PYRO® CONTROLE
CHAUVIN ARNOUX GROUP

Control your temperature control loops in total safety

> MONITORING LOOP WITH THRESHOLD RELAYS

According to good **thermal safety** practices, **a temperature loop must be controlled by a second thermal safety loop**. This second safety loop must be totally independent from the main control loop, so it must have its own temperature sensor.

- The use of a **threshold relay** provides **essential safety** and **protection** in order to:
  - detect any dysfunction of the heating elements,
  - anticipate and react quickly if an anomaly is detected,
  - avoid any interruptions on the production line.

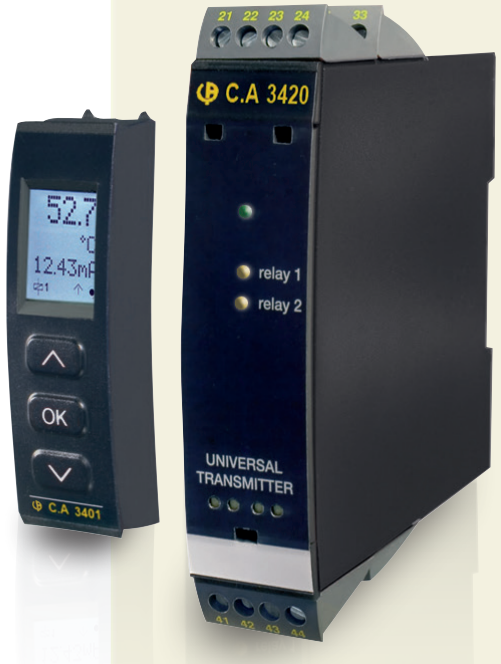
THRESHOLD RELAYS

- Heat treatment
- Safety
- Alarms
- Monitoring

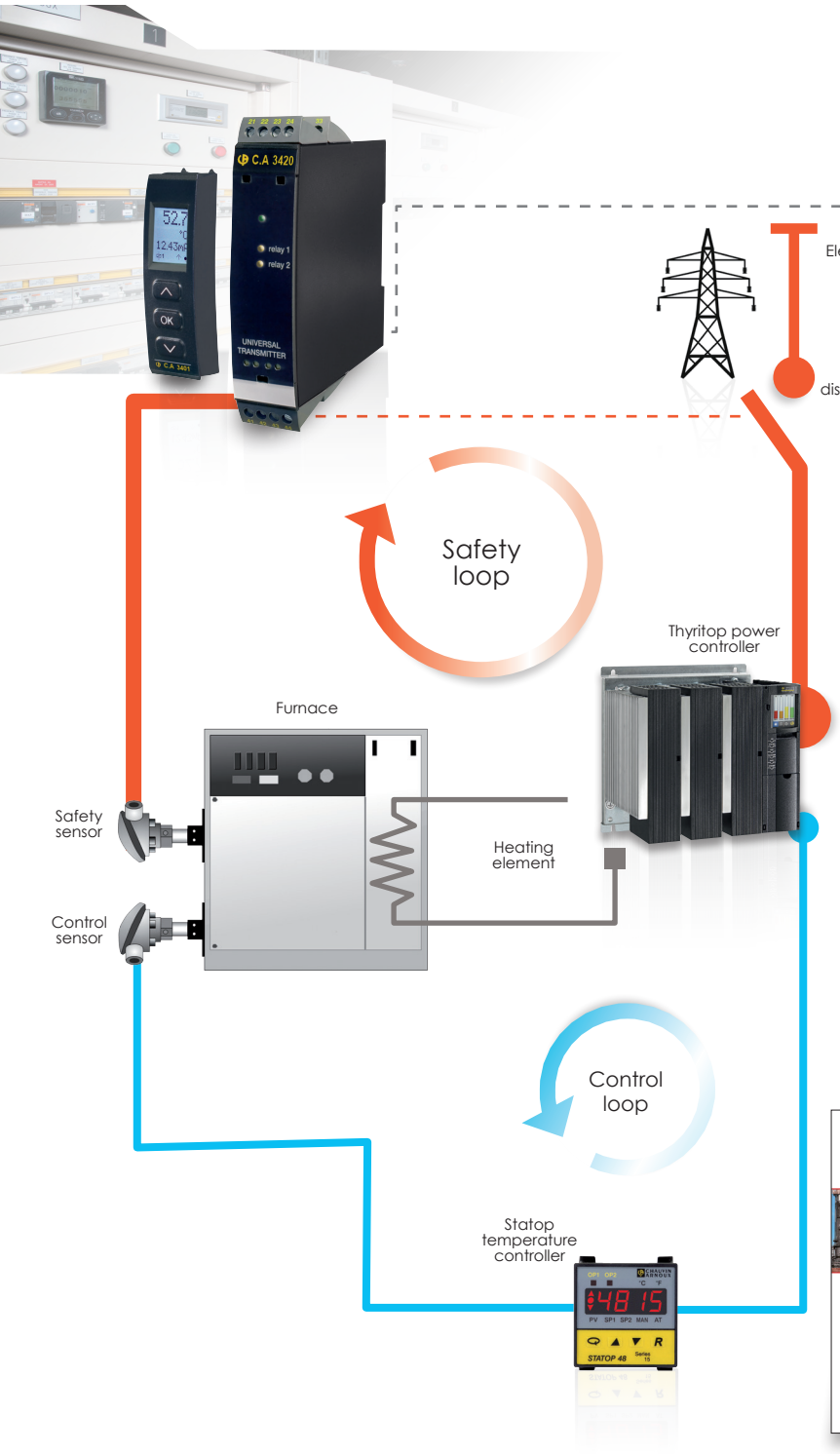
> THE SOLUTION FROM PYROCONTROLE

A **C.A 3420 threshold relay**, plate-mounted in the electrical cabinet, acts as a **safety loop**. Using **two relays** which can be configured with different thresholds, the **C.A 3420 monitors the thermal control loop** and immediately cuts off the main power supply to the installation if the temperature setpoint value is exceeded.

- **2 configurable alarm thresholds:** high absolute threshold and low absolute threshold.
- **Positive safety:** the contact of each relay is activated when it is powered up and deactivated if there is an alarm due to a threshold overrun, a measurement line fault or absence of a power-supply voltage.
- **Latch function**: automatic opening of the contact if a fault is detected - contact closure only after manual acknowledgement of the fault.



> BLOCK DIAGRAM OF THE INSTALLATION



A complete solution

Safety / control sensors

C.A 3420 threshold relays

Statop temperature controller

Thyritop power controller

Advantages of the C.A 3420 relay

- Adjustment of configuration parameters via the programming panel.
- Simulation of alarms
  - Simple, intuitive configuration.
- Duplication of the programming on other C.A 3420 relays => quick and efficient.
- LEDS on front panel:
  - Operating status of the C.A 3420.
  - Status of each active relay.

Ask your usual contact for our literature or download it from our website

www.pyrocontrole.com\publications

NA90621150I - Ed. I – 02/2016 - Non-contractual document – Please confirm specifications when ordering

> RELATED SERVICES

PYROCONTROLE possesses a calibration laboratory for temperature metrology.
COFRAC accreditation no. 2-1385 - Calibration by comparison. • From -40 °C to +1,550 °C

For further details, please contact our advisor at + 33 4 72 14 15 40

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