

## Single-zone-temperature controller



- **Microprocessor single zone controller with LED-Display**
- **Optimized for use in the plastic moulding industry**
- **Available as 2- or 3-point controller**
- **Automatic self-tuning - adapts to different controlled systems**

### Application

This temperature controller unit was specially designed to fit the demands of the plastic moulding industry. It comes up with a clear design and provides easy operation and various self-monitoring features.

The controller is used for hot-runners, extruders and presses.

### Design

Single zone controller in norm-format 96 x 96mm for cabinet front panel integration.

### Function

#### Closed-loop-control

Microprocessor-controller with automatic self-tuning establishes best control-results for fast nozzles as well as for slow manifolds or extruders.

#### Sensor-breaking-guard

In the case of a sensor-breakage, the controller switches over to manual power-control and effects the last used power set-point.

#### Alarm contact

Depending on the configuration, two alarm contacts are available :

2-point-controller :

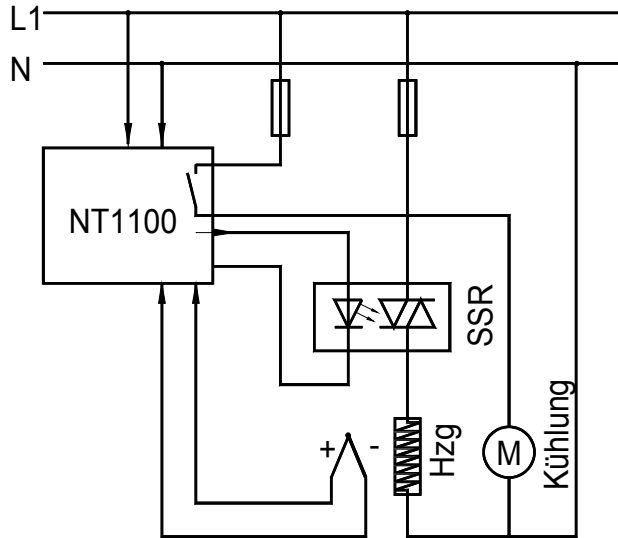
2 Alarm contacts available

3-point-controller :

1 Alarm contact available

The function of the alarms can be set-up in the menu.

**Example for the wiring :**



**Specification**

**Mains voltage**

230V~ ±10%, 48...62Hz

**Control output**

- Heating:  
18V DC, max. 10mA, short-circuit proof  
for the control of a solid state relay (SSR)  
or floating relay contact  
for relay control (Art.-Nr. 82081.9)
- Cooling:  
floating relay contact  
(only 3-point-operation)

**Alarm output**

Relay, floating, max. 250V~, 3A

**TC-input**

- Configurable
- Pt100 DIN IEC 751
  - Fe-CuNi Typ J DIN IEC 584
  - NiCr-Ni Typ K DIN IEC 584
- internal zero point correction

Thermocouple is monitored for cable breakage and short-circuit.

**Temperature range**

- Fe-CuNi (J) 0...800°C
- NiCr-Ni (K) 0...999°C
- Pt100 0,0...99,9°C  
-100...+200°C  
0...400°C  
0...800°C

**Display**

7-segment LED 10mm red

**Type of memory**

EAROM

**Electrical connection**

Terminal strip following DIN 40050

**Dimensions**

Housing 96 x 96mm for cabinet front-panel  
integration following DIN 43700, depth 67mm  
Protection: IP20; Front: IP50

**Weight**

ca. 400g

**Operation conditions**

Environmental temperature 0... 50°C

**Description**  
NT 1100

**Art.-Nr.**  
82081 (Output for SSR)  
82081.9 (Output relay for  
relay control)