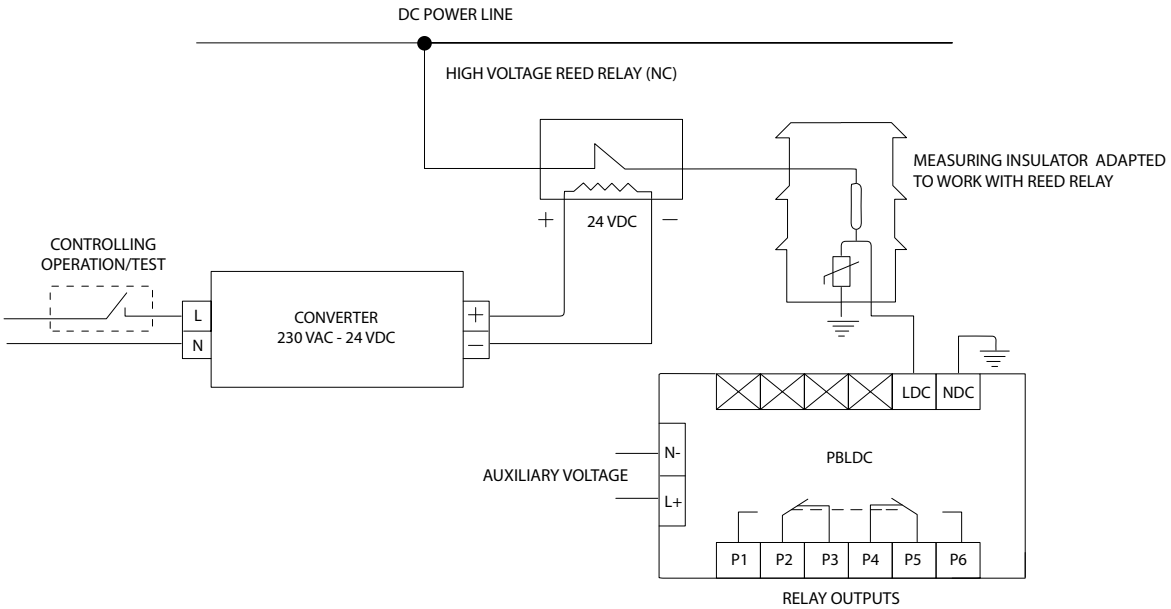
Reed system of separation the busbar

Application

The system is designed to disconnect the VDC busbar (traction) of voltage measurement circuits PBLDC (see page No. 109) and the measurement post insulator. During the operational test of substations supplying the traction, there is the possibility to perform the tests for ground faults.

Because of the way the interlocking relay PBLDC and the post measuring insulators work, between the busbar and the weight there is resistance turn on, which causes the false results during the tests for ground faults.

Reed system of separation the busbar allows to disconnect the busbar from measuring systems during the tests.



Connecting the reed system

ELTOM Tomasz Cisak
ul. Pionierów 17 | 84-300 Lębork
office@cisak.pl | +48 598621 592

Operating

To disconnect the busbar from the measurement systems the reed relay of high voltage with contacts normally closed (NC) is used. In the absence of the voltage on the operating coil, the system is in the 'work' position. The voltage from the busbar is applied on measuring post insulator by the compact reed contact and then to the PBLDC, which controls the voltage on the busbar.

24 VDC in the coil results in disconnecting the contact of the reed and changing the position the system to 'test'. In this position, the measurement of earth fault is not vitiated by an error resulting from the resistance of the insulator and the PBLDC. 24VDC voltage is achieved by switching power inverter 230VAC - 24VDC. The change of state "work - test," or opposite should be carried out in the absence of voltage on the busbar.

The use of high voltage reed relay allows the use of high voltage during the tests.

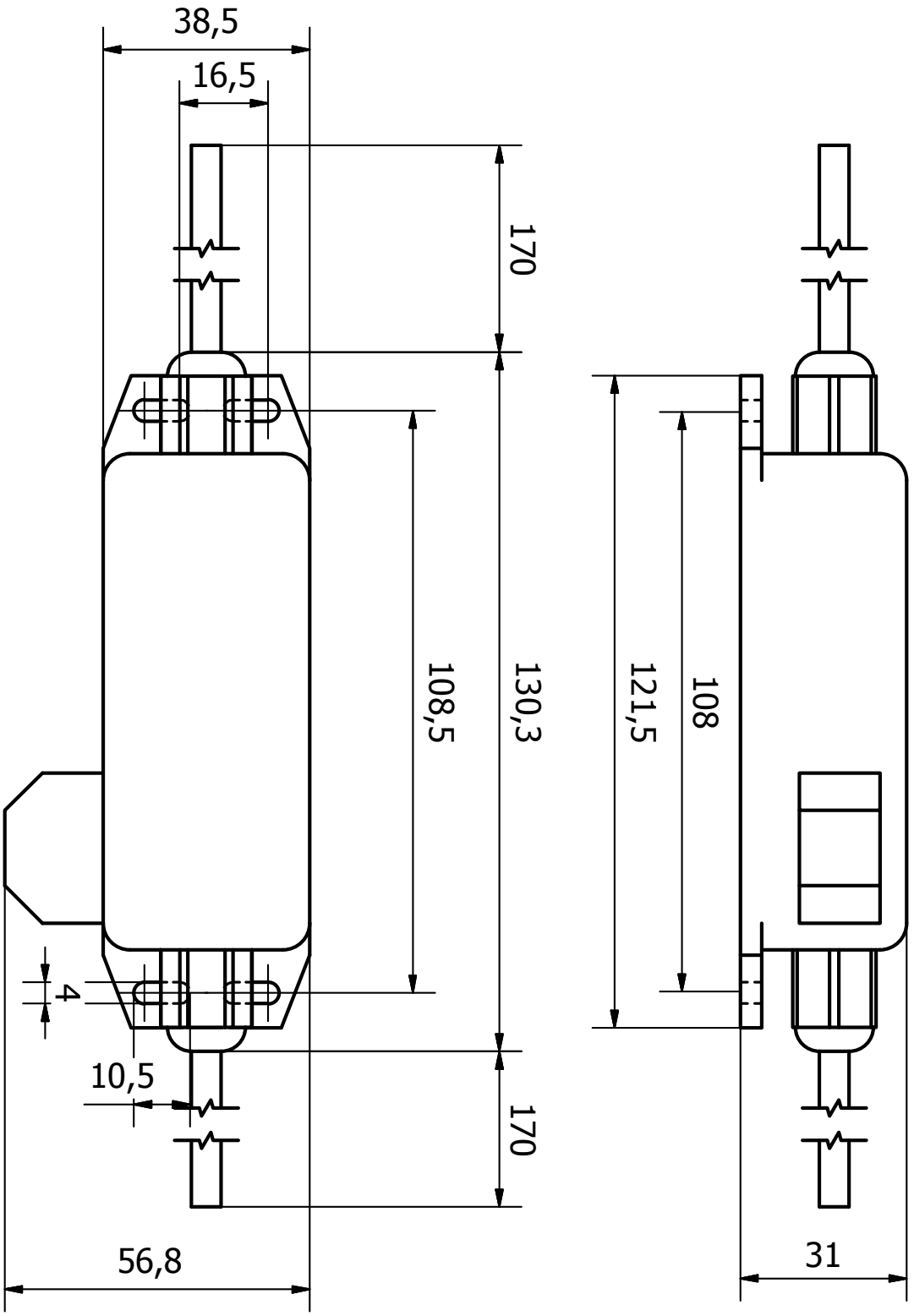
The set includes:

- high voltage reed (24 VDC coil)
- converter 230 VAC – 24 VDC
- post signaling insulator (adapted to work with reed)
- interlocking relay PBLDC

Technical data

PARAMETER	VALUE
Reed relay's coil power supply	24 VDC
Current consumed by the relay's coil	80 mA
Withstand voltage obtuse relay contacts	17 kVDC

ELTOM Tomasz Cisak
ul. Pionierów 17 | 84-300 Lębork
office@cisak.pl | +48 598621 592



Dimensions of reed system

ELTOM Tomasz Cisak
ul. Pionierów 17 | 84-300 Lębork
office@cisak.pl | +48 598621 592