



Switchgears type BTW - 05/1 and BTW - 05/2

for rated voltage 500V



Switchgears type BTW-05/1 and BTW-05/2 are an electrical devices designed for use in underground mining in non-explosive hazard conditions as well as on the ground. Switchgears type BTW-05/1 and BTW-05/2 are designed to connecting and switching on air regulating damper, controlling the flow of air through gangways, in a 3-phase mine grid with isolated star point of the transformer (IT) for rated grid voltage of 500V.

TECHNICAL DATA:

ingress protection
rated supply voltage
rated voltage of external lighting circuit
rated power
rated current
weight
dimensions

IP54
500V/50Hz
24V DC (BTW-05/2) or 230VAC (BTW-05/1)
up to 10kW,
up to 16 A
to 50kg
900x800x300mm (height x width x depth)

CONSTRUCTION

Switchgear type BTW-05/7 consists of two enclosures out of steel sheet. The housing is mounted on a frame out of profiled steel bars equipped with brackets allowing for hanging the device chains mounted to the wall of mine excavation. On the face doors, there are control buttons and control lights. The housing comply with anti-corrosion requirements according to standards PN-84/H-97080,06 for C class corrosive aggression.

MODE OF OPERATION

Electrical switchgear system allows control of the dumper in three modes:

- MACHINE OPERATOR - mode provided to normal work
- FACE - provided to maintenance operations
- REMOTE - provided to control from external systems, such as dispatching unit

In the time of normal work switching on/off damper is carried out after lighting of photoresistor sensor with mining lamp.

After lighting sensor is carried the process of turning on the buzzer and lamps signalling on 10s. After the time 10s contactor is closed and the dumper is opened or closed. This process lasts to moment of tripping on limit switches WKO or WKZ.

SCHEMATIC DIAGRAM

Legend:

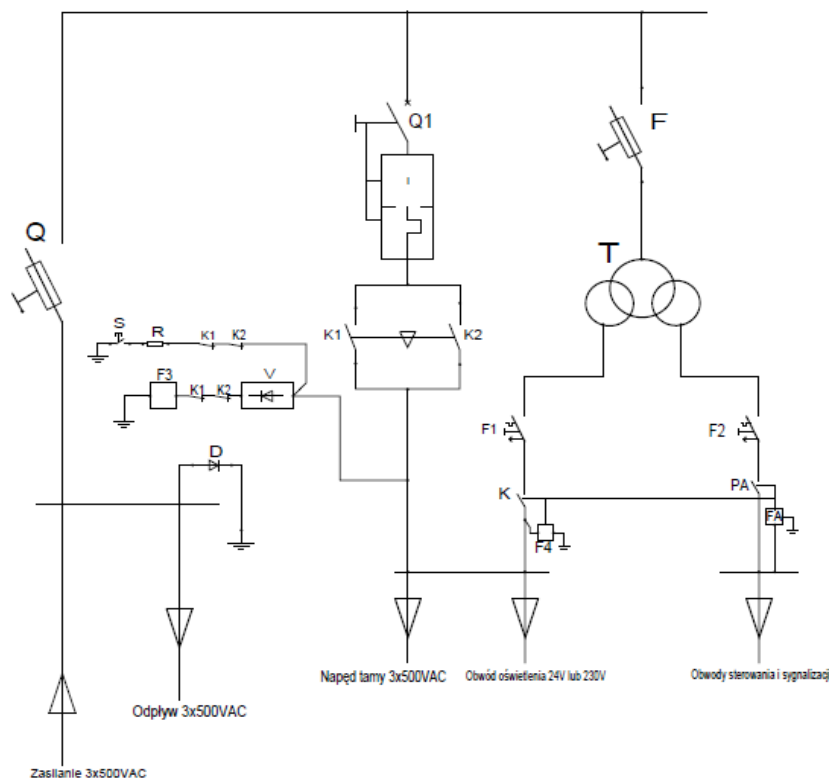
Zasilanie 3x500VAC – **power supply 3x500VAC**

Odplyw 3x500VAC – **outlet 3x500VAC**

Napęd tamy 3x500VAC – **driver-gear of damper 3x500VAC**

Obwód oświetlenia 24V or 230V – **lighting circuit 24V or 230V**

Obwody sterowania i sygnalizacji – **control and signalling circuits**



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

 **Instal-Service PL**

Spółka z ograniczoną odpowiedzialnością
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