

# **Electrode Relays for Conductive Limit Switches**

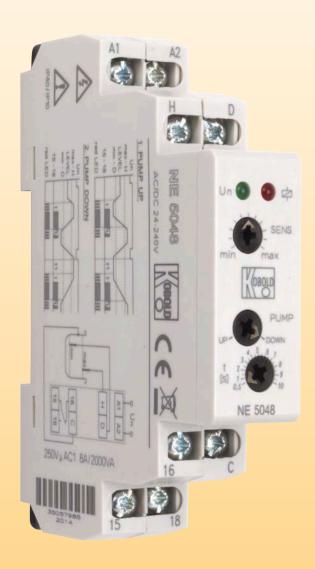


measuring

monitoring

analysing

**NE-5048** 



- For use with conductive electrodes NES, NEH and LNK
- Limit signal
- Min./Max. controller
- Power supply: 24-240 V<sub>AC/DC</sub>



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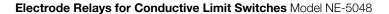
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#### **Description**

The KOBOLD electrode relays type NE-5048 are used in conjunction with the conductive limit switches NES, NEH, and LNK for level monitoring and level control of conductive liquids with a conductivity of more than 10  $\mu$ S/cm.

Probes are immersed in the tank to detect the level. These probes (and the tank wall, if conductive) serve as contacts of a circuit. The probes can be single-rod or multi-rod probes (see also NES, NEH, and LNK).

The NE-5048 relay provides a limit value signal for connecting one control and one earth electrode.

It also includes a bistable interval relay with latching and is thus suitable for interval switching - e.g. for pump control (min./max. control).

#### **Main Features**

- MIN/MAX controller
- Selectable NO/NC relay function
- Adjustable sensitivity
- Adjustable delay time
- Adjustable delay ON and delay OFF time
- Delay time display
- AC/DC versions

#### **Technical Details**

Response sensitivity:

24 - 240 V<sub>AC/DC</sub> Power supply:

(AC 50-60 Hz) -15 %, +10 %

Power consumption: max. 2 VA / 1.5 W max. 3.5 V<sub>AC</sub> 10Hz Electrode voltage: Sensor current:

<0,1 mA AC einstellbar 5 - 100 k $\Omega$ 

400 ms Response time: Switch-on delay: 1.5 s

Switch-off delay: adjustable, 0.5 - 10 s

Output: 1 potential-free change-over contact Switching capacity: max. 250  $V_{AC}$ , 8 A, 2000 VA (AC).

240 W (DC)

Housing: Makrolon® Protection class housing: IP40 Protection class terminals: IP 10

Ambient temperature: -20 °C ... +55 °C Dimensions: 90 x 17.6 x 64 mm

Weight:

Mounting: Quick mounting for standard rail

DIN 60715

Visual indication of

operating status: LED red Monitoring status

LED green Operating voltage

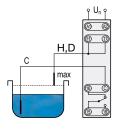
#### Order Details (Example: NE-5048)

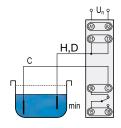
Model	Description	Number of outputs	Power supply
NE-	Elektrode relay	504 = 1 limit signal or 1 Min./Max. controller	8 = 24-240 V <sub>AC/DC</sub>

#### Operation

#### Liquid level switching

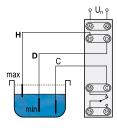
1 vessel, 1 level





### Liquid level monitoring

1 vessel, 2 levels



# **NE Switches**

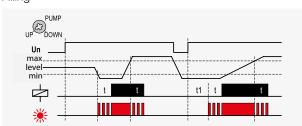
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A1, A2: Power supply C: Reference probe H: Upper level probe D: Bottom level probe

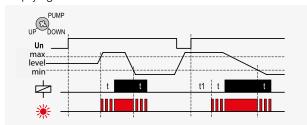


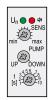
# Operation (continued)

#### Filling



## **Emptying**





## Dimensions [mm]

