

# FIRESAFE R90

THE FIRE BARRIER WITH 100% PASSAGEWAY

## SAFEVENT

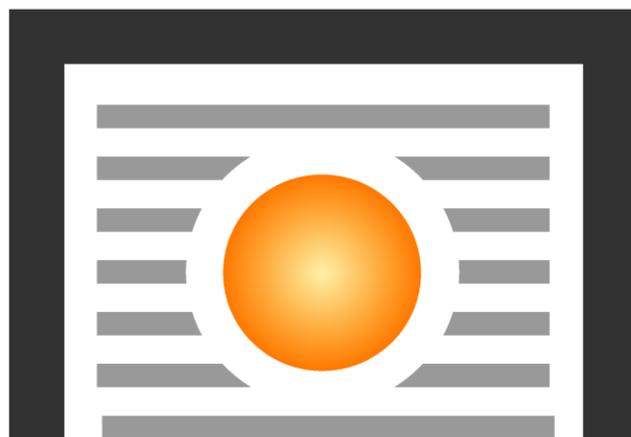
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## FIRESAFE R90 FIRE DAMPER FOR MATERIAL TRANSPORT

### QUICK GUIDE



# SAFE • VENT®

ⓘ This quick guide is meant give a brief overview of the steps needed to install the FIRESAFE® R90 fire damper for material transport. As it is a quick guide, it is by default incomplete and should in no way be used as the only or primary guide for the installation or maintenance of the R90 fire damper. The warranty is forfeited, and Safevent ApS cannot be held liable if any damage or failures of the equipment occur due to improper installation not carried out according to the instructions found in the full installation and maintenance manual. For the full installation and maintenance manual, please visit [www.safevent.dk/](http://www.safevent.dk/).

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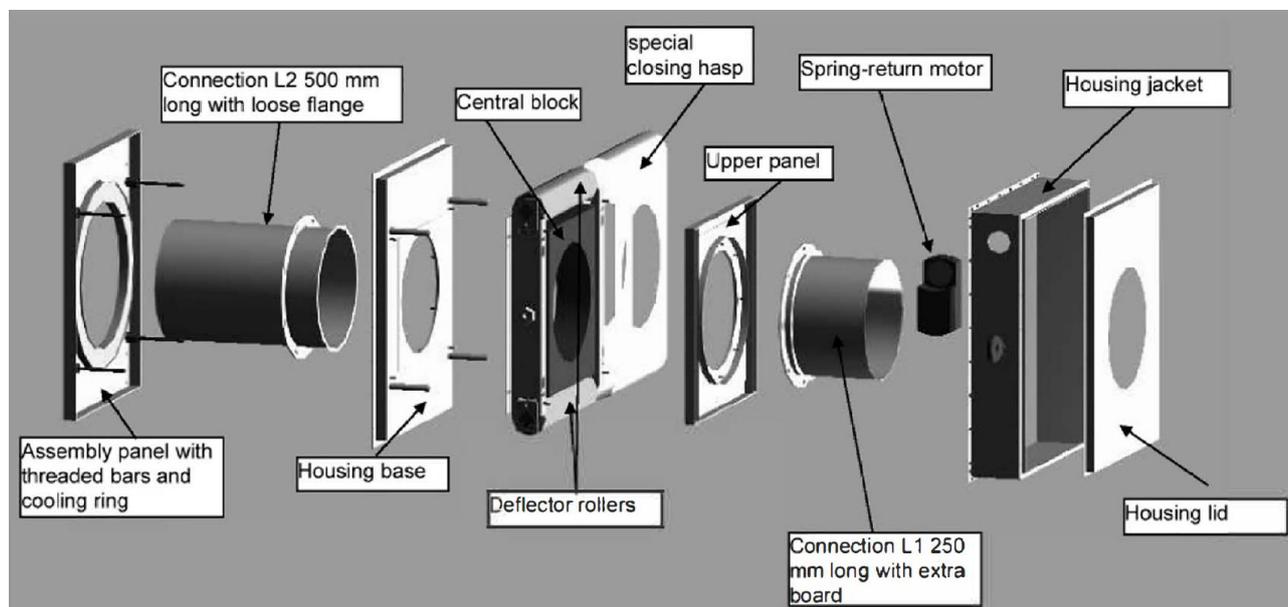
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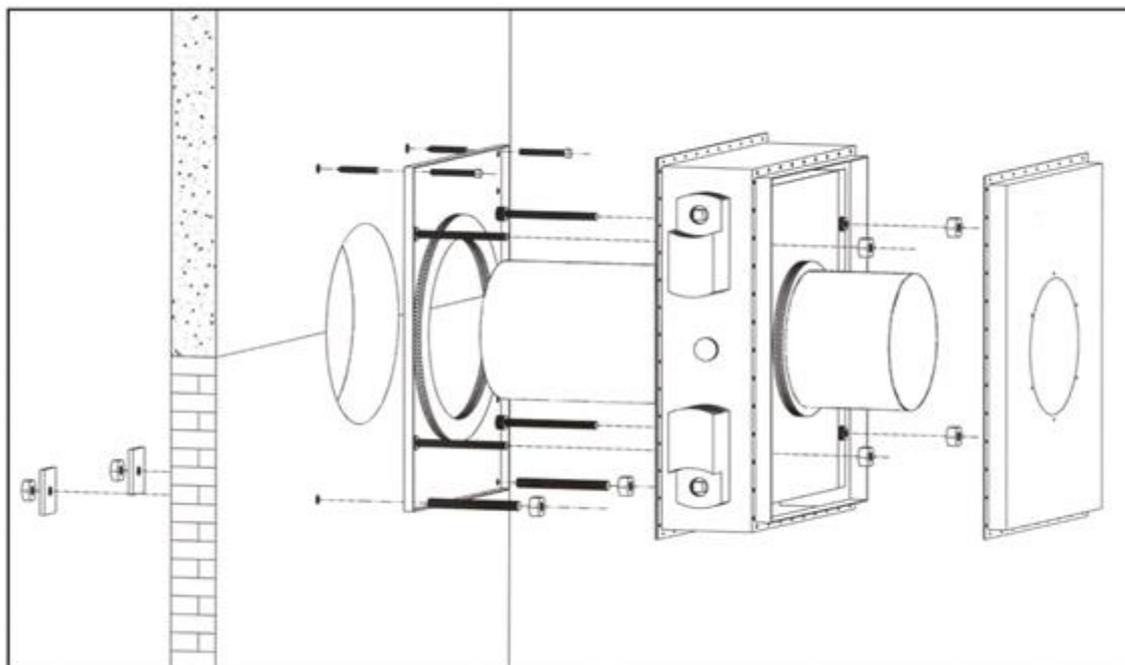
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## 1. DESCRIPTION OF COMPONENTS



## 2. INSTALLATION

This simple installation of the equipment means the FIRESAFE® R90 can also be easily installed subsequently into piping and duct systems, requiring a minimum of space.



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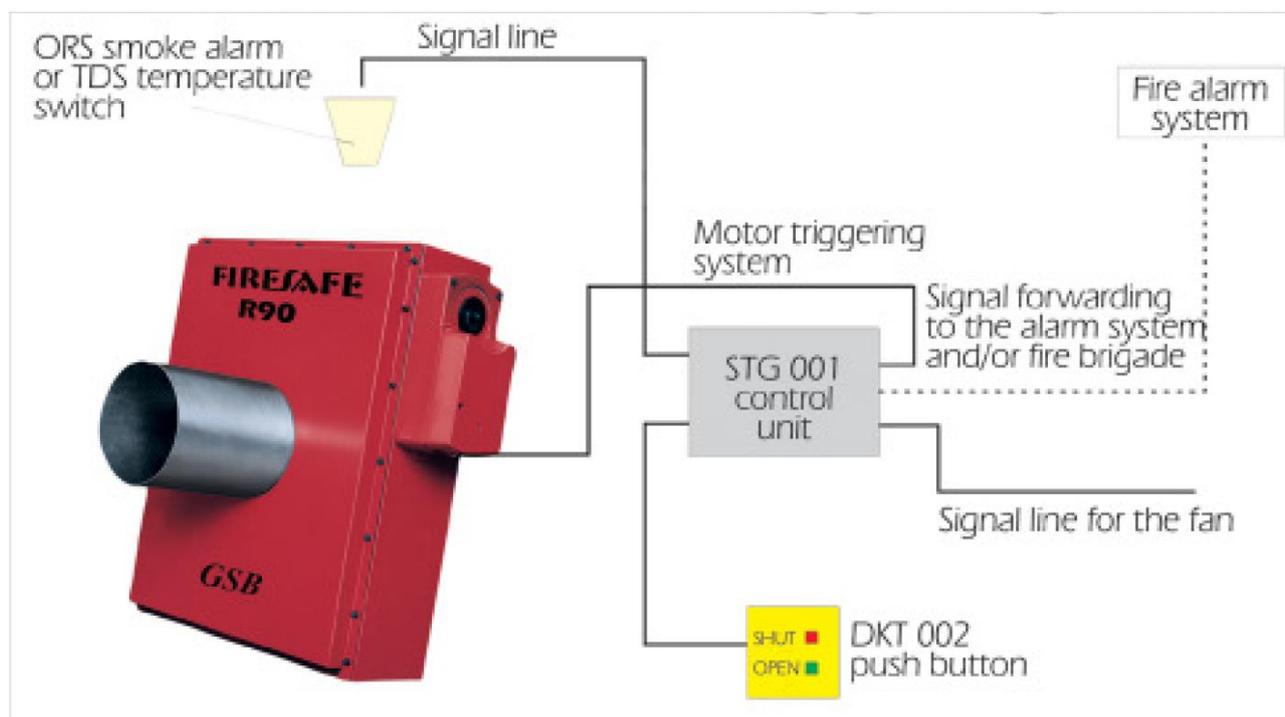


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## 2.2 WORK STEPS

1. Remove the packaging
2. Un screw the screws and lift the cover
3. Screw off the M 10 hex nut
4. Attach lifting bands to the M 16 ring-bolts to be screwed in
5. Lift the device and remove the mounting frame from the pallet
6. Mount the mounting frame absolutely flat to the wall or ceiling
7. Fasten the device to the mounting frame;  
tighten the M 10 nuts to 5 Nm to **maximum** 7 Nm
8. Connect the motor to the mains supply
9. Perform a trial test / functional test
10. Make the stress-free pipe connections
11. Install the locking system
12. Connect the locking system to the FIRESAFE ®

## 3. TRIGGERING DEVICES



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## 4. SPECIFICATIONS

### 4.1 R90 FIRE DAMPER SPECIFICATIONS

DIBT AUTHORIZATION NUMBER	Z-19.17-1180																				
FIRE RESISTANCE DURATION	90 minutes = DIN 4102 part 11																				
AREA OF APPLICATION	<ul style="list-style-type: none"><li>- Conduit systems for gas (except ventilation systems)</li><li>- Conduit systems to transport dust-like, granular, chipping-shaped or fiber-shaped transport items (pressure +/- 25 kPa)</li><li>- Conduit systems to such off air afflicted with grease, oil and other materials</li><li>- Pneumatic transport system's conduits, dust, dust suction conduits etc.</li></ul>																				
PIPE DIAMETER	NW 100 mm – NW 630 mm (special sizes upon request)																				
AUTHORIZED COMPONENTS	<table border="1"><tr><td>Masonry</td><td>≥ 115 mm</td></tr><tr><td>Concrete</td><td>≥ 100 mm</td></tr></table>	Masonry	≥ 115 mm	Concrete	≥ 100 mm																
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Concrete	≥ 100 mm																				
INSTALLATION VARIANTS	<ul style="list-style-type: none"><li>- In front of the wall</li><li>- On top the ceiling</li><li>- On the bottom the ceiling</li></ul>																				
MATERIAL	Sheet steel St37 Upon request: <ul style="list-style-type: none"><li>- Stainless steel V2A 1.4301</li><li>- Stainless steel V2A 1.4571</li><li>- Special lacquering</li></ul>																				
DIMENSIONS [MM]	<table border="1"><thead><tr><th>Nominal width (mm)</th><th>Height [mm]</th><th>Width [mm]</th><th>Depth [mm]</th><th>Weight [kg]</th></tr></thead><tbody><tr><td>100-200</td><td>615</td><td>570</td><td>200</td><td>75</td></tr><tr><td>224-355</td><td>812</td><td>725</td><td>200</td><td>100</td></tr><tr><td>400-630</td><td>1370</td><td>1040</td><td>300</td><td>350</td></tr></tbody></table>	Nominal width (mm)	Height [mm]	Width [mm]	Depth [mm]	Weight [kg]	100-200	615	570	200	75	224-355	812	725	200	100	400-630	1370	1040	300	350
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100-200	615	570	200	75																	
224-355	812	725	200	100																	
400-630	1370	1040	300	350																	
BASE LENGTH	<ul style="list-style-type: none"><li>- Face 250 mm long</li><li>- Reverse 500 mm long</li><li>- Special lengths</li></ul>																				
OPENING	With an electrical motor																				
CLOSING	Currentless by spring force																				
NUMBER OF MOTORS	<table border="1"><thead><tr><th>Nominal width (mm)</th><th>Motor</th></tr></thead><tbody><tr><td>100-355</td><td>1</td></tr><tr><td>400-630</td><td>2</td></tr></tbody></table>	Nominal width (mm)	Motor	100-355	1	400-630	2														
Nominal width (mm)	Motor																				
100-355	1																				
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MOTOR	Optional: <ul style="list-style-type: none"><li>- 24 volt (VDC/VAC) = Actuator type CA1.20F</li><li>- 230 volt (VAC) = Actuator type CA2.20F</li></ul>																				
TRIGGERING MECHANISM	Optional: <ul style="list-style-type: none"><li>- Smoke detector or,</li><li>- Temperature switch</li></ul>																				

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## 4.2 SPRING RETURN MOTOR / ACTUATOR SPECIFICATIONS

### Device Properties

- Spring-return actuators
- 2-point actuation
- 2 potential-free ancillary switches
- 12 mm adapter for square axle
- 2 adjustable ancillary switches

Direct connection of TLR 72/100 or safety device



### Type designation / specification / technical data

CA 1.20F Actuator 24 VAC/NDC with 2 adjustable ar

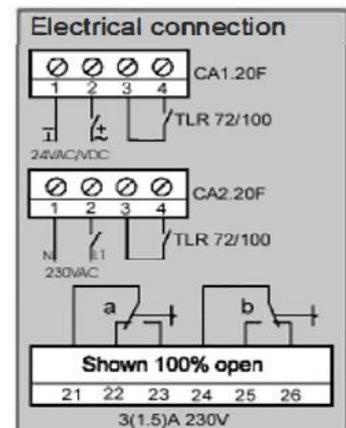
CA2.20F Actuator 230 VAC with 2 adjustable ancillary switches

Actuator type		CA1.20F	CA2.20F
Torque, motor	Nm	6	6
Torque, spring	Nm	5	5
Running time, motor opening	Sec	150	150
Running time, spring return	Sec	10	10
Operating voltage	V	24 VAC/24 VDC	230 VAC
Frequency	Hz	50...60 Hz	50...60 Hz
Power consumption			
- In operation	W	10	8
- In final position	W	4.0	4.5
Dimensioning	VA	18	13
Weight	Kg	2.7	2.7

### Control Signals

2 point

Positioning signal	Mechanical
Swing angle / working range	450° (455° merch.)
Swing angle / limitation	None
Capacity, ancillary switch	3 (1.5) Amp. 230V
Sound level	45 dB (A)
Protection class	II
Kind of protection	IP 44 or IP 54 with Pg11 screw connection
Ambient temperature	-20...50°C
Ambient humidity	5...95% rH
Norms	The devices fulfil CE requirements
Maintenance	Maintenance-free



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## 5. FIRE DAMPER REGULATION

