

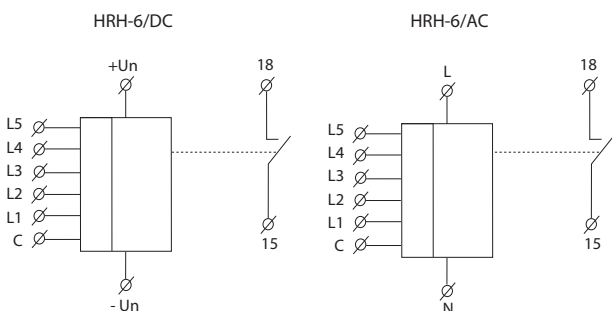


EAN code
HRH-6/AC: 8595188136990
HRH-6/DC: 8595188137409

Technical parameters	HRH-6/DC	HRH-6/AC
Function:	2	
Voltage range:	DC 12 - 24 V	AC 230 V (50-60 Hz)
Burden:	max. 1.8 W	max. 3.8 VA
Max. dissipated power (Un + terminals):	3 W	
Supply tolerance:	± 20 %	-20 % .. +10 %
Measuring circuit		
Sensitivity adjustable in the range*:	min. 10 kΩ max. 200 kΩ	
Voltage on probes:	max. 3 V AC	
Probe cable maximum capacity:	500 nF (for min. sensitivity), 50 nF (for max. sensitivity)	
Time delay:	adjustable 1 to 10 s	
Output		
Number of contacts:	1x switching (AgNi)	
Current rating:	10 A/AC1	
Switching voltage:	2500 VA/AC1, 200 W/DC	
Peak current:	16 A/< 3 s	
Switching voltage:	250 V AC/24 V DC	
Mechanical life (AC1):	10.000.000 ops.	
Electrical life:	100.000 ops.	
Other information		
Operating temperature:	-20 .. +55 °C (-20 .. +55 °F)	
Storage temperature:	-30 .. +70 °C (-30 .. +70 °F)	
Diel. strength (supply - probes):	x	3.75 kV
Operating position:	any	
Protection degree:	IP65	
Overvoltage category:	x	III.
Pollution degree:	2	
Dimensions:	110 x 130 x 72 mm	
Weight:	288 g	385 g
Standards:	EN 60255-1, EN 60255-26, EN 60255-27, EN 60669-1, EN 60669-2-1	
Recommended measuring probe:	see pg. 132	

* sensitivity is higher at both ends of a range of values.

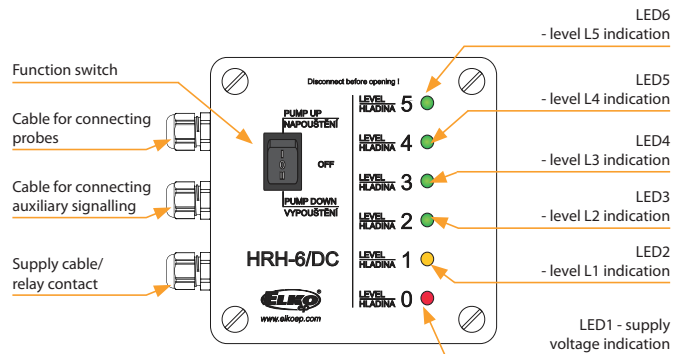
Connection



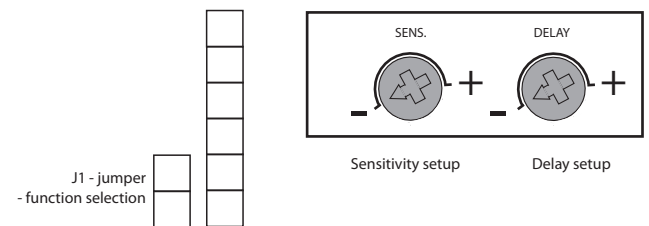
- Function 1 monitors minimal and maximal level depth, for example in fire engine cars, tanks etc.
- Function 2 monitors level depth in water collectors, basins, pools etc.
- Selection of particular function is made by jumper on the front panel.
- Device monitors 5 levels by using six probes (one probe is common).
- Level indication by six LED's on the front panel of the device.
- Measuring frequency 10 Hz to prevent polarization of liquid.
- Supply voltage 12 to 24 V DC (to be used in fire-engines) or galvanically separated 230 V AC for general use.
- Contact relay 10 A for signalization of full/empty tank (according to a chosen function).
- Choice of functions PUMP UP/OFF/PUMP DOWN by a switch located on the front panel of the device.

Description

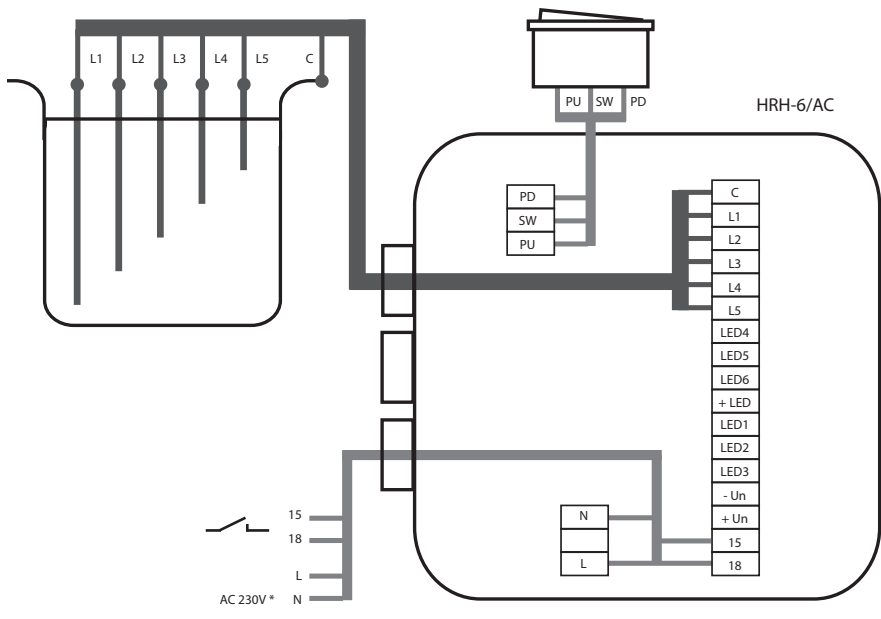
HRH-6/DC



Setup elements (inside unit)

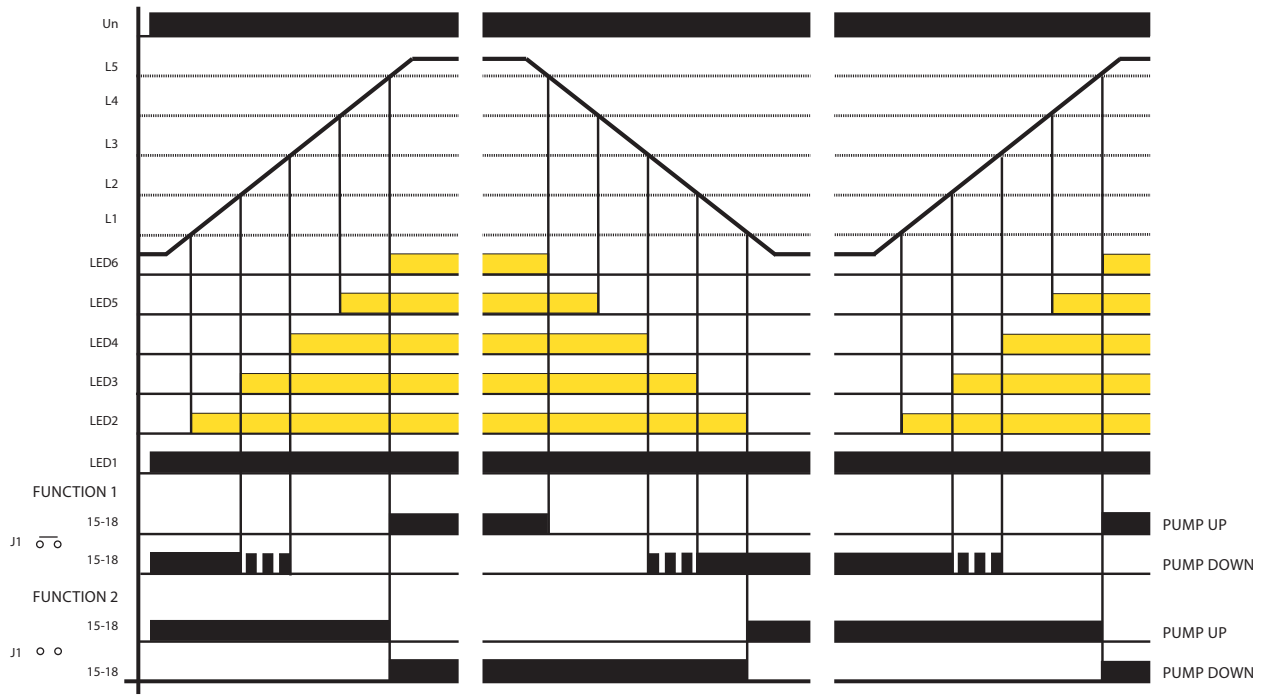


HRH-6 block connecting



* In case of HRH-6/DC, incoming supply is connected on terminals +Un and - Un.

Functions



This device monitors level of a conductive liquid in a tank by using six single probes or one 6-fold probe. In case you use a tank made of a conductive material, it is possible to use it as a common probe C.

This common probe is connected to a pole of supply (for fire-engines it means its body) in case of supply voltage 12 to 24 V DC.

In case of supply voltage 230 V AC, the circuits are galvanically separated from the main.

The device is controlled by a three-position switch PUMP UP/OFF/PUMP DOWN. After switching into a position PUMP UP or PUMP DOWN, red LED1 shines and then also LED2 to LED6 according to liquid level. Output relay has 2 selectable functions.

Function setting is done by a jumper on basic board of HRH-6.

Function 1: (for use in fire-engines) - jumper is applied. In case of function PUMP UP and level reaching L5, the relay controlling e.g. acoustic signalization, permanently closes and indicated full tank. In case of PUMP DOWN function and level drop under level L3, relay periodically switches and under L2 it switches permanently (indicates almost empty tank).

Function 2: (for keeping liquid level) - jumper is not applied. In case of PUMP UP, sensor is switched until liquid reaches level L5. Then relay opens and switches again in case the liquid level falls under level L1. In case of PUMP DOWN - relay is switched until liquid falls under level L1. Then relay opens and switches again on level L5.

To eliminate LED flashing while level gurgle it is possible to delay reaction of probes (set delay 1 to 10 s). According to conductivity of liquid it is possible to set sensitivity of probes (corresponding to "resistance" of liquid).