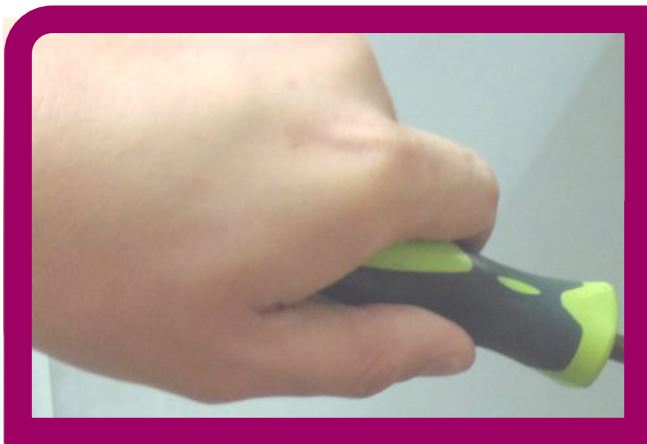


KOOLAIR



Smoke evacuation
damper



SMLD

Mounting
instructions

www.koolair.com

SMLD smoke evacuation damper

Mounting instructions



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SMLD smoke evacuation damper

Mounting instructions

REGULATORY DESIGNATION OF PRODUCT TYPE

Duct type	SCDC Remote Controlled 24/48 Vcc 24/48 Vca 220 Vca + manual reset	SCDC Remote Controlled 24/48 Vcc 24/48 Vca 220 Vca + reset motor	SCDC motor-driven
Riser	X Except undervoltage release	X Except undervoltage release	X
Single duct or main branch	X Voltage-Release Non-Voltage release	X Voltage-Release Non-Voltage release	X





SPECIFIC CHARACTERISTICS CERTIFIED FOR THE PRODUCT TYPES

	COLLECTOR DUCT	SINGLE OR COLLECTOR DUCT
Type of product	Smoke control damper	Smoke control damper
Family	Multi-slat	Multi-slat
Obligations	Resetable after cold-condition interlock release Standby position contact (DCU) Safety position contact (FCU)	Reset after cold-condition interlock release Integrated manual control of level 0 or 1 for opening and closing
Prohibited	State change prohibited due to lack of power at the control	
Safety options	Integrated manual control of level 0 or 1 for opening and closing	Standby position contact (DCU) Safety position contact (FCU)
Operating mode	With intrinsic power supply	With intrinsic power supply
Control mode	Electrical control	Electrical control
Remote control mode	By shunt release	By shunt release or no-voltage release
Uc voltage at Vdc	24 or 48 Vcc 24, 48, 230 Vca	24 or 48 Vcc 24, 48, 230 Vca
Power consumption, in W	CC: Max 3,5 W AC: Max. 5,5 VA	CC Voltage release: Max 3,5 W CC Non-Voltage release: Max 1,6 W AC Voltage release: Max 5,5 VA AC Non-Voltage release: Max 4 VA

SMLD smoke evacuation damper

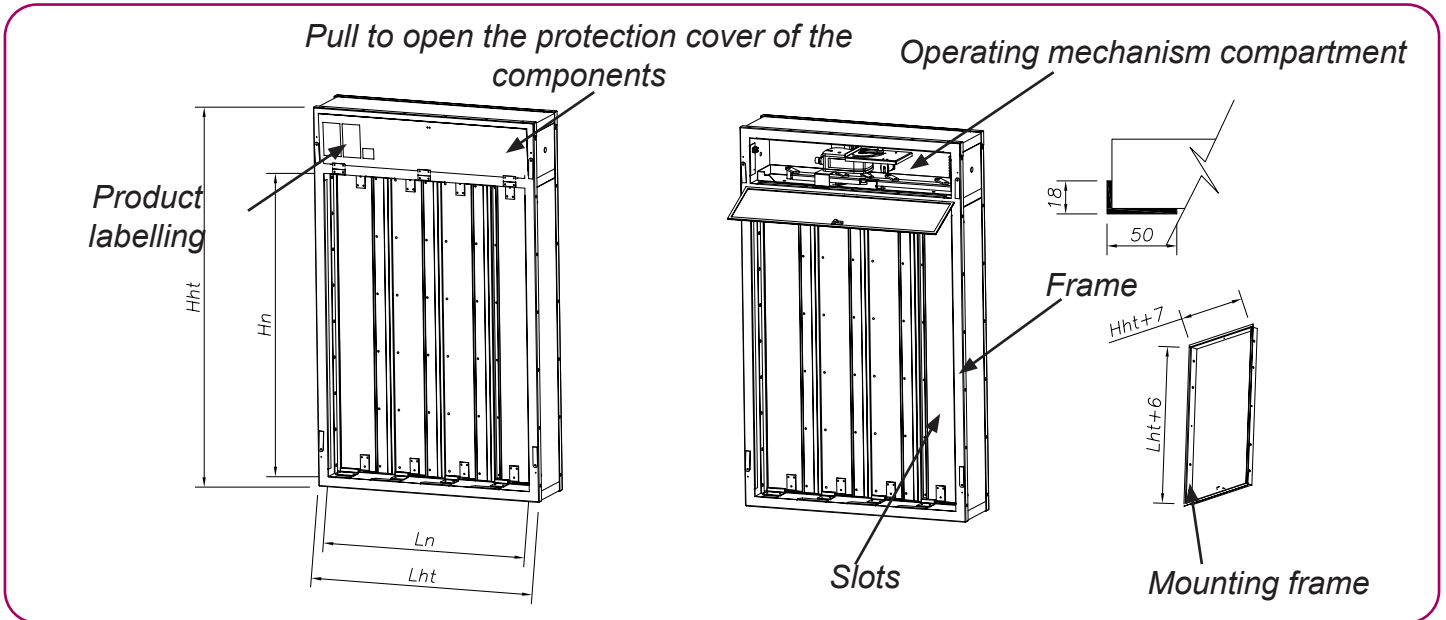
Mounting instructions

SPECIFIC CHARACTERISTICS CERTIFIED FOR THE PRODUCT TYPES

	COLLECTOR DUCT	SINGLE OR COLLECTOR DUCT
Mounting direction	Vertical slat shaft	Vertical slat shaft
Dimensions	See page 4	See page 4
Free surfaces	See page 4	See page 4
Fire resistance classes	EIS 1500 Pa	EIS 1500 Pa
Air circulation direction	Any	Any
Fire direction	Any	Any
Type of mounting	Wall-recessed Attachment with or without frame	Wall-recessed Attachment with or without frame
Protection grille	With RPK protection grille	With RPK protection grille
Additional functions	FDCB two-pole position contacts	FDCB two-pole position contacts
Endurance	300 cycles	300 cycles
Modular product	No	No
List of modules	Not applicable	Not applicable
Certificates	 	 

SMLD smoke evacuation damper Mounting instructions

DAMPER DRAWING



DIMENSIONS AND HOLES

Cotes L (see damper plane)		
No. blades (N)	Nominal dimensions Ln (mm)	Exterior dimensions Lht (mm)
2	354	418
3	527	591
4	700	764
Cotes H (see damper plane)		
Nominal dimensions Hn (mm)	Air passage dimensions Hpa (mm)	Exterior dimensions Hht (mm)
From 200 to 1000 steps from 50 to 50	$Hpa=Hn$	$Hn+249$

Air passage calculation (dm ²)		
$Ln = Lht - 64$	$Hpa = Hn = Hht - 249$	Air passage formule (dm ²)
$Lpa = Ln - (Nx45)$		$(Hpa (mm) \times Lpa (mm)) / 10000$

Dimensions, in mm

SMLD smoke evacuation damper

Mounting instructions

PRODUCT MARKING

Name of the holder: SAFEAIR

Commercial reference: SMLD

Nominal size:

Normative designation: Non-modular smoke flap

Degree of resistance to fire + pressure: EIS 120 1500 Pa

Free area = dm^2

Characteristics of the inputs: E. Tele = Vcc / E / 3.5 W

Certification AFNOR N°

Production lot and year:

PRODUCT CODE KEY

E	= Integrity
I	= Isolation
120	= Resistance time in minutes
i ↔ o	= Mechanism position (indifferent to fire location)
ho	= Application in Horizontal slab. Assembly in horizontal enclosure (slab)
Ve	= Application in vertical enclosure (wall / stud wall).
S	= Airtightness
Pa	= Pressure in Pascals

MARKING CODE KEY

auto	= automatic
télé	= remote controlled
CC	= Shared duct
CU	= Single duct
Pa	= Pressure in Pascals
Dim.nom	= Nominal dimensions
S.L.	= Free Area
E.ALIM	= Power input
E.TELE	= Remote control input
E	= Power on
R	= /Power off
Vca o Vac	= AC voltage
Vcc o Vcc	= DC voltage

SMLD smoke evacuation damper

Mounting instructions

TESTING AND CERTIFICATION

All our dampers are tested at official institutions. The reports from these tests are the basis for certification of our smoke exhaust dampers.

Tested as per EN 1366-10, EN-12101-8, NF- S 61-937-1 and NF- S 61-937-10.



Europe: Classification according to EN 12101 certificate: 0370-CPR-1688

This certificate attests to the constancy of performance:

Within the framework of Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (Construction Products Regulation or CPR), this certificate applies to the construction product: Systems for the control of smoke and heat. Part 8: Smoke exhaust dampers.

Certification organisation :

LGAI. Technological Center, S.A

Campus UAB – Ronda de la Font del Carmen s/n

E-08193 Bellaterra (Barcelona)

T: +34 93 567 20 00

F: +34 93 567 20 01

www.applus.com



France: Certificate NF: 21.02

This NF mark attests to:

- Compliance with standard NF S 61-937 <<Fire Safety Systems - Actuated Safety Devices>> Parts 1 and 10 for shutters.
- Worth presumption of conformity with the decree of March 22, 2004 amended on March 14, 2011 for the fire resistance rating.
- The values of the characteristics announced in this manual.

Certification organisation :

AFNOR Certification

11, Rue Francis de Pressensé 93571 La Plaine Saint Denis Cedex

Telephone : +33(0)1.41.62.80.00

Fax : +33(0)1.49.17.90.00

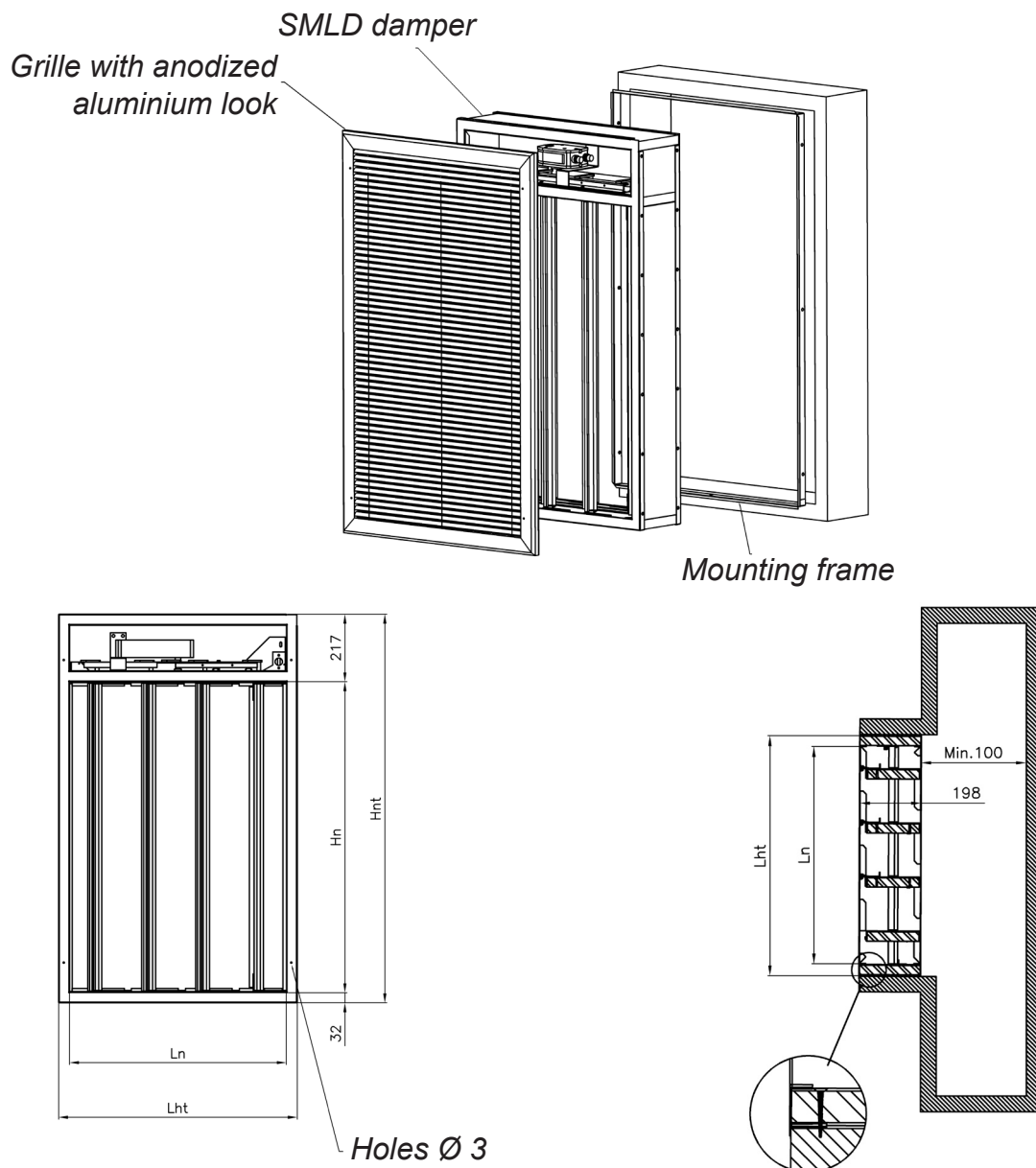
Website : <http://www.afnor.org> et <http://www.marque-nf.com>

Email: certification@afnor.org

SMLD smoke evacuation damper

Mounting instructions

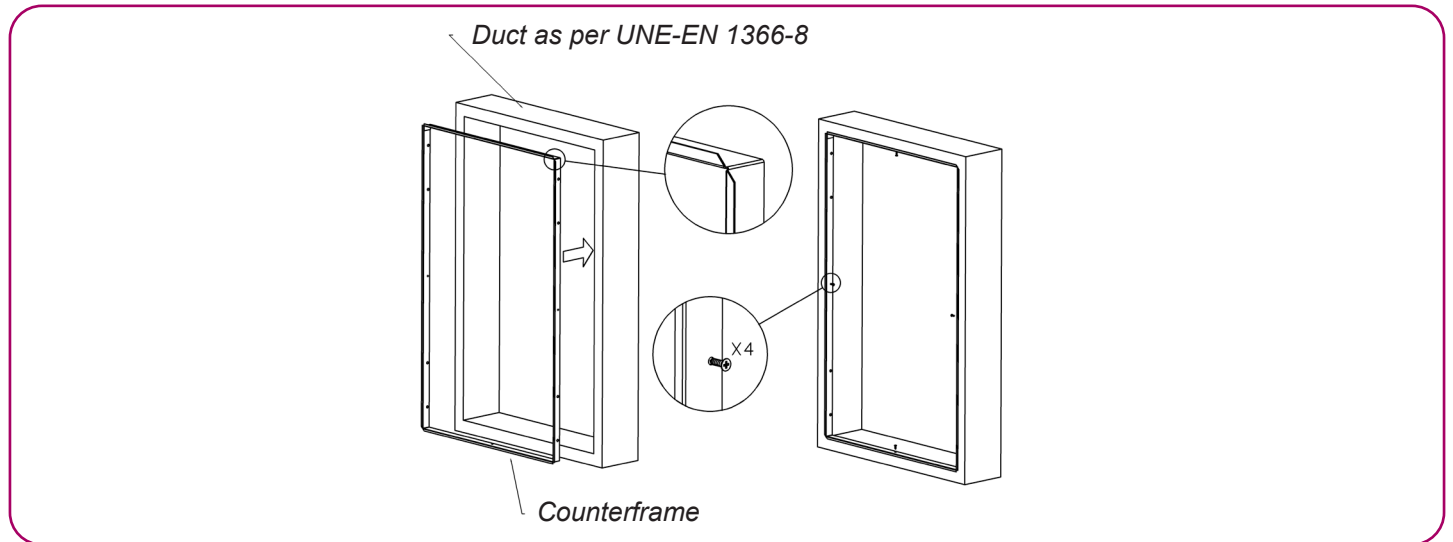
INSTALLATION AND ON-SITE PLACEMENT



Install in a duct in which the internal dimensions are 1250 mm (Width) x 1000 mm (Height) maximum, made of 52 mm thick Promatect L500 plates.

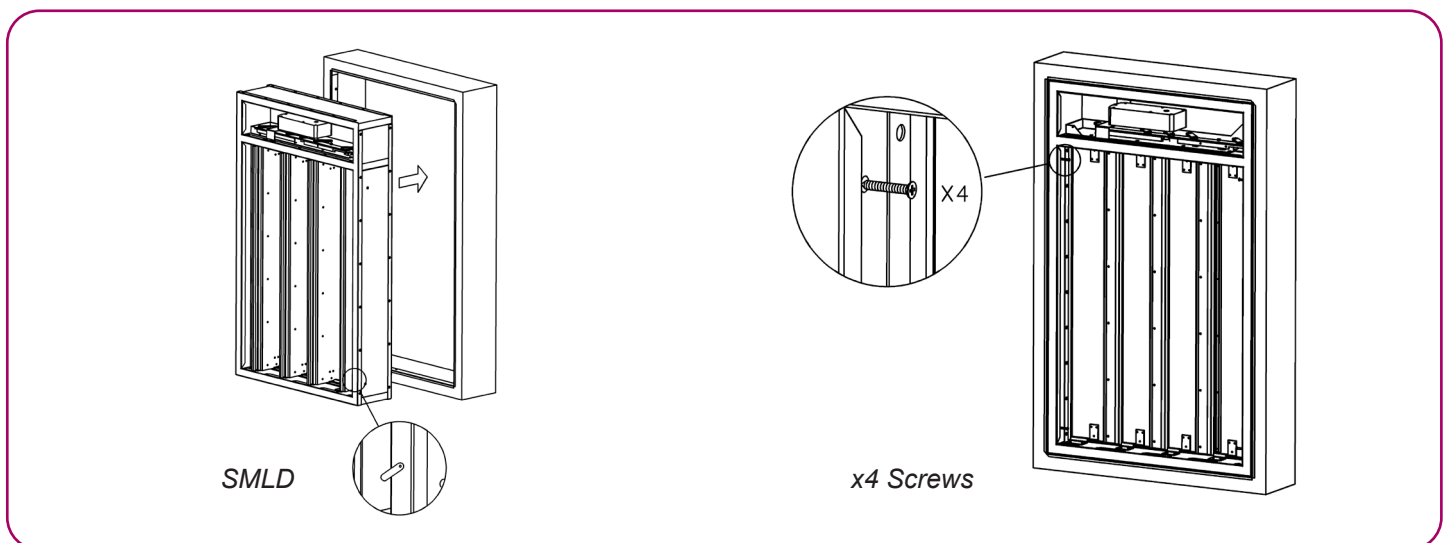
SMLD smoke evacuation damper Mounting instructions

FRAME MOUNTING



- Take care with frame perpendicularity before mounting.
- Attach the frame in the duct with the help of 4 screws supplied with the frame.
- Drill a hole to pass the connections to the duct.

SMLD MOUNTING

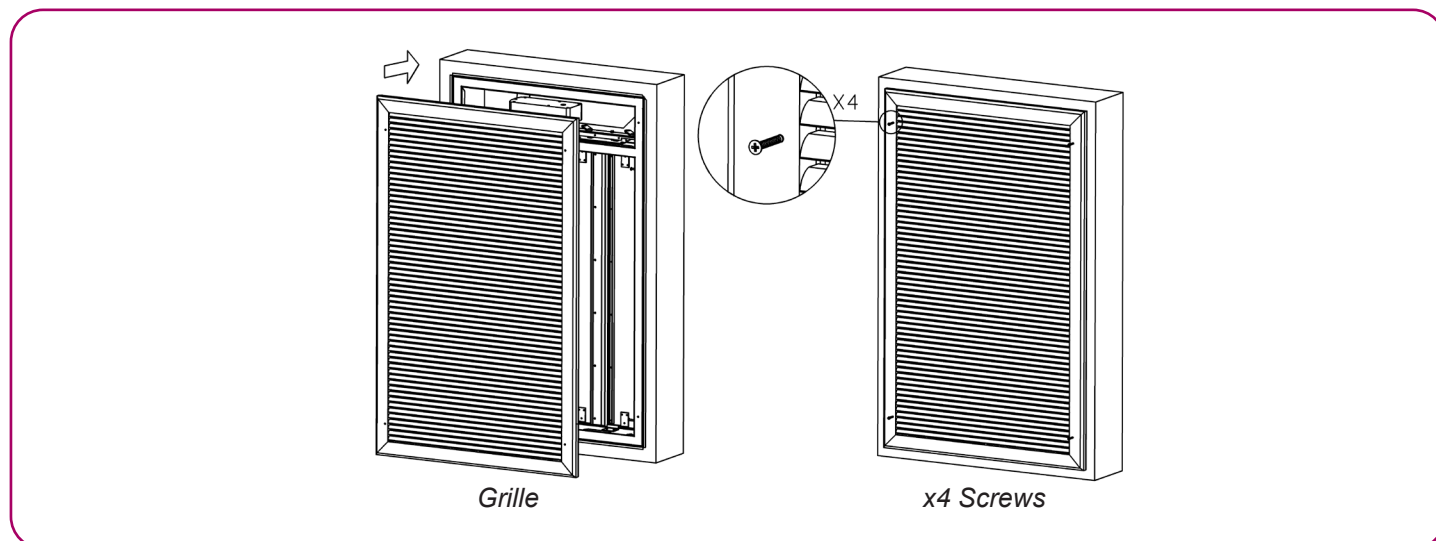


- Mount the damper in the mounting frame; the folding feet of the damper are used as stops.
- Attach the frame in the duct with the help of 4 screws supplied with the frame.
- Finish the mounting by filling all holes with intumescent mastic.

SMLD smoke evacuation damper

Mounting instructions

GRILLE MOUNTING



Because the damper is a safety component, it must be stored and handled with care.

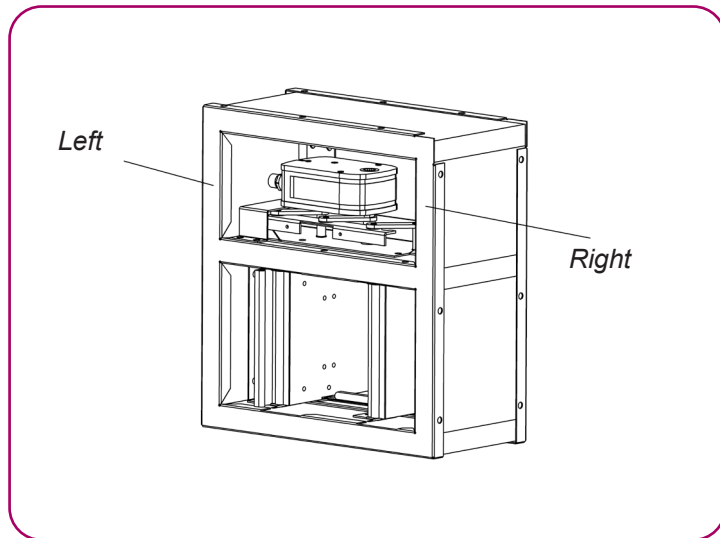
- Store in a place protected from moisture.
- Avoid deterioration.
- Avoid contact with water.
- Avoid damper body deformation during assembly and sealing
- Avoid damper blows and tilting during transport.

ACCESSORIES

- The use of a mounting frame is recommended
- A protection grille to preserve the firewall class of the damper; Koolair proposes its range of RPK grilles compatible with the SMLD damper.

SMLD smoke evacuation damper Mounting instructions

ELECTRICAL CONNECTIONS

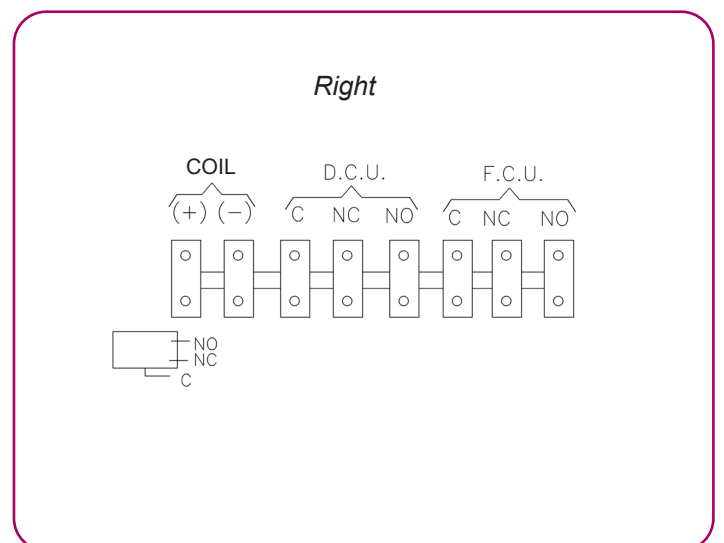
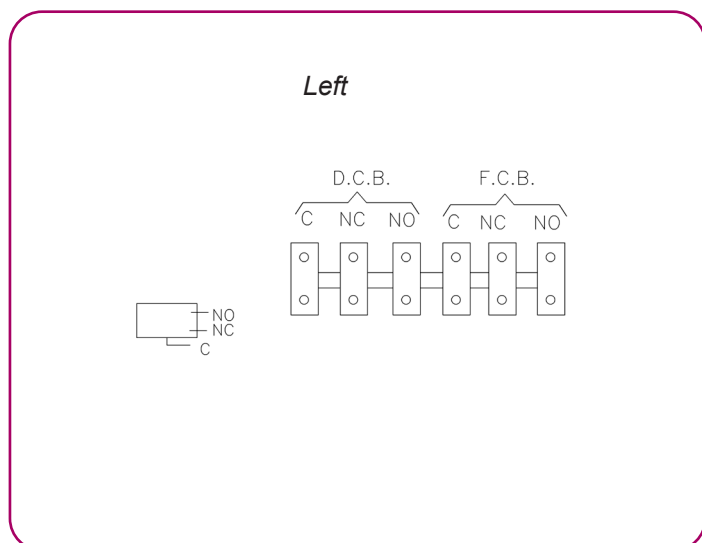


- FCU: single-pole safety position contact (end position)
- DCU: single-pole standby position contact (start position)
- FCB: two-pole safety position contact (end position)
- DCB: two-pole standby setting contact (start position)

Note: The micro-contacts are shown in their working position, closed damper slats (DC contact actuated and FC contact free)

- Remote-controlled version

The remote control and supply voltage for the position contact connections must be: SELV (24 or 48 V).



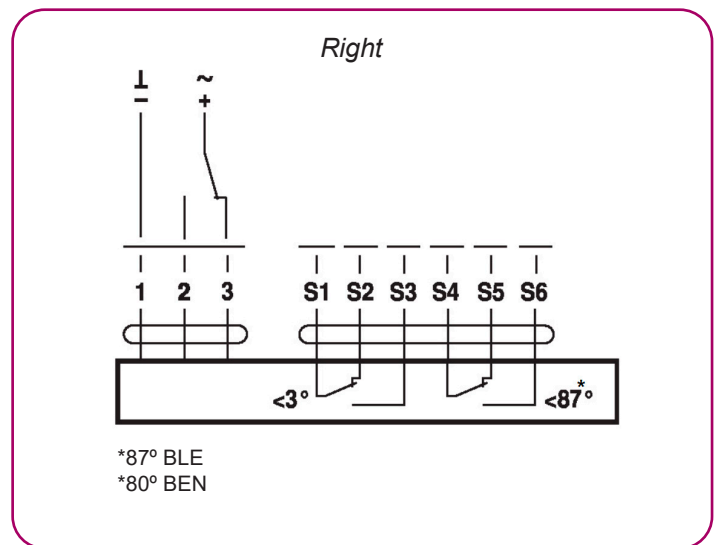
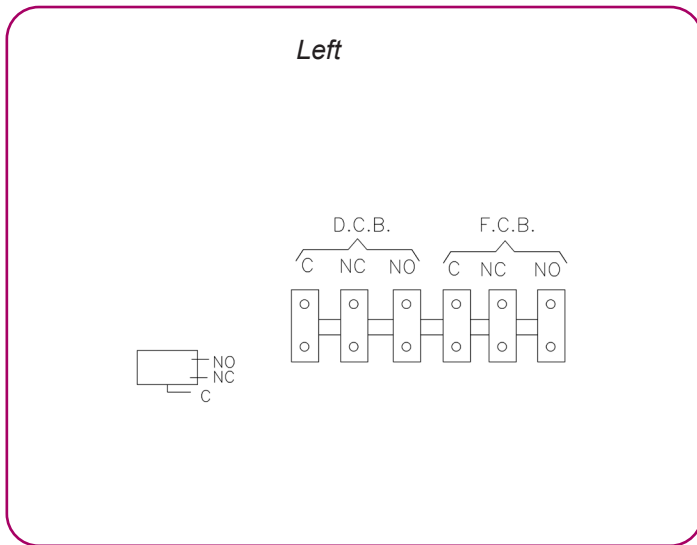
SMLD smoke evacuation damper

Mounting instructions

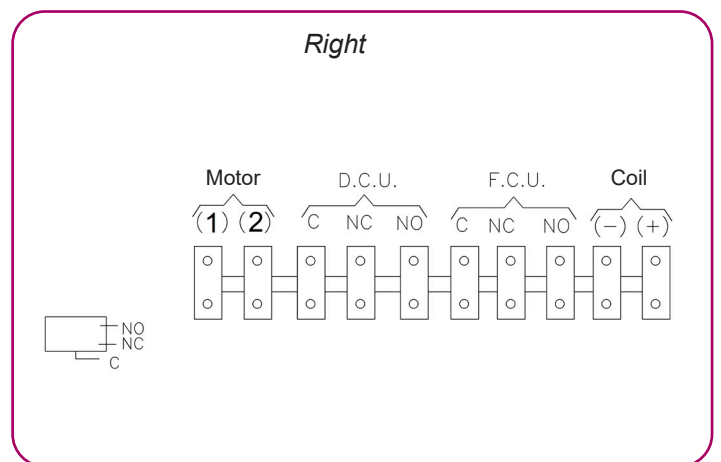
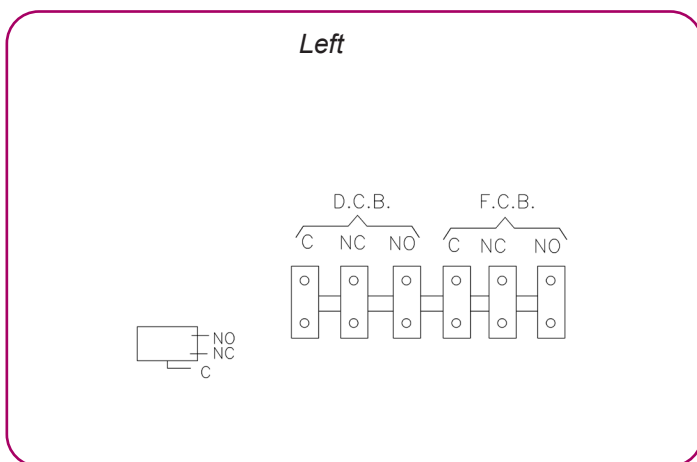
- Motor-driven version

Wiring for motorized version

- NOTE: The motor shall be powered by SEP (Safety Electrical Power).



- Remote-controlled version + motor



Cross sections and number of compatible electrical conductors

Activation	Certification	Number min.	Number max.	Section min.	Section max.
Remote-controlled version		8	14	0.50 mm ²	1.50 mm ²
Motor-driven version		9	15	0.75 mm ²	1.50 mm ²
Remote-controlled versión + motor		10	16	0.50 mm ²	1.50 mm ²

SMLD smoke evacuation damper

Mounting instructions

USER INSTRUCTIONS

It is recommended that dampers be installed in the frame previously sealed in the duct. During installation, the perpendicularity of the assembly must be maintained. The SMLD dampers must be installed vertically. During installation, the damper must be protected from the protrusion of sealing products and handled with care.

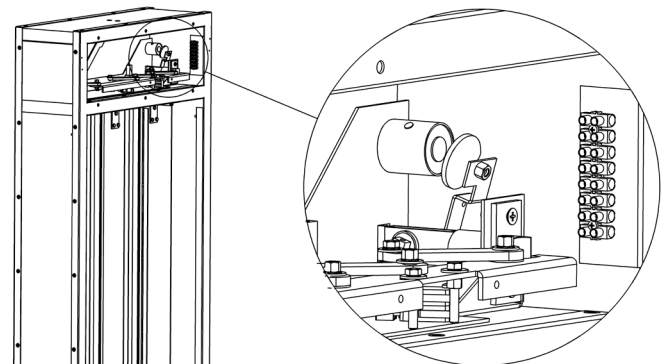
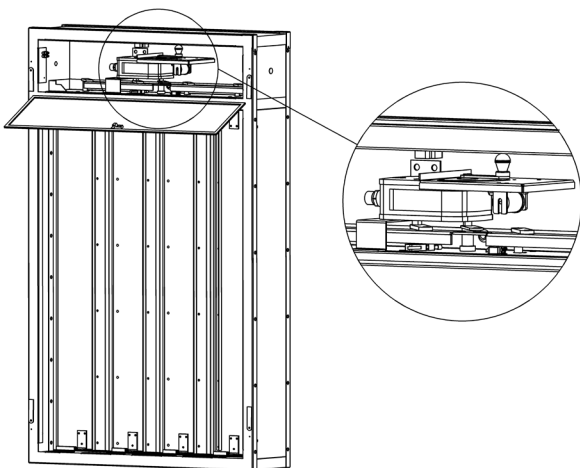
During commissioning of the installation, clean all dust and grime on the assembly to prevent risks of slat deterioration.

The electromagnetic coil is an extremely sensitive element of the mechanism. At commissioning, clean the damper (dust and other particles), in particular the coil.

The front part must have a protection grille to preserve the firewall class. Note: Any air direction (air removal and supply).

- Manual operation
 - Motor-driven version
 - Remote-controlled version

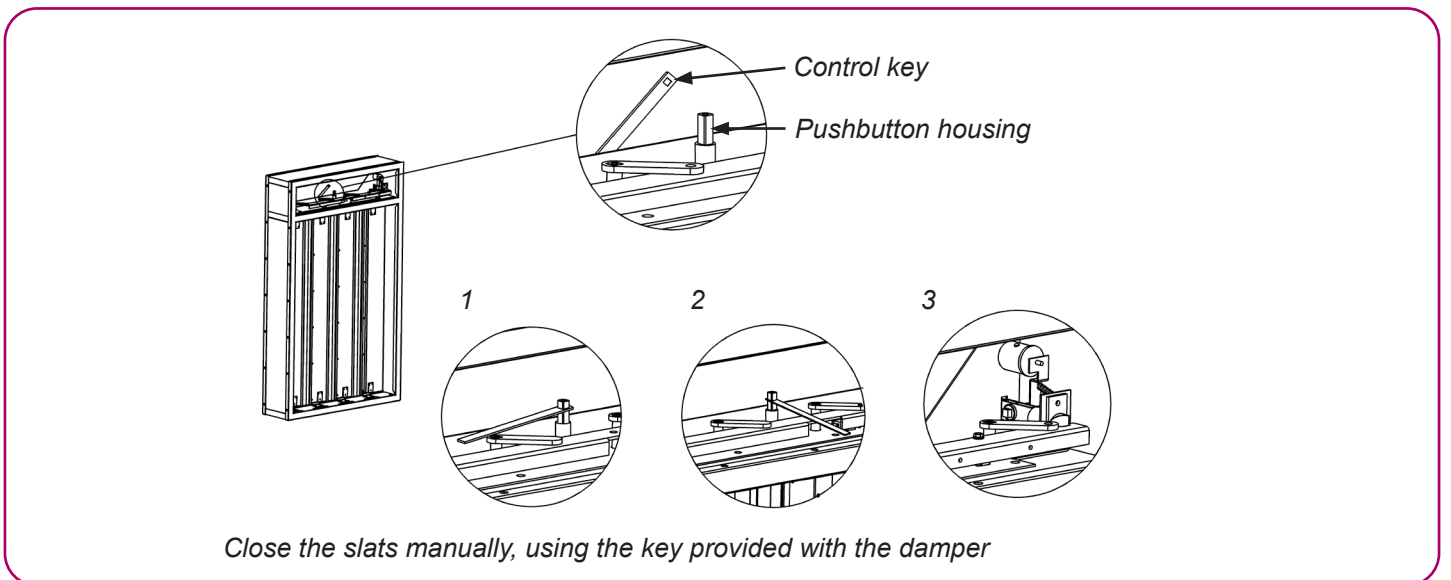
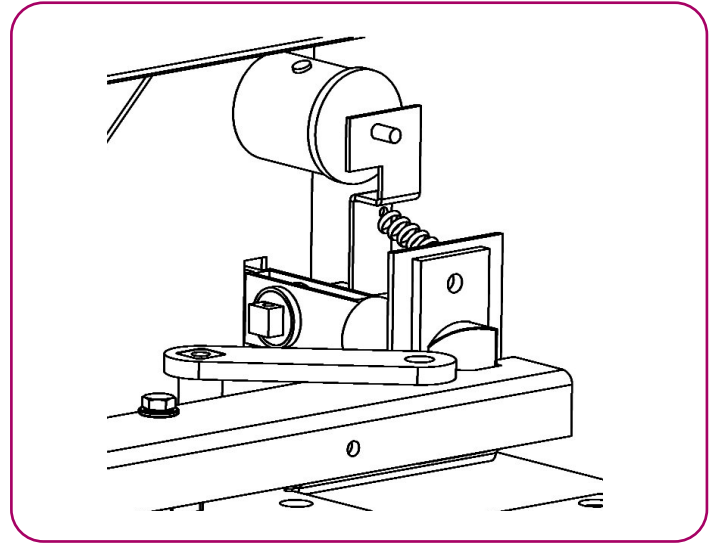
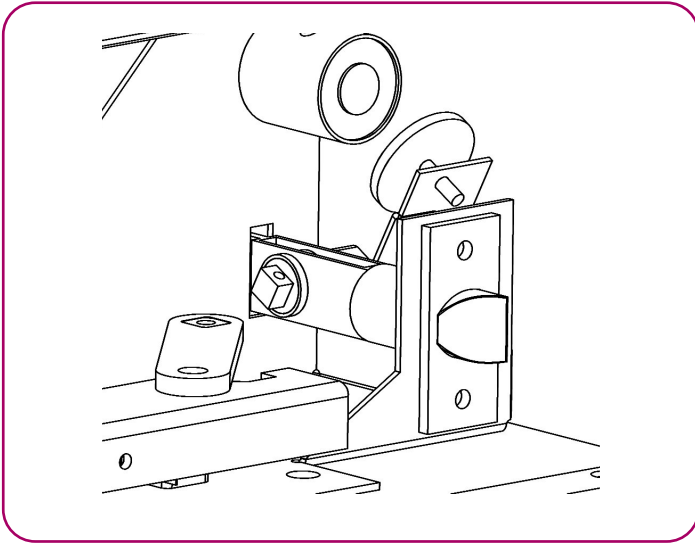
Pull to activate the mechanism



SMLD smoke evacuation damper

Mounting instructions

To reset the remote-controlled SMLD damper, proceed as shown in the following diagrams.



MAINTENANCE AND WARRANTY INSTRUCTIONS

No maintenance in particular.

Perform at least one operational test per year.

KOOLAIR shall be released from its liability in the event that the assembly, installation and electrical connections are not performed as set forth in this technical manual. In this case, the warranty is not ensured.

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KOOLAIR

KOOLAIR, S.A. (Spain)

Calle Urano, 26

Polig. Ind. nº 2 – La Fuensanta

28936 Móstoles (MADRID)

Tel: +34 91 645 00 33

Fax: +34 91 645 69 62

e-mail comercial: comercial@koolair.com

e-mail Koolair: info@koolair.com

www.koolair.com

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