

# Motorised Fire, Smoke & Heat Dampers

## ISONE rectangular - FdP: low pressure loss



**Advantages**

- Fire resistance: 2h.
- No smoke leakage, no heat transfer.
- Quick operation.
- Horizontal or vertical blades.
- Low pressure drop.
- VDS version: operation under power emission allowing no energy consumption.

### FIRE PROTECTION RATING - EN 1366-2

- EIS 120 - 500 Pa in concrete wall 110 mm and cellular concrete wall 150 mm.
- EIS 120 - 500 Pa in concrete tile 150 mm and cellular concrete tile 150 mm.

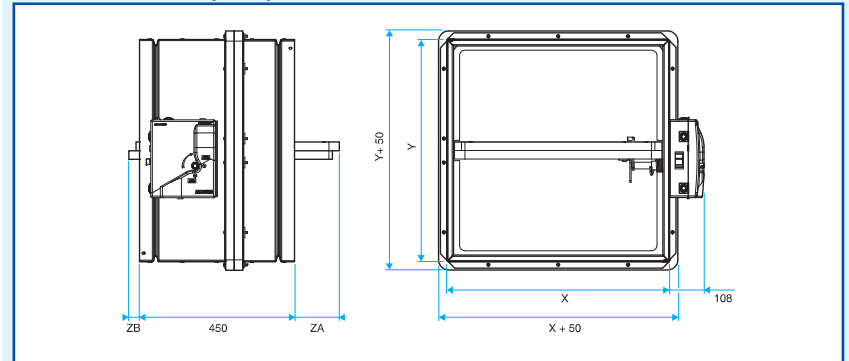
### FIRE PROTECTION RATING - FRANCE

- 1.5h fire resistance rating on 70 mm gypsum wallboards.
- 2h fire resistance rating on 100 mm gypsum wallboards.

### INSTALLATION

- Embedded into a concrete wall.
- Embedded through a concrete tile: the installation requires no particular type of fixing or suspension.
- Traditional grouting with mortar.
- The mechanism's box is fitted flush against the wall or the tile.
- The aeraulic connection must not apply any stress on the damper.

### DIMENSIONS (mm)



ZA: angular displacement of the blade

Y	200	250	300	350	400	450	500	550	600	650	700	750
ZA	0	0	0	0	16	42	66	92	116	142	166	190

### ACCESSORIES

- Base, cover and terminal block kit.

Description	Code
Complete transparent cover	11043413
Blue main control unit + manual control	11043412
10-pin withdrawable terminal block (electromagnet + motor + FCU1 + DCU1)	11041930
6-pin withdrawable terminal block, terminals 1 to 6 (FCU1 + DCU1)	11041931
6-pin withdrawable terminal block, 11 to 16 (FCU2 + DCU2)	11041932

### WEIGHT (kg) - RANGE with a choice of options

- The thermal fusible link at 70°C is included.

Code	11043342 ISONE-EUROPE-RECT-FDP-MM																
	Height Y	Width X															
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200	10	11	12	13	14	15	16										
250	11	12	13	14	15	16											
300	12	13	14	15	17	--											
350	13	14	15	17	---												
400	14	15	17	----													
450	-1	6	-----														

### AVAILABLE OPTIONS

- The blue socket base is supplied when a contact is selected.

Equipment selection	Comments
<b>FTE 70°C</b>	Tripping only by thermal fusible link
<b>"FTE" contacts</b>	Contacts for signalling position of the blade
FCU1 for "FTE"	FCU = closed position switch = blade closed DCU = open position switch = blade open
DCU1 for "FTE"	
FCU1 + DCU1 for "FTE"	
<b>TRIP device</b>	Electrical tripping
VDS 24 ISONE VM 24 ISONE VDS 48 ISONE VM 48 ISONE	Carefull, connecting terminal on "VDS or VM or EHOP" contacts
<b>Contacts "VDS or VM or EHOP"</b>	Contacts for signalling position of the blade
FCU1 "VDS or VM or EHOP"	FCU = closed position switch = blade closed DCU = open position switch = blade open
FCU1 + DCU1 "VDS or VM or EHOP"	
<b>Contacts 2</b>	Doubles the position signalling contacts
FCU2 + DCU2"	Can be fixed to "FTE" contacts or "VDS or VM or EHOP contacts"
<b>Motor</b>	Electrical resetting of the damper by remote control in less than 30 s
EHOP 30S ISONE	Carefull, connecting terminal on "VDS or VM or EHOP" contacts
<b>Protective cover</b>	Protection against dust (IP42), impacts and sealing

Code	11043343 ISONE-EUROPE-RECT-FDP-MM																
	Height Y	Width X															
	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
200	-	-	-	-	-	-	17	18	-	-	-	-	-	-	-	-	
250	-	-	-	-	-	17	18	19	20	21	22	-	-	-	-	-	
300	-	-	-	-	18	19	20	21	22	23	24	25	26	28	-	-	
350	-	-	-	18	19	20	21	23	24	25	26	27	28	30	31	32	
400	-	-	18	19	20	22	23	24	25	27	28	29	30	32	33	34	
450	-	18	19	20	22	23	24	26	27	28	30	31	32	34	35	-	
500	17	19	20	22	23	24	26	27	29	30	31	33	34	36	-	-	
550	-	20	21	23	24	26	27	29	30	32	33	35	36	-	-	-	
600	-	21	23	24	26	27	29	30	32	34	35	37	-	-	-	-	
650	-	-	24	25	27	29	30	32	34	35	37	-	-	-	-	-	
700	-	-	25	27	28	30	32	34	35	37	-	-	-	-	-	-	
750	-	-	-	28	30	31	33	35	37	-	-	-	-	-	-	-	

# Motorised Fire, Smoke & Heat Dampers

## ISONE rectangular - minimum space requirement

### RECTANGULAR ISONE PRESSURE LOSSES

• The below values are the pressure losses in Pa for a duct velocity of 4 m/s inside the damper.

Height Y	Width X																
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200	44	39	36	34	32	31	30	32	31								
250	34	29	26	25	23	22	22	22	21	21	21	20					
300	28	24	21	20	19	22	22	22	22	22	22	23	24	24	25		
350	24	20	18	17	20	19	19	19	19	19	19	20	20	20	21	21	21
400	23	19	17	19	18	17	17	17	17	17	17	17	17	17	17	18	18
450		18	20	18	17	16	16	15	15	15	15	15	15	15	15	15	
500		23	19	17	16	15	15	14	14	14	14	14	14	14	14		
550			18	16	15	14	14	13	13	13	13	13	13	13			
600			18	16	15	14	14	13	13	12	12	12	12				
650				15	14	13	13	12	12	12	12	12					
700				15	14	13	13	12	12	12	11						

ISONE FdP

Height Y	Width X																											
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	
200	328	218	170	145	129	118	110	104	108																			
250	149	109	86	73	64	59	55	52	54	52	50	48																
300	98	69	58	52	50	49	48	48	53	54	55	56	58	60	61													
350	82	55	44	39	36	35	34	33	36	36	36	36	36	37	38	38	39	48										
400	77	49	38	33	30	28	27	27	27	27	27	27	27	27	28	28	33	33	37	38								
450		46	35	30	27	25	23	23	23	22	22	22	22	22	22	25	25	28	28	28	29	29	29					
500		45	33	28	24	22	21	20	20	19	19	19	19	18	18	21	21	23	23	23	23	23	23	23	23	24	24	24
550			32	26	23	21	20	19	18	17	17	17	17	16	18	18	20	20	20	20	20	20	20	20	20	20	20	20
600			32	26	22	20	18	17	17	16	16	15	15	16	16	18	17	17	17	17	17	17	17	17	17	17	17	18
650				25	22	19	18	17	16	15	15	14	15	15	16	16	16	16	16	16	16	16	16	16	16	16	16	16
700				25	21	19	17	16	15	15	14	15	15	15	15	15	15	15	14	14	14	14	14	14	14	14	14	
750					21	19	17	16	15	14	15	14	15	14	14	14	14	14	13	13	13	13	13	13	13			
800					24	20	18	17	16	15	14	15	14	14	13	13	13	13	13	13	13	13	12	12				
850						20	18	17	15	15	15	14	14	13	13	13	12	12	12	12	12	12	12					
900							20	18	16	15	15	14	14	13	13	12	12	12	12	12	11	11						
950								18	16	15	14	14	13	13	12	12	12	12	12	11	11							
1000									18	16	15	14	13	13	12	12	11	11	11	11								
1050										16	15	14	13	13	12	12	11	11	11									

ISONE EM