



## **Fire dampers**

## **CR120+ONE T** 230

Fire dampers Circular EI120S Motorized ONE 230V Ø 100 - 315



# Motorized circular fire dampers EI120S type CR120+ONE T 230

Circular fire dampers with a fire resistance of 120 minutes. When the temperature in the damper vill close. When closed, the expanding material around the fireblade will swell and assure a fire and air-tight seal against hot air and smoke. The tunnel is made out of galvanized steel. The **CR120** + **ONE T 230** fire dampers have a automatic apartice methods. automatic operating mechanism with actuator, with indication of the blade position. An end and begin of range switch is included within the actuator.

#### Application

- Fire compartimentation
- To close and seal off ventilation ducts in case of fire
- For air temperatures of -10°C up to temperature of the thermo-electric fuse
- For air with RV 0-96%
- Range of Ø100 up to Ø315 mm
  To be mounted horizontally or vertically

#### Material

Galvanized steel

## **Fire dampers**

#### Construction





#### Composition

- Galvanized steel tunnel
- Fibersilicate fireproof blade
- Intumescent strip
- Actuator ONE T 230 FDCU with thermo-electrical fuse
- 1. Refractory casing (made out of galvanised steel)
- 2. Damper blade 3. Operating mechanism
- 4. Rubber sealing ring
- 5. Intumescent strip
- Mounting plate thermo-electric fuse
   Positioning plate
   Sealing ring damper blade

- 9. Fusible link
- 10. Blade position indicator
- 11. Unlocking button
- 12. Battery compartment to reset motor (9V) 13. LED

### Mounting

- To be inserted in fire resistant walls or floors and to be fixed according to the mounting instruction delivered with the valves.
- To be connected with round air ducts
- To be electrically wired to the fire detection system or building system

#### Certification

- Classified EI120(v<sub>e</sub>,h<sub>o</sub> i<->o)S at 500Pa according EN 13501-3 in ridid wall and rigid floor.
   Classified EI60(v<sub>e</sub> i<->o)S at 500Pa according EN 13501-3 in flexible wall.
   Certified with test report Efectis 09-A-087 / EFR-19-005412 or WFRG 16127B

- Airtight EN 1751 class C
- CE marked

#### Accessories

Fire resistant plaster, type BP

#### **Other available products**

For bigger sizes see CR2 + ONE T 230

#### **Text for tender**

- The fire dampers shall be of the round type with a fire resistance of 120 minutes, certified according to EN13501-3. They will consist of a galvanized steel tunnel and fireproof fiber silicate valve. The control mechanism will be automatically operated by means of an actuator and shall have a blade position indicator and thermo-electrical link of 72 °C
- type CR120 + ONE T 230



Fire dampers

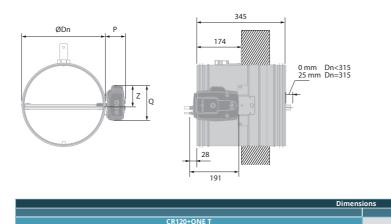
#### **Order example**

## CR120 + ONE T 230, 160 Explanation **CR120** = Round fire damper with fire resistance of 120 minutes **ONE T 230** = Actuator 230V with thermo-electrical fuse **160** = Connection diameter

Quick selection							
Dia	v	3	4	5	6	7	8
100	Qv	85	113	141	170	198	226
	veff	5	6.7	8.3	10	11.7	13.4
	Ps	5	8	13	19	26	33
	Lw	41	45	47	50	52	54
125	Qv	132	177	221	265	309	353
	veff	4.5	6	7.5	9	10.5	12
	Ps	4	7	11	16	21	28
	Lw	38	43	46	48	51	52
150	Qv	191	254	318	382	445	509
	veff	4.1	5.5	6.9	8.3	9.7	11
	Ps	3	6	9	13	18	23
	Lw	38	42	45	47	50	52
160	Qv	217	289	362	434	506	579
	veff	4	5.4	6.7	8.1	9.4	10.8
	Ps	3	5	8	12	16	22
	Lw	37	41	44	46	49	51
180	Qv	275	366	458	549	641	732
	veff	3.9	5.2	6.5	7.8	9.1	10.4
	Ps	3	5	7	10	14	18
	Lw	37	41	44	46	48	51
200	Qv	339	452	565	678	791	904
	veff	3.8	5.1	6.3	7.6	8.9	10.1
	Ps	2	4	6	9	12	16
	Lw	37	41	43	46	48	50
250	Qv	530	707	883	1060	1236	1413
	veff	3.6	4.8	6	7.2	8.4	9.6
	Ps	2	3	4	6	9	11
	Lw	36	40	43	45	47	49
300	Qv	763	1017	1272	1526	1780	2035
	veff	3.5	4.7	5.8	7	8.2	9.3
	Ps	1	2	3	4	6	7
	Lw	35	39	43	44	46	47
315	Qv	841	1122	1402	1682	1963	2243
	veff	3.5	4.6	5.8	7	8.1	9.3
	Ps	1	2	3	4	5	7
	Lw	35	39	43	44	46	47

#### **Symbols and specifications**

- v = Air velocity in the duct in m/s
  Qv = Air volume in m<sup>3</sup>/h
  veff = Effective velocity through the damper in m/s
- Ps = Static pressure in Pa
  Lw = Acoustic power in dB(A)
  Dia = Duct diameter in mm





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#### **Electrical connection**

