



## Control of insulation condition relay UKI-42DC

for rated voltage from 24VDC to 42VDC



Control relay insulation UKI-42DC is a relay for monitoring the value of earth insulation resistance in isolated DC grids with a rated voltage range from 24V to 42VDC. The relay is designed for use on the ground or underground mining excavations of non-hazardous methane and class A coal dust explosion hazard.

### TECHNICAL DATA:

ingress protection  
supply voltage/controlled grid  
the number of executive contacts  
tripping resistance  
resistance of return  
dimensions  
weight

IP20  
24-42 VDC  
2  
 $5k\Omega \pm 15\%$   
 $< 1,5 \times 5k\Omega \pm 15\%$   
100 x 20,5 x 110mm (height x width x depth)  
0,1kg

## CONSTRUCTION

The relay is manufactured in plastic housing of IP 20 protection class, mounted on TS-35 rail.  
From housing following circuits are led out through joint socket:

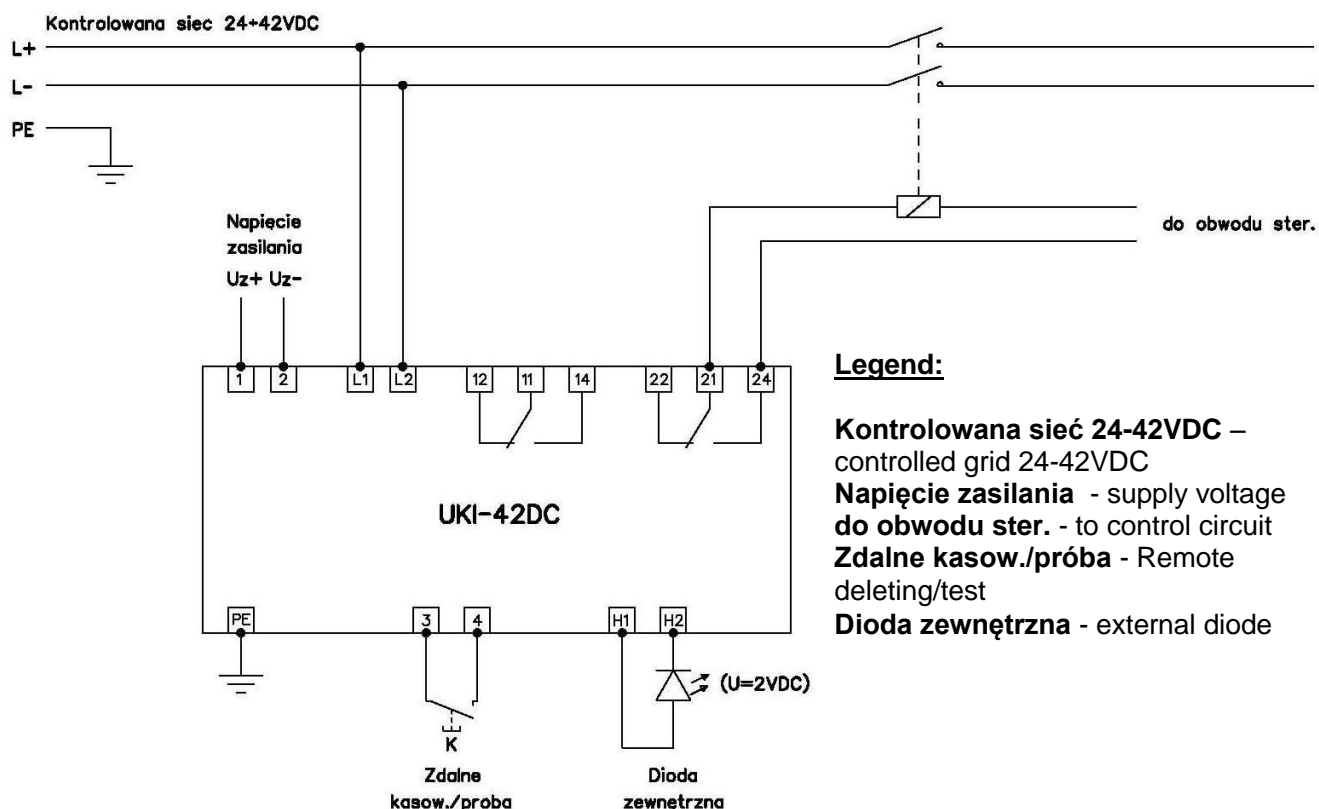
- supply: terminals 1-2,
- measurement input: terminal L1, L2, grounding: PE clamp, the reset button/test: clamps 3,4, external diode clamps H1, H2,
- two switchable executive contacts: clamps 11, 12,14, clamps 21,22,24.

The unit has self-monitoring voltage and LED P diode indicating of the work condition.

## DESCRIPTION OF OPERATION

The system is supplied by 24V - 42V DC. A correct condition of the insulation resistance is indicated by lighting of the LED P diode (green), located on the housing of the relay and the lighting of the external signalling diode (clamps H1, H2). If the measured value of the resistance is less than  $5k\Omega \pm 15\%$ , relay is tripped and lighting of the LED P (red) and turning out external signalling diode. The relay become blocked. Deleting a lock by pressing K button (less than 2 seconds) in the case when the measured insulation resistance is bigger than  $7k\Omega$ . To control of correct operation of the relay also serves the K button (press for more than 3 seconds).

## SCHEMATIC DIAGRAM



Orders should be submitted in writing or by fax to the address: