



Switchgear type RKS5-1/F/S

For rated voltage 500V



Switchgear type RKS5-1/F/S (with frequency converter) is an electrical device designed for use in the underground mining pits in non-explosive conditions and on the ground.

Switchgear type RKS5-1/F/S (with frequency converter) is designed for connecting and switching on receivers (especially fan) in the 3-phase mine grid with insulated star point on the transformer (system IT) of rated grid voltage of 500V. Receiver can be connected to switchgear with buried stationary socket or terminal strip by cable entry (option).

Switchgear RKS5-1/F/S is equipped with power protections against short-circuiting, overloading, low insulation resistance and control system of grounding integrity.

TECHNICAL DATA:

ingress protection	IP54
insulation rated voltage of main circuits	660 V
insulation rated voltage of auxiliary circuits	250 V
supply rated voltage	500V, 50 Hz
rated voltage of control circuits	24V, 50 Hz
maximum outlet load current	acc. to Tab.1
number of 500 V outlets	1
dimensions	1300 x 720 x 400mm (height x width x depth)
weight	60kg

Table 1

Type of switchgear	Maximum outlet rated current without frequency converter [A]	Rated current of clamps from the supply side (Inz) [A]
RKS5-1/F/S	60	400

Note:

Ampacity of outlets can be adapted for the power of supplied receivers on request, however they can't exceed value in table 1.

CONSTRUCTION

The switchgear housing is made of steel sheets. The whole unit is based by a common support frame. The housing is equipped with brackets that allow for the switchgear to be hung on a chain or to be placed directly on the ground.

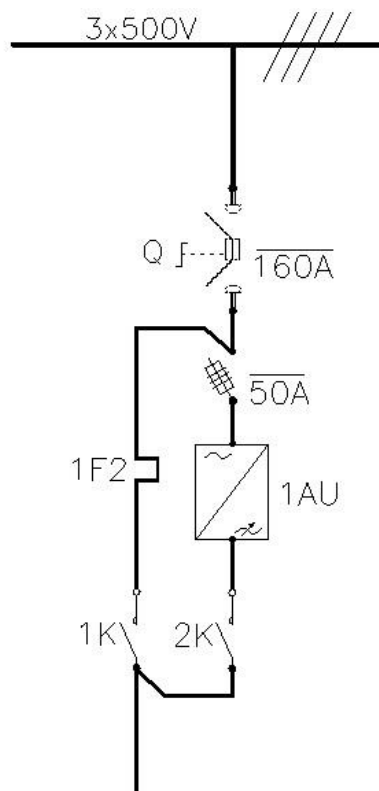
MODE OF OPERATION

The control of 500 V outlet is carried out in two control mode: LOCAL or REMOTE. In LOCAL mode 500V outlet is turned on by the button on the face of switchgear. In REMOTE mode outlet is turned on by controller S with outside control system.

Receiver can operate with or without frequency converter. Without frequency converter receiver (engine) works line 500V and by full loading (with rated speed), supplies by bypass contactor and at programmed time in controller S.

In frequency converter mode receiver is supplied by frequency converter and works line lower than 500V, with incomplete loading (with speed lower than rated) and frequency lower or equal 25Hz and at programmed time in controller S. **FREQUENCY CONVERTER mode applies to saving electrical energy and control rotation (efficiency) mining devices (for example fans).**

SCHEMATIC DIAGRAM



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

 **Instal-Service PL**

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