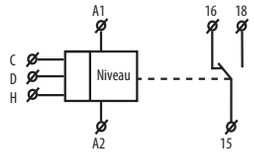
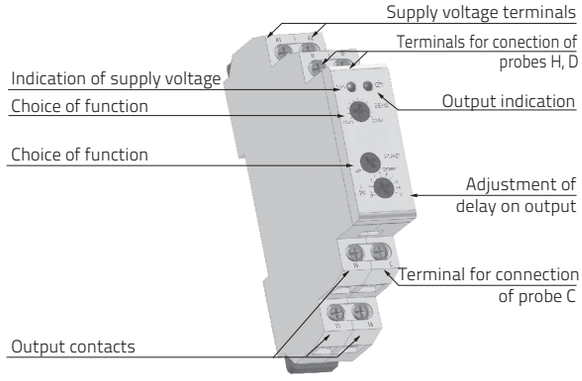
Level switch
NWT 5

- Relay is designed for monitoring levels in wells, basins, reservoirs, tanks....
- In one device you can choose the following confi gurations:
  1. one-level swotch of conductive liquids (by connecting H and D)
  2. two-level switch of conductive liquids
- One-state device monitors one level, two-state device monitors two levels (switches on one level and switches off on another level)
- Choice of function PUMP UP, PUMP DOWN
- Adjustable time delay on the output (0.5 - 10 s)
- Sensitivity adjustable by a potentiometer (5-100 kΩ)
- Measuring frequency 10Hz prevents polarization of liquid and raising oxidation of measuring probes
- Galvanically separated supply voltage UNI 24.. 240 VAC/DC
- Output contact 1xchangeover/SPDT 8A/250V AC1
- 1-module type, mounting onto a DIN rail

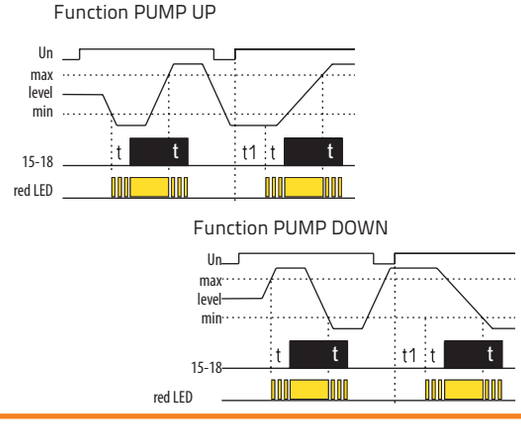
Symbol



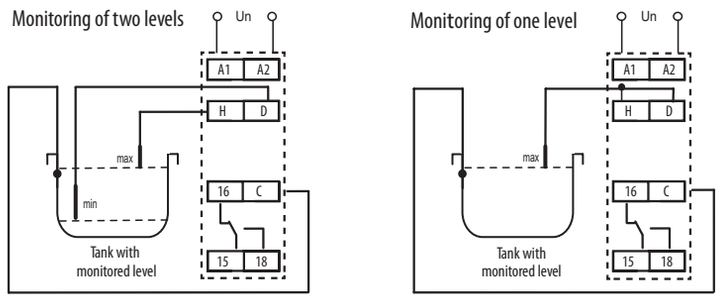
Description



Function



Connection



Function descripton

Relay is designated for monitoring of levels of conductive liquids with possibility of functions: PUMP UP or PUMP DOWN. To prevent polarization and liquid electrolysis of liquid, and undesirable oxidation of measuring probes, alternating current is used. For measuring use three measuring probes: H- upper level, D- lower level, C - common probe. In case you use a tank made of a conductive material, you can use it as probe C. In case you require monitoring of one level only, it is necessary to connect inputs H and D and connect them to one probe - in this case sensitivity is lowered by half (2.5... 50 kohm). Probe C can be connected with a protective wire of supply system (PE). To prevent undesirable switching out output contacts by various infl uences (sediment on probes, humidity...) it is possible to set sensitivity of the device according to conductivity of monitored liquid (corresponding to "resistance" of liquid) range 5 up to 100...kohm. To reduce influences of undesirable switching of output contacts by the movements of the liquid in tanks, it is possible to set delay of output reaction 0.5 - 10 s.

Level switch
NWT 5

Technische Daten	NWT 5
Functions	2
Supply terminals	A1 - A2
Voltage range	24 ... 240 V AC/ DC (AC 50 - 60 Hz)
Input	max. 2 VA
Toleration of voltage range	-15 % ; +10 %
Measuring circuit	
Sensitivity (input resistance)	adjustable in range 5 kΩ -100 kΩ
Voltage of electrodes	max. AC 3,5 V
Current in probes	AC <0,1 mA
Time response	max. 400 ms
Max. capacity of probe cable	800 nF (sensitivity 5 kΩ), 100 nF (sensitivity 100 kΩ)
Time delay (t)	adjustable, 0.5 -10 sec
Time delay after switching on (t1)	1.5 sec
Accuracy	
Accuracy in setting (mechanical)	± 5 %
Output	
Number of contacts	1x changeover (AgNi)
Current rating	8 A / AC1
Switching voltage	2500 VA , 240 W
Switched voltage	250 V AC1 / 24 V DC
Min. switched output DC	500 mW
Mechanical life (AC1)	1×10^7
Electrical life	1×10^5
Other information	
Operational temperature	-20 ... +55 °C
Storage temperature	-30 ... +70 °C
Electrical strenght	3.75 kV (supply - sensors)
Operational position	any
Mounting	DIN rail EN 60715
Protection degree	IP 40 from font panel / IP 10 terminals
Overvltage category	III.
Pollution degree	2
Max. cable size (mm^2)	2.5
Dimensions	90 x 17.6 x 64 mm
Weight	72 g
Standards	EN 60255-6, EN 61010-1