

Level controllers

NR 3 and NR 5/G electrode relays


for level control or for signalling a limit level

Electrode relay for U-bar mounting, with connection terminals on top of housing and with 2 built-in LEDs for signalling the switching status

Electrode relay in surface-mount housing, with transparent cover and with 2 built-in LEDs (inside the housing) for signalling the switching status



This unit is designed for switch cabinet mounting or installation in a suitable protective housing and may therefore only be mounted/installed in these locations. It is suitable for use in clean environments only.

Technical data	NR 3	NR 5/G
Alternative supply voltages AC versions: DC versions:	terminals 10 and 12; terminal 10: – / terminal 12: + AC 230 V (supplied if no other supply voltage is specified in the order) or AC 240 V or AC 115 V or AC 24 V or DC 24 V or } only for connection to a safety low voltage which corresponds DC 12 V or } to the safety regulations relating to the application further supply voltages on request	terminals 1 and 2; terminal 1: – / terminal 2: +
Power input	approx. 3 VA	
Electrode circuit	terminals 4, 5, 6 under SELV (safety extra low voltage), acting on 1 output relay with self-hold	terminals 6, 7, 8
No-load voltage	9 V _{eff}  10 Hz SELV (safety extra low voltage)	
Short-circuit current	max. 0.5 mA _{eff}	
Response sensitivity	approx. 30 kΩ or approx. 33 μS (electric conductance)	
Controlled circuit	terminals 7, 8, 9 1 single-pole potential-free changeover contact based on the quiescent current principle	terminals 3, 4, 5
Switching status indicators	1 green LED, lights when output relay is energized 1 red LED, lights when output relay is not energized	
Switching voltage	max. AC 250 V	
Switching current	max. AC 4 A	
Switching capacity	max. 500 VA	
Housing	insulating material, 75 x 22.5 x 100 mm	insulating material, 130 x 94 x 57 mm, with 3 cable entries M 20 x 1.5
Connection	terminals on top of housing	internal terminals
Protection class	IP20	IP54
Mounting	clip attachment for U-bar to DIN 46 277 and EN 50 022	surface mounting using 4 screws
Temperature range	– 20°C to + 60°C	
Mounting orientation	any	
Max. cable length between electrode relay and electrode(s)	1,000 m	
EMC	for interference emission in accordance with the appliance-specific requirements for households, business and commerce as well as small companies, and for interference immunity in accordance with the appliance-specific requirements for industrial companies	