

FEATURES

- **Input:**
DGW 2.01: PT 100
optional PT 500/ PT 1000
DGW 2.08: thermocouples
- **Output:**
2 relays with change over contacts
Relay 1: limit value function
Relay 2: limit value or alarm function
- **Parameterization, operation and actual value over display**
- **Galvanic 4-way isolation of 4 kV**



FUNCTION

The digital units of the DGW – series are being used for the limit value control of standard inputs. The DGW 2.01 has an input for PT 100 respectively optional PT 500 or PT 1000. The DGW 2.08 for thermocouples.

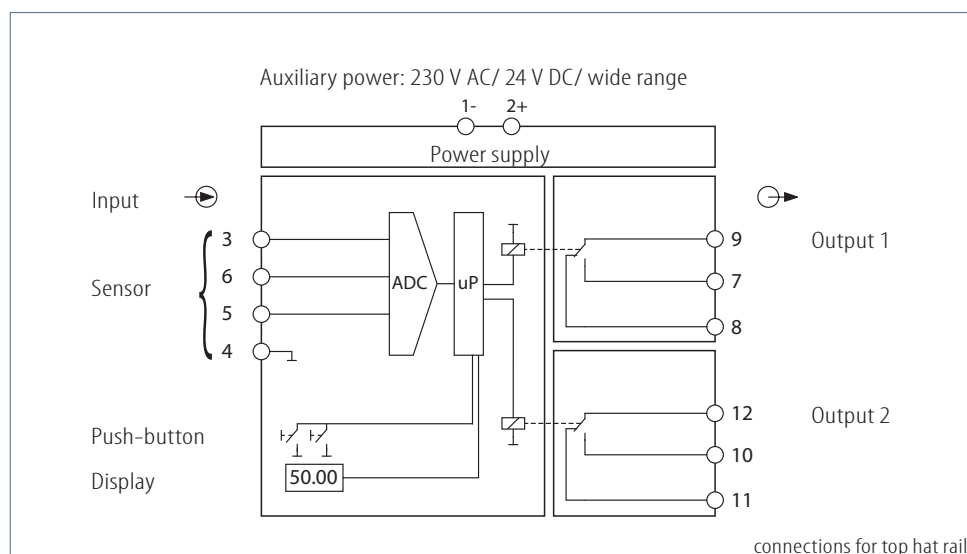
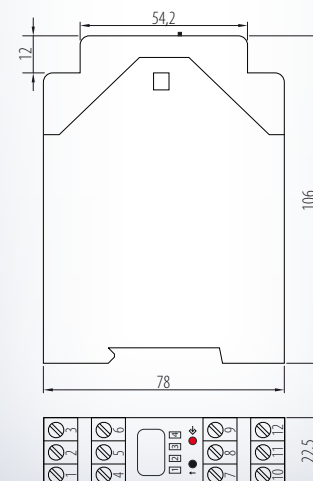
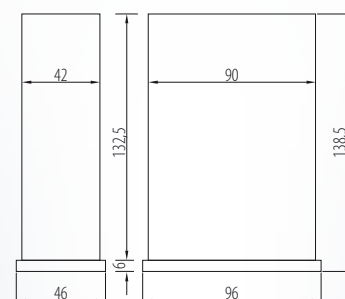
Each of the both devices have two relay outputs. The parameterization is carried out by front side push-buttons and indicated by display. The 4-digit actual value indication is free scalable.

Based on the input, the ON and OFF switchpoints (limits) of the two independent relays can be freely defined. This automatically results in a hysteresis. The ON-delay and the delay release times of the relays are separately adjustable.

The status indication of the relays is displayed as bargraphs.

An alarm function can be realized with the relay 2, in which the pane, via the thresholds for on and off, can be set.

The door installation versions DGW 2.0x T also have an simultaneous analog voltage and current output.



OVERVIEW-MENU

adjustable range	description	main menu*1	description	available display
	actual indicated value in °C	1234		
-99,9 ... 500,0 °C	switch on point relay 1	change value rl.on	change value r2.on	switch on point relay 2
-99,9 ... 500,0 °C	switch off point relay 1	rl.oF	r2.oF	switch off point relay 2
0,1 ... 999,9 sec. (comma defined)	on-delay relay 1	t1.on	t2.on	on-delay relay 2
0,1 ... 999,9 sec. (comma defined)	delayed release relay 1	t1.oF	t2.oF	delayed release relay 2
Rn Rb	energise fallen off	behavior relay 1 in case of sensor break r1.Fb	r2.Fb	behavior relay 2 in case of sensor break
			r2.AL	behavior*2 relay 2 as alarm relay
error message: F-04 sensor break AL alarm message RL.oF unlocking alarm		back to actual indicated value EndE	displayed for 2 seconds	

Legend: selection next

*1 There is a constant change between the actual indicated value and the display of the menu item.

*2 alarm relay: (window: acceptance region between switching and tripping point)

RUS no alarm function, hysteresis

Ab.h relay 2 fallen off outside acceptance region and locked

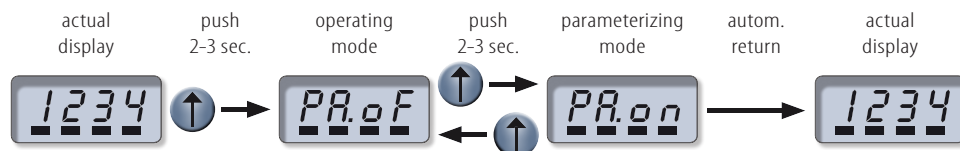
Relay 2 latched on outside acceptance region and locked	Relay 2 energised outside acceptance region and locked
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Ab relay 2 fallen off outside acceptance region

R_n relay 2 energised outside acceptance region

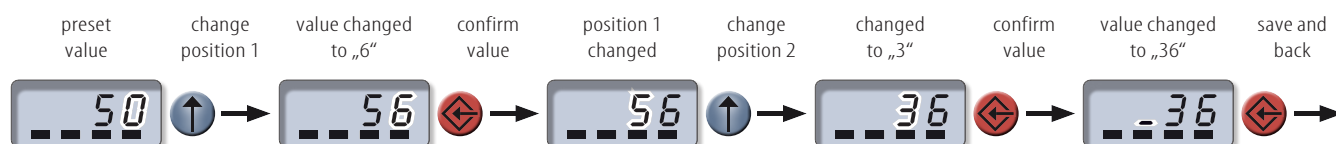
*3 menu point *r1.Fb* and *r2.Fb* at DGW 2.08 not available !

changeover parameterizing mode/ operating mode:

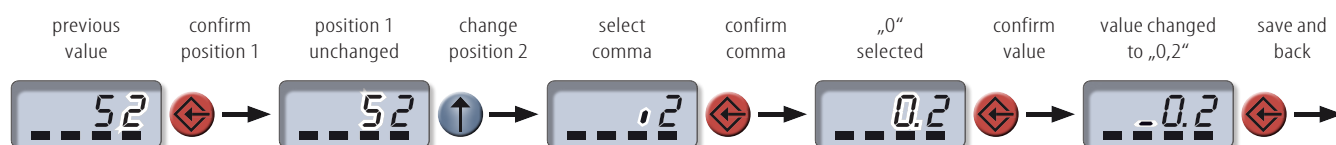


CHANGE VALUE (select to change the menu item):

change value:



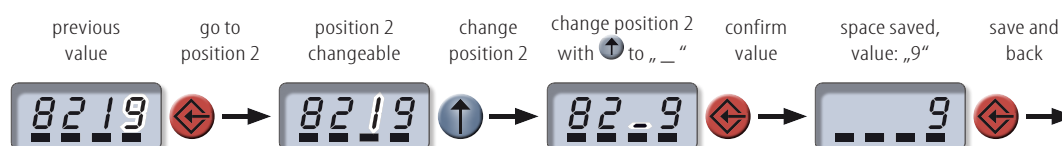
define decimal place:



delete decimal place:



delete positions:



Details of operation:

The displayed position gets changed with the push-button . Values such as  to , minus , comma , and space  are possible.

Use the push-button  to confirm the actual position and go to the next or return to the main menu after changing the last digit. Break-off possible by pushing  longer.

Optional door installation:

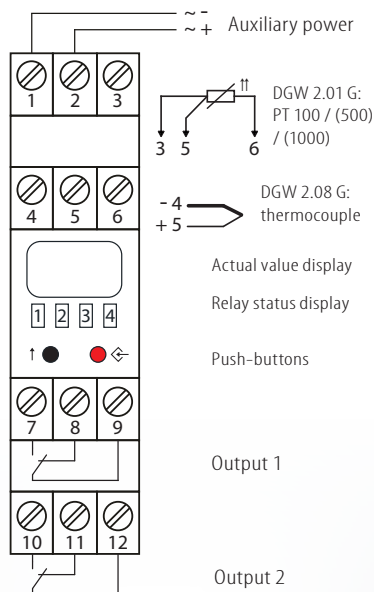
Push red push-button longer than 2 seconds: code requested. Enter default code to change parameters, otherwise display only.

Legend:

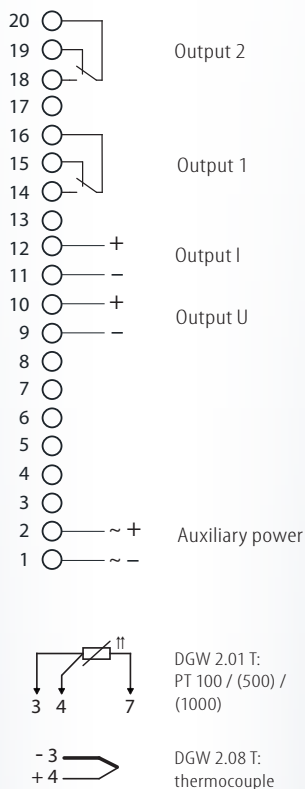
-  Digit on display blinks.
-  Display of comma.
-  space
-  selection
-  confirm

DGW 2.01 DGW 2.08

DGW 2.01/2.08 G



DGW 2.01/2.08 T

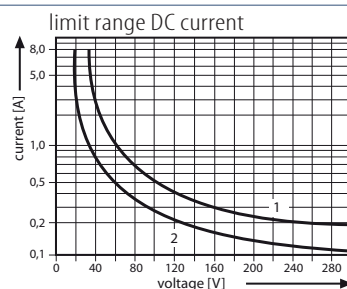


Input:

DGW 2.01:	PT 100, 2/3-wire optional PT 500 / PT 1000	range -100...500 °C
DGW 2.08:	thermocouples internal compensation: error $\pm 0,05$ %	
type J	-20...1200 °C	type K -50...1370 °C
type L	-50...900 °C	type N -50...1300 °C
type U	-20...600 °C	other types on request

Output:

2 relay outputs:
 max. switching current: 8 A
 max. switching voltage: 250 V AC
 mechanical life cycle: 30×10^6 cycles
 contact life cycle: 10^5 cycles
 connection: see connection diagram



Only at DGW 2.01/ 2.08 T: Output simultaneous:
 I: load-independent DC current: 0(4)...20 mA input resistance approx. 680 Ω
 U: load-independent DC voltage: 0(2)...10 V input res. approx. ≥ 5 k Ω simultaneous operat.

Adjustment:

The functions are adjusted by 2 front side push-buttons and display (see page 03-10 and 03-11).

Display:

4-digit LC-display with 2 bargraphs to indicate the relay status of output 1 and 2.



Environmental conditions:

Storage temperature: -40...+70 °C
 Operating temperature: 0...55 °C
 Isolation voltage: 4 kV eff. 1 sec.
 input-output-auxiliary voltage

Auxiliary power:

Housing for top hat rail:

230 V AC: 230 V AC
 < 3 W
 24 V UC: 20...45 V AC
 10...70 V DC
 < 3 W

Door installation:

Wide range: 20...253 V AC/ DC
 < 3 W

Characteristics of transmission:

Linearity error: < 0,03 % of final val.
 Temperature error: < 30 ppm/ K

Directive:

EMV Directive: 2004/108/EG*
 Low Voltage Directive: 2006/95/EG

*minimum deviations possible during
 HF-radiation influence

Mounting details:

Housing for top hat rail:

Type of protection: IP 40 housing
 IP 10 clamps
 Mounting rail fixed according to
 EN 50022-35 x 6,2 mm
 Width: 22,5 mm
 Weight: 250 g
 Material: Polyamide PA
 Flammability class: V0 (UL94)
 Approval: CE
 Connection: screw clamps
 $\leq 2 \times 2,5$ mm²

Door installation:

Type of protection: IP 54 Front
 Front frame: 96 x 48 mm
 Installation depth: 138,5 mm
 Weight: 290 g
 Material: PC/ ABS
 Flammability class: V0 (UL94)
 Approval: CE
 Connection: pluggable
 screw clamps
 0,14...1,5 mm²

**For safety reasons we recommend to
 mount the housing for top hat rail with a
 distance of approx. 5 mm to each other.**

Ordering information:

Please specify signals in clear text:
 e.g. PT 100, 0...20 mA

Type: DGW 2.0x G 230 V AC housing
 DGW 2.0x GDC 24 V UC housing
 DGW 2.0x TW wide range door inst.

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