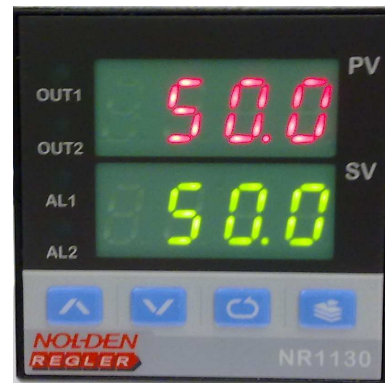


## Single-zone temperature controller



- **Microprocessor single-zone controller with bright LED-Display**
- **Optimized for use in the plastic moulding industry**
- **Can be configured as PID- , 2-point-controller or dimmer**
- **Automatic self-tuning - adapts to different controlled systems**
- **Simple operation, clear and easily understandable manual**

### 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 selfmonitoring features.

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

### Design

Single zone controller in norm-format 48 x 48mm 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. Two PID-control characteristics are available : „Autotuning“ (overshoot is accepted, quicker and more precise) or „Selftuning“ (overshoot is avoided,

slower and less precise ). Further, the unit can be configured as a simple 2-point controller or as a dimmer.

#### Soft-start

The controller starts-up (if desired) with a soft-start to preserve cold heating elements. Time and power-setting during this phase can be set-up as needed.

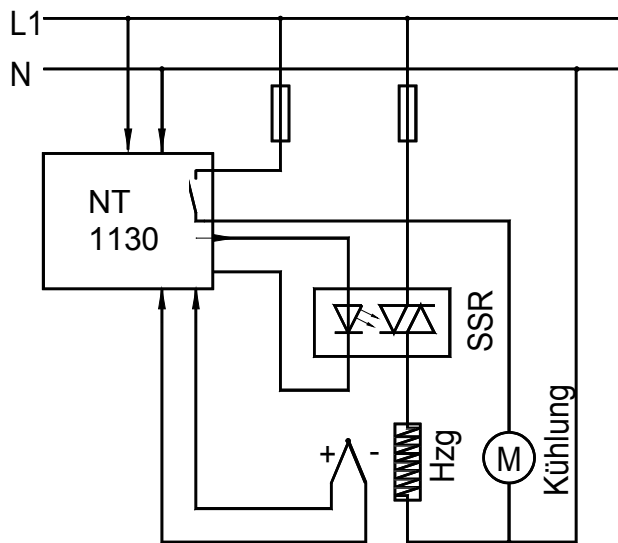
#### Sensor or cable breaking guard

Breakage of the thermocouple or the sensor cable is immediately detected and signaled in the LED-display.

#### Alarm contact

Floating alarm contact for one or two functions, e.g. process high and / or process low alarm, absolute temperature etc. .

Example for the wiring (heating or cooling) :



## Specification

### Mains voltage

230V~ ±10%, 50/60Hz

### Control output

- Heating: 24V DC, max. 20mA, short-circuit proof for the control of a solid state relay (SSR) or floating relay contact for relay control (Art.-Nr. 82080.9)
- Cooling: Floating contact See heating (Art.-Nr.82080.9)

### Alarm output

Relay, floating contact, max. 250V~, 5A

### Thermocouple (TC) -input

Configurable

- Fe-CuNi Type J DIN IEC 584
- NiCr-Ni Type K DIN IEC 584  
internal zero point correction
- Pt100 DIN IEC 751, 2- or 3-wire  
(please mention in order)

Thermocouple is monitored for cable breakage and short-circuit.

### Temperature-range

Fe-CuNi (J)	0...900°C (with or w/o position after the decimal point)
NiCr-Ni (K)	0...1200 °C 0...999,9°C (1 position after d.p.)
Pt100	0...500°C (with or w/o position after the decimal point)

### Display

7-segment LED-display 8mm green (actual value) and red (setpoint), signal-LED red for control output and alarm.

### Precision

0,5% FS

### Electrical connections

Terminal strip, protected

### Dimensions

Housing 48 x 48mm for cabinet front-panel  
Integration, depth 91,5mm

### Weight

ca. 155g

### Operation conditions

0 ... 55°C

### Description

NT 1130

### Art.-Nr.

82080 (output for SSR)  
82080.9 (output relay)

Pt100 please indicate in order