ESAS

- Smoke valves
- Rectangular
- Galvanized steel

Motorized smoke control dampers type ESAS

Rectangular smoke control damper ESAS is specially designed to use in single fire compartment applications as a closing or as an opening damper for smoke extract purposes. ESAS is fulfilling the european product standard **EN12101-8** requirements for single compartment applications and it is CE marked. The product has been tested according to EN 1366-10 fulfilling fireclass E 120 with pressure class 500 Pa and temperature class 600 °C. ESAS dampers are suitable both for automatically by a fire alarm activated systems (AA) and manually, after the fire has started, by fire fighter acated systems (MA), 25 min open / close. ESAS smoke control damper is designed so, that opening or closing can be made even 25 minutes after the fire has started, in 600 °C. Factory mounted electrical actuator is placed inside fireresistant calcium-silicate box.

Application

- ESAS has been designed to use in single fire compartment applications as a closing or as an opening damper for smoke extract purposes.

Material

- Galvanized steel frame and damper blades
- Damper blades of ESAS are insulated with stone wool insulation
- Smoke control damper ESAS is always delivered with factory mounted electrical actuator 24 V or 230 V placed inside calcium-silicate box.

Composition

- Galvanized steel frame and damper blades
- Standard delivered with Flange joint of 32 mm, slip joint of 230 mm available upon request
- Insulated damper blades with stone wool insulation
- Smoke control damper ESAS is always delivered with factory mounted electrical actuator 24 V or 230 V inside calcium-silicate box
- Smoke control damper has two safety positions open or closed
- Smoke control damper is activated to transfer to safety position automatically by smoke detection or manually by switch used by fire fighters
- Electrical actuator has 2 free auxiliary switches for open / close position indication

Mounting

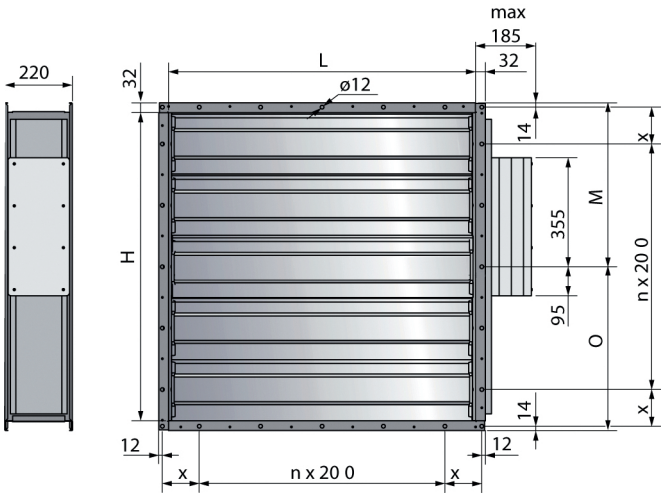
- Installation instructions (see download area) has to be followed to be able to fulfill fire classification.
- The duct outlet must be placed so that the smoke extraction damper is protected from water coming from outside as well as ice and snow that could hinder the opening of the damper
- The ductwork section between the smoke extraction damper and duct outlet must be designed and insulated so that the fire resistance and tightness requirements are met
- Also take account of possible condensation
- By design phase and installation work it is very important to notice, that all cable system with connection boxes has to be done by fire resistant products. Electrical actuator changes the damper position from open or close with transfer time not more than 60 s. If the electricity is cut off, damper blade will remain in its position
- Flow direction has no affect to the function of the damper

Accessories

- ESAS dampers are standardly delivered with flange joint of 32 mm. Upon request also a slip joint of 20 mm is possible
- Smoke dampers can be equipped with circular connection on both sides of the damper
- Protection grid FNR can be supplied on the damper

Text for tender

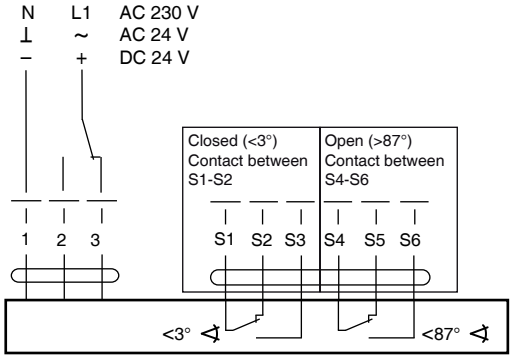
- Smoke Control Damper ESAS for Single Compartment smoke control systems, with factory mounted safety actuator, which is placed inside fire resistant calcium-silicate box. Opening and closing with electrically driven actuator 24 V or 230 V. Fire tested and CE marked according the harmonised product standard EN 12101-8. Fire class according to EN 13501-4. E_{600} 120 (ve i o) 500C_{300}MAsingle. ESAS fullfills the requirements for MA clas for opening / closing (25 min, 600 °C) Suitable both for AA and MA smoke control systems
- ATC Type **ESAS**



Dimensions														
L [mm]	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
H [mm]	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
M [mm]	134		284		334		484	534	484	534	484	534	684	734
O [mm]	134		84		134		84	134	284	334	484	534	484	534
x [mm]	120	145	170	195	120	145	170	120	170	120	170	120	170	120
n(spacing)[mm]	0	0	0	0	1	1	1	2	2	3	3	4	4	5

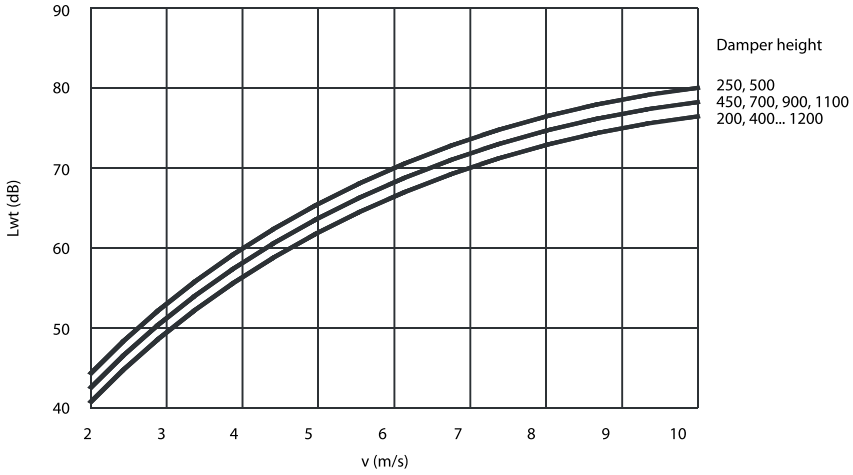
Electrical wiring diagram

L1-L2 open (90°)
L1-L3 closed (0°)

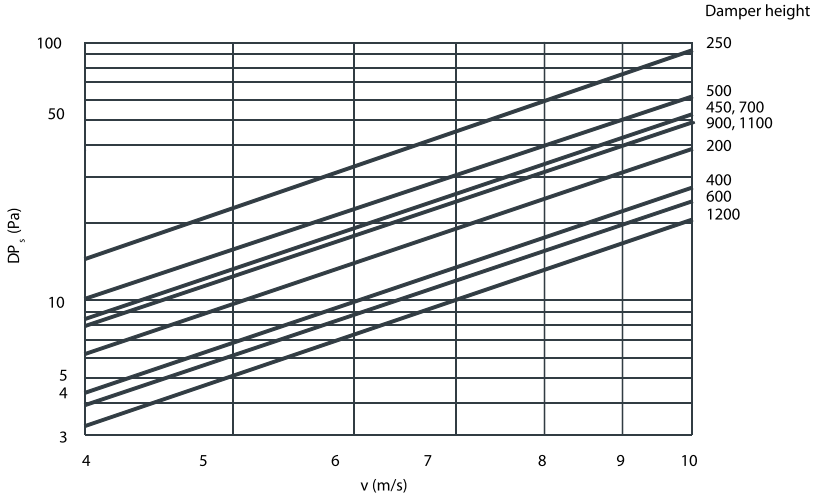


Actuator electrical data		
U [V]	Max Power [W]	Power for wire size
24C AC/DC	0,5W / 12W	18VA
230V AC	0,5W / 8W	15VA

Noise level in the duct



Pressure drop



Correction factors							
Correction of sound power per octave bands Koct							
Frequency band	125	250	500	1000	2000	4000	8000
Correction Koct	-3	-5	-11	-15	-18	-21	-33
Lwoct = Lwt + Koct							