



## Transformer station type ST-T2/N4U

For rated power 100 kVA, 250 kVA, 400 kVA or 630 kVA

for rated upper voltage 3 kV, 6kV or 10kV



**HOMOLOGATION  
SIGN:  
GE-56/13  
GE-57/12  
GE-58/12  
GE-5/14**

The transformer station type ST-T2/N4U 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 ST-T2/N4U is equipped with a power protections against short-circuits, overloads and lowered insulation resistance with installed transformer: 100kVA and 250kVA or 400 kVA or 630 kVA and rated upper voltage of 3 kV (only for transformer of 400kV power) or 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	100, 250, 400 or 630 kVA
station upper voltage rated power	3 or 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	2 or 3 or 4
no of 230V outlets	2
dimensions	1860(1760 without cable outlets)x1250x2300 mm (height x width x length)
weight for power 100/250/400/630 kVA	2600/3100/3600/4300 kg

**Tab. 1**

Ugn (V)	10 000				6 000				10 000-6 000			
<b>Sn (kVA)</b>	630	400	250	100	630	400	250	100	630	400	250	100
<b>Ign (A)</b>	36	23	15	5,8	60	38	24	9,6	36-60	23-38	15-24	5,8-9,6
<b>Udn (V)</b>	<b>525</b>											
<b>Idn (A)</b>	695	440	275	110	695	440	275	110	695	440	275	110

**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 3/6/10 kV (equipped with the disconnector fuse disconnector protecting the transformer)
- The transformer chamber ( with resin transformer)
- The chamber 500 V (equipped with the main circuit breaker protecting the transformer, leakage protection, monitoring and control circuits)

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**

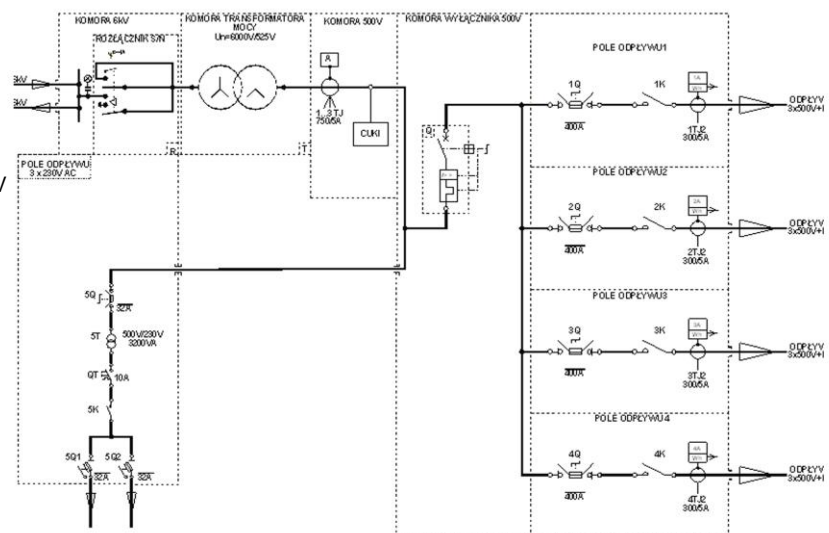
The disconnector or fuse disconnector on the GN (upper) side allows on switching off the entire station, have earthing and obtain a visible discontinuity. Transformer station has two, three or four 525V outlets and two 230V outlets designated to supply receivers. The outlets are equipped with power protections 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). Each 525 V and 230 V outlet are an independent apparatus compartment and has the ability for an individual switching off with the fuse disconnector and the opening without any need to switch off the entire station.

**SCHEMATIC DIAGRAM**

**Legend:**

- komora 6kV** – the chamber 6kV
- roziłącznik S/N** – the medium voltage switch
- komora transformatora** - the transformer chamber
- komora 500V** – the chamber 500V
- komora wyłącznika 500V** – the breaker chamber 500V
- pole odpływu 1-4** – the outlet field 1-4
- pole odpływu 3x230VAC** – the outlet field 230VAC
- CUKI** - central leakage protection



Orders S/N should be made in writing or by fax to the address: