



Transformer station type ST-T2/N1V

for rated power 630 or 800 kVA

for rated upper voltage 6 kV, 10 kV or 10-6 kV



HOMOLOGATION SIGN:
GE-54/15,
GE-55/15

The transformer station type ST-T2/N1V is a device designed for use in underground mining in excavations with no explosion hazard or in conditions with no methane explosion hazard and designated as class A coal dust explosion hazard.

The transformer station type ST-T2/N1V is dedicated to for connecting and switching receivers (including frequency converters) in the mine 3-phase power grid with an insulated transformer star point (IT system) for rated grid voltage 500V AC.

The transformer station ST-T2/N1V is equipped with a power protections against short-circuits, overloads and lowered insulation resistance with installed transformer: 630 kVA or 800 kVA and rated upper voltage 6 kV or 10 kV or (10-6) kV (switchable transformer) and lower rated voltage 525V AC. Electrical equipment of a transformer station at the upper rated voltage of 10kV and (10-6) kV is matched to 10 kV rated voltage.

TECHNICAL DATA:

ingress protection	IP54
station rated power	630 or 800 kVA
station upper voltage rated power	6 or 10 or 10-6kV
station lower rated voltage	525 V
frequency	50 Hz
no of phases	3
station upper and lower rated current	acc. to Tab.1
no of 500 V outlets	4 or 5
no of 230V outlets	2
dimensions	1790(1690 without cable outlets)x1400x3035mm (height x width x length)
weight for power 630/800 kVA	5200/4800kg

Tab. 1

Ugn (V)	10 000		6000		10000-6000	
Sn (kVA)	630	800	630	800	630	800
Ign (A)	36	46	60	77	36-60	46-77
Udn (V)	525					
Idn (A)	695	880	695	880	695	880

Legend:

- Ugn (V)** – upper rated voltage
- Sn (kVA)** – station rated power
- Ign (A)** – station upper rated current
- Udn (V)** – lower voltage rated voltage
- Idn (A)** – lower rated current

CONSTRUCTION

The ST station housing is made of steel sheets and steel profiles. It is of a modular design and comprises of the following parts:

- the chamber 6/10 kV
- the transformer chamber (with resin transformer)
- the chamber 500, 230V and control chamber

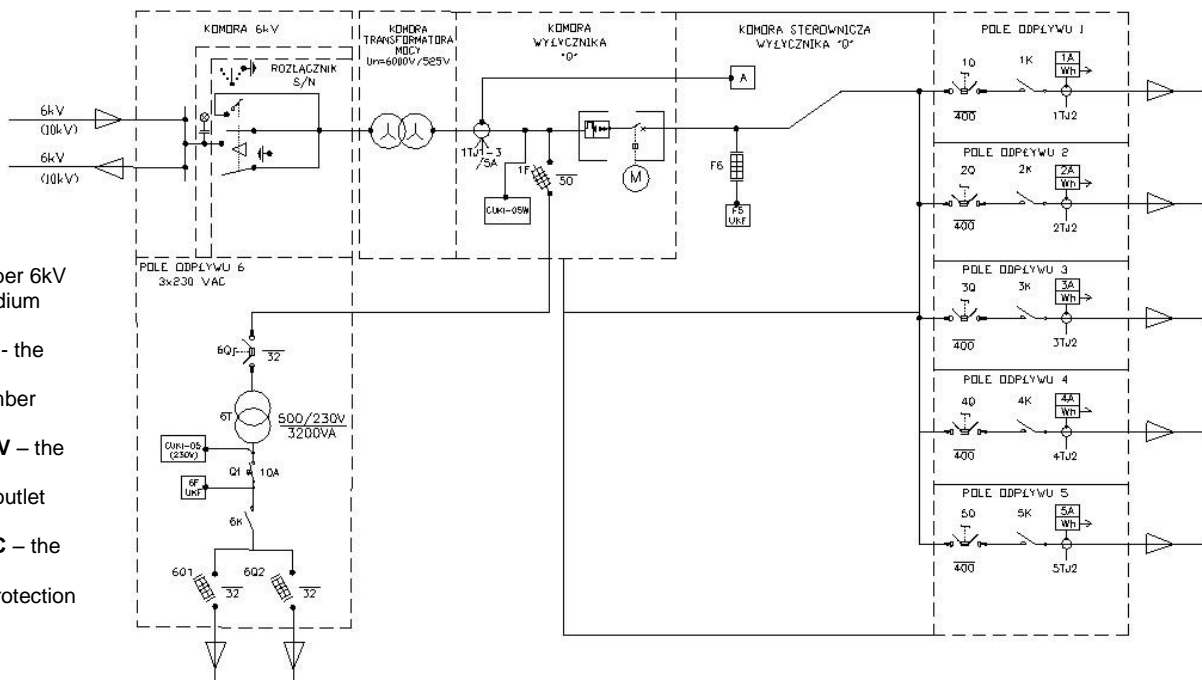
The entire station can be moved at short distances (up to 50 m) on its support structure in form of sledges, using a stiff towing bar, appropriate for the weight of the station, on the platform with wheels, as well as on the bucket loader.

DESCRIPTION OF OPERATION

The disconnector on the GN (upper) side allows on switching off the entire station, have earthing and obtain a visible discontinuity. Transformer station has four or five 525V outlets and two 230V outlets designated to supply receivers. The outlets are equipped with power protections against short circuit and overload. Protection against electric shock is based on the central leakage protection and blocking protection for the outlet 500V.

Control of the outlets can be realized in two modes: LOCAL (on the front wall of the station) and REMOTE (from the external control system).

SCHEMATIC DIAGRAM



Legend:

- komora 6kV** – the chamber 6kV
- roziącznik S/N** – the medium voltage switch
- komora transformatora** - the transformer chamber
- komora 500V** – the chamber 500V
- komora wyłącznika 500V** – the breaker chamber 500V
- pole odplywu 1-5** – the outlet field 1-5
- pole odplywu 3x230VAC** – the outlet field 230VAC
- CUKI** - central leakage protection

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