

Regula Secura

Mounting instruction

Read through the directions before mounting.

General:

Regula Secura is working as an “intelligent” switch. When the condensation sensor detects condensation, the Regula Secura cuts the power supply off at the actual actuator and therefore shuts the flow down through the product. To secure that this works, it's important that the combination Valve + Actuator is normally closed (NC).

When the condensation has dried out, the Regula Secura senses it and starts the power supply again.

Regula Secura works with 24V AC and internal with 3V DC to the condensation sensor. Regula Secura is fed in series with the actuator.

Delivery control:

- Regula Secura (Injected connection card with 8-points connection splint and red indication diode)
- Condensation sensor with cable
- 2 pcs stripes

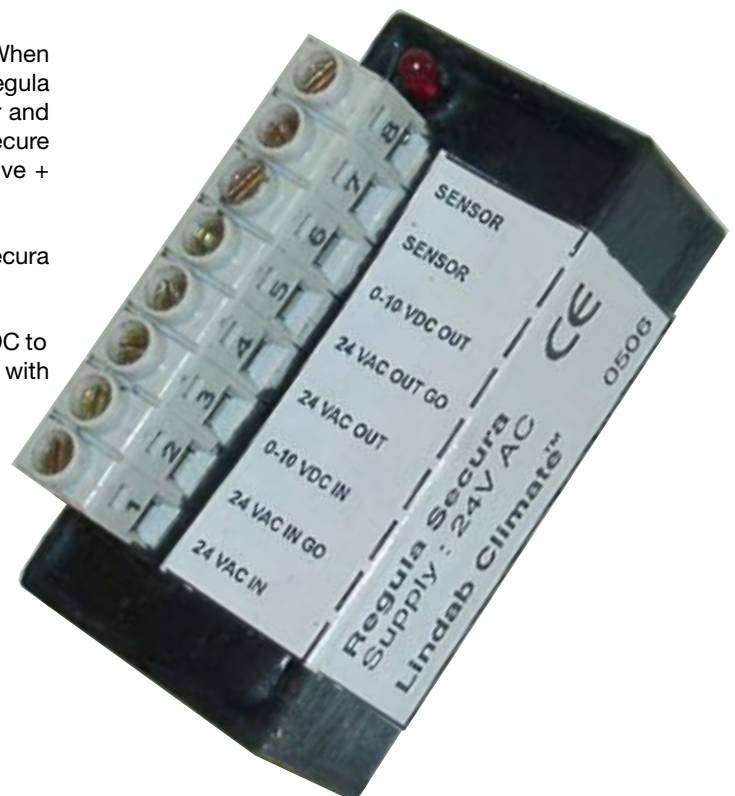


Figure 1. Regula Secura



Figure 2. condensation sensor



Figure 3. Stripes

Mounting:

- The sensor should be mounted on the cooling flow pipe, close to the connection point.
- The sensor is pasted around a horizontal, plain copper pipe and is secured with two stripes (cable tie) on the outside of the copper tracks. Make sure that the surface is cleaned before mounting. It can not be short-circuit between the condensation sensors copper tracks and the copper pipe.
- Don't attach the sensor on a rough surface.
- Mount Regula Secura on appropriate even surface on the product close to the sensor. Clean the surface before mounting Regula Secura, with the double-coated adhesive tape.
- Connection is done according to connection schedule Figure 5.
- Regula Secura is power supplied with 24V AC from the regulation central, e.g. Regula Combi or Regula Mono.
- Function check should be done when mounting is finished.

Function check:

1. Check that the mounting is correct done according to schedule Figure 5.
2. Adjust the regulation central to use cooling and control that Regula Secura is supplied with power.
3. Moist your finger and place it towards the copper tracks on the condensation sensor, the red diode should flash and shows that Regula Secura indicates condensation. Move your finger and the diode turn off when the condensation has dried out.
4. Moist your finger and place it on one of the copper track sensors, that you short-circuit between the sensor copper track and the copper pipe, this should NOT make the diode to turn off. Repeat with the other copper track. If the diode is turned on while doing this test, it shows short-circuit and the probable error is that the sensor is mounted wrong. Demount the sensor and mount a new one.

Other information:

- Extension of cables:

The cable between Regula Secura and the condensation sensor shouldn't be extend.

The cable to Regula Secura and the cable between Regula Secura and actuator will be 2 x 0,75 mm².

- Capacity:

One Regula Secura can operate three actuators which uses maximum 200 mA/actuator in the start moment and totally less than 500 mA with continuous operation.

- Valve placement:

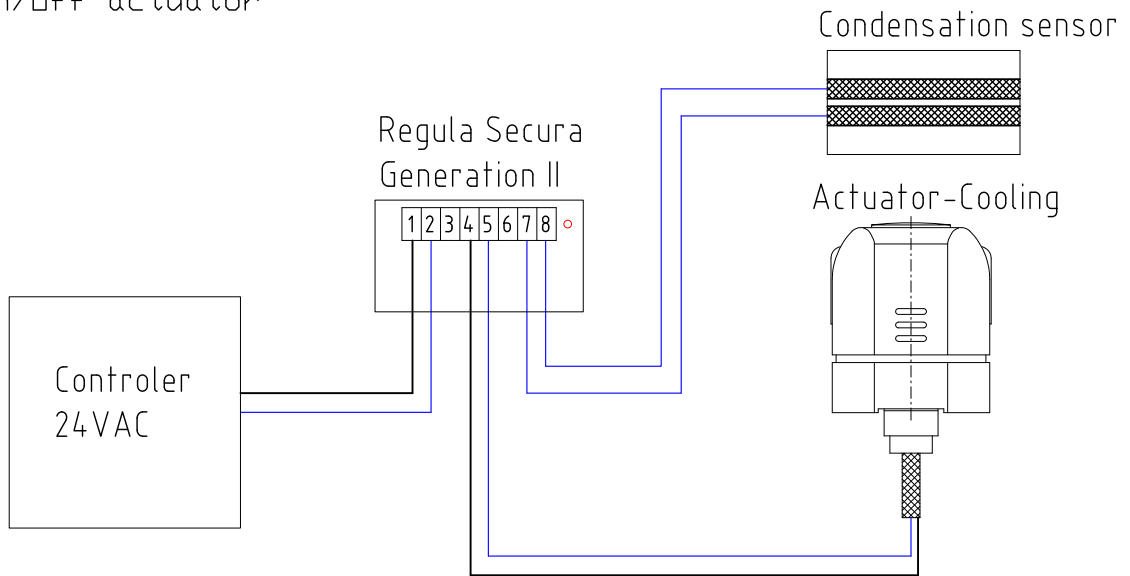
the valve will be placed that it shuts off the flow through the product



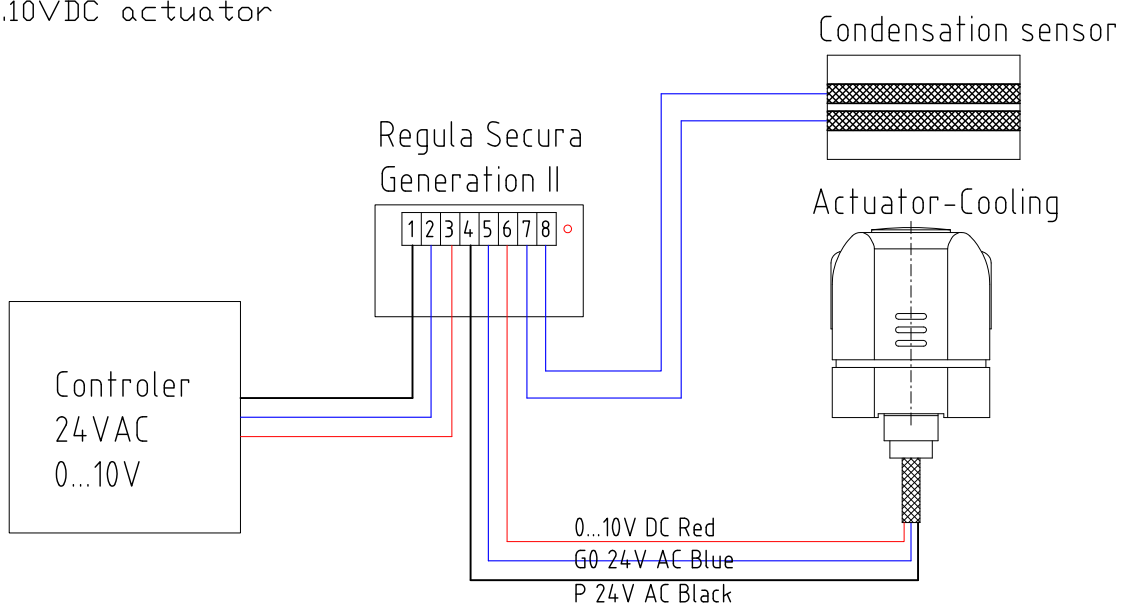
Figure 4. Sensor mounted around a horizontal, plain copper pipe and secured with two stripes

Figure 5. Connection schedule

24VAC; On/Off actuator



24VAC; 0...10VDC actuator



General information

1. Input 24VAC
2. Input 24VAC system neutral
3. Input 0-10VDC (Optional)
4. Output 24VAC
5. Output 24VAC system neutral triac controlled
6. Output 0-10VDC (Optional)
7. Input condensation sensor
8. Input condensation sensor system neutral

0...10V-connection is optional.

If you use an actuator with 0...10V-connection, you use point 3 and 5 for incoming respectively outgoing current on the connection terminal board.

If an On/Off actuator is used point 3 and 5 is not connected.