

Halton Sec Compact Rectangular (SCS) – Smoke control damper (MAsingle, AAsingle)



Overview

- CE marked according to the product standard EN 12101-8:2011
- Fire resistance class
 - E600 120(h_{odw}-i↔o) S 1500C10000 AAsingle
 - E600 120(h_{odw}-i↔o) S 1500C10000 MAsingle
 - E600 120 (v_{ew}-i↔o) S 1500C10000 AAsingle
 - E600 120 (v_{ew}-i↔o) S 1500C10000 MAsingle
- Certificate of constancy of performance 0809-CPR-1018
- Classification of casing leakage EN 1751 class C
- Manufacturing in accordance with the ISO 9001 quality standard.
- Third party certification product audit by VTT, the Technical Research Centre of Finland.
- Suitability for use in smoke extraction ducts with a maximum of 1500 Pa under pressure
- Suitability for use in ducts with a maximum air speed of 15 m/s.
- Suitability for rectangular smoke extraction ducts from size 200 mm x 200 mm to 1250 mm x 1000 mm.

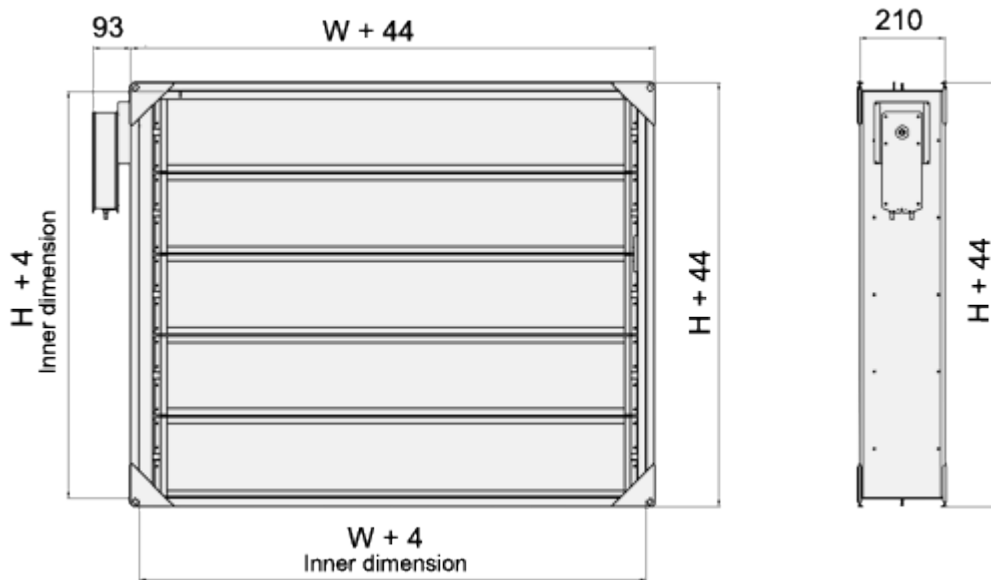
Product models and accessories

- Suitable for the automatically activated fire alarm systems (AA)
- Suitable for the manual activated fire alarm systems (MA)
- Models equipped with electric actuator (no fuse, no spring return)
- Actuator with a visual position indicator
- Circular duct connections

- Modular damper casing extension for optional protecting mesh (L+210 mm)
- Model with stainless steel AISI 316 material also available

Dimensions

Rectangular connections (R)

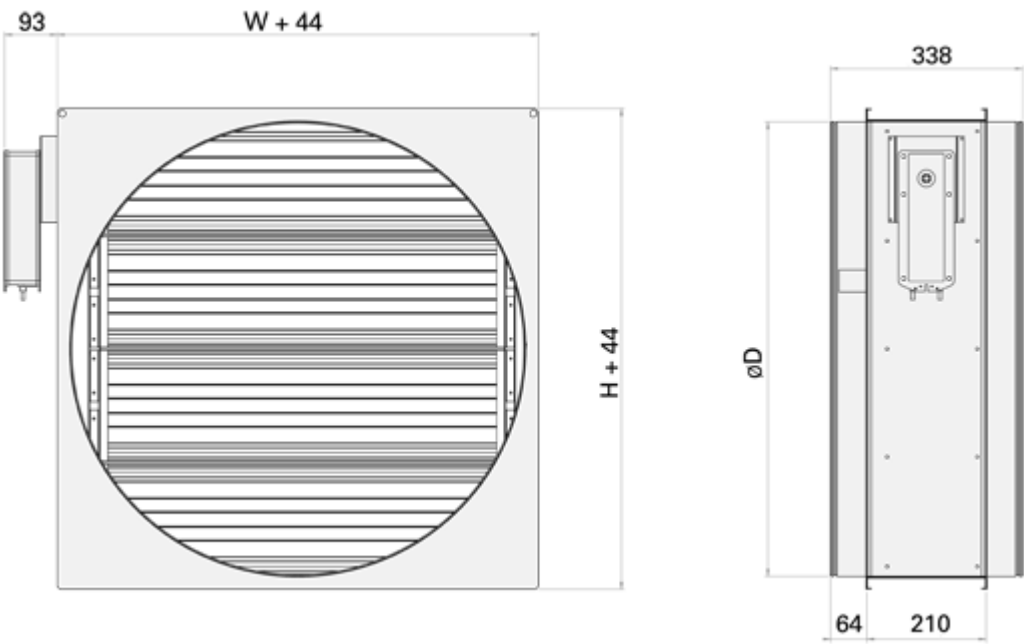


H/W	200-1000	1050	1100	1150	1200	1250
200	B	H	H	H	H	H
300	B	H	H	H	H	H
350	B	H	H	H	H	H
400	B	H	H	H	H	H
450	B	H	H	H	H	H
500	B	H	H	H	H	H
550	B	H	H	H	H	H
600	B	H	H	H	H	H
650	B	H	H	H	H	H
700	B	H	H	H	H	H
750	B	H	H	H	H	H
800	B	H	H	H	H	H
850	B	H	H	H	H	H
900	B	H	H	H	H	H
950	B	H	H	H	H	H
1000	B	H	H	H	H	H

B Both horizontal and vertical blade direction allowed

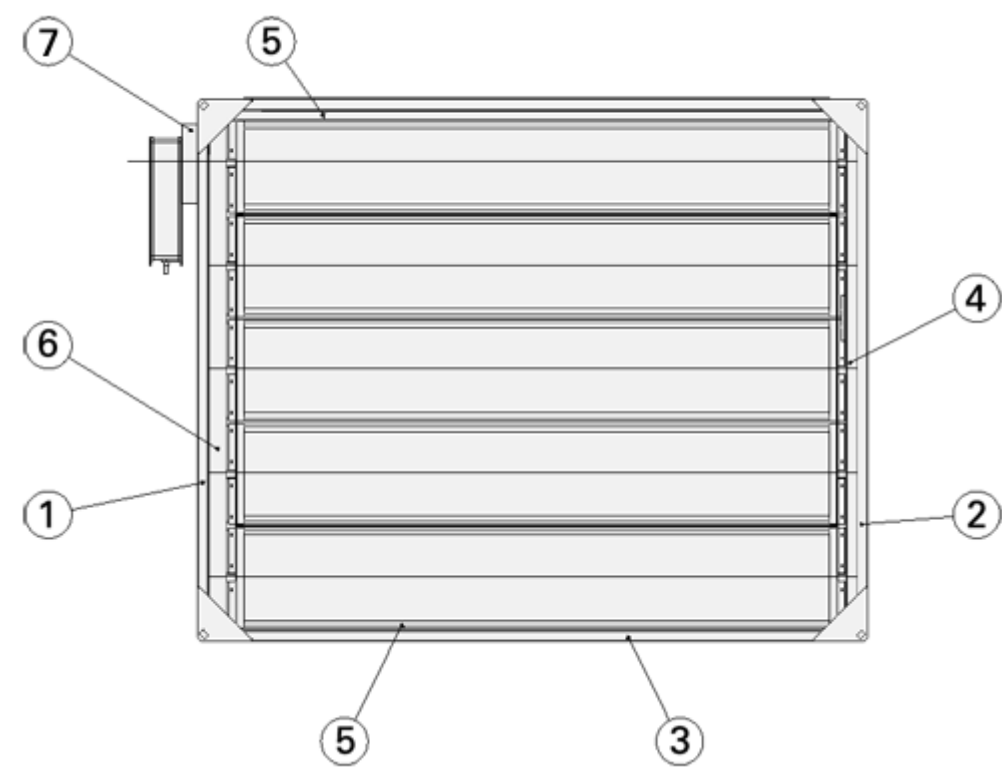
H Horizontal blade direction only

Circular connections (C)



$\varnothing D$	W x H
100	200×200
125	200×200
160	200×200
200	200×200
250	300×300
315	300×300
400	400×400
500	500×500
630	600×600
800	800×800
1000	1000×1000

Material



Number	Part	Material	Note
1, 2, 3	Casing	Galvanised steel	Stainless steel (EN 1.4404 / AISI 316L) available
4	Blade stopper	Stainless steel (AISI 316)	
5	Support beam, W sides	Galvanised steel	Stainless steel (EN 1.4404 / AISI 316L) available
6	Bearing list, form actuator side	Galvanised steel	Stainless steel (EN 1.4404 / AISI 316L) available
7	Actuator mounting bridge	Galvanised steel	Stainless steel (EN 1.4404 / AISI 316L) available

Accessories and actuators

Accessory	Code	Description
Damper casing extension	CE	Length 210 mm, for structural thickness >200 mm
E600 120 (h _{odw} -i↔o) S 1500C ₁₀₀₀₀ AAsingle E600 120 (v _{ew} -i↔o) S 1500C ₁₀₀₀₀ AAsingle	A	Non insulated actuator
E600 120 (h _{odw})-i↔o) S 1500C ₁₀₀₀₀ MAsingle E600 120 (v _{ew} -i↔o) S 1500C ₁₀₀₀₀ MAsingle	M	Actuator with heat insulated box

Electric actuator options

Actuators do not have a fuse and are equipped with a limit switch.

- R1 BLE24 HL, operating voltage AC/DC 24 V, 15 Nm (H or W < 400 mm)
- R2 BLE230 HL, operating voltage AC 230 V, 15 Nm (H or W < 400 mm)
- R3 BE24 HL, operating voltage AC/DC 24 V, 40 Nm
- R4 BE230 HL, operating voltage AC 230 V, 40 Nm

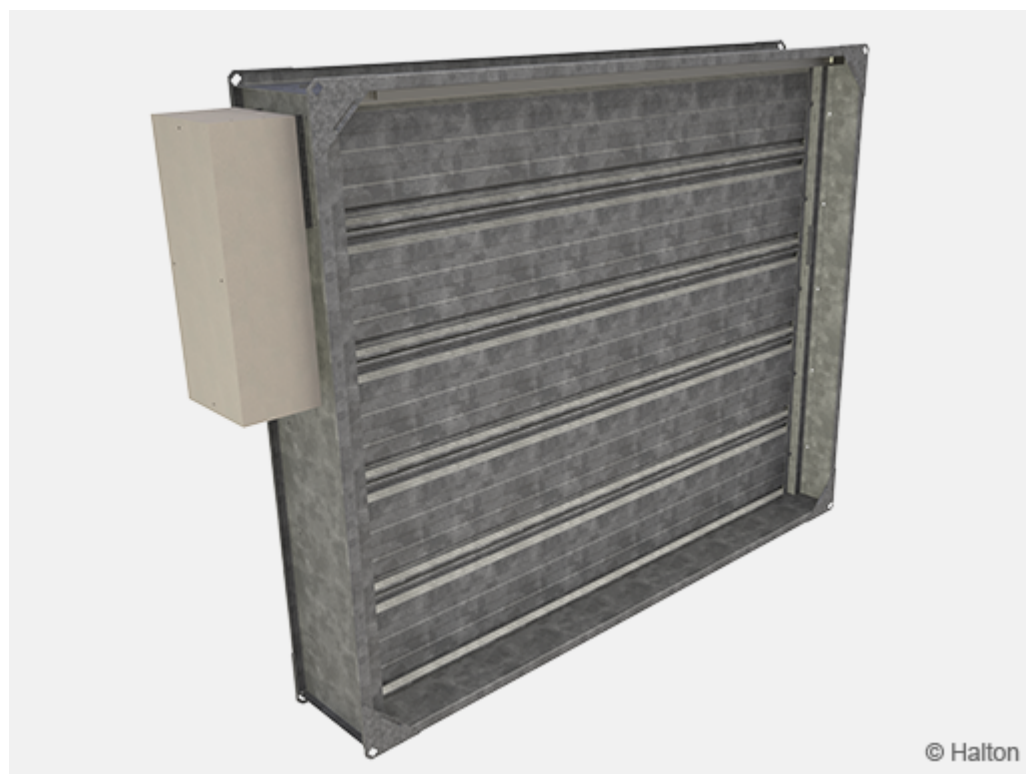


Fig.1. Halton SCS, model M = Actuator with insulated box, for manual activation system.

Function

The Halton Sec Compact Rectangular a motorised rectangular smoke control damper that allows

smoke to be extracted from the single compartment space by dedicated smoke extraction system.

The smoke damper is made of fireproof materials with incombustible glass fiber blade gaskets. They are preventing the air to infiltrate the extraction ducts to collect smoke from closed dampers.

The Halton Sec Compact Rectangular smoke control damper shall be connected to the control and testing system delivered by Halton or to common building automation systems. The smoke control damper can be used in fully automatic (SCS/A) or manual activation (SCS/M) systems.

In case of fire sequence of operation is important, smoke extract fans should not be started before the smoke control dampers are opened.

Installation

Smoke control damper Halton Sec Compact Rectangular can be installed on the certified single compartment ducts. Damper can be also installed on the wall or floor surface. The blade direction may be either horizontal or vertical.

The correct operation of the smoke control damper must be ensured before and after installation.

After fixing the smoke control damper check the diagonal dimension.
The damper should be cleaned after installation.

Detailed installation instructions, as well as an installer's installation certificate form, are supplied with each product.

See also the section Documents for detailed installation guidance.

Installation on the single compartment duct

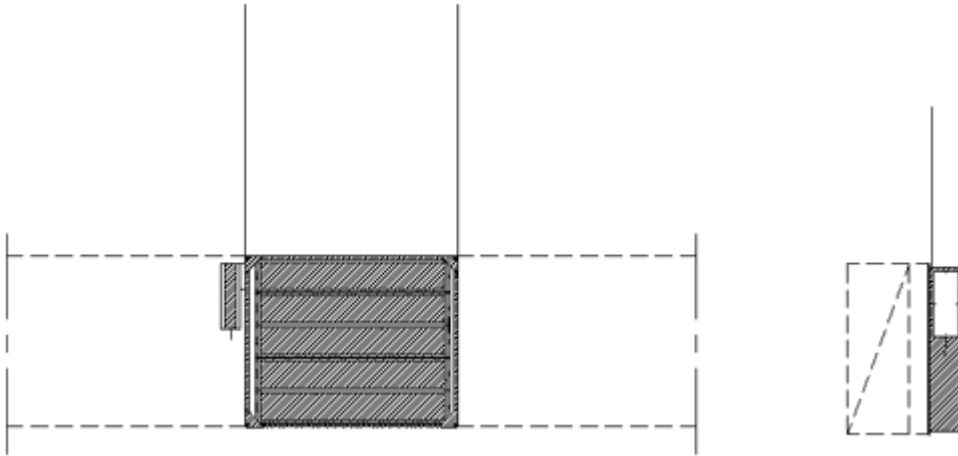
All dampers are delivered with an installation flange, which is used to fasten the fire damper with screws to the surface of steel duct or to a connection.

The gap between the damper and the supporting structure is filled with fireproof seal rock wool or firestop mastic, after fixing of the damper.

When Halton Sec Compact Rectangular is used as manual activated (MA) smoke control damper, connect the connection cables for electrical actuator inside of heat insulated box. Use nonflammable cables

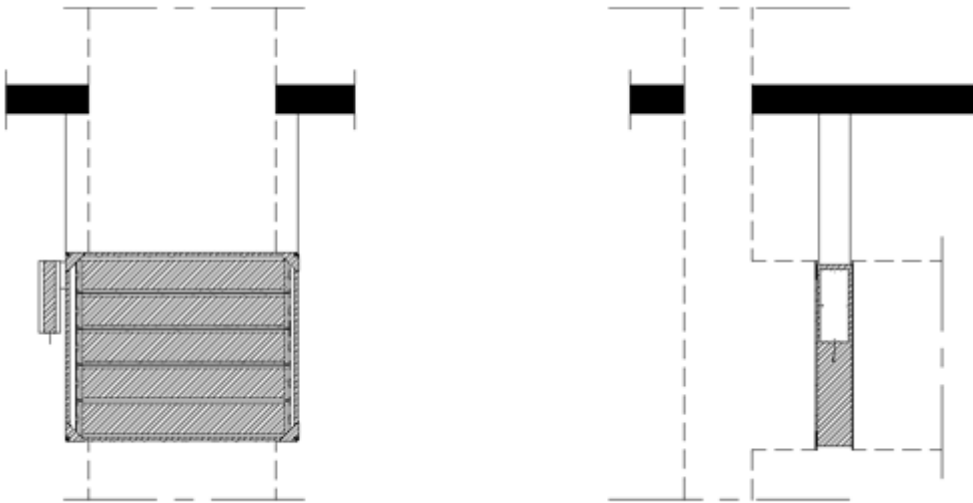
Use M10 threaded rod for supporting the smoke control damper. See drawings below.

Installed to side of horizontal duct

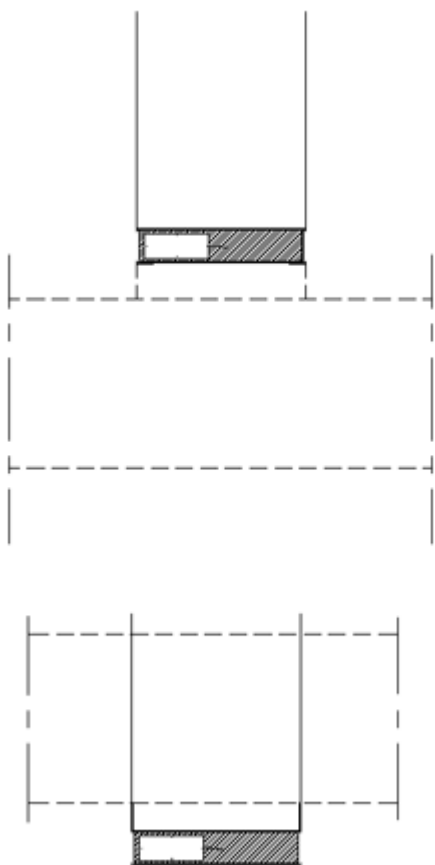


Installed to side of vertical duct

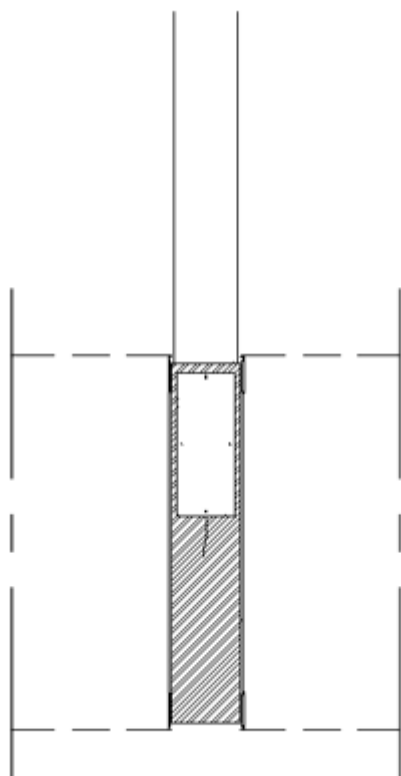
Note! Need to use CE marked smoke ducts.



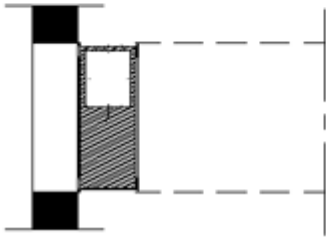
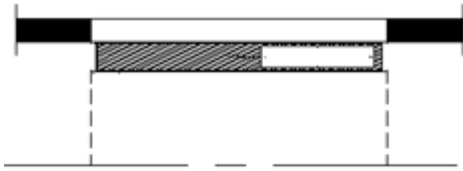
Installed on the top and bottom of duct



Installed in the horizontal duct



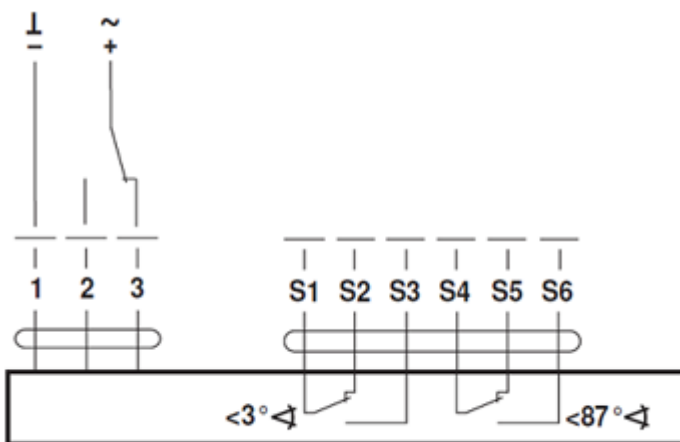
Installed on the wall or floor surface



Electric actuator wiring diagram

Diagram below is used for actuators:

R1	BLE24 HL	R3	BE24 HL
R2	BLE230 HL	R4	BE230 HL



Servicing

No regular maintenance is required for the product.

Regular testing with the separate testing system is recommended twice a year. Upon failure during testing of the smoke damper, a Halton representative shall be connected to ensure appropriate operation of the product.

Specification

Multi-blade-type single zone smoke control damper Halton Sec Compact Rectangular for rectangular and circular ducts with electric actuator and position indicator.

Damper has to fulfill the requirements from harmonized product standard EN 12101-8 and tested according to demands in standard EN 1366-10 and be labeled with CE Mark.

Damper has to be classified as:

E600 120(h_{odw}-i↔o) S 1500C₁₀₀₀₀ AAsingle

E600 120(h_{odw}-i↔o) S 1500C₁₀₀₀₀ MAsingle

E600 120 (v_{ew}-i↔o) S 1500C₁₀₀₀₀ AAsingle

E600 120 (v_{ew}-i↔o) S 1500C₁₀₀₀₀ MAsingle

The casing and blades of the smoke control damper shall be made of galvanised or stainless steel and the blade gaskets made of incombustible material.

The smoke control damper shall be installed horizontal and vertical position, CE marked, single compartment duct with incombustible sealing mass to ensure tightness of the connection

Order code

SCS-W-H; CM-MA-CT-SF-RE-AC-ZT

S = Type of connection

R Rectangular

C Circular

D = Connection size (if circular connection)

100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1000

W = Width (if rectangular connection)

200, +50, ..., 1250

H = Height (if rectangular connection)

200, 300, +50, ..., 1000

Other options and accessories

CM = Model

A Actuator without heat insulated box (for automatic activation system)

M Actuator with heat insulated box (for manual activation system)

MA = Material

CS Galvanised Steel

AS Stainless steel (EN 1.4404/AISI 316L)

CT = Type of circular connection

D2 Circular connections on both sides

D1 Circular connection only on actuator side

SF = Flange option

NA Standard

L1 Standard + flange connection

L2 Flange connection on both sides

R2 Flange connection with holes

RE = Release type

R1 BLE24 HL (no fuse), 15 Nm (H or W < 400 mm)

R2 BLE230 HL (no fuse, 15 Nm (H or W < 400 mm)

R3 BE24 HL (no fuse), 40 Nm

R4 BE230 HL (no fuse), 40 Nm

AC = Accessories

CE Casing extension of 210 mm, for structural thickness > 200mm

ZT = Tailored product

N No

Y Yes (ETO)

Code example

SCS/R-200-200 , CM=A, MA=CS, CT=D2, SF=NA, RE=B3, AC=NA, ZT=N