



REACT

The adaptable and easy way to secure the indoor climate in each room

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REACT

The adaptable and easy way to secure the indoor climate in each room

With REACT, it is easy to select the right solution to ensure the indoor climate in each room, whether it is a renovation or new-build. Based on the requirements of each room, the range of adaptable climate products is matched with suitable room controllers to achieve the desired room function.

The solution is suitable for smaller projects with requirements for indoor climate control in individual rooms, as well as entire properties. The adaptable solution offers efficient installation and each room may either be fully operating as a stand-alone unit, or simply be integrated with a building management system.

A REACT solution may be combined with our Swegon INSIDE digital services for visualization and analysis of the indoor climate.

Made for renovations and new-builds

There are great opportunities for upgrades and improvements in buildings with older ventilation and climate systems. A gradual upgrade from constant air volume, CAV, to variable air volume, VAV, is possible with our REACT family. A few components may then easily be added on a room by room basis as the demand arises.

The recommendation is to start with the rooms where the need is greatest and the results are most clear, then scale up gradually as the demand arises. Are there existing climate products in the rooms that are worth keeping? No problem – many climate products can be integrated with room controllers from us at Swegon.

An initial analysis of the indoor climate with the help of Swegon INSIDE Analytics can be helpful. A diagnosis of the property is generated and based on it, the most effective solution for achieving a good indoor climate can be selected. A diagnosis also provides a starting point for additional selective measures of improvements that may be completed thereafter.

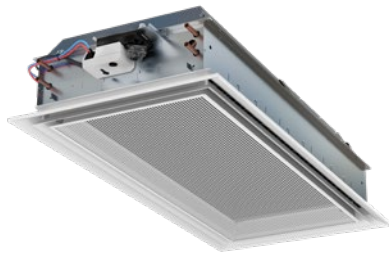


Products and room controllers

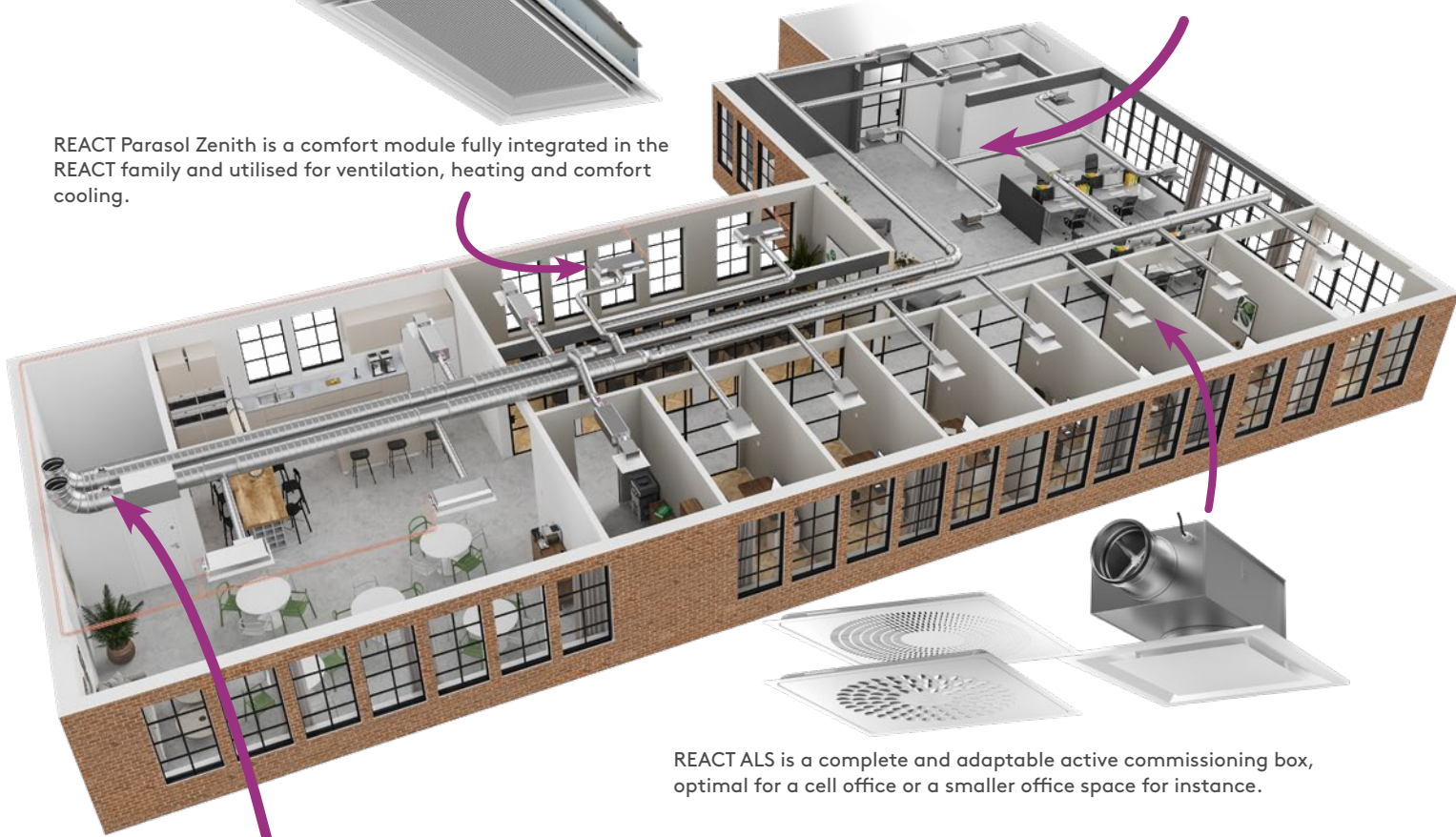
Commissioning boxes with belonging diffusers, comfort modules and dampers are all included in the REACT family. They are equipped with an integrated solution for VAV and may very well be combined with room controllers to measure and control the indoor climate in each room. The products allow easy installation as they are all developed with space, time and cost efficiency in mind.



Swegon's room controllers allow for occupancy, air quality and/or temperature to be monitored and adjusted accordingly.



REACT Parasol Zenith is a comfort module fully integrated in the REACT family and utilised for ventilation, heating and comfort cooling.



REACT ALS is a complete and adaptable active commissioning box, optimal for a cell office or a smaller office space for instance.



The duct mounted products in the REACT family manages variable air flow, constant air flow, pressure control, pressure measurement, air flow measurement as well as combinations of these.

Waterborne climate products

REACT Parasol Zenith

Comfort module with integrated variable flow regulation

- High performance 4-way distribution comfort module with cooling, heating and ventilation
- The product is equipped with an actuator for flow adjustment, terminal block and air connection for flow measurement
- Simple commissioning because the flow measurement is performed directly in the air connection
- Pressure-independent flow regulation
- Can easily be integrated by a control equipment supplier via Modbus communication
- Few variants for easier sizing and variable air flow control
- Optimised for low energy consumption



Variant		Supply air			Performance	
Size	Air connection	Pa*	l/s	m ³ /h	Total cooling capacity (W)**	Sound level (dB(A))
600	125	75	20	72	493	26
600	125	75	30	108	631	30
600	160	75	35	126	697	30
600	160	75	45	162	809	33
1200	125	75	25	90	882	26
1200	125	75	45	162	1218	30
1200	160	75	60	216	1375	28
1200	160	75	80	288	1591	34
1800	200	75	80	288	1890	33
1800	200	75	100	360	2135	35

* Total pressure duct (Pa)

**Air: $\Delta T_i=7K$ /Water: $\Delta T_{mk}=8.5K$, $t_{water}=14/17^\circ C$



Airborne climate products

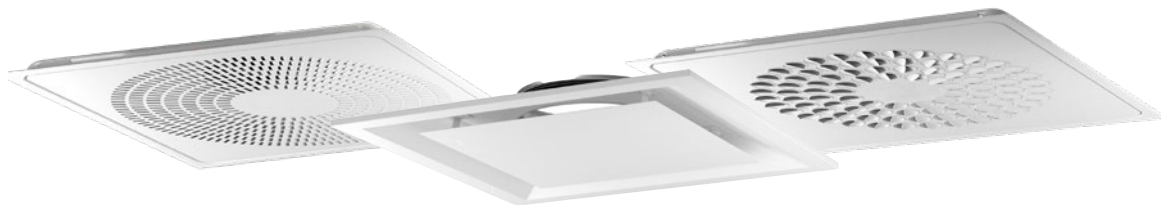
REACT ALS

Commissioning box with variable flow regulation for air diffusers

- Variable or constant flow regulation for supply air
- Can be mounted directly at bends and duct transitions/reductions
- Quick access to readings via the controller display
- Quick setting of parameters
- Analogue controls and Modbus control
- Can be used in combination with the air diffusers COLIBRI Ceiling VF, KITE Ceiling, LOCKZONE Ceiling VF
- Connection: Ø160 eller Ø250



The product is fully modular and it is possible to choose from several of our air diffusers. This enables a project specific solution in regards to performance, design and colour.



AIR FLOW - SOUND LEVEL					
REACT ALS Size	COLIBRI Ceiling VF, KITE Ceiling, LOCKZONE Ceiling VF Size	Min.*		60 Pa/30 dB(A)	
		l/s	m ³ /h	l/s	m ³ /h
160	250-600	7	25	74	266
250	315-600	20	72	104	374

*The product must not go below min. as the measurement function cannot then be guaranteed, for tolerance levels see separate product sheet for REACT ALS. NOTE: for a high pressure drop across the product, it may be difficult to reach the min. flow. See sizing diagrams in each air diffusers product sheet.



COLIBRI Ceiling VF

Square ceiling diffuser with nozzles for supply air with variable flow

- Circular nozzle pattern with 100% flexible spread pattern
- Fast and simple installation and commissioning through Quick Access
- Designed for modular suspended ceilings
- ADAPTER for suspended ceiling system



KITE Ceiling

Square ceiling diffuser for supply air

- Non-perforated diffuser face
- Fast and simple installation and commissioning through Easy Access
- Designed for suspended ceiling system 600x600
- Possibility to adapt to various suspended ceiling systems



LOCKZONE Ceiling VF

Square ceiling diffuser for supply air with variable flow

- Circular guide vane perforations
- Fast and simple installation and commissioning through Quick Access
- Designed for modular suspended ceilings
- ADAPTER for suspended ceiling system



AIR FLOW - SOUND PRESSURE ROOM (Lp10A) *)							
COLIBRI Ceiling VF, KITE Ceiling, LOCKZONE Ceiling VF Size	REACT ALS Size	25 dB(A)		30 dB(A)		35 dB(A)	
		l/s	m ³ /h	l/s	m ³ /h	l/s	m ³ /h
250-600	160-250	62	223	73	263	87	313
315-600	250-315	93	335	109	392	127	457

Data is specified for supply air with an open damper when REACT ALS is used.

*) Lp10A = Sound pressure incl. A-filter with 4 dB room attenuation and 10 m² room absorption area.



Duct mounted products

The ventilation requirement must be met and safeguarded to achieve a good indoor climate. Energy consumption is also a parameter that is affected by the solution. Swegon provides a comprehensive range of damper and measurement units that make it possible to measure, regulate and create a solution based on demand with low energy consumption.

- Rapid access to readings via the controller display
- Quick setting of parameters
- Analogue controls or Modbus control
- Can be easily anti-condensation insulated in the duct system
- Variants:
 - Circular connections: Ø100-630 mm
 - Rectangular connections: 200x200-1400x700 mm

REACT V

Variable or constant flow regulation

Can be mounted directly at bends and duct transitions/ reductions (circular). Available with spring return actuator.



REACT V Size	Flow range			
	Min.		Max.*	
	l/s	m ³ /h	l/s	m ³ /h
100	5	18	67	241
125	9	32	108	389
160	16	58	184	662
200	25	90	292	1051
250	40	144	470	1692
315	63	227	747	2689
400	102	367	1240	4464
500	164	590	1900	6840
630	300	1080	2950	10620

*Nominal flow (Vnom), based on 120 Pa in pressure reading.

REACT M

Stand-alone measurement unit for measuring air flow



REACT M Size	Flow range			
	Min.		Max*	
	l/s	m ³ /h	l/s	m ³ /h
100	5	18	90	324
125	9	32	147	529
160	16	58	254	914
200	25	90	404	1454
250	40	144	658	2369
315	63	227	1054	3794
400	102	367	1732	6235
500	164	590	2670	9612
630	300	1080	4174	15026

* Nominal flow (Vnom), based on 250 Pa in pressure reading.

REACT P, REACT P-X

Pressure regulation dampers

Pressure measurement up to 300 Pa recommended regulation range 20-290 Pa. REACT P-X has an external controller and is available with spring return actuator.



Room controllers

Swegon offers several room controllers that are recommended for monitoring and regulating the products included in the REACT family. Use different room controllers and combinations to achieve desired monitoring and regulation of the room.

DETECT IAQ

Carbon dioxide and temperature controller.



DETECT IAQ OCS

Carbon dioxide and temperature controller, also detects occupancy.



DETECT IAQ D

Carbon dioxide and temperature controller for duct installation.



DETECT Occupancy

Occupancy detector.



LUNA RC

Room controller for temperature control (With display).



LUNA RC CO₂

Room controller for temperature control with CO₂ sensor.



LUNA RE

Room controller for temperature regulation.



Below is an overview of the the different room controllers features. For more detailed information, see separate product sheet for each product.

	LUNA RE	LUNA RC	LUNA RC CO ₂	DETECT IAQ	DETECT IAQ OCS	DETECT IAQ D	DETECT O
Temperature control	✓	✓	✓	✓	✓	✓	
Temperature setpoint controller	✓	✓	✓				
Air quality control CO ₂			✓	✓	✓	✓	
Airflow control	✓	✓	✓	✓	✓	✓	
Control of actuators cooling/heating	✓	✓	✓				
Occupancy detector	•	•	•		✓		✓
Modbus and 0-10V	✓	✓	✓	✓	✓	✓	
CONFIGURATION TOOLS							
LUNA T-CU	✓						
DETECT IAQ TOOL				✓	✓	✓	

• = Available input/possibility

Feel good **inside**

