REACT ALS

Commissioning box with variable flow regulation for air diffusers

QUICK FACTS

○ Variable or constant flow regulation for supply air.

○ Can be mounted directly at bends and duct transitions/reductions.

○ Quick readings via the controller display.

○ Quick setting of parameters.

○ Analogue and Modbus controls.

○ Can be used in combination with the air diffusers COLIBRI Ceiling VF, KITE Ceiling, LOCKZONE Ceiling VF.

○ Variants:

  - Connection: Ø160 or Ø250.

AIR FLOW - SOUND LEVEL					
REACT ALS Size	**COLIBRI CC VF, LOCKZONE C VF, KITE CR Size**	**Min.***		**60 Pa /30 dB(A)**	
		l/s	m³/h	l/s	m³/h
160	250-600	7	25	74	266
250	315-600	20	72	108	374

*The product must not go below min. as the measurement function cannot then be guaranteed. For tolerances, see page 4. NOTE: for a high pressure drop across the product, it may be difficult to reach the min. flow. See the sizing diagrams.

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Technical description

General
- Intended for flow regulation of comfort ventilation.
- Moist, cold and aggressive environments must be avoided.
- To be installed in supply air systems.
- Pressure-independent, but does require a minimum pressure drop equivalent to that of an open damper.
- The minimum air flow must be considered during planning.
- For good regulation, a minimum difference between Vmin and Vmax of 20% of the product's Vnom is recommended.

Design
- Integrated air flow sensor.
- Analogue controls 0(2)-10 V and Modbus control.
- Connection Ø160 or Ø250.
- Always supplied with dust protection.

Functions
- Variable flow or constant flow regulation.
- Measurement of air flow.
- Display for direct reading.
- Settings can be made directly on the controller with the help of a screwdriver.

Materials and surface treatment
- All sheet-metal parts are galvanized sheet steel (Z275).
- Measuring rods are aluminium.

Project design / Typical room
See separate documentation "REACT Function description & wiring diagram", available for download via www.swegon.com.

Maintenance
The product does not require any maintenance/service, except for any cleaning when necessary. See the separate Instructions for Use, available on www.swegon.com.

Environment
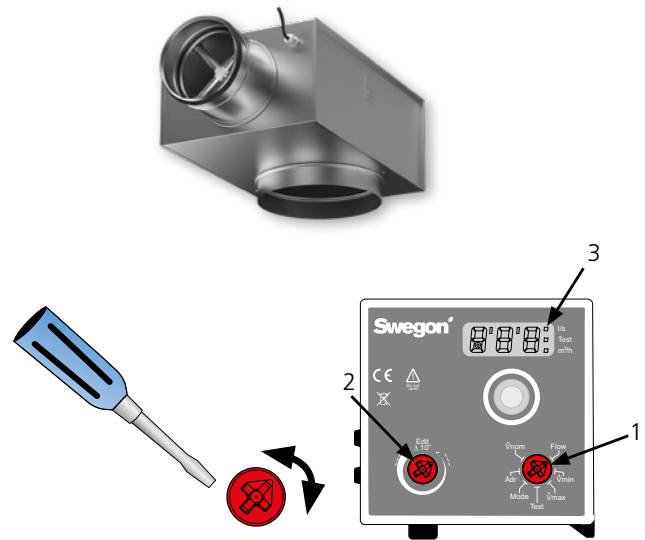The Building Materials Declaration is available from www.swegon.com.

Figure 1. REACT ALS controller.
1. Function wheel
2. Edit wheel
3. Display

Accessories
- LUNA RC – Room controller for temperature control with display.
- LUNA RE – Room controller for temperature regulation.
- DETECT IAQ – Carbon dioxide and temperature controller.
- DETECT IAQ OCS – Carbon dioxide and temperature controller that also detects occupancy.
- DETECT IAQ D – Carbon dioxide and temperature controller for duct installation.
- DETECT Occupancy – Occupancy detector.
    - DETECT O V110 – For wall and corner installation.
    - DETECT O T360 – For ceiling installation.

Figure 2. Accessories.

1. LUNA RC
2. LUNA RE
3. DETECT IAQ
4. DETECT IAQ OCS
5. DETECT IAQ D
6. DETECT O V110
7. DETECT O T360

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Technical data

IP class:	IP42
Corrosivity class:	C3
Pressure class:	A
Leakage classes according to SS-EN 1751	C
Running times open/closed:	85 s
Ambient temperature	
Operation:	0 – +50 °C
Storage:	-20 – +50°C
RH:	10 - 95% (non-condensing)
CE marking:	2006/42/EC (MD)
	2014/30/EU (EMC)
	2011/65/EU (RoHS2)

Electrical data

Power supply:	24 V AC/DC ±15% 50 - 60 Hz
Fixed connection cable, 250 mm med cable size.	4 x 0.75 mm²
	2 x 0.38 mm²
	See figure 3 below.

Power consumption, for transformer rating:

REACT ALS 150 N	2.0 W	3.5 VA
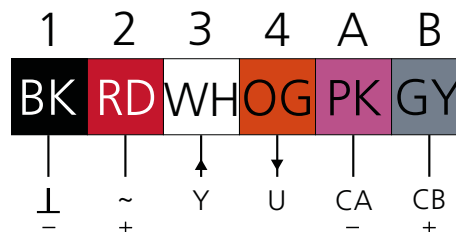
Figure 3. Connections.

Connections

1-2 – Supply voltage	24 V AC/DC
3 – Control signal (Y)	0..10/(2..10) V
4 – Actual value signal (U)	0..10/(2..10) V
A-B – Modbus	

Installation, dimensions and weights

Size	Min.		Max = Vnom[*]		Tolerance Q* ±5% with at least ±x l/s
	l/s	m³/h	l/ s	m³/h	
160-250	7	25	110	396	2
250-315	20	72	330	1188	3

[*] Vnom at 100 Pa in pressure reading.

* Installed according to the instructions

Size	B	C	ØD	Ød	Weight (kg)
160-250	504	332	159	250	4.9
250-315	622	388	249	315	7.8

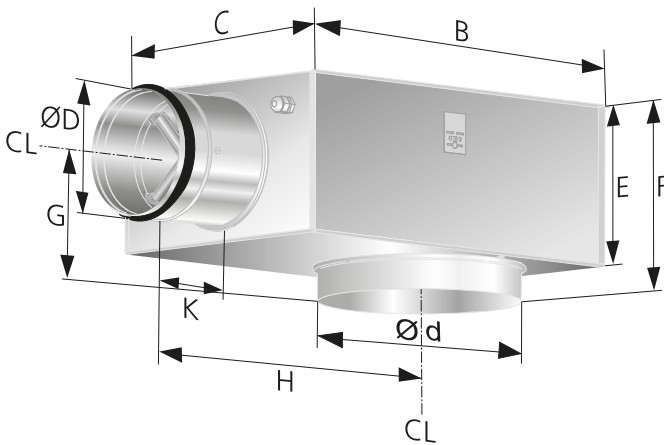| Size	E	F	G	H	K
160-250	199	239	140	445	100
250-315	300	340	190	575	140

Figure 4. Dimensions (mm).

Installation

- The product's air flow measurement requires a straight duct section as per the installation figures.
- In unfavourable conditions before or with disruption, the product's tolerances cannot be guaranteed.
- Instructions for Use are supplied with the product on delivery, but can also be downloaded from www. swegon.com.
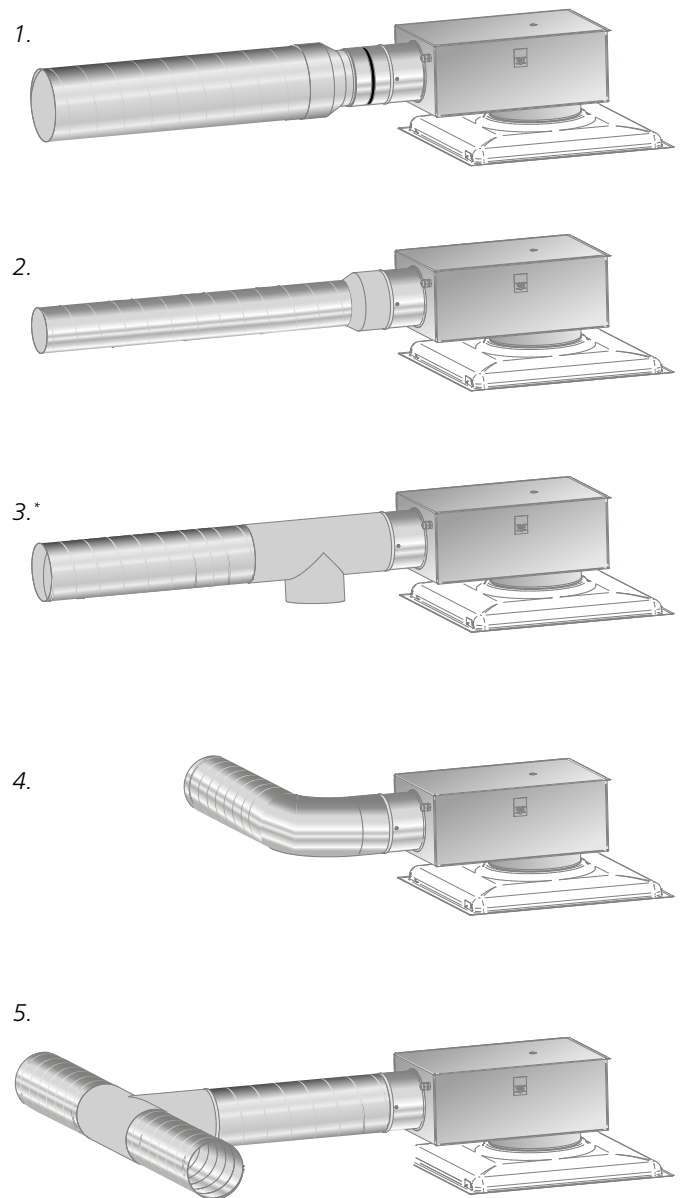
1.

2.

3.*

4.

5.

Figure 5. Straight section requirements, circular ducts.
1-4: Quantity Ø before the product: 0 x Ø.
5: Quantity Ø before the product: 4 x Ø.
*Cleaning hatch

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Specification

Product

Commissioning box with variable flow regulation	REACT ALS	a	bbb
Version:			
Connection dimensions Ø: 160, 250			
REACT ALS factory setting - Vmax = Vnom l/s and Vmin = 0 l/s			

Accessories

LUNA RE-S MB	Room controller for temperature regulation.
LUNA RCa TEMP-MB	Room controller for temperature control.
LUNA RCa CO_2-TEMP-MB	Room controller for temperature control with built-in CO_2 sensor.
DETECT IAQa CO_2-TEMP-MB	Carbon dioxide and temperature controller for room areas.
DETECT IAQ OCSa CO_2-TEMP-MB	Carbon dioxide and temperature controller with PIR for room areas.
DETECT IAQ Da CO_2-TEMP-MB	Carbon dioxide and temperature controller for ventilation duct.
DETECT O V110	Occupancy detector for wall and corner installation.
DETECT O T360	Occupancy detector for ceiling installation.