



TB 40

Temperature limiter



PROFILE

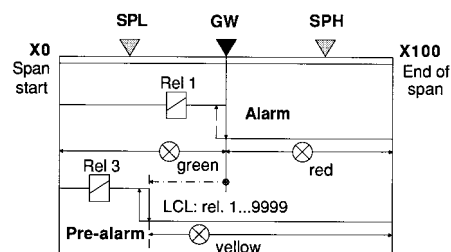
The Temperature limiter TB 40 has been given Safety Approval according to DIN 3440. This enables it to be used as a safety cut-out in heating plants. If the pre-set limit value is exceeded, output relay 1 is de-energized and remains locked in this state, even if the process value falls back below the limit.

The limit value (GW) is adjusted by means of the front-panel keys, and is only possible if an internal switch is closed and a code number has been entered.

With process value X higher than limit value GW, relay 1 is de-energized and remains locked.

When X falls below GW, the relay can be reset by means of front panel keys or via an external contact.

Functional description



Switching difference of the contacts:
1 digit

Action of input circuit monitor:
same as $X \geq GW$

Further technical data: see KS 40

Parameter adjustment ranges

Parameter	Symbol	Adjustment range	Remarks
Pre-alarm	LCL ¹⁾	rel. 1 ... 9999	
Reset	Loc ²⁾	0 ... 3	
Lower set-point limit	SPL	$x_0 \dots x_{100}$	Adjustment range corresponds to input span (see configuration)
Upper set-point limit	SPH	$x_0 \dots x_{100}$	
Decimal point	dP ³⁾	0 or 1	0 = no decimal point
Lower input limit	InL ³⁾	- 999 ... 9999	x_0 Span start
Upper input limit	InH ³⁾	- 999 ... 9999	x_{100} End of span

¹⁾ Setting of pre-alarm is relative to the limit value GW. If LCL is adjusted to a value less than 1, the display shows "----", and the pre-alarm is switched off.

²⁾ Loc = 0: Resetting only via front keys.
 Loc = 1: Resetting only via external contact.
 Loc = 2: As Loc 0, but process value X is only displayed on alarm.
 Loc = 3: As Loc 1, but process value X is only displayed on alarm.

³⁾ Only with inputs 0/4 ... 20 mA and 0 ... 10 V (see configuration)

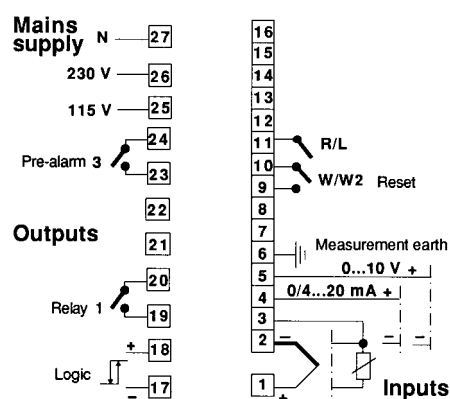
Configuration

C 0 0 0 0

Input		
Type L	0 ... 900 °C	0
Type J	0 ... 900 °C	1
Type K	0 ... 1350 °C	2
Type N	0 ... 1300 °C	3
Type S	0 ... 1760 °C	4
Type R	0 ... 1760 °C	5
Pt 100 DIN/IEC – 99 ... 500 °C		6
0 ... 20 mA, linear		7
4 ... 20 mA, linear		8
0 ... 10 V, linear		9

Factory setting: C0000

Connections



ORDERING DATA

Temperature limiter TB 40	Order no. 9404 407 46021
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