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HK

Conductive liquids level monitor

- Monitors one or two levels of conductive liquids.
- Sensitive adjustment from 4.7kΩ to 100kΩ
- Controls in conductive or non-conductive containers
- One level regulated option.
- LED indicates state of relay
- Fast connection pluggable terminal blocks.

Operating

Controls of maximum and/or minimum levels of conductive liquids such as; (tap water, sea water, waste water, chemical solutions, coffee etc). The principle is based on measurement of the apparent resistance of the liquid between two submerged probes. When the measured value is lower than the present threshold on the unit front face, output relay changes state. To avoid electrolytic phenomena, an AC current flows across the probes. The output relay changes state when the level of liquid reaches the maximum electrode, with the minimum electrode submerged. It returns to its initial state when the minimum probe is no longer in contact with the liquid. The probe wire (max length 100 meters) does not have to be screened, but avoid mounting it in parallel with the power supply wires. A screened wire can be used, with the screening connected to the common.

One level emptying control

(H) And (C) terminals connected, a single probe (L) used. When probe (L) immersed, relay energizes, pump is ON, and red LED lit.

Two level emptying control

When the liquid in the tab reaches probe (H): relay energizes, alarm ON, and red LED lit. When the liquid level falls below probe (L) relay de-energize and red LED extinguishes.

General specifications

- Power supply: 240Vac
- Supply tolerance: +10% / -15%
- Frequency: 50 / 60Hz
- Power consumption: 2.4 VA
- Duty cycle: 100%
- Sensitivity range 4.7kΩ to 100kΩ
- Display: LED red indicates relay energize.
- Probes: cable length max 100m
- Protection class open air: IP20
- Protection class enclosed: IP40
- Self-extinguishing plastic housing UL V0 acc IEC 529
- Mounting position: on DIN-rail TS 35 according to EN 50022
- Terminal : pluggable acc IEC 60947-7-1, IEC 60998-1
- Terminal Capacity:1x4mm^2 without multicore cable end
  1x0.5 to 2.5mm^2 with/without multicore cable end

Output circuit

- Relay: 1 C/O
- Rated voltage: 250 Vac
- Switching capacity ac: 2000 VA (8A / 250V) COS φ = 1
- Switching capacity dc: 3 A 30 Vdc
- Max switching capacity ac: 10 A
- Mechanical life: 1 x 10^6 operations
- Electrical life at 1000 VA COS φ=1: 200.000 operations

Environmental conditions

- Permissible ambient temperature: -20°C….+50°C
- Storage temperature: -25°C….+70°C
- Transport temperature: -25°C….+70°C
- Relative humidity (acc. IEC 721-3-3 CLASS 3K3): 15% to 85%
- Vibration resistance (acc. IEC 68-2-6): 10 TO 55 H

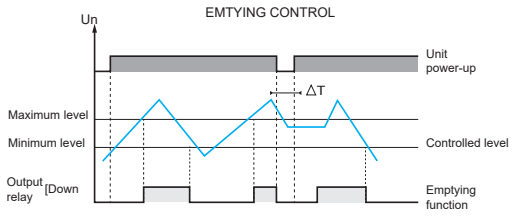
Display

- Red LED- relay status (red LED On – relay energizes)

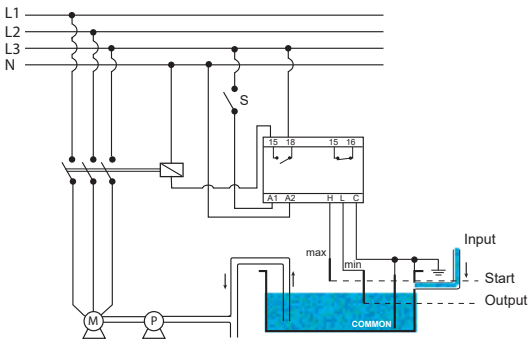
Dimensions & weight

- Width: 34 mm
- Height: 88 mm
- Depth (excl. DIN-profile): 67 mm
- Weight: 165 gram

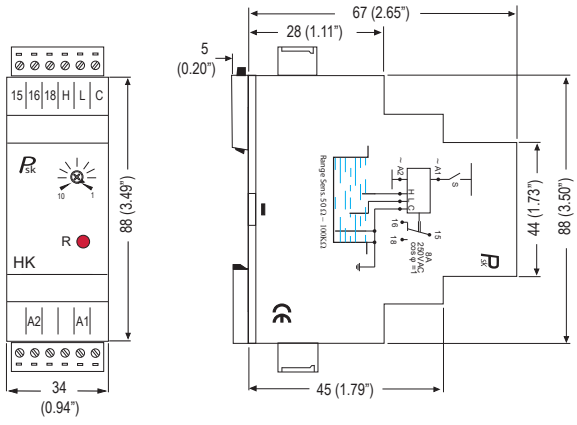
Function



Opplications



Dimensions



Ordering information

HK — V

230VAC	A
110VAC	B
24VAC	C

Liquid level monitoring relay