 84, 120, 150, 180
- **Heating capacity 5** kW: 30, 37.5, 54, 81, 108, 144, 180, 225

**Pre-heating coil option**

- **Heating capacity** kW: 6.4, 12.2, 20.9, 31.4, 38.8, 53, 69.6, 86.5

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**Notes on dimensions:**

- All dimensions are for indoor units with backward-curved fans, except size 0402 that has dimensions with a forward-curved fan.
- Casing length is exclusive of return air damper.
- Electric heater option: length varies with heating capacity.
- Pre-heating coil option: length + 160 mm.
- Contact your Carrier representative for certified dimensional drawings.

**Standard conditions:**

- **Heating:** air -10°C/90% rh, +25°C, water 80/60°C
- **Cooling:** air 28°C/50% rh, +16°C, water 7/12°C
- **Pre-heating:** air -5°C, +5°C, water 80/70°C
- **External static pressure:** 300 Pa

**Notes on dimensions:**

- All dimensions are for indoor units with backward-curved fans, except size 0402 that has dimensions with a forward-curved fan.
- Casing length is exclusive of return air damper.
- Electric heater option: length varies with heating capacity.
- Pre-heating coil option: length + 160 mm.
- Contact your Carrier representative for certified dimensional drawings.

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**Hospital exhaust and supply units with run-around coil for energy recovery**
Options/accessories
- Outdoor installation
- Reversed extract/supply air duct connections
- Left-hand water connections & service side
- Outdoor air pre-heater to prevent air-to-air heat exchanger freezing at very low outside air temperatures
- Air heater (hot-water or electrical heater)
- Air cooler (chilled-water coil)
- Inspection chamber between heating and cooling coils
- Pro-Dialog human interface (local or remote installation)
- Inspection windows
- Extract, exhaust, outside, supply air isolating dampers
- G4 fresh-air pre-filter
- Sound attenuators (accessory)
- Direct-expansion R-410A refrigerant coil
- JBus, BACnet communications gateways
- Cool/heat change-over coil for heat pump applications
- Coated coils
- Recirculation damper (39SQ/R)

Features
- Three versions in nine sizes with air flows from 0.2 to 8.4 m³/s (700 to 30000 m³/h).
- 39SQ units are designed to supply fresh air to any type of building. The efficient air-to-air heat exchanger recycles the heat from the exhaust air, pre-heats cold outdoor air in winter and pre-cools hot outdoor air in summer, resulting in impressive energy savings.
- Eurovent-certified performances.
- High-efficiency units with counter-flow plate (C models) or rotary heat exchangers (R models) with a thermal efficiency up to 85%.
- Casing performance (EN1886): air leakage L1, thermal transmittance T3, thermal bridging TB3.
- Standard-efficiency units with cross-flow plate heat exchangers (P models) with a thermal efficiency up to 54%.
- Plug & play installation thanks to factory-mounted control system.
- Delivered in one piece with integrated heating and cooling coils (only the 39SQR 1212 is delivered in two pieces).
- Field-separable casing in two pieces to facilitate installation in existing buildings.
- Plug fans with variable frequency drive.
- F7 efficiency filters.
- Main control system functions:
  - Air flow control: constant volume, constant pressure, variable volume (demand ventilation with CO₂ sensor)
  - Temperature control: extract or supply air temperature, room temperature sensor
  - Summer night free-cooling control
  - Alarm indication: temperature too low, coil frosting, clogged filters, etc.
  - Easy local or remote access by integrated web server (no specific software required)
  - RS485 communication port
Physical data

<table>
<thead>
<tr>
<th>Model</th>
<th>39SQC</th>
<th>39SQR</th>
<th>39SQP</th>
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<tbody>
<tr>
<td>Size</td>
<td>0405</td>
<td>0506</td>
<td>0606</td>
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<tr>
<td>Weight</td>
<td>Unit without coils kg</td>
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<td>Unit with reheating and cooling coils kg</td>
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<td>m³/h</td>
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<td>m³/h</td>
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<td>Cross-flow plate</td>
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<td>Bypass damper</td>
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<td>Bypass damper</td>
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* Thermal efficiency of supply air at 2 m/s with the effect of supply air fan, outside air -10°C, extract air 22°C/50%.
** Specific fan power with clean filters at 2 m/s and 200 Pa.
*** Sound power at 2 m/s and 200 Pa.

Data for standard unit without optional coils and dampers.

Electrical data

<table>
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<th>Model</th>
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<th>39SQP</th>
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<tbody>
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Note: Electric pre-heater and reheater have separate power supply.