

# REACT Paragon

Comfort module with integrated variable flow regulation



## QUICK FACTS

- Intelligent room control - Controls airflow, cooling and heating for optimal comfort and energy efficiency
- Optimised for hotel rooms - Creates a quiet and comfortable indoor climate with individual comfort
- Flexible integration - Supports common building automation systems and easy integration with BMS
- Easy installation - Factory-fitted control equipment enables quick commissioning and reduces installation time
- High comfort with low energy use - Adapts performance to the room's current demand

### KEY TECHNICAL DATA

| Airflow range |                   | Pressure range | Total cooling capacity | Heating capacity (W) |
|---------------|-------------------|----------------|------------------------|----------------------|
| l/s           | m <sup>3</sup> /h | Pa             | W                      | water                |
| 0-49          | 0-176             | 20-200         | ≤ 1250                 | ≤ 1700               |

### SIZE

| Length (mm)     | Depth (mm)  | Height (mm) |
|-----------------|-------------|-------------|
| 800, 1100, 1400 | 722 (+0-20) | 205         |

Cooling, air:  $\Delta T_l = 6,6K$  / water:  $\Delta T_{mk} = 8,5K$ ,  $t_{water} = 14/18^\circ C$ , water flow 0,1 l/s.

Heating, air:  $\Delta T_l = 0K$  / water:  $\Delta T_{mk} = 19K$ ,  $t_{water} = 45/31^\circ C$ , water flow 0,045 l/s.

Commissioning pressure: 70 Pa.

30 dB with 5 dB room attenuation.

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# Technical description

## Design

### REACT system

Variable air volume solutions with the REACT system are straightforward and reliable.

REACT is designed for projects where a wired control strategy and integration with the building management system (BMS) are preferred.

### Communicates via wired control

REACT room units and controllers communicate via wired 0–10 V, Modbus RTU or BACnet MS/TP.

This ensures robust and stable communication, fully aligned with standard BMS architectures.

### REACT supports different combinations of indoor climate systems

REACT enables flexible system design by supporting both waterborne and airborne climate solutions.

It allows integration from system level down to zone and room level, making it possible to combine multiple solutions within the same building.

This flexibility ensures that each space can be optimised based on its specific requirements.

REACT Paragon is designed for integration with traditional wired control systems, enabling demand-controlled operation and precise room regulation.

With pressure-independent airflow control and flexible BMS connectivity, REACT Paragon ensures stable performance and reliable operation.

The result is a robust and future-proof solution that delivers high indoor comfort, energy efficiency and full control within the building management system.



Figure 1. REACT Paragon.

## VAV – 1-way air distribution comfort module

REACT Paragon is a comfort module designed primarily for hotels and hospital wards, where high demands are placed on comfort, low sound levels and discreet installation.

Thanks to an optimised cooling/heating coil, REACT Paragon delivers high cooling and heating capacity even at low airflows and pressure drops. The compact height minimizes the space required above the false ceiling and enables maximum ceiling height, for example at the entrance to hotel rooms.

On the rear of the product, the supply airflow is adjusted by the motorized Flow Control. The control also indicates the product's current k-factor, simplifying commissioning and verification of the set airflow.

## Adjustable supply and return air grilles

The adjustable supply and return air grilles ensure a clean, well-fitted transition to the wall or ceiling. Both grilles can be adjusted for a good fit against the ceiling and wall and are easily secured with screws for stable and safe installation.

## Lightweight and service-friendly

The construction reduces weight and improves access to all components, ideal for buildings with tight installation spaces and renovation projects.

## Quiet and efficient

- High induction ensures excellent air quality and comfort.
- Low pressure drop reduces fan energy.
- Quiet operation suitable for noise-sensitive environments.

## Sustainable by default

- The product contains steel with at least 75% recycled material.

## Sizes and variants

The product is available in three lengths: 800, 1100 and 1400 mm.

All sizes can be ordered with the water connection on the left or right short side, or centred at the rear, providing high installation flexibility.

## Water connections

Optional water connections on the right side, left side or at the rear provide great flexibility in both planning and installation. The connection position can be adapted to pipe routing, available installation space and room layout.

## Suite version

REACT Paragon in length 1400 mm is available in a suite design with dual air connections. This enables a higher airflow and makes the product particularly suitable for larger hotel rooms and suites with greater ventilation requirements.

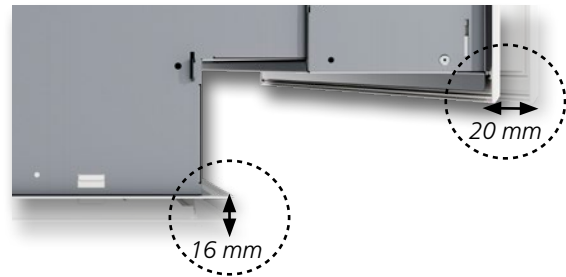


Figure 2. Adjustment of supply and return air grille.



Figure 3. Water connection right.



Figure 4. Water connection left.

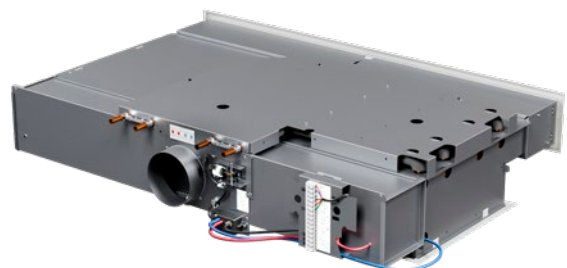


Figure 5. Water connection, rear (WB).

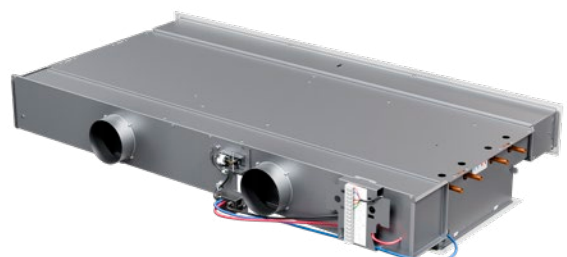


Figure 6. Suite design with dual air connections.

## Functionality

REACT Paragon features an integrated actuator for airflow adjustment and is easy to integrate into external building management systems.

This ensures:

- Optimal comfort in every room or zone.
- Lower energy use.
- Flexible integration with BMS and room control systems.
- Future-proof and flexible operation.

## Flow Control

REACT Paragon has an integrated damper and actuator that continuously regulate the airflow and ensure the correct air volume. The control is pressure-independent and automatically compensates for pressure variations in the duct system.

Because the airflow is regulated internally in the product rather than by a traditional damper installed upstream, the available driving pressure is maintained.

This means that the product's air induction, cooling and heating capacity, and other functions are not adversely affected by pressure losses from an external damper.

## Anti-Draught Control (ADC)

Anti Draught Control (ADC) makes it possible to direct and distribute the supply air to reduce the risk of draughts in the occupied zone.

REACT Paragon is equipped with both horizontal and vertical ADC fins, providing great flexibility to adapt the air distribution pattern to the room layout and current conditions.

## Material and surface treatment

- REACT Paragon is manufactured from recycled and renewably produced galvanized sheet steel (zinc plated).
- Supply and return air grilles can be ordered in several colours.
- Standard colour:
  - RAL 9003 Signal white, gloss 30
- Alternative Standard colours:
  - RAL 7037 Dusty grey, gloss 30
  - RAL 9010 Pure white, gloss 30
  - RAL 9005 Jet black, gloss 30
  - RAL 9006 White aluminium, gloss 70
  - RAL 9007 Grey aluminium, gloss 70



Figure 7. Flow Control for quick and easy commissioning during start-up and when the room layout changes.



Figure 8. ADC.

## Operating principle

Primary air is supplied through the duct connection at the rear and creates positive pressure inside the product. The positive pressure distributes the primary air at relatively high velocity across the slot openings. The high velocity of the primary air creates negative pressure that induces room air. The recirculated air is drawn through the return air grille and then through the coil, where it is cooled, heated or passes untreated depending on demand, before mixing with the primary air and being supplied to the room.

The air is distributed into the room as straight as possible, allowing it to travel along the ceiling by means of the Coanda effect and reach the façade. The air distribution can be directed horizontally using ADC. Where vertical distribution is required, this is achieved by adjusting the outlet grille blades upwards or downwards. The angle of the outlet grille can be locked using an accessory that secures the blades.

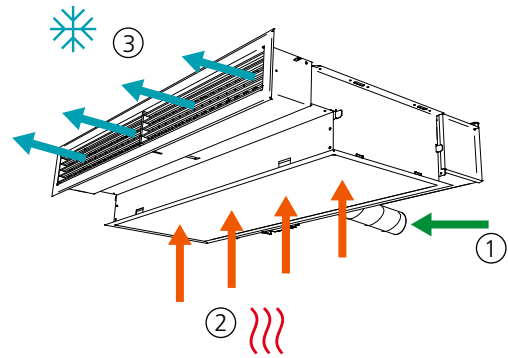


Figure 9. Cooling function REACT Paragon.

1. Primary air.
2. Induced room air.
3. Primary air mixed with cooled room air.

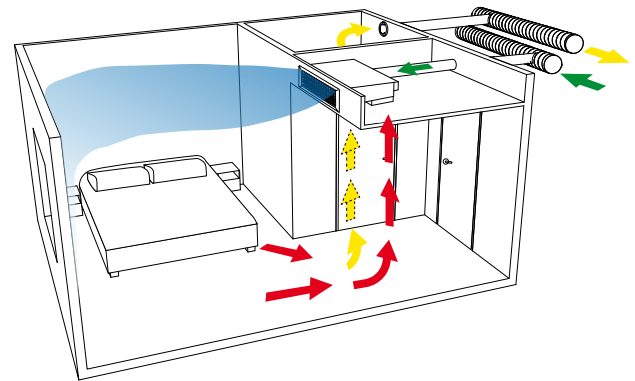


Figure 10. Air distribution with REACT Paragon in a hotel room.

## Installation, commissioning and maintenance

REACT Paragon has two holes on each short side for suspension and is mounted with one threaded rod in each hole. For installation, use the assembly fitting containing threaded rods, ceiling brackets and nuts for all four suspension points. Threaded rod length from 200 mm.

For large distances between the ceiling and the unit, double threaded rods with a thread lock are used. Assembly fitting SYST MS M8 is ordered separately.

### Water connection

The water pipes are located on the left or right short side of the product depending on the selected option. A version with the water connection at the rear (WB) is also available.

Connect the water pipes using push-on couplings or compression ring couplings.

Note that compression-ring couplings require support sleeves inside the pipes. Do not use solder couplings to connect the water pipes. High temperatures can damage the product's existing soldered joints.

Flexible connecting hoses for water are available for both plain pipe ends and valves and can be ordered separately.

### Recommended limit values, water

|                                                         |                                                                            |
|---------------------------------------------------------|----------------------------------------------------------------------------|
| Max. recommended operating pressure (across coil only): | 1600 kPa*                                                                  |
| Max. recommended test pressure (across coil only):      | 2400 kPa*                                                                  |
| Max. recommended pressure drop across CCO-valve:        | 20 kPa                                                                     |
| Max. recommended pressure drop across standard valve:   | 20 kPa                                                                     |
| Min. heating water flow:                                | 0.013 l/s                                                                  |
| Max. permissible inlet flow temperature:                | 60°C                                                                       |
| Min. cooling water flow:                                | 0.04 l/s                                                                   |
| Min. permissible inlet flow temperature:                | Should always be sized to ensure the system operates without condensation. |

\* Applies without fitted control equipment.

### Electrical data

|                          |                       |          |
|--------------------------|-----------------------|----------|
| Power supply             | 24V AC +-15 % 50-60Hz |          |
|                          | 24V DC +-25 %         |          |
| Power consumption        | VA / unit             | W / unit |
| Inrush current 10ms/20ms | 72.0                  | 36.0     |
| Operation                | 4.5                   | 3.0      |

### Mounting

Once REACT Paragon has been installed, work on the surrounding ceiling finish can begin. REACT Paragon is designed to suit most ceiling types available on the market, such as T-bar ceilings with tiles, plasterboard ceilings, etc. Detailed opening dimensions are specified in the separate installation instructions.

### Air connection

All designs have an Ø125 air connection. The standard design has the air connection centred at the rear of the product for easy access from both ends and the rear, and to avoid product mix-ups during site logistics.

The suite design, available only in length 1400 mm, has two parallel air connections at the rear, i.e. 2 x Ø125.

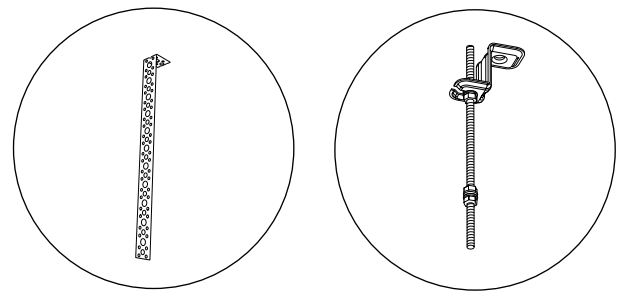


Figure 11. Suspension options with mounting strips and threaded rods respectively.

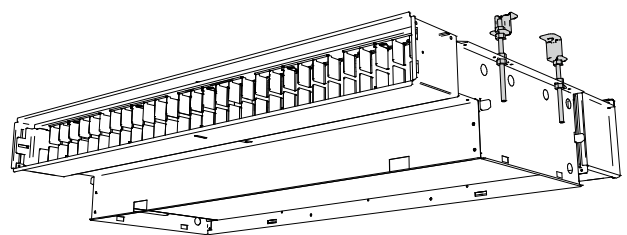


Figure 12. Installation of REACT Paragon, here suspended using threaded rods.

For detailed information about installation, commissioning and maintenance, see the REACT Paragon IOM manual.

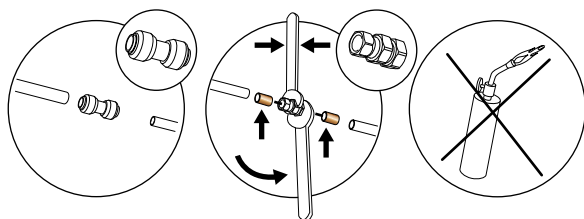
## Connection dimensions - water

Standard version with factory-fitted valves:

| Length (mm)     | Cooling, return      | Heating, return      |
|-----------------|----------------------|----------------------|
| 800, 1100, 1400 | DN15 external thread | DN15 external thread |

Standard version without factory-fitted valves:

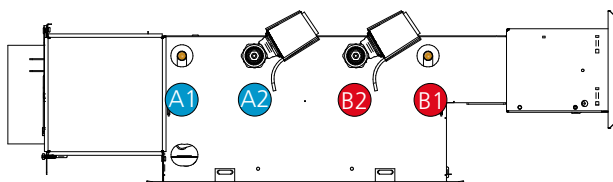
| Length (mm)     | Cooling, supply and return           | Heating, supply and return           |
|-----------------|--------------------------------------|--------------------------------------|
| 800, 1100, 1400 | Plain pipe end<br>(Cu) Ø 12 x 1.0 mm | Plain pipe end<br>(Cu) Ø 12 x 1.0 mm |



Note that compression-ring couplings require support sleeves inside the pipes.

### Water connection on right side (R)

Cooling and heating R, all sizes.



Cooling R, all sizes.

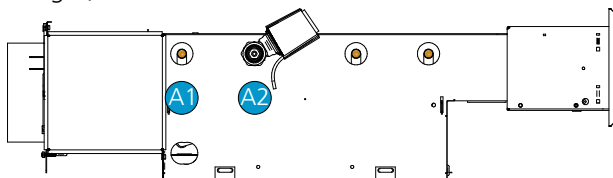


Figure 13. Water connection on right side (R).

A1 = Cooling water, supply B1 = Heating water, supply  
A2 = Cooling water, return B2 = Heating water, return

### Rear connection (WB)

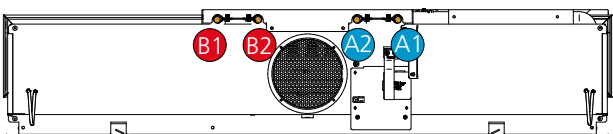


Figure 14. Water connection, rear (WB)

A1 = Cooling water, supply B1 = Heating water, supply  
A2 = Cooling water, return B2 = Heating water, return

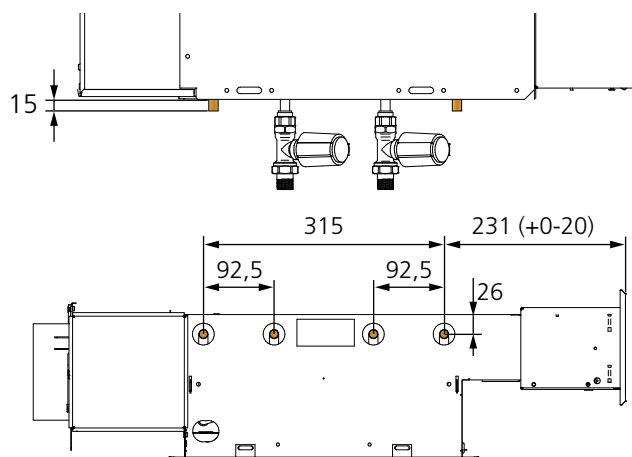
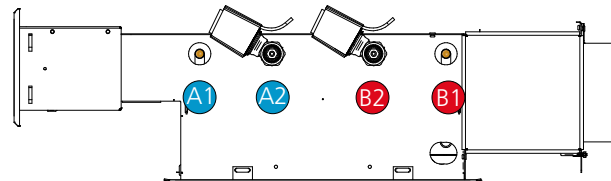


Figure 15. Dimensions, suspension.

### Water connection on left side (L)

Cooling and heating L, all sizes.



Cooling L, all sizes.

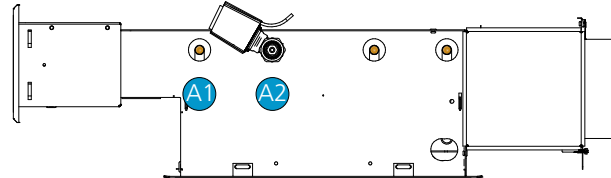


Figure 16. Water connection on left side (L).

A1 = Cooling water, supply B1 = Heating water, supply  
A2 = Cooling water, return B2 = Heating water, return

## Certificates and standards

- EPD Declaration.
- CE Declaration.
- Eurovent.

Certifications and standards are available at [www.swegon.com](http://www.swegon.com).



# Technical data

## Dimensions and weights

### REACT Paragon 800

| Length (mm) | Type | Dim. (Ø) | Dry weight* (kg) |             | Water volume (l) |         |
|-------------|------|----------|------------------|-------------|------------------|---------|
|             |      |          | Without grille   | With grille | Cooling          | Heating |
| 800 R       | A    | 125      | 15.0             | 17.7        | 1.4              |         |
| 800 L       | A    | 125      | 15.0             | 17.7        | 1.4              |         |
| 800 R       | B    | 125      | 15.0             | 17.7        | 1.4              | 0.4     |
| 800 L       | B    | 125      | 15.0             | 17.7        | 1.4              | 0.4     |
| 800 R       | X    | 125      | 15.0             | 17.7        | 1.4              |         |
| 800 L       | X    | 125      | 15.0             | 17.7        | 1.4              |         |

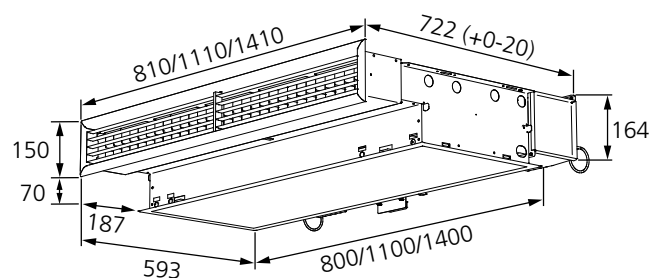


Figure 17. Dimensions with grille.

### REACT Paragon 1100

| Length (mm) | Type | Dim. (Ø) | Dry weight* (kg) |             | Water volume (l) |         |
|-------------|------|----------|------------------|-------------|------------------|---------|
|             |      |          | Without grille   | With grille | Cooling          | Heating |
| 1100 R      | A    | 125      | 20.0             | 23.4        | 1.9              |         |
| 1100 L      | A    | 125      | 20.0             | 23.4        | 1.9              |         |
| 1100 R      | B    | 125      | 20.0             | 23.4        | 1.9              | 0.5     |
| 1100 L      | B    | 125      | 20.0             | 23.4        | 1.9              | 0.5     |
| 1100 R      | X    | 125      | 20.0             | 23.4        | 1.9              |         |
| 1100 L      | X    | 125      | 20.0             | 23.4        | 1.9              |         |

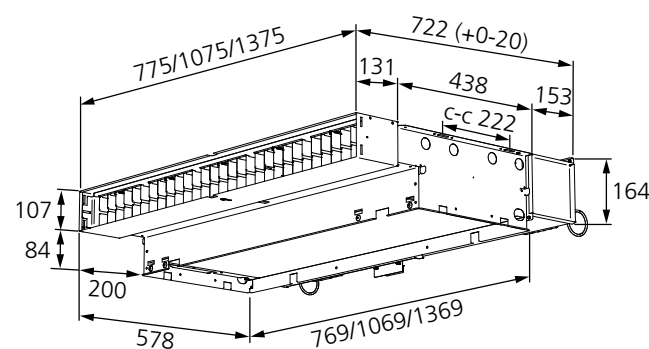


Figure 18. Dimensions without grille.

### REACT Paragon 1400

| Length (mm) | Type | Dim. (Ø) | Dry weight* (kg) |             | Water volume (l) |         |
|-------------|------|----------|------------------|-------------|------------------|---------|
|             |      |          | Without grille   | With grille | Cooling          | Heating |
| 1400 R      | A    | 125      | 23.2             | 27.6        | 2.5              |         |
| 1400 L      | A    | 125      | 23.2             | 27.6        | 2.5              |         |
| 1400 R      | B    | 125      | 23.2             | 27.6        | 2.5              | 0.7     |
| 1400 L      | B    | 125      | 23.2             | 27.6        | 2.5              | 0.6     |
| 1400 R      | X    | 125      | 23.2             | 27.6        | 2.5              |         |
| 1400 L      | X    | 125      | 23.2             | 27.6        | 2.5              |         |

\*Add 0.7 kg for control equipment.

## Performance

### Designations

P: Power (W, kW)

v: Velocity (m/s)

q: Flow (l/s)

p: Pressure (Pa, kPa)

$t_r$ : Room temperature (°C)

$t_m$ : Mean water temperature (°C)

$\Delta T_m$ : Temperature differential [ $t_r - t_m$ ] (K)

$\Delta T$ : Temperature differential, between inlet and return (K)

$\Delta T_r$ : Temperature differential between room and supply air (K)

$\Delta p$ : Pressure drop (Pa, kPa)

$k_p$ : Pressure drop constant

Supplementary index:

k = cooling, l = air, v = heating, i = commissioning

## Cooling

Tables 1–2 show the achieved cooling capacity from both primary air and water for different lengths and airflows.

The total cooling capacity of the product is the sum of the primary-air and water cooling capacities.

**Table 1 - Cooling capacity, 70 Pa**

| Length<br>(mm) | Airflow |      | Sound level*<br>(dB (A)) | Cooling capacity, air (W) at $\Delta T$ |     |     |     | Cooling capacity, water (W) at $\Delta T_{mk}^{**}$ |     |     |     |      |      |      | Air pressure drop<br>constant (k) |
|----------------|---------|------|--------------------------|-----------------------------------------|-----|-----|-----|-----------------------------------------------------|-----|-----|-----|------|------|------|-----------------------------------|
|                | l/s     | m³/h |                          | 6                                       | 8   | 10  | 12  | 6                                                   | 7   | 8   | 9   | 10   | 11   | 12   |                                   |
| 800            | 8       | 30   | <20                      | 60                                      | 80  | 100 | 120 | 214                                                 | 250 | 285 | 320 | 356  | 391  | 427  | 1.0                               |
| 800            | 17      | 60   | <20                      | 120                                     | 161 | 201 | 241 | 319                                                 | 370 | 422 | 473 | 524  | 575  | 626  | 2.0                               |
| 800            | 25      | 90   | 20                       | 181                                     | 241 | 301 | 361 | 356                                                 | 414 | 473 | 537 | 595  | 660  | 719  | 3.0                               |
| 1100           | 8       | 30   | <20                      | 60                                      | 80  | 100 | 120 | 236                                                 | 274 | 311 | 349 | 386  | 423  | 460  | 1.0                               |
| 1100           | 25      | 90   | <20                      | 181                                     | 241 | 301 | 361 | 445                                                 | 519 | 594 | 668 | 743  | 818  | 893  | 3.0                               |
| 1100           | 37      | 133  | 28                       | 266                                     | 355 | 444 | 533 | 506                                                 | 591 | 676 | 762 | 848  | 934  | 1020 | 4.4                               |
| 1400           | 8       | 30   | <20                      | 60                                      | 80  | 100 | 120 | 263                                                 | 306 | 348 | 391 | 433  | 475  | 517  | 1.0                               |
| 1400           | 25      | 90   | 21                       | 181                                     | 241 | 301 | 361 | 497                                                 | 581 | 665 | 749 | 833  | 917  | 1002 | 3.0                               |
| 1400           | 48      | 172  | 29                       | 344                                     | 459 | 574 | 688 | 612                                                 | 712 | 812 | 920 | 1021 | 1130 | 1231 | 5.7                               |

**Table 2 - Cooling capacity, 100 Pa**

| Length<br>(mm) | Airflow |      | Sound level*<br>(dB (A)) | Cooling capacity, air (W) at $\Delta T$ |     |     |     | Cooling capacity, water (W) at $\Delta T_{mk}^{**}$ |     |     |      |      |      |      | Air pressure drop<br>constant (k) |
|----------------|---------|------|--------------------------|-----------------------------------------|-----|-----|-----|-----------------------------------------------------|-----|-----|------|------|------|------|-----------------------------------|
|                | l/s     | m³/h |                          | 6                                       | 8   | 10  | 12  | 6                                                   | 7   | 8   | 9    | 10   | 11   | 12   |                                   |
| 800            | 10      | 36   | 21                       | 72                                      | 96  | 120 | 144 | 258                                                 | 302 | 345 | 389  | 432  | 476  | 520  | 1.0                               |
| 800            | 20      | 72   | 21                       | 144                                     | 192 | 240 | 288 | 373                                                 | 435 | 496 | 556  | 617  | 678  | 738  | 2.0                               |
| 800            | 30      | 108  | 24                       | 216                                     | 288 | 360 | 432 | 417                                                 | 489 | 555 | 627  | 699  | 765  | 837  | 3.0                               |
| 1100           | 10      | 36   | 21                       | 72                                      | 96  | 120 | 144 | 297                                                 | 344 | 390 | 437  | 483  | 529  | 574  | 1.0                               |
| 1100           | 30      | 108  | 25                       | 216                                     | 288 | 360 | 432 | 524                                                 | 613 | 703 | 793  | 883  | 974  | 1064 | 3.0                               |
| 1100           | 44      | 158  | 31                       | 317                                     | 422 | 528 | 634 | 588                                                 | 684 | 788 | 885  | 982  | 1088 | 1185 | 4.4                               |
| 1400           | 10      | 36   | 22                       | 72                                      | 96  | 120 | 144 | 324                                                 | 378 | 433 | 487  | 542  | 597  | 651  | 1.0                               |
| 1400           | 30      | 108  | 24                       | 216                                     | 288 | 360 | 432 | 585                                                 | 684 | 784 | 883  | 983  | 1082 | 1182 | 3.0                               |
| 1400           | 57      | 205  | 34                       | 410                                     | 547 | 684 | 821 | 709                                                 | 828 | 937 | 1055 | 1173 | 1292 | 1360 | 5.7                               |

\*Room attenuation = 4 dB.

\*\*The stated capacities are based on the complete product including standard supply and return air grilles.

Without grilles, the water capacity increases by approx. 5%.

N.B.! The total cooling capacity is the sum of the airborne and waterborne cooling capacities.

Water flow = 0.05 l/s, room temperature 20°C.

## Heating

**Table 3 - Heating capacity, 70 Pa**

| Length (mm) | Airflow |                   | Sound level*<br>(dB(A)) | Heating capacity, water (W) at $\Delta T_{mk}$ |     |     |      |      |      |      | Air pressure drop<br>constant (k) |
|-------------|---------|-------------------|-------------------------|------------------------------------------------|-----|-----|------|------|------|------|-----------------------------------|
|             | l/s     | m <sup>3</sup> /h |                         | 5                                              | 10  | 15  | 20   | 25   | 30   | 35   |                                   |
| 800         | 8       | 30                | <20                     | 100                                            | 196 | 302 | 412  | 524  | 636  | 751  | 1.0                               |
| 800         | 17      | 60                | <20                     | 134                                            | 281 | 436 | 598  | 764  | 933  | 1104 | 2.0                               |
| 800         | 25      | 90                | 20                      | 141                                            | 296 | 457 | 621  | 784  | 952  | 1124 | 3.0                               |
| 1100        | 8       | 30                | <20                     | 105                                            | 219 | 344 | 474  | 609  | 745  | 883  | 1.0                               |
| 1100        | 25      | 90                | <20                     | 190                                            | 385 | 598 | 821  | 1044 | 1271 | 1504 | 3.0                               |
| 1100        | 37      | 133               | 28                      | 193                                            | 408 | 640 | 877  | 1119 | 1369 | 1619 | 4.4                               |
| 1400        | 8       | 30                | <20                     | 140                                            | 297 | 458 | 624  | 792  | 963  | 1135 | 1.0                               |
| 1400        | 25      | 90                | 21                      | 230                                            | 474 | 735 | 997  | 1262 | 1535 | 1787 | 3.0                               |
| 1400        | 48      | 172               | 29                      | 252                                            | 518 | 803 | 1087 | 1380 | 1676 | 1975 | 5.7                               |

**Table 4 - Heating capacity, 100 Pa**

| Length (mm) | Airflow |                   | Sound level*<br>(dB(A)) | Heating capacity, water (W) at $\Delta T_{mv}$ |     |     |      |      |      |      | Air pressure drop<br>constant (k) |
|-------------|---------|-------------------|-------------------------|------------------------------------------------|-----|-----|------|------|------|------|-----------------------------------|
|             | l/s     | m <sup>3</sup> /h |                         | 5                                              | 10  | 15  | 20   | 25   | 30   | 35   |                                   |
| 800         | 10      | 36                | 21                      | 105                                            | 221 | 343 | 467  | 593  | 721  | 851  | 1.0                               |
| 800         | 20      | 72                | 21                      | 153                                            | 316 | 489 | 667  | 848  | 1036 | 1223 | 2.0                               |
| 800         | 30      | 108               | 24                      | 157                                            | 327 | 504 | 684  | 870  | 1058 | 1245 | 3.0                               |
| 1100        | 10      | 36                | 21                      | 120                                            | 255 | 400 | 547  | 700  | 854  | 1012 | 1.0                               |
| 1100        | 30      | 108               | 25                      | 204                                            | 431 | 672 | 919  | 1171 | 1427 | 1686 | 3.0                               |
| 1100        | 44      | 158               | 31                      | 212                                            | 458 | 714 | 980  | 1257 | 1534 | 1815 | 4.0                               |
| 1400        | 10      | 36                | 22                      | 165                                            | 341 | 530 | 719  | 916  | 1115 | 1313 | 1.0                               |
| 1400        | 30      | 108               | 24                      | 260                                            | 540 | 829 | 1123 | 1421 | 1722 | 2030 | 3.0                               |
| 1400        | 57      | 205               | 34                      | 275                                            | 576 | 893 | 1210 | 1536 | 1866 | 2199 | 6.0                               |

\*Room attenuation = 4 dB.

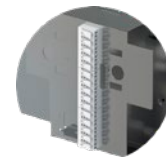
Water flow = 0.04 l/s, room temperature 20°C.

# Accessories

## Factory-fitted accessories

### Terminal block

Factory-fitted terminal block for connection of accessories.



### Valve cooling and heating – SYST VDN 215

Valves for cooling and heating.

Preset fully open.

| Function        | Type   | Dim.        | $K_v(m^3/h)$ |
|-----------------|--------|-------------|--------------|
| Cooling/heating | VDN215 | DN15 (1/2") | 0,07-0,89    |



For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).

### Actuator, cooling and heating – ACTUATOR 24V NC

Valve actuators for cooling and heating.

24 V AC/DC, NC (Normally Closed).

For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).



### Temperature sensor – T-TG-1

For temperature measurement.



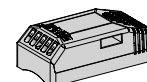
### Condensation sensor – SYST PCS

The detector operates at the dew point temperature rather than a fixed relative humidity value.

The dew point is calculated from a temperature-compensated RH element and an extremely accurate sensor element thermally bonded to the detector's metal plate.

Compatible with LUNA.

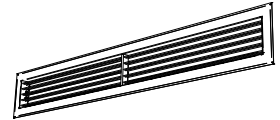
For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).



## Loose accessories

### Supply air grille – PARAGON-SG

Supply air grille for REACT Paragon, available for product lengths 800, 1100 and 1400 mm.



### Grille lock – PARAGON T-GL

Grille lock for securing the position of the supply air grille.



### Return air grille – PARAGON-RG

Return air grille for REACT Paragon, available for product lengths 800, 1100 and 1400 mm.



### Transformer – Power ADAPT 20 VA (ARV)

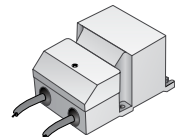
Input voltage 230 V 50-60 Hz, Output voltage 24 V AC.  
Power 20 VA, Enclosure IP33.



### Transformer – SYST TS-1

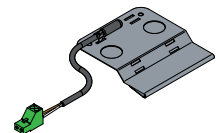
Double-insulated protective transformer 230V AC/24 V AC.  
Input voltage 230 V 50-60 Hz, Output voltage 24 V AC,  
Power 20 VA, Enclosure IP33

For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).



### Temperature sensor – T-TG-1

External temperature sensor. Used, for example, if the room temperature is to be measured at a location other than the sensor module, or to measure the temperature on the main pipe in a change-over system.



### Valve – SYST VDN 215

Straight valve for cooling and heating.

VDN 215 is preset fully open at  $K_v 0,89$ .

For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).

| Function            | Type   | Dim.      | $K_v(m^3/h)$ |
|---------------------|--------|-----------|--------------|
| Cooling/<br>heating | VDN215 | DN15 (½") | 0,07-0,89    |



### Valve actuator, cooling and heating – ACTUATOR 24V NC

Valve actuators for cooling and heating.

24 V AC/DC, NC (Normally Closed).

For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).



### Card switch – SYST SENSO II

Key card holder for hotel rooms.



## Assembly fitting – SYST MS M8

For installation use the assembly fitting containing threaded rods, ceiling brackets and nuts for all four mounting brackets.

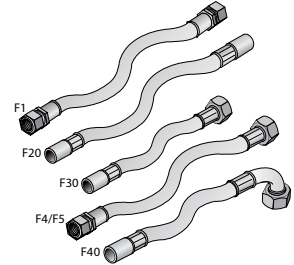
Threaded rod length from 200 mm. For large distances between ceiling and unit, double threaded rods with a thread lock are used.



## Flexible hoses – SYST FH

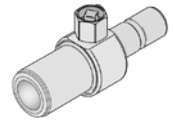
Flexible hoses with couplings for chilled beams and comfort modules.

For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).



## Venting nipple, push-on – SYST AR-12

A venting nipple is available as a complement to the flexible hoses with push-on couplings. The nipple fits directly in the push-on hose coupling for easy installation.



## Air connection fitting, nipple – SYST AD1

SYST AD1 is used as a joint between REACT Paragon and the duct system.

Available in two dimensions: Ø125 and Ø160 mm.



## Air connection fitting – SYST CA

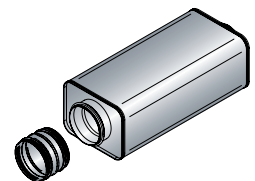
90° duct bend.

Available in 2 dimensions: Ø125 and Ø160 mm.



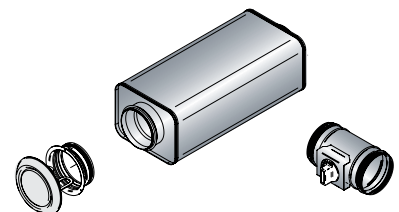
## Supply air kit – Supply Air Kit-125

Supply air kit containing CLA sound attenuator, Ø125 mm and sleeve.



## Extract air kit – Extract Air Kit CAV-CRP-125

Extract air kit for CAV containing CLA sound attenuator, Ø125, manual commissioning damper, EXC extract air diffuser.



## Accessory kits

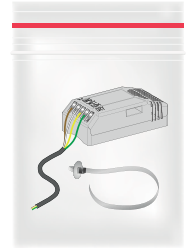
### SYST PCS-KIT

SYST PCS condensation sensor and fastening components for retrofitting.

The detector operates at the dew point temperature rather than a fixed relative humidity value.

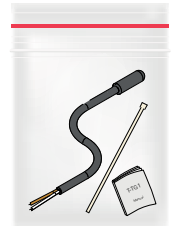
The dew point is calculated from a temperature-compensated RH element and an extremely accurate sensor element thermally bonded to the detector's metal plate.

*For more information, see separate product data sheet on [www.swegon.com](http://www.swegon.com).*



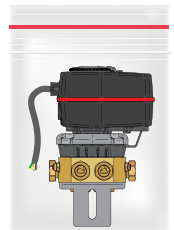
### Temperature sensor – T-TG-1

Kit with temperature sensor and cable ties for fastening.



### CCO-Kit (ventil + damper)

Compact change-over valve for maximum utilization of the coil.



# Specification

REACT Paragon comfort module for cooling, heating, ventilation and control.

## Scope of supply

Swegon's scope of supply ends at the water connection point.

At the connection points, the pipe contractor connects to the plain pipe end and/or external valve thread, fills the system, vents it and pressure-tests it.

The ventilation contractor connects to the duct connection with the dimension shown in the Dimensions and weight chapter *Dimensions and weight*.

The electrical contractor provides a 24 V AC power supply or an earthed 230 V socket for the transformer and, where required, a wall-mounted junction box for the room thermostat.

The building contractor makes openings in the corridor wall for the supply air duct, in internal walls and ceilings for supply and extract air grilles, and in the bathroom ceiling for the extract air duct.

The electrical contractor connects the power (24 V) and signal cables to the terminal block with spring-loaded push connections.

Maximum cable area is 2.5 mm<sup>2</sup>. For reliable operation, ferruled cable ends are recommended.

## Ordering specification

### REACT Paragon

REACT Paragon e aaa- bb- cc- ddddd

Version:

Length (mm): 800, 1100 and 1400

Function:

A = Cooling (water)

B = Cooling and heating (water)

Connection side for water (viewed from the rear of the product):

R = Right

L = Left

WB = Centred at rear (optional)

Air connections:

125 = Ø125 (standard)

2x125 = 2Ø125 (suite, only available for length 1400)

### Accessories

Grille PARAGON e aa- bbbb cccccc

Type:

SG = Supply air grille

RG = Return air grille

Product length (mm): 800, 1100, 1400

Colour: STD (RAL9003), RAL9010, RAL7037, RAL9005, RAL9006, RAL9007, COLOR (Special)

Assembly fitting SYST MS M8 aaa- b

Threaded rod length (mm): 200; 500; 1000

Type:

1 = One threaded rod

2 = Two threaded rods and one thread lock

# Specification text

Example specification text according to VVS AMA.

PCT.312 Duct-connected chilled beams.

PTD.4 Duct-connected room units for heating and cooling.

KB XX

REACT Paragon comfort module with integrated supply air damper. Designed for rear-edge installation in ceiling/wall with the following functions:

- Waterborne cooling.
- Waterborne heating or electric heating.
- Ventilation.
- ADC comfort function with adjustable setting  $\pm 30$  degrees.
- Duct connection  $\varnothing 125$  mm.
- Integrated recirculation air opening in the lower section.
- Coil and any control equipment accessible from the rear of the product or via the return air grille.
- Cleanable.
- Fixed measuring point with hose.
- Eurovent certified.
- Grille in Standard colour RAL 9003.
- Pressure-independent airflow control
- Easy connection to BMS, 0–10 V DC, Modbus RTU or BACnet MS/TP

Contract boundary at the water and air connection points according to the schematic drawing.

- At the connection points, the pipe contractor connects to the 12 mm plain pipe end, after which the ventilation contractor connects to the  $\varnothing 125$  mm connection sleeve.
- The pipe contractor fills, vents and pressure-tests the system and is responsible for ensuring that the design water flows reach each system branch and unit.
- The ventilation contractor commissions the design airflows.