

**IR FLAME DETECTOR MODEL RIV-601P/F**  
**watertight enclosure**

**ELECTRICAL AND GENERAL SPECIFICATIONS**

- Cast aluminium watertight case, **IP66** grade protection (dust and water spray). Explosion-proof available with the model RIV-601P/FA.
- 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 infrared 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 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. Typical covering figure is 400 square meters at 20m distance.
- Alarm delay time set to 5 sec. Adjustable from 1 to 10 sec. Reset is automatic. The detector turns on 5 seconds 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.
- 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 recognise 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 2,5mm<sup>2</sup> max (a max 1,5mm<sup>2</sup> wire gauge is suggested to avoid a difficult wire entry into the screw terminal).
- Cable entry fitting M25 internal diameter 13-18mm.
- Operating temperature -20 +60°C.
- Storage temperature -40 +85°C.
- Dimensions 180x85x65(H) mm (mounting holes 125x70mm).
- Weight 700 grams.
- Manufactured in compliance with the essential requirements of the CPR Regulation.
- EN 54-10 class 1 approved, EC-certificate of conformity no. 0786-CPD-21103, VdS Approval no. G 211093.

**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.

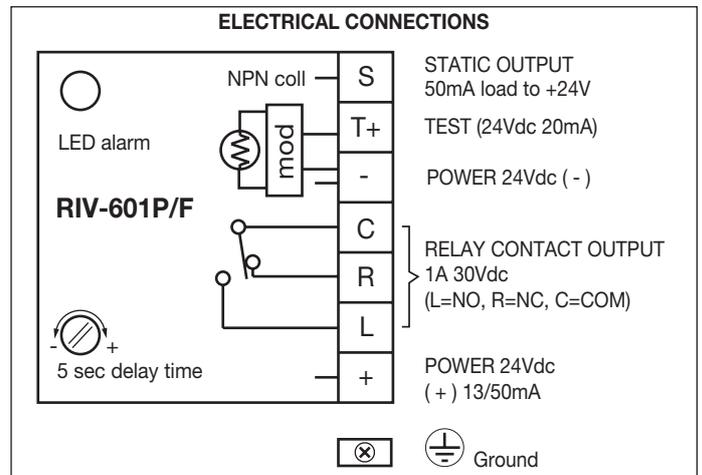
2. In order to ensure an **IP66 protection grade** the cover must be tightly closed turning the four screws provided. The suggested closing torque value is 1 ÷ 1,5 Nm.

**IR FLAME DETECTOR MODEL RIV-601P/FA**  
**explosionproof enclosure**

**DESCRIPTION AND SPECIFICATIONS**

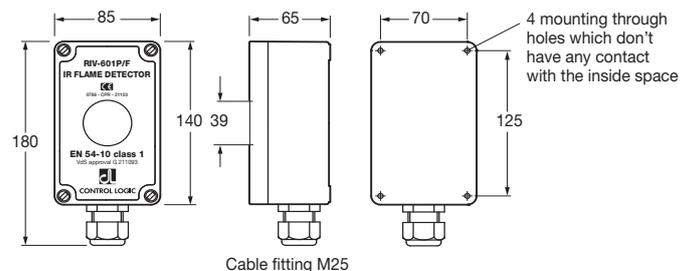
All same as for RIV-601P/F model except:

- Cast aluminium explosion-proof enclosure **ADF-600AP** model. External grey epoxy paint RAL7000 and internal anti-condensing orange paint RAL2004.
- Type of protection II 2 GD Ex d IIC T6 Ex tb IIIC T85°C IP66 (85°C max case temperature, referred to 40°C ambient).
- Conforms to ATEX Directive, BVI 14 ATEX 0007 certificate.
- Dimensions: mm. 225x255x170h main body only (mounting holes 260x220 – overall dimensions 290x255).
- Weight: kg. 10,5 case only - kg. 11,5 with detector inside.
- Sensitivity reduced to 4% of the distance.
- 1" Gas cable entry.

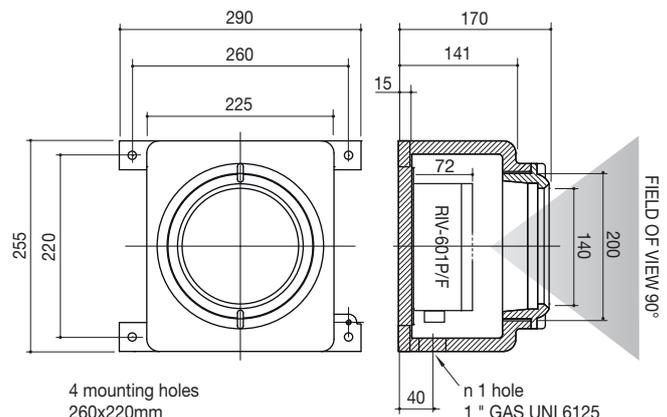


**MECHANICAL DIMENSIONS**

**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 explosionproof case by the customer during the installation phase, through the front window, over the steel plate provided on the bottom.