



## Switchgear type SF-2 for rated voltage 500V



Switchgear SF-2 (with frequency converter) 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 SF-2 (with frequency converter) is used for connecting and switching receivers (especially mining driver-gear that requires speed control, for example fans, pumps, belt conveyors) to the mine 3-phase power grid with isolated star point of the transformer (IT system ) for 500V rated voltage. The receiver is connected to the switchgear via a terminal by cable gland. Switchgear SF-2 is equipped with a power protections against short-circuits (option with fuse disconnecter), overloads, lowering of earth resistance and continuity of the earthing control system.

### TECHNICAL DATA:

ingress protection	IP54
rated power supply voltage	500V, 50 Hz
rated power	(75, 90, 110, 132, 160) kW
rated current	(115, 145, 163, 220, 254) A
rated output voltage	(0÷500) V
output frequency	(0÷300) Hz
control circuit voltage	24V, 50 Hz
number of 500 V outlets	1
dimensions (height x width x depth)/weight - (without a protective cage)	1800 x 1100 x 600mm /420kg
- (in a protective cage)	1900 x 1500 x 800mm /530kg

## CONSTRUCTION

The switchgear housing is made of sheet steel. The unit is placed on a steel support base enabling the switchgear to be placed directly on the ground.

## MODE OF OPERATION

The frequency converter can be operated in two modes: LOCAL, REMOTE. Control mode selection is carried out on control panel P of frequency converter, which is situated on the face of the switchgear. LOCAL control mode selection is carried out by buttons situated on control panel and regulate of rotation speed. In REMOTE mode, the outlet is turned on with an external control system via ethernet module. Messages of the status of the frequency converter can be read on the panel, built on the face wall of the switchgear.

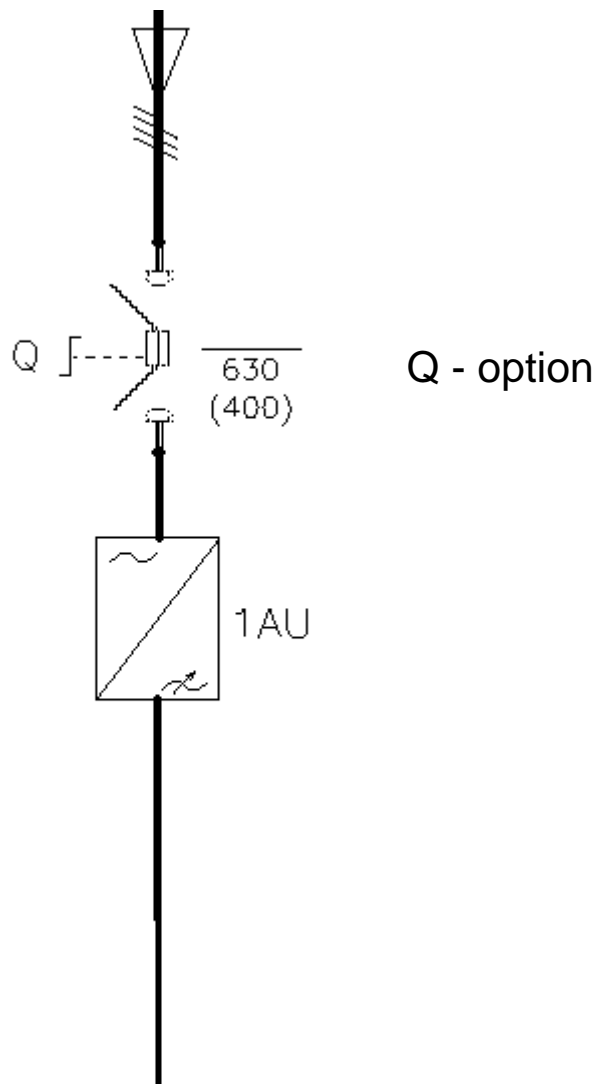
## AIR CONDITIONING

The switchgear is equipped with a air conditioning unit KL, ensuring the internal temperature not to exceed 40°C, which ensures optimum operating temperature for the frequency converter 1AU. The internal and external circuit of the air conditioner are totally separated providing the switchgear protection degree of IP 54.

## SCHEMATIC DIAGRAM

### Legend:

**Q** – fuse disconnecter (option)  
**1AU** – frequency converter



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