MOTORISED DAMPERS FOR SMOKE CONTROL IN CASE OF FIRE

- DAMPER OPERATED BY ELECTRIC ACTUATOR
- HIGH AIR TIGHTNESS
- 600 °C FIRE TEST
- CE MARKING
- MINIMAL PRESSURE DROP

Approved according to standard EN 12101-8
Tested according to standard EN 1366-10

SODECA®

CE

APPROVED ACCORDING TO STANDARD EN 12101-8

MOTORISED SMOKE CONTROL DAMPERS

KEEP ESCAPE ROUTES SMOKE FREE

In the event of a fire, smoke and high-temperature gases are the greatest threat to people inside the building. Smoke reduces visibility and contains toxic components that reduce the evacuation possibilities of people, as well as making extinguishing tasks more difficult.

The installation of an adequate smoke extraction system ensures the safe evacuation of people in case of fire and reduces the chances of serious smoke contamination.

Fire safety features must ensure good performance and resistance to fire and high temperatures and prevent smoke leakage away from the source of the fire.

SODECA smoke dampers have passed the most rigorous fire tests at 600 ºC 2/h and comply with the requirements of the EN-12101-8 standard.

Sodeca offers three damper options for smoke control in case of fire:

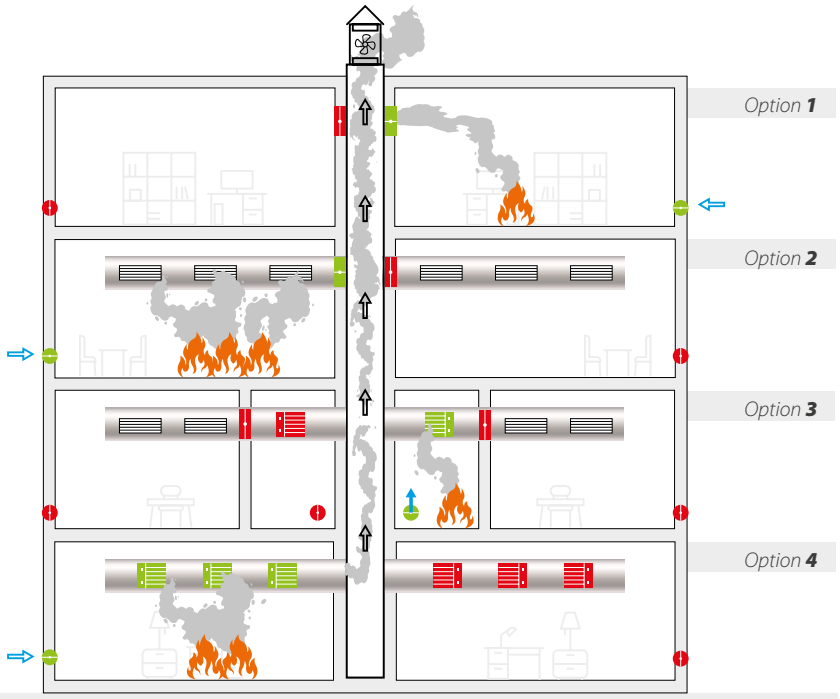
	SCDLM-MA	SCDLS-MA	SCDRS-MA
Multicompartment	X		
Single compartment		X	X
Circular			X
Rectangular	X	X	
Single leaf			X
Multileaf	X	X	
Change of damper position during fire (MA)	X	X	X
Damper operated by electric actuator	X	X	X
Cycle test C 10,000 according to EN 12101-8	X	X	X

The three damper options have 4 different operating mechanisms:

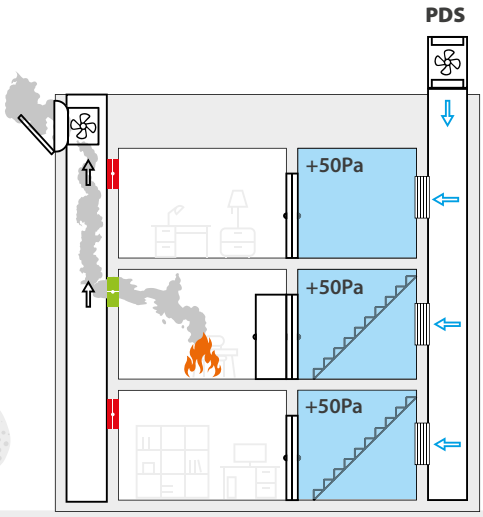
1. Belimo 230 V actuator with two positions: open or closed.
2. Belimo 24 V actuator with two positions: open or closed.
3. Belimo 24 V actuator adjustable by 0-10 V signal.
4. Design with Belimo BKNE 230 V - 24 V communication and power supply device and BEN 24 - ST actuator.

APPLICATIONS

Smoke exhaust system



Pressurisation system for stairs, halls and evacuation routes, complemented by smoke exhaust system



Smoke exhaust fans

Closed smoke damper

Opened smoke damper

Closed air inlet damper

Opened air inlet damper

Duct with grill

Air inlet

SMOKE EXTRACTION DAMPERS
MULTI-COMPARTMENT

Multi-compartment dampers allow the smoke and fire to be confined to the sector where the ignition has occurred, preventing it from spreading to other sectors.

In the event of a fire, the smoke extraction dampers of the affected sector are opened to evacuate the smoke. At the same time, the air supply dampers in the fire area are activated together with the smoke extraction fan.

The rest of the dampers in the building remain closed to prevent the fire and smoke from spreading to unaffected areas.

CONTROL
The dampers are controlled from the central fire detection control system and can be fully opened, closed or regulated. The use of fire resistant cables ensures that the actuator is powered even during a fire.

Multi-compartment smoke extraction dampers are classified as follows:

Construction support	Classification
In a solid wall construction and on duct in a solid wall construction, th. 100 mm	**EI 90 (V_{edw} - i ↔ o) S1000C_{mod}HOT 400/30MAmulti**
For duct in a solid wall construction, th. 100 mm	**EI 120 (V_{ed} - i ↔ o) S1000C_{mod}HOT 400/30MAmulti**
In gypsum wall construction and on the duct in gypsum wall construction, th. 100 mm	**EI 120 (V_{edw} - i ↔ o) S1000C_{mod}HOT 400/30MAmulti**

SCDLM-MA

Multi-compartment smoke control dampers with manual and automatic activation

Features:
- Rectangular fire damper from 200 x 430 mm to 1200 x 2030 mm.
- CE-certified according to EN 12101-8.
- 250 mm wide damper.
- Tested according to EN 1366-10.
- Classified according to EN 13501-4+A1 as EIS 120, with AA/MA positioning for Multi-compartment fire protection.
- Cycle test class Cmod according to EN 12101-8.
- External housing leakage Class C, internal leakage Class 3 according to EN 1751.
- Damper actuation via 24 V or 230 V electric actuator.
- Designed for systems with automatic or manual activation.
- Recommended maximum velocity 12m/s, allowable pressure up to 500 Pa, or vacuum up to -1000 Pa
- The damper can be supplied with or without flanges.
- The dampers are only suitable for vertical installation with the blade axis in a horizontal position.
- Working temperature: -30 ºC +50 ºC.

SMOKE EXTRACTION DAMPERS
SINGLE COMPARTMENT

Single compartment smoke exhaust dampers are designed for smoke exhaust from buildings with a single fire section. In an emergency, the smoke exhaust system opens the damper in the affected section and exhausts the smoke and heat from this section.

Single compartment smoke control dampers are classified as follows:

E_{600} 120 (v_e - i ⟷ o) S1500C_{mod}MAsingle

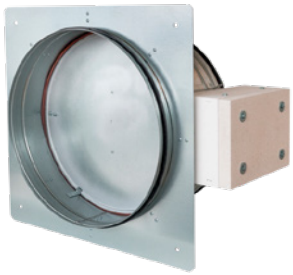
SCDLS-MA

Single compartment smoke control dampers with manual and automatic operation

Features:
- Rectangular gate from 200 x 200 mm to 1200 x 1200 mm.
- CE certified according to EN 12101-8.
- Tested according to EN 1366-10.
- Cycle test in class Cmod according to EN 12101-8.
- Actuation of the damper by means of a 24 V or 230 V electric actuator.
- External casing leakage Class B, internal leakage Class 3 according to EN 1751.
- For vertical or horizontal installation.
- Classified according to EN 13501-4+A1 as EIS 120/600, acting MA or AA in single compartment.
- Maximum recommended velocity 12 m/s, allowable pressure up to 500 Pa, depression up to -1500 Pa.
- Gate width 250 mm.
- Designed for systems with automatic or manual activation.
- The damper is supplied with flanges.
- Working temperature: -30 ºC +50 ºC.

SCDRS-MA

Single compartment circular smoke control dampers with manual or automatic operation



Features:
- Circular damper from ø 100 to 630 mm.
- CE certified according to EN 12101-8.
- Tested according to EN 1366-10.
- Classified according to EN 13501-4+A1 as EIS 120/600, acting MA or AA in single compartment.
- External enclosure leakage Class C, internal leakage Class 4.
- Cycle test class Cmod according to EN 12101-8.
- Damper actuation by 24 V or 230 V electric actuator.
- Recommended maximum speed 15 m/s, permissible pressure up to 500 Pa, or vacuum up to -1500 Pa.
- Designed for systems with automatic or manual activation.
- Working temperature: -30 ºC +50 ºC.

SODECA offers a wide range of solutions for fire safety and together with the smoke control dampers maximise safety in case of fire.

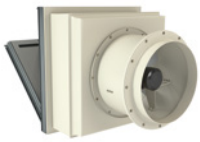
SMOKE EXHAUST FANS

THT

400°C/2h and 300°C/2h tubular axial extract fans with short casings

THT/CL

400 °C/2h and 300 °C/2h tubular axial extractor fans with long casing and external terminal boxes



THT/WALL

Dynamic wall mounted extractor fans with motorised hatch, for smoke exhaust in case of fires, 400 °C/2h and 300 °C/2h

THT/WALL-F

Dynamic wall mounted extractor fans with motorised hatch, for smoke exhaust in case of fires, 400 °C/2h and 300 °C/2h

THT/HATCH

400°C/2h and 300°C/2h rated dynamic discharge system with motorised opening function, fitted with roof mounted extractor, for smoke exhaust in the event of fire

CJTHT/PLUS

400 °C/2h and 300 °C/2h axial exhaust fan units with built-in acoustic attenuator

CJTHT

400 °C/2h and 300 °C/2h axial fans with acoustically insulated box

CJTHT/ATEX

400 °C/2h and 300 °C/2h axial exhaust units with ATEX certification

TCR

400 °C/2h and 300 °C/2h centrifugal extractor fans with backward curved impeller

CJS

400 °C/2h and 300 °C/2h extractor fan units with interchangeable covers

CJMD

400 °C/2h and 300 °C/2h extractor fan units with linear inlet and outlet

HTMF

400 °C/2h (F400) and 300 °C/2h (F300) roof mounted multifunctional extract fans

THT/ROOF

400 °C/2h and 300 °C/2h roof mounted axial extract fans with vertical air outlets

CJBDT

Extract units with direct drive, to work inside the fire zone 400 °C/2h and 300 °C/2h

CBDT

Double inlet centrifugal fans, direct drive, to work inside the fire zone 400 °C/2h and 300 °C/2h

PRESSURISATION SYSTEMS FOR STAIRCASES, LOBBIES AND ESCAPE ROUTES

KIT SOBREPRESIÓN

Pressurisation system for stairs or evacuation routes. Maintains a differential pressure of 50 Pa in a single stage, designed according to the European standard EN 12101-6

KIT BOXPRES PLUS

Pressurisation system for stairs or evacuation routes. Maintains a differential pressure of 50 Pa in a single stage, designed according to the European standard EN 12101-6

PRESSKIT

Pressurisation equipment for lobbies, compliant with DM 30/11/1983 and designed according to the European standard EN 12101-6

BOXPRES PLUS

Control panel for a fan

BOXPRES PLUS II

Control panel with standby fan

KIT BOXSMART

Pressurisation system for stairs or evacuation routes. Maintains a differential pressure of 50 Pa in a single stage, designed according to the European standard EN 12101-6

KIT BOXSMART EC

Pressurisation system for stairs or evacuation routes. Maintains a differential pressure of 50 Pa in a single stage, designed according to the European standard EN 12101-6

KIT BOXSMART FLAP

Pressurisation system for stairs or evacuation routes. Maintains a differential pressure of 50 Pa in a single stage, designed according to the European standard EN 12101-6

BOXSMART

Control panel for a fan

BOXSMART II

Control panel with standby fan

KIT BOXPDS

Pressurisation equipment for evacuation routes, designed according to the European standard EN 12101-6

KIT BOXPDS II

Pressurisation equipment for evacuation routes with standby fan, designed according to the European standard EN 12101-6

HATCH PDS

Equipment for pressurizing evacuation routes in the event of fire, designed according to the European standard EN 12101-6

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SODECA

HEADQUARTER

Sodeca, S.L.U.
Pol. Ind. La Barricona
Carrer del Metall, 2
E-17500 Ripoll
Girona, SPAIN
Tel. +34 93 852 91 11
Fax: +34 93 852 90 42
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com

PRODUCTION PLANT

Sodeca, S.L.U.
Ctra. de Berga, km 0,7
E-08580 Sant Quirze de Besora
Barcelona, SPAIN
Tel. +34 93 852 91 11
Fax: +34 93 852 90 42
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com

SODECA Group

EUROPE

FINLAND
Sodeca Finland, Oy
HUITTINEN
Sales and Warehouse
Mr. Kai Yli-Sipilä
Metsälinnankatu 26
FI-32700 Huittinen
Tel. + 358 400 320 125
orders.finland@sodeca.com

HELSINKI
Smoke Control Solutions
Mr. Antti Kontkanen
Vilppulantie 9C
FI-00700 Helsinki
Tel. +358 400 237 434
akontkanen@sodeca.com

HYVINKÄÄ
Smoke extraction and industrial applications
Niinistönkatu 12
FI-05800 Hyvinkää
Mr. Jaakko Tomperi
Tel. +358 451 651 333
jtomperi@sodeca.com
Mrs. Kaisa Partanen
Tel. +358 451 308 038
kpartanen@sodeca.com

ITALIA
Marelli Ventilazione, S.R.L.
Viale del Lavoro, 28
37036 San Martino B.A.
(VR), ITALY
Tel. +39 045 87 80 140
vendite@sodeca.com

PORTUGAL
Sodeca Portugal, Unip. Lda.
PORTO
Rua Veloso Salgado
1120/1138
4450-801 Leça de Palmeira
Tel. +351 229 991 100
geral@sodeca.pt

LISBOA
Pq. Emp. da Granja Pav. 29
2625-607 Vialonga
Tel. +351 219 748 491
geral@sodeca.pt

ALGARVE
Rua da Alegria, 33
8200-569 Ferreiras
Tel. +351 289 092 586
geral@sodeca.pt

UNITED KINGDOM
Sodeca Fans UK, Ltd.
Mr. Mark Newcombe
Tamworth Enterprise Centre
Philip Dix House, Corporation
Street, Tamworth, B79 7DN
UNITED KINGDOM
Tel. +44 (0) 1827 216 109
sales@sodeca.co.uk

AMERICA

CHILE
Sodeca Ventiladores, SpA.
Sra. Sofía Ormazábal
Santa Bernardita 12.005
(Esquina con Puerta Sur)
Bodegas 24 a 26,
San Bernado, Santiago,
CHILE
Tel. +56 22 840 5582
ventas.chile@sodeca.com

COLOMBIA
Sodeca Latam, S.A.S.
Sra. Luisa Stella Prieto
Calle7 No. 13 A-44
Manzana 4 Lote1, Montana
Mosquera, Cundinamarca
Bogotá, COLOMBIA
Tel. +57 1 756 4213
ventascolombia@sodeca.co

PERU
Sodeca Perú, S.A.C.
Sr. Jose Luis Jiménez
C/ Mariscal Jose Luis de
Orbegoso 331. Urb. El pino.
15022, San Luis. Lima, PERÚ
Tel. +51 1 326 24 24
Cel. +51 994671594
comercial@sodeca.pe

ISO 9001 BUREAU VERITAS Certification

www.sodeca.com