DC Voltage or Current Input with Relay Output

NEW

WAVEANALOG DC/Alarm

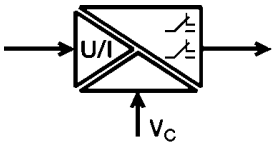
- 3-way-isolation
- Low trip/high trip
- FAILSAFE/NON FAILSAFE modes
- 1 relay per setpoint 250 VAC @ 3A

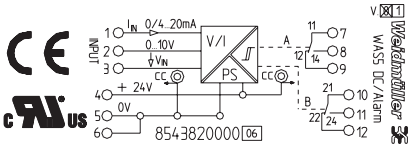
DC/Alarm

Approvals:

CE cULus

Schematic circuit diagram





Ordering data	Type	Part No.
Screw clamp connection	WAS5 DC/Alarm	**8543820000**
Tension clamp connection	WAZ5 DC/Alarm	**8543880000**

Technical data*	
Input	
Input voltage	0…10 V
Input resistance	≥ 100 kΩ
Input current	0/4…20 mA
Input resistance	≤ 110 Ω
Output	
Relay	1 relay per channel
Relay type	SPDT
Contact material	AgNi 90/10
Switching voltage	253 VAC
max. switching voltage	253 VAC
Steady state current ac	3 A
Switching load ac	750 VA
Status indication	1 red LED per channel for alarm indication, power on: green LED
Mechanical lifetime	15 x 10^6 operations
Electrical lifetime (max. load)	10^5
Threshold	1…90% (independent for channel 1 & 2)
Hysteresis	1…10% (independent for channel 1 & 2)
Temperature coefficient	≤ 500 ppm/K
Repeatability	max. ± 0.3 % from full scale value
	10 V or 20m A
Coordination of insulation according to EN 50178, 04/98	
Rated voltage	300 V
Rated surge voltage	4 kV
Overvoltage category	III
Contamination class	2
Clearance and creepage distance	3 mm
Test voltage	4 kV_{eff}
General Data	
Supply voltage	18 VDC…24 VDC…30 VDC
Power consumption	typ. 1 W both relay detected
Current carrying capacity of cross-connection	≤ 2 A
Operating temperature	0°C…+55°C mounted on horizontal DIN rail
Storage temperature	-20°C…+85°C
Standards/Specifications	EN 50178
EMC standards	EN 50082-2, EN 50081-1, EN 50081-2 EN 55011
Dimensions W/L/H mm (in.)	17.5/92.4/112.5 (0.69/3.64/4.43)
Weight	150 g
Approvals	CE cULus

* Tu 23 °C, single module

Function	SW 1 1	2	3	4
Channel A High Trip	□			
Channel A Low Trip	■			
Channel B High Trip		□		
Channel B Low Trip		■		
FAILSAFE, Channel 1 & 2			□	□
NON FAILSAFE, Channel 1 & 2			■	■

■ = on
□ = off

NON FAILSAFE: The relay picks up when the alarm is triggered. The relay drops out when the alarm is triggered.

FAILSAFE: An alarm is also triggered in the FAILSAFE mode, if for example, the operating voltage to the module fails.

Low trip: Alarm is triggered if the set signal threshold is exceeded.

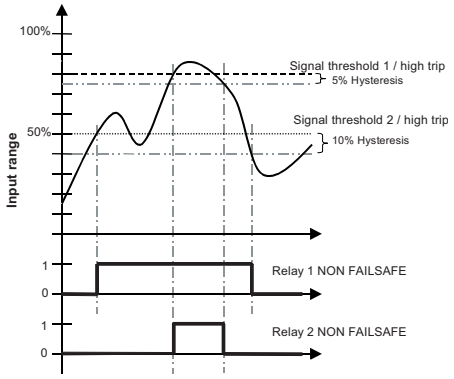
High trip: Alarm is triggered if the set signal threshold is exceeded.

Signal threshold: Adjustments of the signal threshold (1…90)% are made for channel 1 with the potentiometer P1, and separately for channel 2 via potentiometer P2.

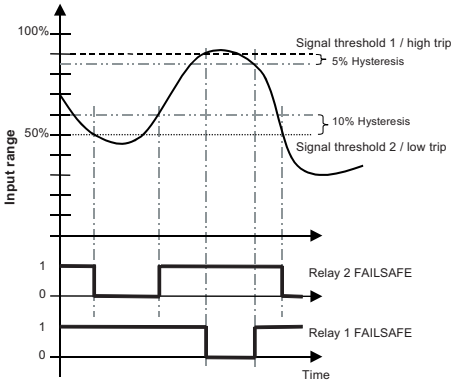
Hysteresis: Adjustments of the hysteresis (1…90)% are made for channel 1 with the potentiometer P3, and separately for channel 2 via potentiometer P4.

WAVEANALOG DC/Alarm – Alarm indication

Example 1



Example 2



ANALOG SIGNAL PROCESSING