

# Monitoring relays series *clip* CLH3X

2.2

- installation profile according to VDE 43880
- level monitoring for conducting fluids
- filling or emptying control
- adjustable sensitivity



## Technical Data:

### Supply voltages:

Single voltage:  
24 VAC  
110 VAC  
230 VAC

Nominal consumption:  
4 VA

### Permissible voltage range

24VAC/110V AC 0,85 to 1,1U<sub>N</sub>  
230VAC 0,8 to 1,15U<sub>N</sub>  
Frequency range 45-65 Hz  
Duty cycle 100% IEC class 1c

### Environmental conditions:

Permissible ambient temperature -25°C to +55°C  
Class of application HVF to DIN 40040

### Mechanical data//specifications:

Enclosure in self-extinguishing plastic. Type of protection IP 40

### Type of connections:

Contact-protected terminals

### Dimensions and standards:

78.5 x 35 x 66 mm (h x b x d)

Mounting on DIN rails to DIN 46277/3 (European standard EN 50 0222)

Connection via terminals up to 4 mm<sup>2</sup> with protection against accidental contact.

Type of protection IP20

Contact protection to VDE 0106 and VBG 4

Terminal arrangement and connection markings to DIN 46 199

### Output stage:

1 changeover

Max. switching voltage: max. 250VAC

Continuous current: max. 5A

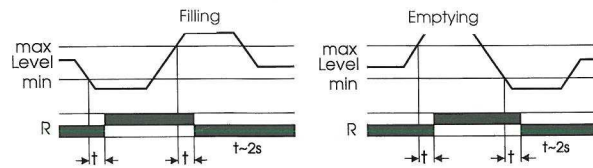
Switching capacity: 250VAC cosφ = 1 1250VA

Max. switching rate  
without load 72000/h  
with nominal load 3000/h

Mechanical life >30.10<sup>6</sup> switching operations

## level monitoring for conducting fluids

### Function diagram:



### Description of function:

The level monitoring relay CLH can be used with conducting fluids to control filling and emptying, depending on the position of the function selection switch.

This switch is on the front panel. A potentiometer can be used for infinitely variable control of sensitivity between 10 kΩ and 70 kΩ. The earth probe (E3) may also be connected to the container, provided it conducts and is earthed.

Function selection switch in position „down“: The output relay responds after the set time delay (approx 2s) when the maximum probe (E1) is wetted. This status is also signalled by the yellow LED.

The output relay will release after the fixed time delay (approx 2s) and the LED switch off only when the level falls below the minimum probe.

Function selection in position „max“

The output relay responds after the set time delay (approx 2s) when the level falls below the minimum probe (E2). This status is also signalled by the yellow LED.

The output relay will release after the fixed time delay (approx 2s) and the LED switch off only when the the maximum probe is wetted.

### Sensing range:

Input	Probe voltage max.	Probe current max.	cable length max.
E1-E3	~18V AC	0,3...1 mA	100 m

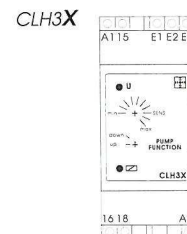
### Range of adjustment:

Switching points:	on	off
Potentiometer in min. position:	<10 kΩ	> 40 kΩ
Potentiometer in max. position:	<40 kΩ	> 70 kΩ

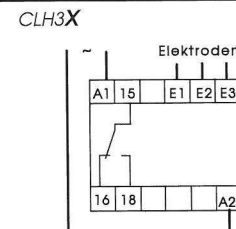
### Time delays:

Rewlease delay: fixed approx 2 sec.  
Start-surge delay: none

### Front view:



### Connection:



## Types:

CLH3X 24 V AC CLH3X 110 V AC CLH3X 230 V AC

## Accessories:

Probe heads: KS1P, KS1N, KS2NH, KS3NH, SK2, SK3  
Probe rods: KL05, KL10, KL15, KL20, KL25, KL30  
suspended probe: SK1 Seperator KSS Mounting plate MP  
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