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ISO 9001
CONTROL LOGIC S.r.l.

RIV-601P/F
IR flame detector electrical connections

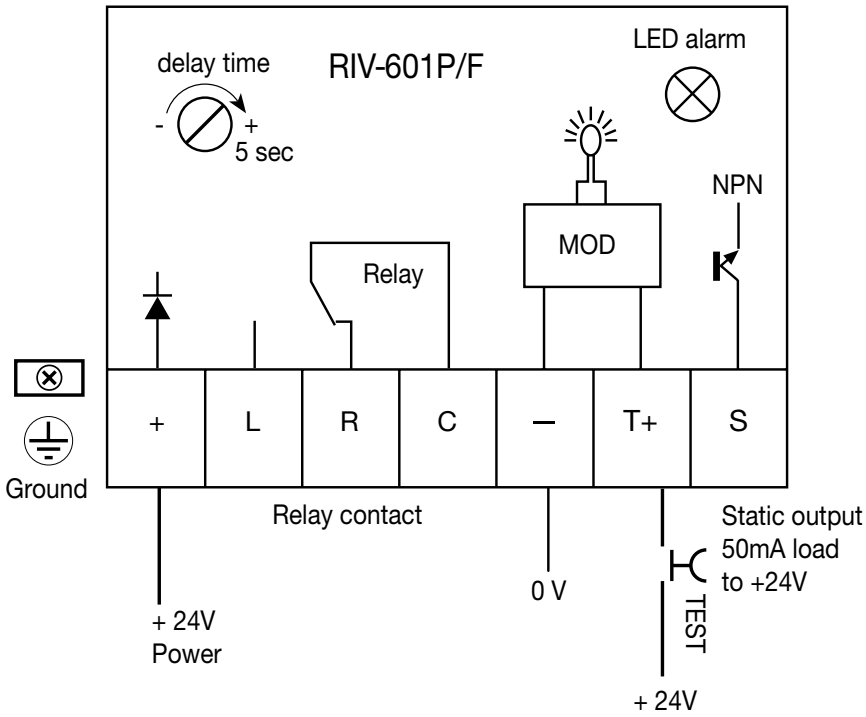
The electrical connections are done on 7-way screw type terminal block, plug in type.
Each terminal function is printed on the top of every terminal and on the circuit board just before the connector.
The input power voltage is 24Vdc nominal value, with an accepted range of 20 to 28Vdc.

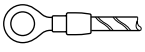
The current values are rather low, typically 0.1 to 0.2 Adc. Therefore the wire gauge is only chosen to be strong enough, not for the rated current.
A max 1,5 square mm wire gauge is suggested to avoid a difficult wire entry into the screw terminal.
Before turning the input power on is highly recommended to check the power voltage value and polarity in order to avoid damage.

Input power:
The 24Vdc power voltage must be entered into the two terminals marked (**+**) and (**-**). Pay attention to the polarity, even if an anti-inversion diode is provided on the (**+**) terminal.
Please remember that after the 24Vdc power voltage is applied the detector is disabled and standing by for about 10 seconds (start-up delay) before starting the normal operation and being able to start an alarm.

Output:
- One static output on the "**S**" terminal from an NPN collector. Normally it is high (+24V). In alarm goes low (+0.1V or higher, depending on the load). Max load 50mA to +24V.
- One changeover SPDT relay contact on the **C-R-L** terminals, rated 1A 30Vdc.
  C-R normally closed contact. Opens in alarm.
  C-L normally open contact. Closes in alarm.

Test:
The **T +** must be connected to +24V through a normally open pushbutton, which will be depressed for more than 5 sec in order to perform the **manual test** (see the next page).
The **T +** terminal must be permanently connected to +24V if the **automatic continuous self test** is wanted (see the next page).



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.