

SC-S

Circular fire damper cartridge for installation in a fire resistant suspended ceiling.




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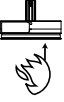



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Explanation of the abbreviations and pictograms

Dn = nominal diameter	o -> i = meets the criteria from the outside (o) to the inside (i)	OP = option (delivered with the product)
E = integrity	GKB (type A) / GKF (type F): "GKB" stands for standard plasterboards (type A according to EN 520) while "GKF" plasterboards offer a higher fire resistance for a similar plate thickness (type F according to EN 520)	KIT = kit (delivered separately for repair or upgrade)
I = thermal insulation	Sn = free air passage	DAS MOD = modular product
S = smoke leakage	ζ [-] = pressure loss coefficient	dB(A) = A-weighted decibel value
Pa = pascal	Q = airflow	Lw oct = sound power level per octave midband
ve = vertical wall penetration	ΔP = static pressure drop	ΔL = correction factor
ho = horizontal floor penetration	v = air speed in the duct	
i <-> o = fire side not important	Lwa = A-weighted sound power level	

	fast installation		
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Rf-t_S6_EN = A-02/2021

1. Unique identification code of the product-type:		SC-S	
2. Intended use/es:		Circular fire damper to be used in conjunction with partitions to maintain fire compartments in heating, ventilating and air conditioning installations.	
3. Manufacturer:		RF-Technologies NV, Lange Ambachtstraat 40, B-9860 Oosterzele	
4. System/s of AVCP:		System 1	
6. Declared performance according to		(Fire resistance according to EN 1366-2 and EN 1364-2)	
Essential characteristics			
Range	Wall type	Wall	Sealing
SC-S Ø 100-200 mm	Fire resistant suspended ceiling	Metal studs gypsum plasterboard Type F (EN 520) 2 x 12.5 mm Metal studs gypsum plasterboard Type F (EN 520) 2 x 15 mm	Not applicable Not applicable
1 Type of installation: built-in inside a duct, 0-360°; Fire side = side opposite to the fusible link			
Harmonised standard			
Performance		Installation	Classification
EI 30 (h _o , o → i) S - (300Pa)		1	EI 30 (h _o , o → i) S - (300Pa)
EI 60 (h _o , o → i) S - (300Pa)		1	EI 60 (h _o , o → i) S - (300Pa)
 		 	
Nominal activation conditions/sensitivity:			
Response delay (response time); closure time			
Operational reliability: cycling			
Durability of response delay:			
Protection against corrosion according to EN 60068-2-52:			
Pass			
Pass			
Pass			
NPD (no performance determined)			
NPD (no performance determined)			

Signed for and on behalf of the manufacturer by:
Mathieu Steenland, Technical Manager

 Oosterzele, 02/2021



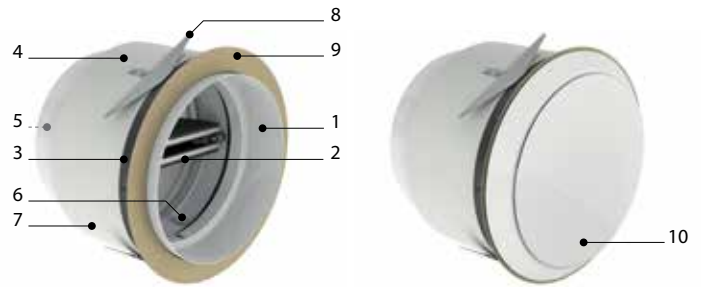
Product presentation SC-S

Product presentation SC-S

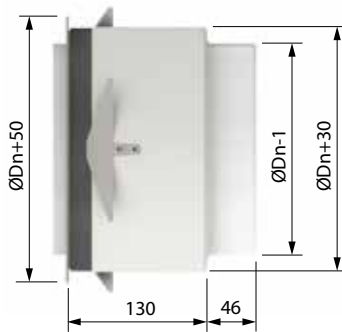
Circular fire damper cartridge with a finishing valve and collar for installation in a fire resistant suspended ceiling. Connection to a ventilation system with flexible duct. For installation in fire-resistant EI30 and EI60 ceilings. The circular fire damper cartridges are equipped with a fusible link that holds the two parts of the blade in the open position. When the temperature in the duct rises above 72°C, the fusible link melts and releases the two blades. The damper is now closed and two blocking hooks keep the blades in their safety position, which prevents any smoke or flames from passing through.



1. SCV+ fire damper cartridge
2. damper blade
3. intumescent sealing
4. installation collar
5. flexible duct connection
6. blocking hooks
7. product identification
8. fixation spring
9. finishing collar
- 10.ventilation valve



Range and dimensions SC-S



ØDn (mm)	100	125	160	200
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Storage and handling

As this product is a safety element, it should be stored and handled with care.

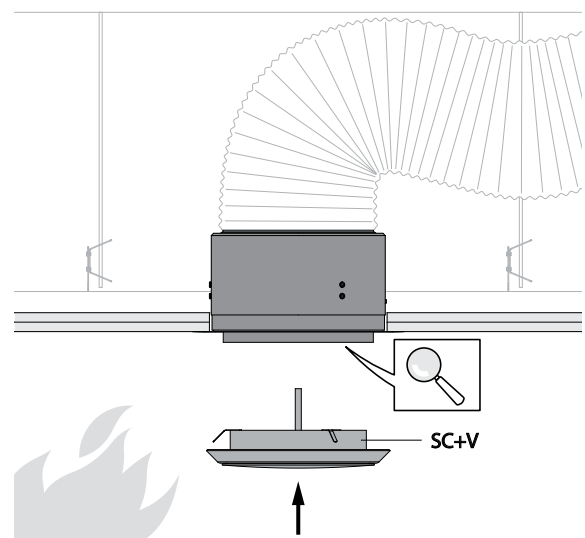
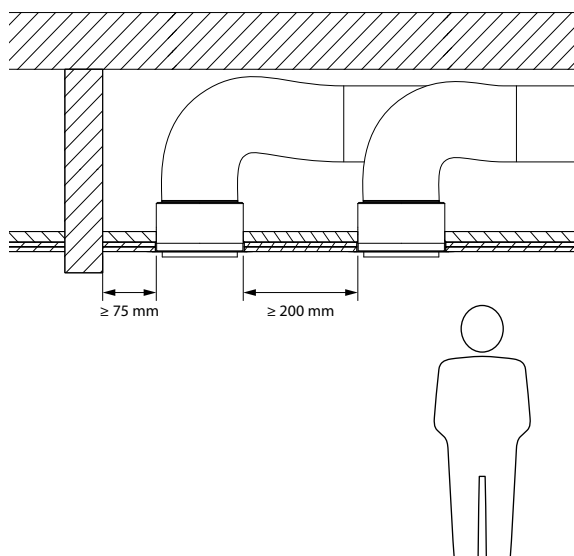
Avoid:

- any kind of impact or damage
- contact with water
- deformation of the casing

Installation

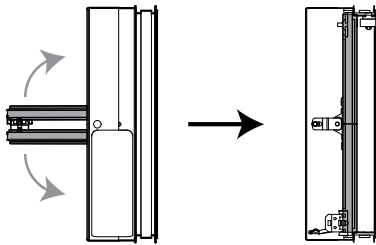
General points

- The installation must comply with the installation manual.
- Verify if the blades can move freely.
- Direction of the airflow: discretionary
- SC-S fire damper cartridges are tested in standardised fire resistant suspended ceilings in accordance with EN 1366-2 and EN 1364-2.
- The fire damper cartridge must remain accessible for inspection and maintenance.
- Please observe safety distances with respect to other construction elements.

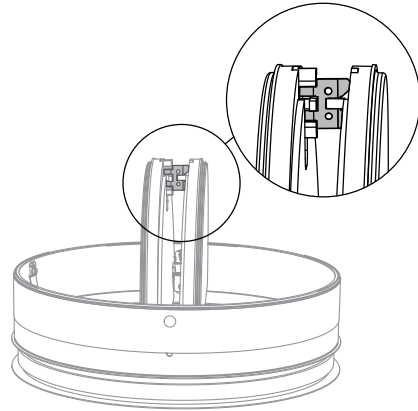


Operation: manual closing

1

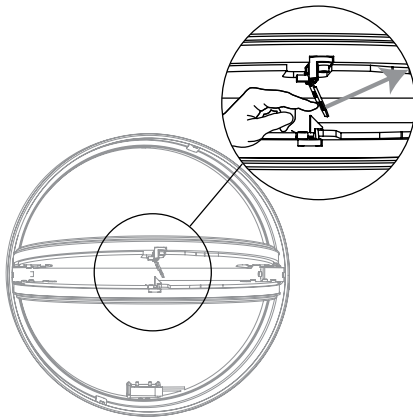


2



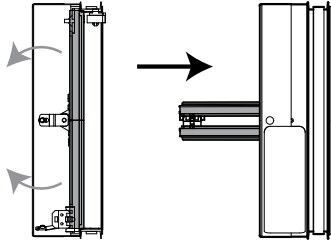
2. Unlock (close) the damper blades by pushing them towards each other. Carefully unlock the fusible link by pushing it sideways.

3

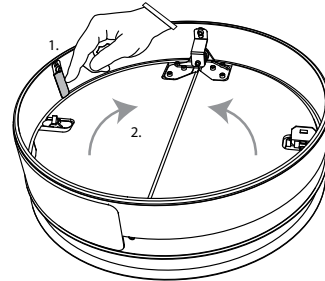


Operation: manual opening

1

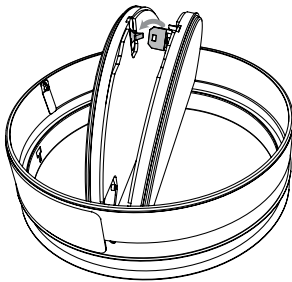


2



2. Press the two blocking hooks carefully to unlock the blades.

3



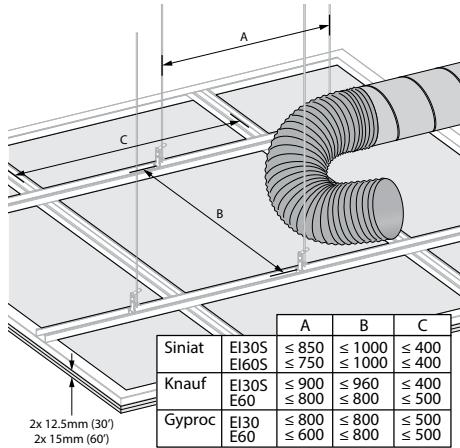
3. Click the fusible link into the holder to lock the blades.

Installation in a fire resistant suspended ceiling

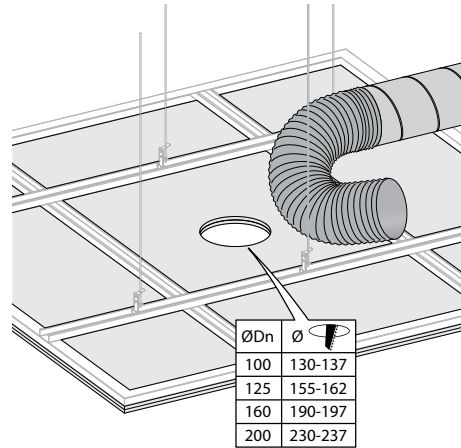
The product was tested and approved in:

Range	Wall type	Sealing	Classification
SC-S Ø 100-200 mm	Fire resistant suspended ceiling	Metal studs gypsum plasterboard Type F (EN 520) 2 x 12.5 mm	Not applicable
SC-S Ø 100-200 mm	Fire resistant suspended ceiling	Metal studs gypsum plasterboard Type F (EN 520) 2 x 15 mm	Not applicable

1



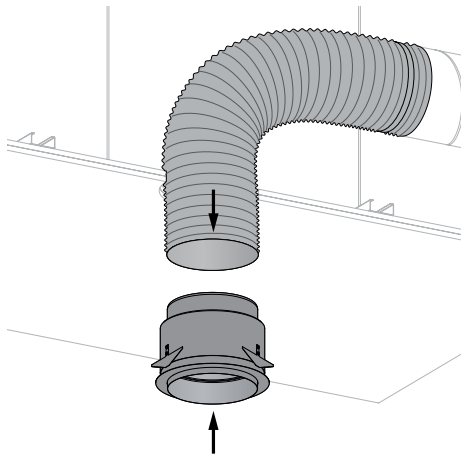
2



1. Build the fire resistant suspended ceiling according to the manufacturer's instructions. Provide a piece a flexible duct to connect the ventilation duct to the SC-S.

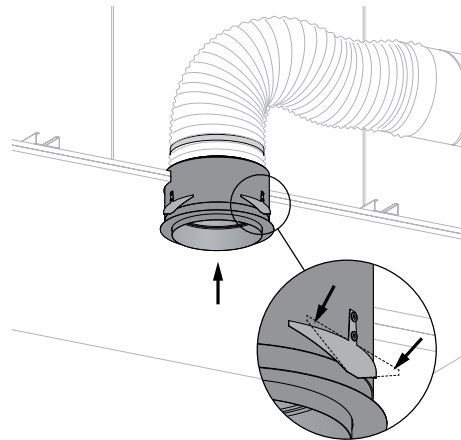
2. Make a round opening in the fire resistant suspended ceiling, with diameter as indicated in the table.

3



3. Arm the fire damper cartridge as explained in the operating instructions. Pull the flexible duct through the opening and place it over the connection provided for the ventilation duct. Attach the duct to the SC-S in an airtight manner.

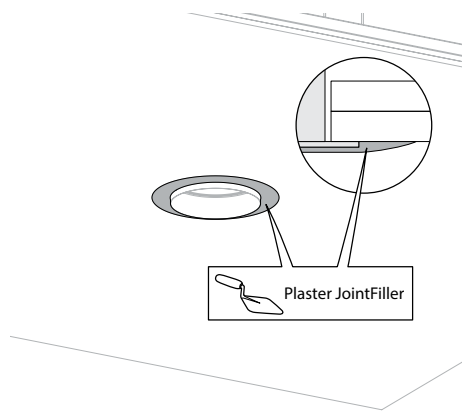
4



4. Press the retaining springs against the cylinder and slide the SC-S in the opening. Push the SC-S all the way into the opening so that the retaining springs lock above the ceiling.

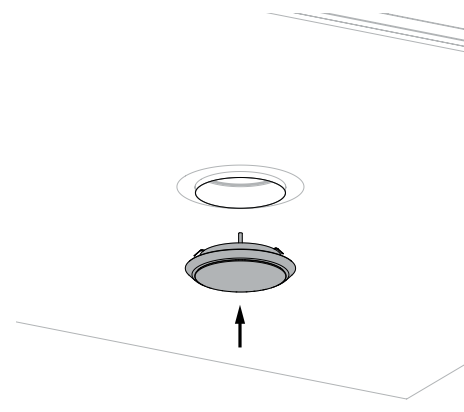
⚠ Caution: Make sure that the damper blades are in open position before installing into the ceiling.

5



5. Finish with joint filler and allow to dry.

6



6. Finally, install the finishing valve and adjust according to the desired flow rate.

The use of another plastic finishing valve is permitted, as long as it does not interfere with the operation of the damper blades.

Maintenance

- No specific maintenance required.
- Schedule at least 2 visual checks each year.
- Remove dust and all other particles before use.
- Follow local maintenance regulations (i.e. BS9999 Annex V; NF S 61-933) and EN13306.
- Warning: butterfly dampers, in their closed position, can move in the duct when placed under too high pressure.

Weights

SC-S

ØDn [mm]	100	125	160	200
kg	1,4	1,8	2,4	3,2

Selection graphs

a = number of complete revolutions of the valve. a = 0 = closed valve

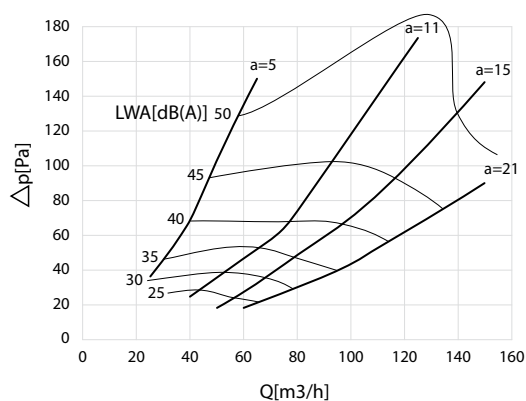
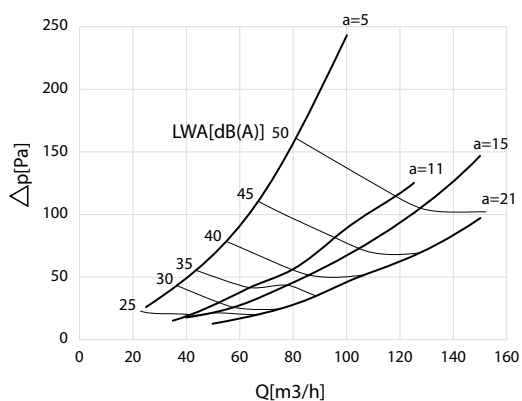


air exhaust

Ø 100



air supply

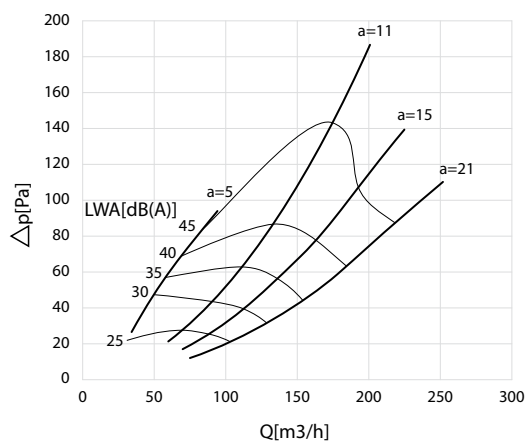
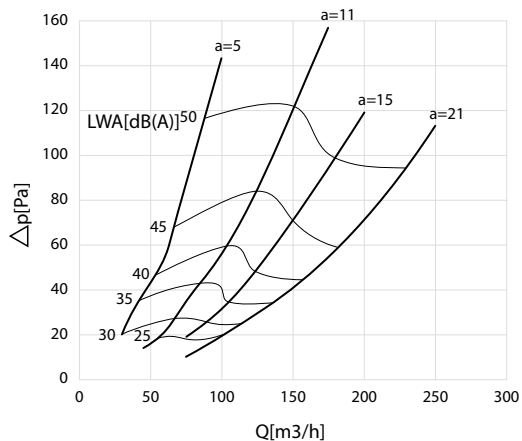


air exhaust

Ø 125

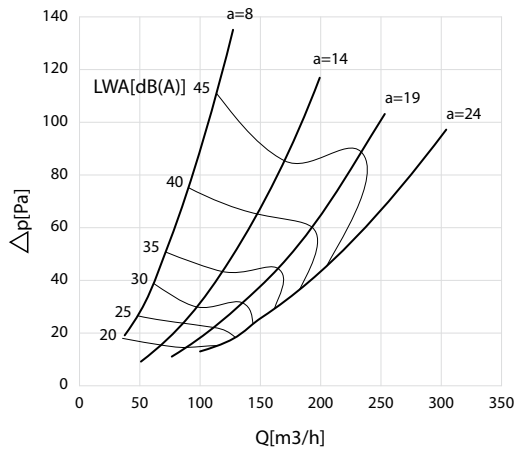


air supply





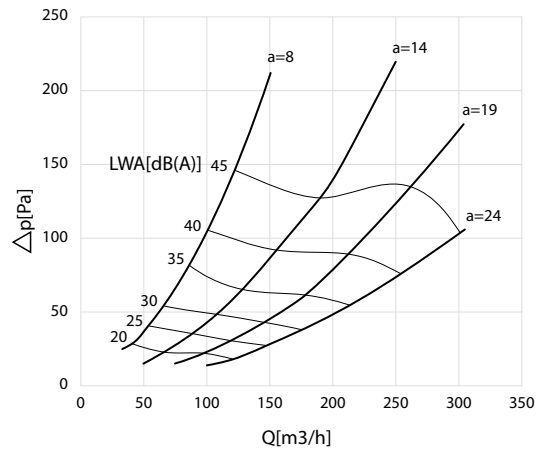
air exhaust



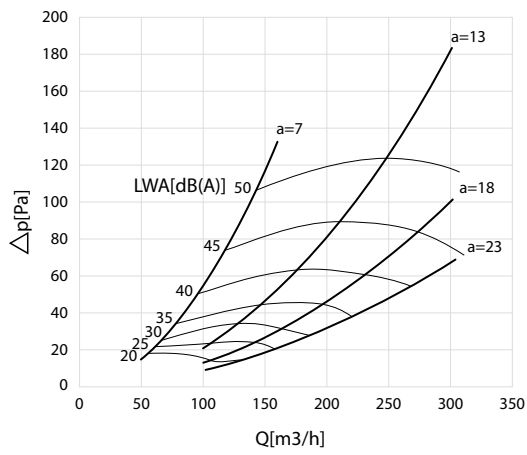
Ø 160



air supply



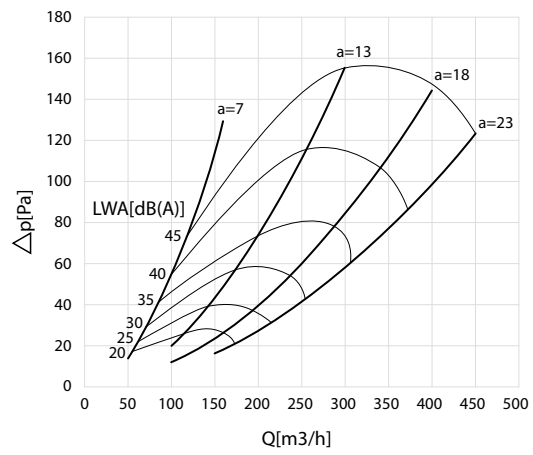
air exhaust



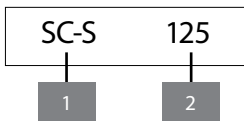
Ø 200



air supply



Sample order



1. product
2. diameter

Approvals and certificates

All our products are submitted to a number of tests by official test institutes. Reports of these tests form the basis for the approvals of our dampers.