

# CU2 + ATEX

Explosion protected fire damper

K50-C 08/2014

### PRODUCT PRESENTATION

The rectangular fire damper CU2 with option ATEX is an explosion protected fire damper for use in EEx-areas zone 1,2 (gas) and zone 21,22 (dust). The option is available on all dimensions of the CU2.

1. Explosion proofed operating mechanism
2. Equipotential connection

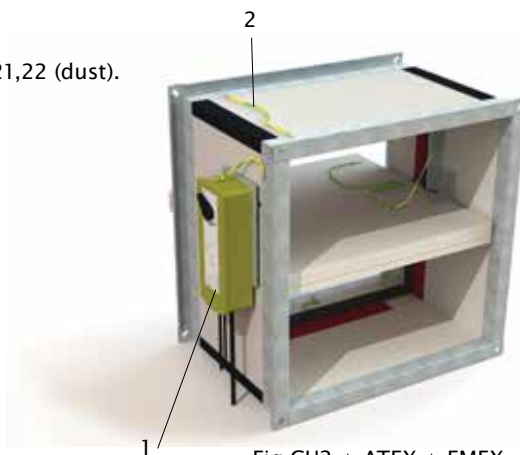


Fig.CU2 + ATEX + EMEX

### OPERATION MECHANISMS

#### EMEX(T) - RMEX(T)

#### Rearmation

• **Manual rearmation:**

1. Use delivered socket wrench
2. Slow motion
3. Enough torque/force is required

Caution!

ⓘ Manual override only if supply voltage is cut!

• **Motorized rearmation:**

1. Supply the actuator (respect the prescribed voltage) for at least 60 sec.
2. The rearmation stops automatically

#### Unlocking:

• **Remote controlled unlocking:**

By interrupting the power supply

• **Automatic unlocking:**

As soon as the temperature exceeds 72°C outside or inside the damper (Types EMEXT/RMEXT)

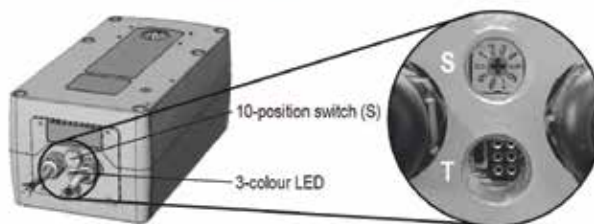
• **Selection of running time:**

Put switch (S) into the correct/selected position in accordance to the table below.

The selected parameter will work at next operation of the actuator. Adjustment can be done even without supply voltage.

Running times	Position of S
3 sec./90°	00
15 sec./90°	01
30 sec./90°	02
60 sec./90°	03
120 sec./90°	04

Switch – Push button – Lamp for adjustment, behind the blanking plug

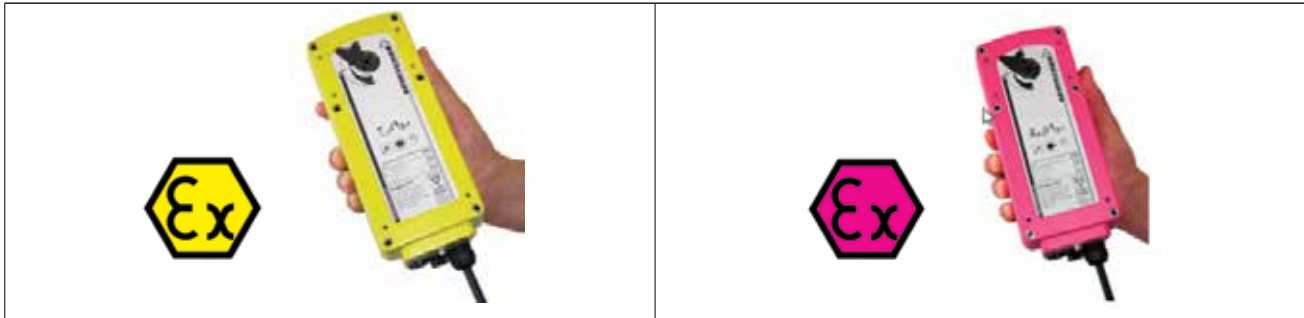


Caution!

ⓘ If supply voltage is available, turn switch only if actuator is not running !

• **Selection of running time spring return:**

The running time of 3 or 10 sec. spring return is selected by wiring (see p. 3).



### APPROVALS AND TEST REPORTS

All our dampers are submitted to a number of tests by official test institutes. Reports of these tests form the basis for the approvals of our dampers.





ATEX: TÜV 14 ATEX 7540 X

### ELECTRICAL CONNECTION

RMEX/EMEX	RMEXT/EMEXT
<p>24 to 230 VAC/DC</p>	<p>24...230 VAC/DC</p>
<b>Power Supply</b>	
24...230 VAC/DC	24...230 VAC/DC
<b>Power consumption</b>	
Max.20 W	Max.20 W
<b>Position switches</b>	
max. 24V/3A, 230V/0,25A	max. 24V/3A, 230V/0,25A
<b>Running time</b>	
Motor : 3/15/30/60/120s Spring : 3 or 10 s	Motor : 3/15/30/60/120s Spring : 3 or 10 s
<b>Degree of protection</b>	
IP 66	IP 66

### TECHNICAL DATA

<b>Operating mechanism Description</b>	<b>CU2 RMEX(T)</b> Remote controlled damper with electrical, explosion proof rotary actuator (for zone 2/22)	<b>CU2 EMEX(T)</b> Remote controlled damper with electrical, explosion proof rotary actuator (for zone 1/2/21/22)
<b>Certifications</b>		
<b>Classification</b>	See installation manual of CU2 (NT-C2)	See installation manual of CU2 (NT-C2)
<b>Free air passage</b>	$SL (dm^2) = [(W_{nom} - 36) \times (H_{nom} - 36) - 45 (W_{nom} - 36)] / 10\,000$	$SL (dm^2) = [(W_{nom} - 36) \times (H_{nom} - 36) - 45 (W_{nom} - 36)] / 10\,000$
<b>Mounting</b>	In floor/ wall	In floor/ wall
<b>Durability test</b>	After 10.000 cycles the characteristics stay within the declared limit values.	After 10.000 cycles the characteristics stay within the declared limit values.
<b>Safety position</b>	Closed	Closed
<b>Operation</b>	Automatically: (only RMEX- version) by melting of the thermo-electric fuse at 72°C. Remote controlled by interrupting the power supply.	Automatically: (only EMEX- version) by melting of the thermo-electric fuse at 72°C. Remote controlled by interrupting the power supply.
<b>Rearmation</b>	Manual Remote controlled	Manual Remote controlled
<b>Unlocking</b>	Cold unlocking possible	Cold unlocking possible
<b>Functioning</b>	Without external energy	Without external energy
<b>Installation direction</b>	Horizontally or vertically	Horizontally or vertically
<b>Air movement</b>	Both Directions	Both Directions
<b>Fire side</b>	Random	Random
<b>Operating pressure</b>	Max 500 Pa	Max 500 Pa
<b>Environment</b>	For interior use	For interior use
<b>Nominal voltage</b>	24...230 VAC/DC	24...230 VAC/DC
<b>Position indication</b>	2 integral, potential free aux. switches, 2 x EPE	2 integral, potential free aux. switches, 2 x EPE
<b>Degree of protection</b>	IP66	IP66
<b>Maintenance</b>	Maintenance-free	Maintenance-free
<b>Explosion proof</b>	Ambient temperature: $-10^{\circ}C \leq Ta \leq 40^{\circ}C$ II2G IIC T6 II2D T80°C  Ambient temperature: $-10^{\circ}C \leq Ta \leq 50^{\circ}C$ II2G IIC T5 II2D T95°C	Ambient temperature: $-10^{\circ}C \leq Ta \leq 40^{\circ}C$ II3G IIC T6 II3D T80°C  Ambient temperature: $-10^{\circ}C \leq Ta \leq 50^{\circ}C$ II3G IIC T5 II3D T95°C

If the damper is manipulated in any other way than described in this manual, Rf-Technologies will decline any responsibility and the guarantee will immediately expire.