

Electrode Relays for Conductive Limit Switches



measuring monitoring analysing

NE-104/-204/-304



- For use with conductive electrodes NES, NEW, NEH and LNK
- Limit signal
- Min./Max. controller
- Power supply: 230 V_{AC}, 110 V_{AC}, 24 V_{AC}



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Description

KOBOLD electrode relays of model NE- are used with conductive level switches NES, NEH, NEW and LNK for level monitoring and control of conductive liquids.

An electrode relay NE-104 is required for single point signalling. It posses additionally a bi-stable interval relay which lock and is therefore suitable for pump control.

With relay NE-304 and a level conductive switch with two signal and one ground electrodes, two level limits could be detected.

The relay outputs could be configured as a Min./Max. control or as a single limit switch.

The relay NE-204 is used together with the conductive level limit switch NEW for water contaminating liquids. This system complies with the requirements of the §19 WHG. It should be used for tanks and vessels for storage of non-flammable, water contaminating liquids.

Technical Details NE-104, NE-304

Power supply: 230, 110, 24 $V_{AC} \pm 15\%$;

50-60 Hz

Power input: NE-104: approx. 2 VA NE-304: approx. 4 VA

Floating voltage: approx. 10 V_{AC} Short-circuit-current: approx. 0.5 mA Sensitivity: adjustable 0-50 k Ω

Response time: approx. 1 s
Output: NE-104:

1 floating changeover contact

NE-304:

 $\begin{array}{c} \text{2 floating changeover contacts} \\ \text{Switching capacity:} & \text{max. 250 V}_{\text{AC}}, \, 5 \, \, \text{A}, \, 600 \, \, \text{VA} \end{array}$

Housing: Makrolon®
Protection: housing: IP 40
terminals: IP 20

Ambient temperature: $-20 \,^{\circ}\text{C} \dots +60 \,^{\circ}\text{C}$ Dimensions: $75 \times 55 \times 110 \,\text{mm}$

Installation: DIN rail mount or wall mount Signalling: LED red: monitoring state

NE-204 according to § 19 WHG

Power supply: 24, 230 $V_{AC} \pm 15\%$; 50-60 Hz

Power input: approx. 2 VA Floating voltage: approx. 20 V_{AC} Short-circuit-current: approx. 4 mA Sensitivity: approx. 50 k Ω Response time: approx. 1 s

Output: 1 floating changeover contact Switching capacity: max. 250 V_{AC} , 5 A, 600 VA

Housing: Macrolon
Protection: housing: IP 40
terminals: IP 20

Ambient temperature: $-20 \,^{\circ}\text{C} \dots +60 \,^{\circ}\text{C}$ Dimensions: $75 \times 55 \times 110 \,\text{mm}$

Installation: DIN rail mount or wall mount Signalling: LED green: auxiliary power on

LED red: open-circuit LED yellow: monitoring state

Monitoring the

mains supply: by dropping out the switch

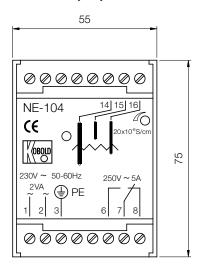
contact

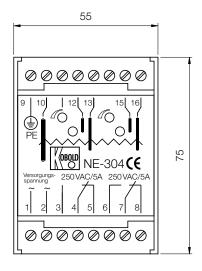
Monitoring electrode: lead by dropping out the switch

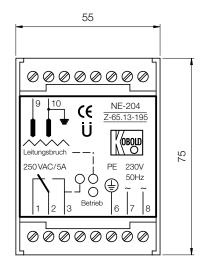
contact, red LED lights up



Dimensions [mm]







Order Details (Example: NE-104 0)

Model	Description	Number of outputs	Power supply
NE-	Electrode relay	104 = 1 limit signal or 1 Min./Max. controller 304 = 2 limit signals or 2 Min./Max. controller 204 = 1 limit signal acc. to § 19 WHG 504** = 1 limit signal or 1 Min./Max. controller	$0 = 230 V_{AC}$ $1^* = 110 V_{AC}$ $2 = 24 V_{AC}$ $8 = 24 - 240 V_{AC}$

^{*} Not with NE-204
** See separate data sheet NE-5048