

## Relay UKI- 2U

for rated voltage of controlled grid up to 1000V



The relay is used to control the resistance of earth insulation (unit UKI) and the continuity of the earth line (UKU unit) two separate outlets. The relay is designed to work in 3-phase grids with rated voltage up to 1000V AC with insulated neutral point of the transformer and devices designed to operate on the ground or underground mines working in non-hazardous explosion or non-hazardous methane and A class conditions of coal dust explosion hazard. Relay cooperates with the artificial zero unit.

### TECHNICAL DATA:

supply voltage	24VAC
rated power consumption in standby/activated state	3VA / 5VA
controlled grid voltage/setting resistance (of UKI unit)	24V AC / $7k\Omega \pm 20\%$ 42V AC / $7k\Omega \pm 20\%$ 230V AC / $15k\Omega \pm 20\%$ 500V AC / $25k\Omega \pm 20\%$ 690V AC / $50k\Omega \pm 20\%$ 1000V AC / $50k\Omega \pm 20\%$
return resistance / tripping (UKU unit)	$75\Omega$ / $95\Omega \pm 10\%$
dimensions	115 x 35 x 120 mm

## CONSTRUCTION AND MODE OF OPERATION

The relay is manufactured in plastic housing of IP 20 protection class, mounted on TS-35 rail. The relay is equipped with automatic self-control of the UKI unit. This function is enabled:

- every time after switching off the contactor,
- every 24 hours (in condition of closed auxiliary contact of contactor),
- switching on of the relay (in condition the contactor is off).

The relay was divided into two separate sections for control of two separate outlets. The relay can work in remote SMG control mode with using the continuity of control system (UKU). Changing the operating mode UKU unit is carried out with using the proper configuration of the input (according to DTR relay).

The state of correct operation is signalled with diode LEDs in green colour and switching off the external signalling LEDs. Tripping of UKI and UKU unit is signalled with diode LED in red colour.

## CONNECTION DIAGRAM

### Legend:

Odcinek sieci kontrolowanej - **Grid controlled section**

Odbiornik - **Receiver**

Do obwodu sterowania - **to the controlling circuit**

Obwód układu kontroli uziemienia - **Earth controlling circuit**

Napięcie zasilania - **Power supply voltage**

Sygnalizacja doziemienia - **Earthing signallisation**

Sygnalizacja braku ciągłości uziemienia - **Absent of earthing continuity signallisation**

Uwaga: Należy podłączyć wszystkie zaciski "PE" - Note: all "PE" terminal clamps should be connected

Zmiana trybu pracy układu kontroli ciągłości uziemienia - **Changing the operating mode of the control of earth continuity system**

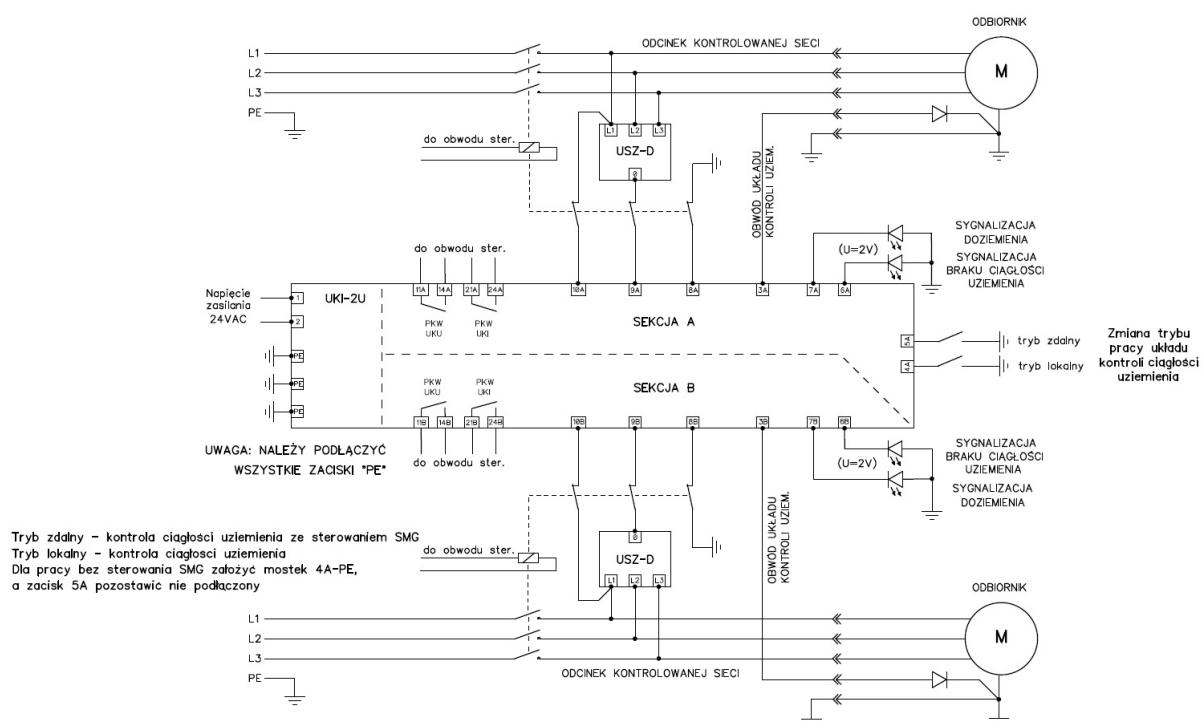
Tryb zdalny - **Remote mode**

Tryb lokalny - **Local mode**

Tryb zdalny - kontrola ciągłości uziemienia z sterowaniem SMG - **Remote mode - Control of earth continuity with the control of self-propelled machine**

Tryb lokalny - kontrola ciągłości uziemienia - **Local mode - Control of earth continuity**

Dla pracy bez sterowania SMG założyć mostek 4A+PE, a zacisk 5A pozostawić niepodłączony - For work without SMG control attach the bridge 4A + PE, and clamp 5A leave disconnected



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

**Instal-Service PL**  
Spółka z ograniczoną odpowiedzialnością  
Spółka komandytowa

58-506 Jelenia Góra, ul. Wrocławska 15a  
tel. (+48 075) 64-57-950  
fax. (+48 075) 64-57-951  
e-mail: instal@instal-service.pl