

INSTAL-SERVICE PL

Spółka z ograniczoną odpowiedzialnością Spółka komandytowa

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Central-blocking safety device CUKI-05

for rated voltage of 500V



Leakage central-blocking device type CUKI -05 is designed for controlling the earth resistance of a grid (including frequency converters) for rated three-phase voltage of 500V/50Hz with isolated star point on the transformer (system IT), to be used with equipment designed for working on the ground and in underground mining in mine face pits in non-explosive conditions, in conditions without methane explosion hazard and classified as A coal-dust explosion hazard.

TECHNICAL DATA:

ingress protection rated voltage of controlled grid power supply rated voltage tripping resistance of the central leaking unit tripping resistance of leakage blocking unit tripping time of the central leakage unit weight: IP54 or IP20 3x500V/50Hz 24V/50Hz $15k\Omega\pm20\%$ $25k\Omega\pm20\%$ <100ms or $<500ms^*$ main unit ZG: 0,5kg coil unit ZD: 0,8kg indicator unit: 0,2kg test unit: 0,3kg artificial zero unit: 0,2kg

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^{*} for grids with frequency converters

CONSTRUCTION

Central-blocking safety device type CUKI -05 comprises of the following units:

a/ main unit ZG

b/ indicator unit ZW

c/ coil unit ZD-500

d/ artificial zero unit USZ

e/ test unit ZP

MODE OF OPERATION

CUKI-05 is powered with 24V/50Hz voltage through separation transformer. The measuring voltage causes current flow through earth resistance of the controlled grid. This current is measured by a microcontroller system and depending on the value the appropriate values of earth resistance are displayed. If the measured value of the earth resistance is lower than 15k Ω ±20% the central unit and the executing relay of the safety device become actuated and a communicate EARTH CENTRAL UNIT is displayed. For check earth resistance outlet without voltage grid is realized by leakage blocking unit. If the measured value of the earth resistance is lower than 25k Ω ±20% the blocking unit and the executing relay of the safety device become actuated and a communicate EARTH BLOCKING UNIT is displayed.

SCHEMATIC DIAGRAM

Legend:

Do obwodu sterowania – to control circuit Zasilanie 24VAC – power supply 24VAC Zdalne kasowanie – remote clearance





