features

- IR Flame detector for industrial applications, indoor and outdoor
- 2 versions with watertight enclosure or explosion proof enclosure
- High sensitivity
- Variable direction stand for easy change of direction
- IP66 protection
- Field of view 90° cone
- CPD and VdS approved
- 0023 ATEX BVI 07 certificate

RIV-601P/F IR flame detector

For industrial applications indoors and outdoors where fire can spread out rapidly due to the presence of highly inflammable materials, and where vast premises need an optical detector with a great sensitivity and large field of view.

SOR-873P Variable Direction stand for IR flame detector RIV-601P/F

The Variable Direction Stand SOR-873P is a useful accessory for installing IR Flame Detector RIV-601P/F when an easy change of direction of the optical field of view towards the area of interest is needed.
It is composed of a steering arm with both horizontal and vertical steering, and of a base plate designed for IR Flame Detector RIV-601P/F mounting.
Both the steering arm and the base plate are made of aluminium, screw parts are of stainless steel, and can be used in outdoor applications.

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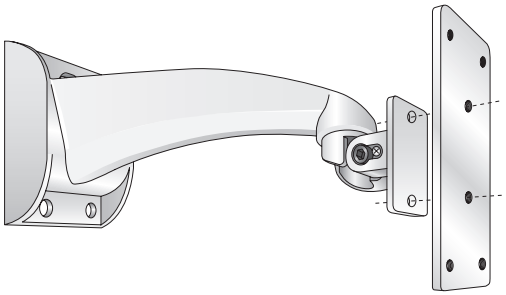
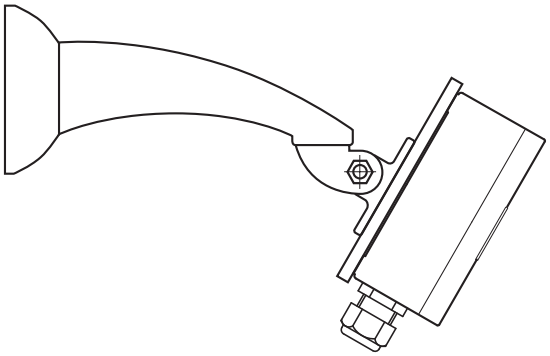
RIV series flame detectors

Data Sheet



Base Plate

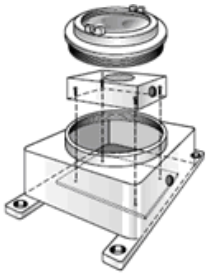


Variable direction SOR-873P stand with RIV-601P/F

RIV-601P/FA IR flame detector in explosion proof enclosure

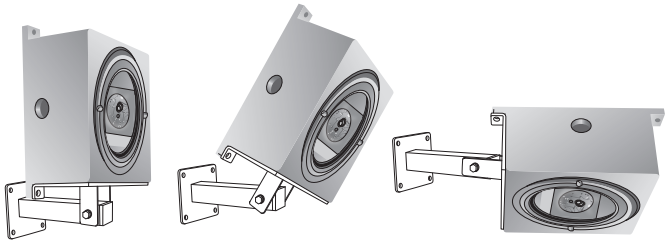
For industrial applications indoors and outdoors where is a risk of explosion and where the explosion proof protection is required. One detector can monitor a vast area and responds immediately to the fire, yet of small size.

The explosion proof model RIV-601P/FA is made by mounting the watertight model RIV-601P/F inside the explosion-proof case.
The RIV-601P/FA shipping package includes:
- 1 IR flame detector model RIV-601P/F
- 1 explosion-proof enclosure model ADF-600AP (Cast aluminium external grey epoxy paint (RAL 7000), internal anti-condensing orange paint (RAL 2004).)
- 1 set technical information

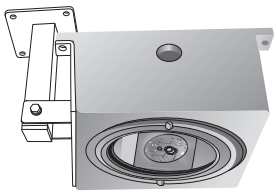


SOA-875 Variable Direction stand for IR explosion proof flame detector RIV-601P/FA

The Variable Direction Stand SOA-875 is a useful accessory for installing IR Explosion-Proof Flame Detector RIV-601P/FA when an easy change of direction of the optical field of view towards the area of interest is needed.
It is composed of a steering arm with both horizontal and vertical steering, and of a base plate designed for IR Explosion-Proof Flame Detector RIV-601P/FA mounting.
The Variable Direction Stand and the screw parts are made of stainless steel, and can be used in outdoor applications.



Wall mounting



Ceiling mounting

specifications

Electric

Power voltage:	24Vdc +/-15% (20 to 28V)
Current consumption:	13mA in stand-by (0.25W), 50mA in alarm state (max 1.5W including 20mA for test).
Anti-inversion diode:	on +24V and + Test (T+).
Spectral response IR:	1 to 3 micron. Tuned to flame pulsing frequency (flickering).
Field of view:	90° cone. The detector can see outside the field of view or indirectly by reflection, or even through smoke, with a reduced sensitivity.
Sensitivity:	
RIV601P/F:	2-3% of the distance, which means that the smallest detectable flame size is 2-3% of the distance. For example, at 10m the smallest flame size is 20cm.
RIV601P/FA:	reduced to 4% of the distance.
Typical covering figure:	400 m² at 20m distance.
Alarm delay time:	Set to 5 sec. Adjustable from 1 to 10 sec. Reset is automatic. The detector turns on 5 sec. after the flame is started. As soon as the flame stops, the detector returns off.
Front LED lamp:	lights in alarm. It blinks shortly during the teletest.
Output:	on changeover SPDT relay contact rated 1A 30Vdc.
Other output:	on NPN transistor open collector rated 50mA 24Vdc, which goes low in alarm.

Remote monitoring: Built-in “Teletest” device for the remote monitoring of the detector ability. Needs a 24Vdc +/-15% 20mA. Built-in modulator. When the teletest circuit is powered, a small incandescent bulb placed near the sensor starts pulsing so as to simulate a flame. During the test the detector turns on for half a second every 4 seconds. The teletest can be remotely controlled from the control panel, or can be wired for a continuous and automatic operation. Control panel must recognize the short test pulses from the alarm state, which is steady on.

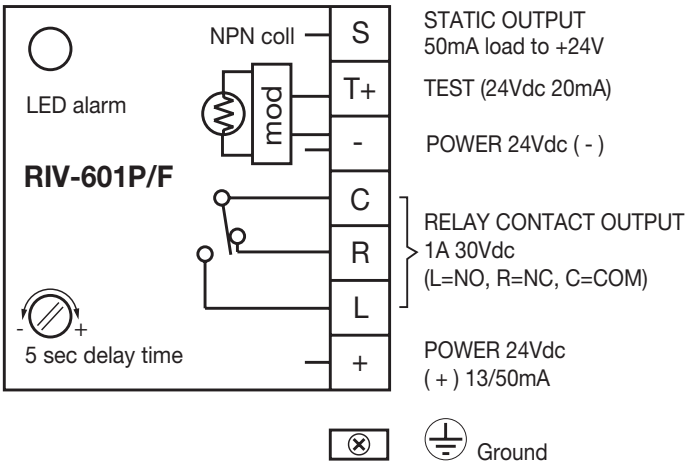
Electrical wiring: on 7 way terminal block, plug-in type, 10 pitch, wire size 2,5mm² max (a max 1,5mm² wire gauge is suggested to avoid a difficult wire entry into the screw terminal).

Cable entry fitting:

RIV601P/F: M25 internal diameter 13-18mm.

RIV601P/FA enclosure: 1” Gas cable entry.

Electrical connections



Note:

1. It is highly recommended to connect the enclosure base to a good ground line using the ground terminal provided inside up on the left. Then, connect base and cover using the ground terminal provided inside the base lower on the right and the ground terminal provided inside the cover lower on the left. All the ground terminals are signaled by ground label.
The ground connection must be done using a yellow-green conductor and a M4 double crimp eyelet.
The yellow-green ground conductor must be longer than the other conductors.
2. In order to ensure an IP66 protection grade the cover must be tightly closed turning the four screws provided. The suggested closing torque value is 1 ÷ 1,5 Nm.

Mechanical

Housing:

RIV601P/F: Cast aluminum watertight case, IP66 grade protection (dust and water spray).

RIV601P/FA: explosion proof housing

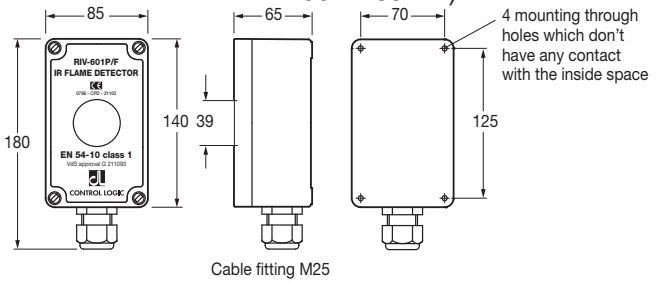
Operating temperature: -20 +60°C.

Storage temperature: -40 +85°C.

Dimensions:

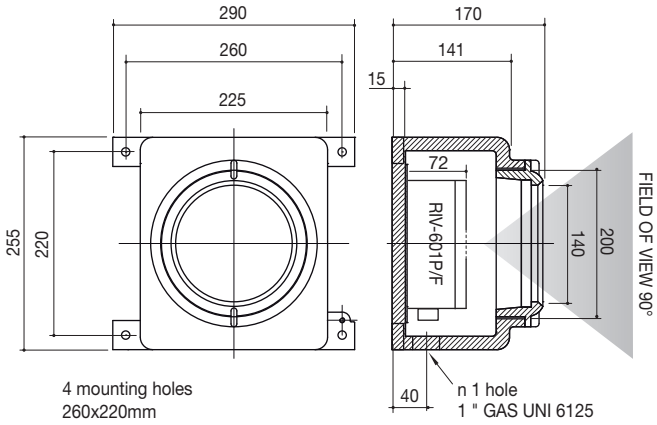
RIV601P/F: 180 x 85 x 65 (H) mm (mounting holes 125 x 70mm).

RIV601P/FA: 225 x 255 x 170 (h) mm main body only (mounting holes 260 x 220mm - overall dimensions 290 x 255mm).



Cable fitting M25

RIV-601P/F watertight enclosure



RIV-601P/FA with explosionproof enclosure ADF-600AP

Note:

In the model RIV-601P/FA the detector RIV-601P/F is to be mounted inside the explosion proof case by the customer during the installation phase, through the front window, over the steel plate provided on the bottom.

Weight:

RIV601P/F: 700 grams.

RIV601P/FA: 10,5 kg (case only); 11,5 kg (with detector inside)

SOR-873P

Steering range: horizontal 210°; vertical 137°

Dimensions:

Steering arm: 270 x 129 x 72 mm.

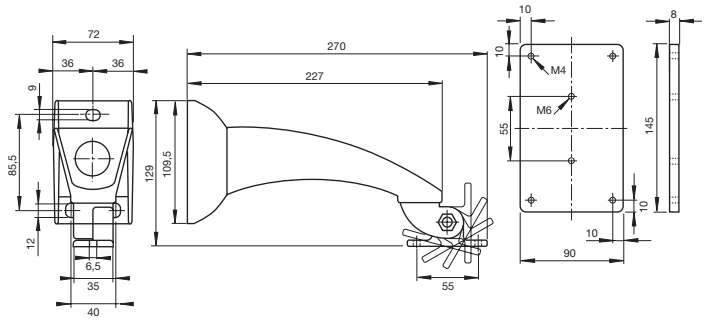
Base plate: 145 x 90 x 8 mm.

Material:

Steering arm: cast aluminium grey RAL 7035 paint.

Base plate: silver color galvanized aluminium.

Weight: 0,85 kg net – 1 kg gross.



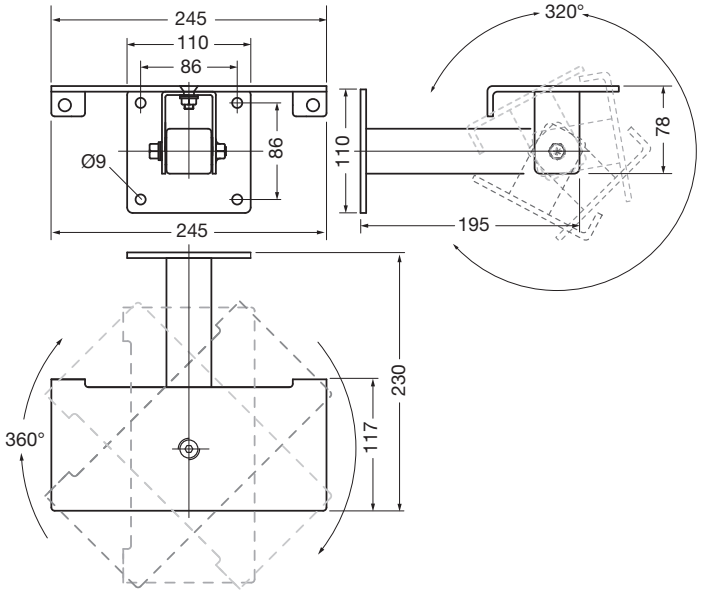
SOA-875

Steering range: horizontal 360°; vertical ± 90°

Dimensions: 270 x 129 x 72mm

Material: AISI 316L polished stainless steel

Weight: 2,5 kg net - 2,8 kg gross



Approvals

In compliance with the following directives:

- 2004/108/EEC (EMC)
- 89/106/EEC (CPD)

Certification - RIV601P/F version

EN 54-10 class 1 approved

EC-certificate of conformity: 0786-CPD-21103

VdS Approval: G 211093.

Certification - RIV601P/FA version

Type of protection: II 2 GD Ex d IIC T6 Ex tD A21 IP66 (85°C max case temp., referred to 40°C ambient).

ATEX: 0023 ATEX BVI 07 certificate.

Conforms to ATEX 94/9 directive and EN 60079 and EN 61241 European norms.

product references

RIV-601P/F	IR flame detector
RIV-601P/FA	IR flame detector in explosion proof enclosure

Accessories

SOR-873P	Variable Direction stand for IR flame detector RIV-601P/F
SOA-875	Variable Direction stand for IR explosion proof flame detector RIV-601P/FA

local distributor