

## Electrode Relays for Conductive Limit Switches

NE-104/-204/-304



- For use with conductive electrodes  
NES, NEW, NEH and LNK
- Limit signal
- Min./Max. controller
- Power supply: 230 V<sub>AC</sub>, 110 V<sub>AC</sub>, 24 V<sub>AC</sub>



KOBOLD companies worldwide:

AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHINA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, SPAIN, SWITZERLAND, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Messring GmbH  
Nordring 22-24  
D-65719 Hofheim/Ts.  
Head Office:  
+49(0)6192 299-0  
+49(0)6192 23398  
info.de@kobold.com  
www.kobold.com



## 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 possesses 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. It should be used for tanks and vessels for storage of non-flammable, water contaminating liquids.

## Technical Details NE-104, NE-304

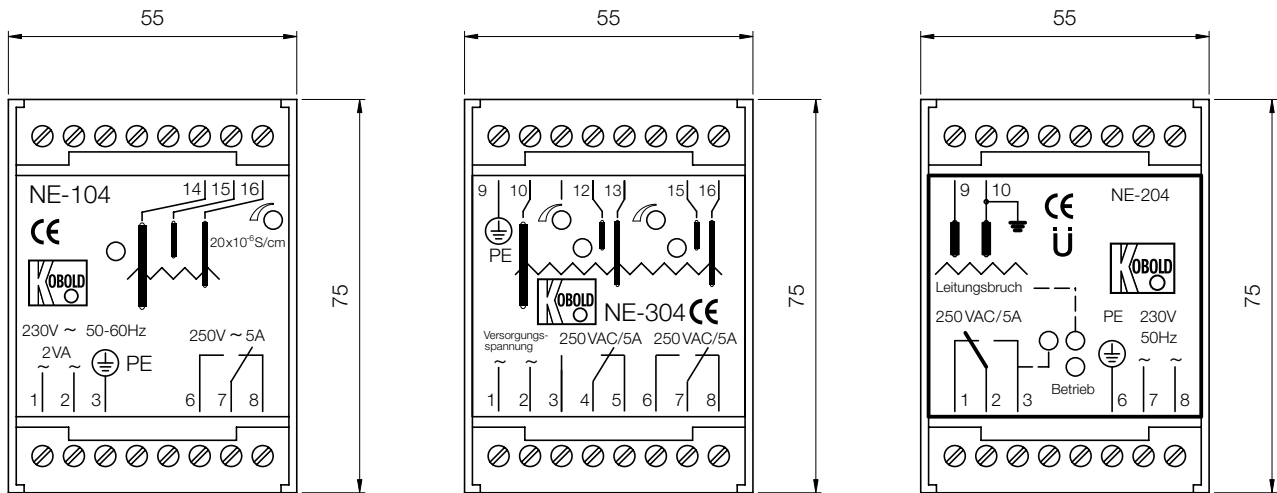
Power supply:	230, 110, 24 V <sub>AC</sub> ± 15%; 50 - 60 Hz
Power input:	NE-104: approx. 2 VA NE-304: approx. 4 VA
Floating voltage:	approx. 10 V <sub>AC</sub>
Short-circuit-current:	approx. 0.5 mA
Sensitivity:	adjustable 0 - 50 kΩ
Response time:	approx. 1 s
Output:	NE-104: 1 floating changeover contact NE-304: 2 floating changeover contacts
Switching capacity:	max. 250 V <sub>AC</sub> , 5 A, 600 VA
Housing:	Makrolon®
Protection:	housing: IP 40 terminals: IP 20
Ambient temperature:	-20 °C ... +60 °C
Dimensions:	75 x 55 x 110 mm
Installation:	DIN rail mount or wall mount
Signalling:	LED red: monitoring state

## NE-204

Power supply:	24, 230 V <sub>AC</sub> ± 15%; 50 - 60 Hz
Power input:	approx. 2 VA
Floating voltage:	approx. 20 V <sub>AC</sub>
Short-circuit-current:	approx. 4 mA
Sensitivity:	approx. 50 kΩ
Response time:	approx. 1 s
Output:	1 floating changeover contact
Switching capacity:	max. 250 V <sub>AC</sub> , 5 A, 600 VA
Housing:	Makrolon®
Protection:	housing: IP 40 terminals: IP 20
Ambient temperature:	-20 °C ... +60 °C
Dimensions:	75 x 55 x 110 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	0 = 230 V <sub>AC</sub> 1* = 110 V <sub>AC</sub> 2 = 24 V <sub>AC</sub>
		504** = 1 limit signal or 1 Min./Max. controller	8 = 24 - 240 V <sub>AC</sub>

\* Not with NE-204

\*\* See separate data sheet NE-5048