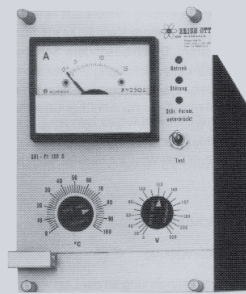


SRI-Pt 100 D

Voltage- und temperature controller with monitoring



Characteristics

- Construction with minimal technical effort
- Low installation costs
- Only one cable for power supply

This device has been developed in cooperation with a company, to standardize heatings which are installed by means of single-core Teflon heating conductors. Heating cable resistance 0,1 Ω/m. Variable length 17 - 310 m.

To be able to cover a large power range, the design was made for 220 V~ and 380 V~. The heating circuit installation is carried out with a minimum of device-related expenditure. Concerning this see chapter 8.1 and 8.2.. To safe assembly costs, the control and monitoring unit is designed so that for the temperature sensor and the power supply of the heating circuit only one cable must be laid. The length of the supply line can be up to 1 km. In order to accomodate subsequent modifications of the heating circuit, the heating circuit can be switched from 230 V~ to 400 V~ with little amendments of the wiring. The pin location is identic for all types of controller. The mixing up of the controller between 230 V and 400 V- types can not lead to a failure at the devices.

INSTALLATION OF THE HEATING CIRCUIT

For the construction of the heating circuit only the following five components and the heating loop are required:

- Automatic circuit breaker
- Circuit breaker
- Limiter
- Temperature sensor
- Controller SRI-Pt 100 D

TECHNICAL DATA

| | |
|---------------------------|-------------------------------|
| Nominal voltage | 230 V (400 V~) |
| Operating current | 0,3 - 16 A (40 A) |
| Series fuse | 16 A semi time-lag |
| Voltage controller | 5 - 230 V~ (10 - 400 V~) |
| Min. current monitoring | ~ 0,5 A* |
| Max. current monitoring | 14,1 A (0,1/m)* |
| Ampèremeter | 3 - 15 A* |
| Limiter monitoring | 100 - 400 V~, Ri ~100 k Ω |
| Ambient temperature | 0 - 70°C |
| Temperature controller | 0 - 100°C (0 - 200°C) |
| Measuring sensor | Pt-100, 3-wire switch |
| Ripple voltage suppressor | 0,8 V~ (2,2 V _{SS}) |
| Max. current pulse strain | 600 Ws |
| Switching hysteresis | ≤ 1,5% |
| Switching point | ± 1% |
| Switching capacity relay | 230 V ~; 3 (2) A |
| Dimensions H x W x D | |

FUNCTIONS OF THE CONTROLLER

| | |
|----|-----------------------------------------------------------------|
| 1. | Temperature measurement with wire break monitoring |
| 2. | Voltage controller |
| 3. | Min. current monitoring |
| 4. | Max. current monitoring |
| 5. | Limiter monitoring with safety and voltage breakdown monitoring |
| 6. | Electronic evaluation |
| 7. | Signal relay |

TYPE CODE

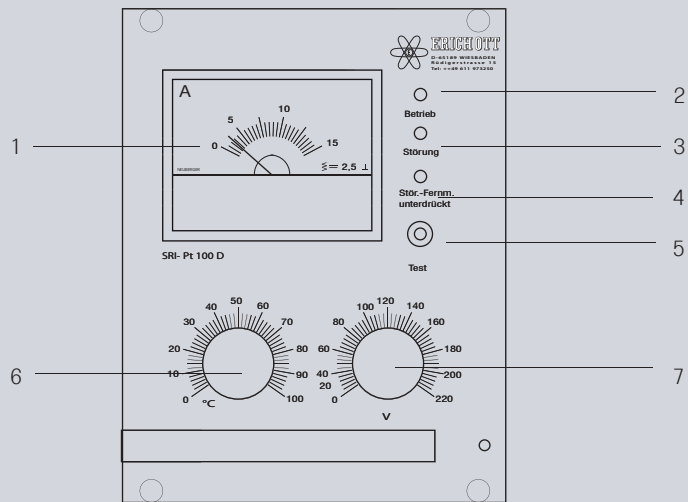
SRI-Pt 100 D 1 2 3 4 5

| | | |
|---|-----------------------------|------------------------------------------------|
| 1 | Nominal voltage | |
| | - | 230 V |
| | 3 | 400 V |
| | 2 P | 230 V 2 P |
| 2 | Temperature measuring range | |
| | 100 | 0 to 100°C |
| | 200 | 0 to 200°C |
| 3 | Max. current limitation | |
| | - | 14,1 A (Standard) |
| | U | Switchable current monitoring 3,0/6,1/7,6/13,8 |
| 4 | A | With remote switch ON OFF |
| | - | Without remote switch ON OFF |
| 5 | - | Standard |
| | | Mounting enclosure AG 18-16 |

Example: Nominal voltage 230 V, Temperature measuring range 0-100°C switchable current monitoring, with remote switch

SRI-Pt 100 D 1 100 U A -

FUNCTIONS ON THE FRONT PANEL



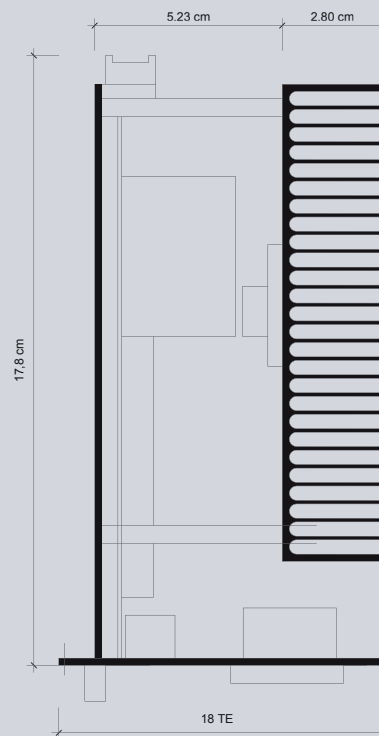
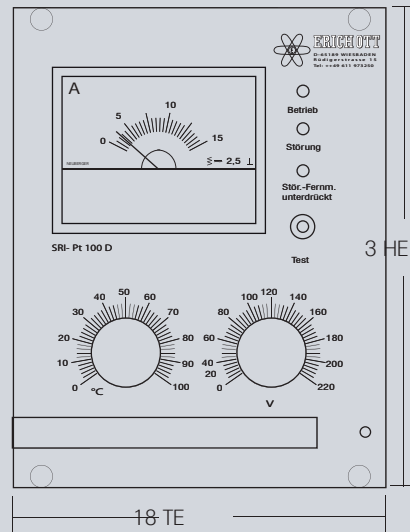
| | |
|---|---------------------------------|
| 1 | Ampèremeter |
| 2 | Display operation conditions |
| 3 | Failure indication |
| 4 | Failure remote alarm suppressed |
| 5 | Switch |
| 6 | Temperature |
| 7 | Voltage |

SIGNALING FUNCTION ON THE FRONTPANEL

| | Front panel text | LED | Signal signification |
|---|----------------------------------|------|--------------------------------------------------------------|
| 2 | Operation | gelb | Heating power switched on |
| 3 | Failure | rot | Fault |
| 4 | Failure remote alarm suppression | rot | Switch in switch position „Failure remote alarm suppression“ |

DIMENSIONS

Euro board 100 x 160
 Width of the controller 18 TE
 Diameter bar according to DIN 41612, Type F, 32-pin b, z



Please take further information from the operating instructions.
 Download on www.erich-ott.de