ZYGGOT® Temperature

Online Thermography System - Continuous Thermographic Monitoring

Relay not switching on

- Check if the relay's power supply terminal and V5Con (V5F version) are powered correctly.
- Check if the power supply at the relay input is 24 Vdc.
- Check if the power supply is switched on.

Relay indicating trip

- Check the *trip setpoint* for point temperature and ambient temperature around the sensor.

Sensor oscillation

- Check if the termination resistors are used correctly:
  - VZX/B1 Relay: 2 resistors
  - V5F Relay: 1 resistor
- Check the integrity of the ZTA shunts.
- Insulate and test the cables to identify possible shorts.

Relay indicating alarm

- Check the alarm *setpoint* for point temperature and ambient temperature around the sensor.
- Analyze whether there are any unresponsive sensors.

Sensor error

Bottom of scale (888)

- Check if the sensors are correctly addressed with different numbers.
- Check if the termination resistors are being used:
  - VZX/B1 Relay: 2 resistors
  - V5F Relay: 1 resistor
- Check if all cables are connected.
- Check the integrity of the ZTA shunts.
- Check if the sensor terminals are intact.
- Check if any sensors are burnt out.
- If the previous items are correct, test the cables individually.
- Check for a possible short in the termination resistor.
- For the V5F relay, check the voltage level at the LV sensors.
- Check that the maximum distance of the sensor network is being respected — 80 meters.
- Check that the maximum number of sensors in the network has not been exceeded — 125 sensors.

Incorrect sensor reading

- In the case of tubular sensors, check if they are positioned correctly, using the VLP2 laser sight to ensure that they are aimed at the center of the Unidex tape.
- Check if the Unidex tape that comes with each sensor is being used and if the monitoring is being carried out exclusively on it, respecting the sensor's lens opening (7°).
- Use the Zyggot 2.0 manager software (available on our website in the Downloads tab), together with the ZCC180 addressing cable, to confirm that the emissivity is set to 0.95 — the recommended value for use with the Unidex tape.
- Check if the angle of view is within the recommended limit — up to 45°.
- Confirm that the monitoring is being carried out on an ad hoc basis (one sensor per busbar).

Communication failure with supervisor

- VZX/B1/U Relay:
  - For Modbus RTU 485 or 232 communication, use port MJ1.
- V5F Relay:
  - For Modbus RTU 485 communication, use terminals “C” and “D” on the V5con.
  - For Modbus TCP/IP or Ethernet IP communication, check that the “LAN” port on the back of the V5F relay is being used.
  - For Modbus RTU 232 communication, use the relay’s MJ1/2 port via an RJ45 connector.
- Check the pinout according to the communication protocol used.
- Consult the Modbus map in the product manual (valid for both relays).
- Check if the function is active on the Modbus configuration screen.
- Confirm if the correct *offset* is used, according to the Modbus map.
- Check the use of a resistor in the customer’s Modbus network.
- Analyze possible interference from other *slaves* on the network.

Downloads

- **Addressing Software:** Zyggot Manager 2.0
- **Manual ZYGGOT® Temperature:** User Manual - V5F
- **Manual ZYGGOT® Temperature:** User Manual - V5L
- **Catalog ZYGGOT® Temperature:** Catalog

Access website