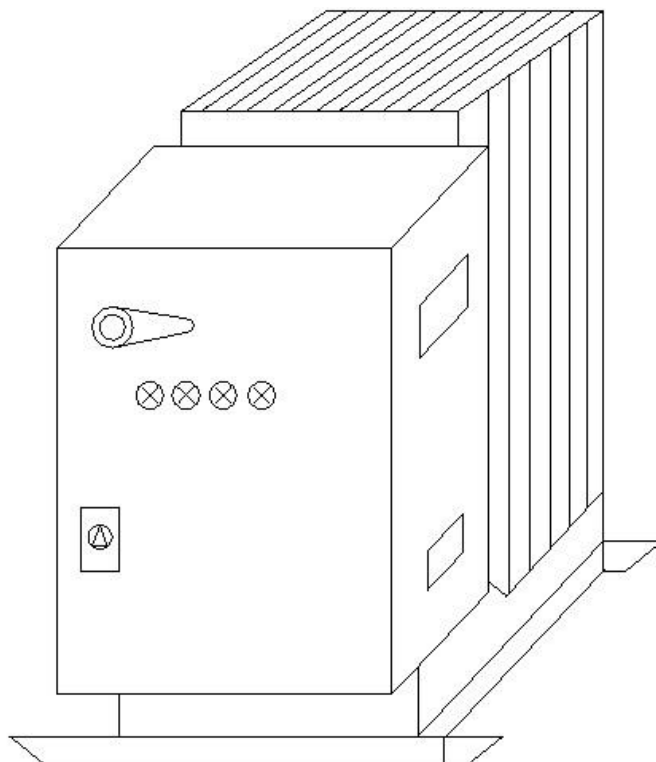




## Switchgear type SFT-1 for rated voltage 500V



Switchgear SFT-1 (with passive high current harmonic filter) ) is an electrical device designed for use in underground mining, with no explosion hazard present and on the ground, with no explosion hazard present.

Switchgear SFT-1 (with passive high current harmonic filter) is designed for reduction and mitigation current harmonic in wide range loading of receiver (or group receivers), supplied through switchgear with six-peak frequency converter (f.e. type SF-1, SF-2, SF-3) to the mine 3-phase power grid with isolated star point of the transformer (IT system) for 500V rated voltage..

Switchgear with frequency converter (f.e. type SF-1, SF-2, SF-3) is connected to the switchgear SFT-1 via a terminal by cable gland.

Switchgear SFT-1 is equipped with a power protections against short-circuits, excessive growth temperature of filter, lowering earth resistance.

### TECHNICAL DATA:

ingress protection	IP54
rated power supply voltage	500V, 50 Hz
range of swing power supply voltage	(470-760)V
rated power	(75, 90, 110, 132,160, 200) kW
THDi (Total Harmonic Distortion)	<5%
cooling	air normal
no of outlets 500V	1
dimensions	1300x620x1120mm (height x width x depth)
weight for power (75-110/132/160/200 kW)	610/650/670/710 kg

## CONSTRUCTION

The switchgear housing is made of sheet steel. It is of a modular design and comprises of the following parts: housing of passive filter, housing apparatus of 500 V.

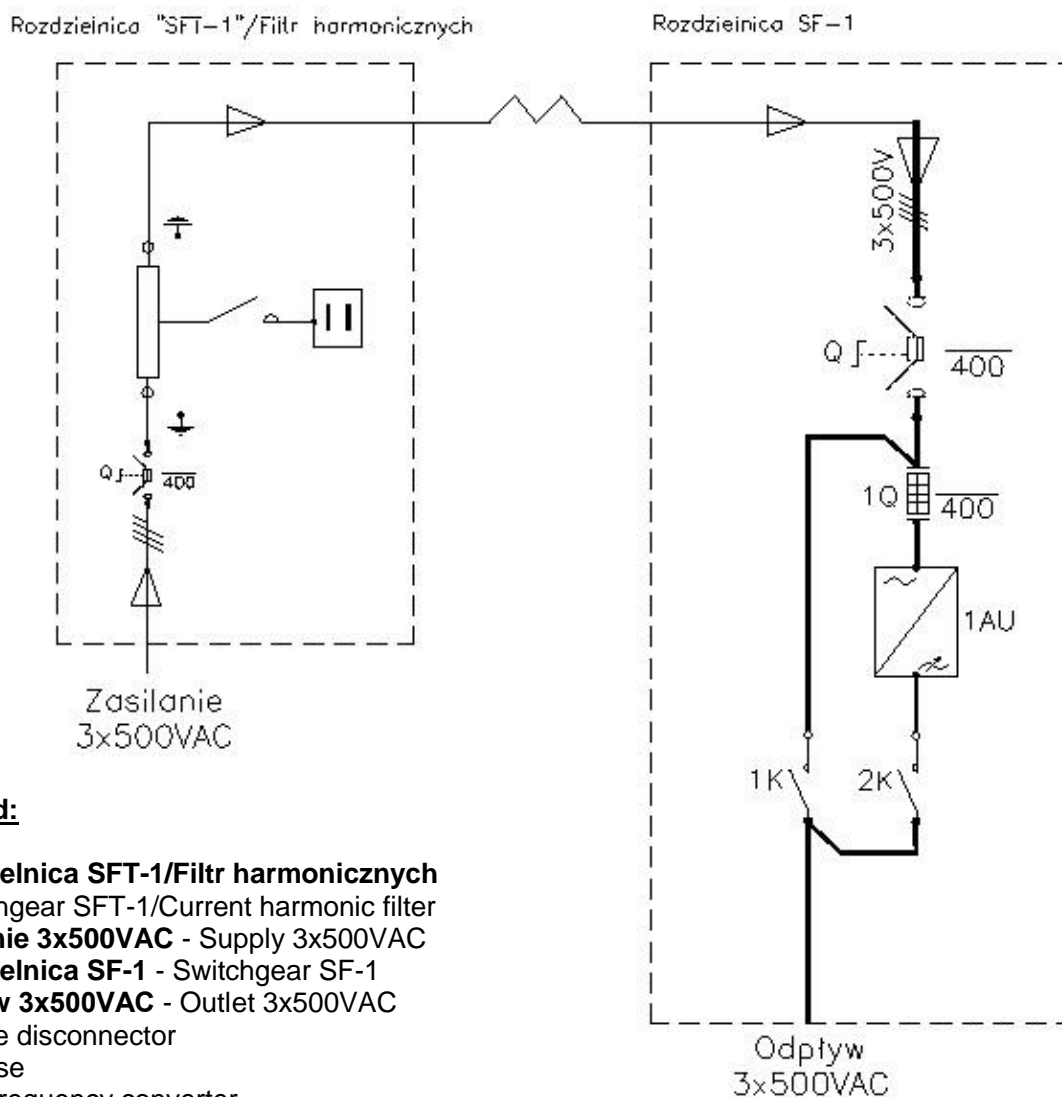
## MODE OF OPERATION

Switchgear SFT-1 is equipped with passive high current harmonic filter FT, based on RLC technology. Switchgear SFT-1 is designed for operate from input side of six-peak frequency converter (f.e. mounted in switchgear SF-1, SF-2, SF-3).

Passive high current harmonic filter FT mounted in switchgear SFT-1 reduces current harmonic to unimportant level (THDi<5% for loading in range from 0,7- 1,2 rated loading) and provides sinusoidal current consumed from grid.

Turning on/off the outlet is carried out through moving lever of disconnecter Q in on/off position.

## SCHEMAT IDEOWY



### Legend:

#### **Rozdzielnica SFT-1/Filtr harmonicznych**

- Switchgear SFT-1/Current harmonic filter

**Zasilanie 3x500VAC** - Supply 3x500VAC

**Rozdzielnica SF-1** - Switchgear SF-1

**Odptyw 3x500VAC** - Outlet 3x500VAC

**Q** - fuse disconnector

**1Q** - fuse

**1AU** - frequency converter

**1K,2K** - contactors

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

 **Instal-Service PL**

Spółka z ograniczoną odpowiedzialnością  
Spółka komandytowa

58-506 Jelenia Góra, ul. Wrocławska 15a

tel. (+48 075) 64-57-950

fax. (+48 075) 64-57-951

e-mai: instal@instal-service.pl