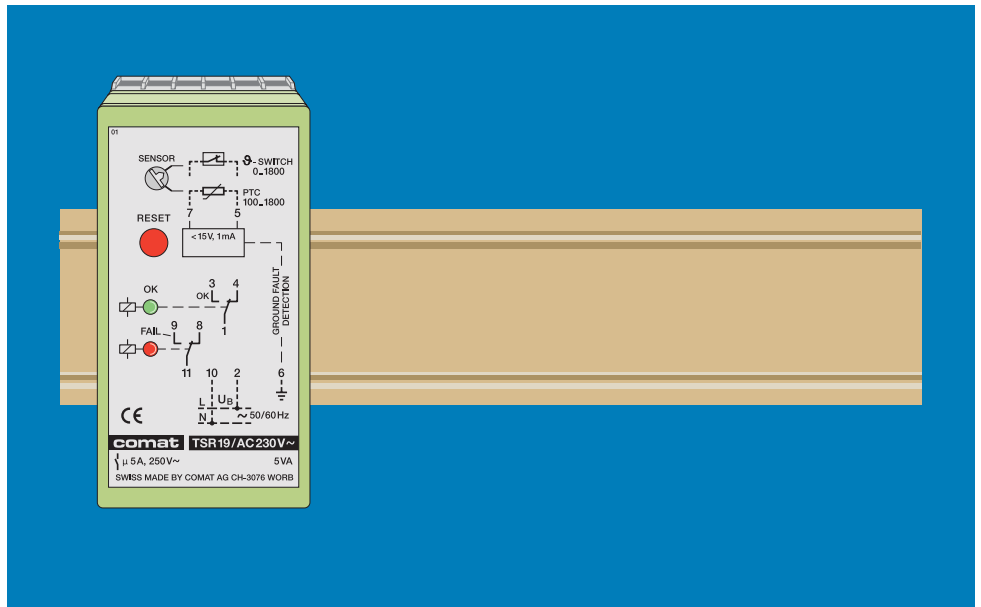


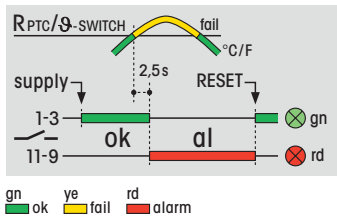
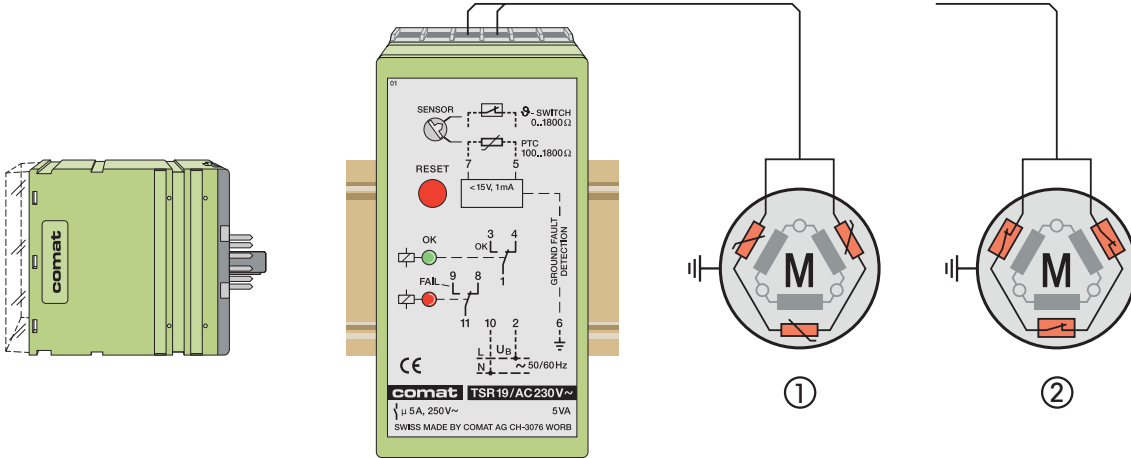
*Monitoring Relays*

# Thermo Protection Relays



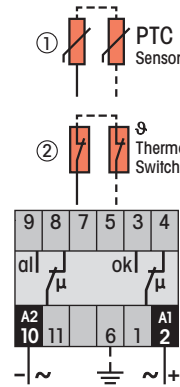
Comat products comply with different international standards and are certified accordingly.

Lloyd's; IEC 61810; EN 60974

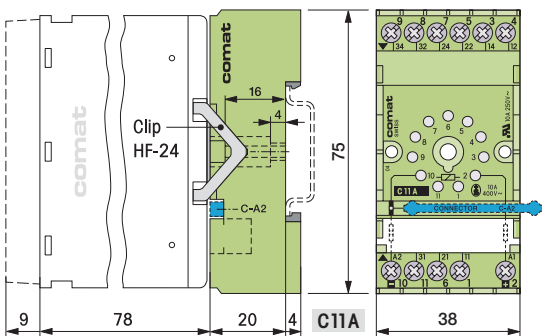


TSR19

The TSR19 is intended to monitor the temperature of motor coils, generators and transformers. It detects the temperature of the windings over the change in resistance of the PTC thermistors ① or the position of the thermo switches ②. The circuit is designed to detect a break in the continuity of the detection circuit and ground failures. On position "PTC", line or sensor fault is also detected. Reset after failure detection: Press reset button or interrupt supply for >200ms.



|                             |                      |
|-----------------------------|----------------------|
|                             | Data at Tamb. = 20°C |
| Sensor resistance Rok       | 100..1800Ω; 0..1800Ω |
| Sensor wire Rmax            | 20Ω                  |
| Error-detection Rtail       | Rtail >2200Ω         |
| Sensor supply U5-7          | 15V / Rsens ∞        |
| Sensor supply I5max         | ≤ 3mA                |
|                             |                      |
| Switching current/voltage   | 5A 250V~             |
| Switch rating               | 1250VA/...180W       |
| Mechanical switching cycles | 30x10 <sup>6</sup>   |
|                             |                      |
| Voltage tolerance           | -15/+10%             |
| Power consumption           | ≤ 5VA                |
| Ambient temperature         | -25...+60°C          |



Order no.

|               |         |                 |           |
|---------------|---------|-----------------|-----------|
|               | 50/60Hz |                 | UC(AC/DC) |
| TSR19/AC 230V |         | TSR19/UC 24-48V |           |
| TSR19/AC 115V |         |                 |           |

Accessories

|                      |       |
|----------------------|-------|
| Socket               | C11A  |
| Retaining clip       | HF-24 |
| Frontpanel mounting: | HF-23 |

The TSR19 replaces the types TSR17 and TSR18.



**Kühn Controls AG**

**Notes:**

You want more information about this product, please call us: tel: +49 (0)7082-940000 or send us a fax: +49 (0)7082-940001, or email: [sales@kuehn-controls.de](mailto:sales@kuehn-controls.de) or visit our Website: [www.kuehn-controls.de](http://www.kuehn-controls.de)