



RK1 - Switchboard for reactive power compensation

Use

Device RK1 serves as a switchboard for reactive power compensation. The entire compensation system consists of several stages, which are controlled (switched) via controller.

Description

Inside the switchboard RK1, the supply wiring is protected by a knife fuse circuit breaker Q1.

Each level of compensation consist of a fuse circuit breakers, compensatory contactor and compensatory capacitor.

Fuse circuit breakers are interconnected with three-pole connecting strips and they are powered from the knife fuse circuit breaker Q1 through connection extension pieces.

Compensating capacitors stand on a shelf at the bottom of the switchboard and they are bolted from the bottom with M12 bolt. Each capacitor is grounded through the protection terminal on the lid.

Switching of each compensation level is carried via controller NOVAR 1114. On its measuring input, the current is led from measuring current transformer KLL.

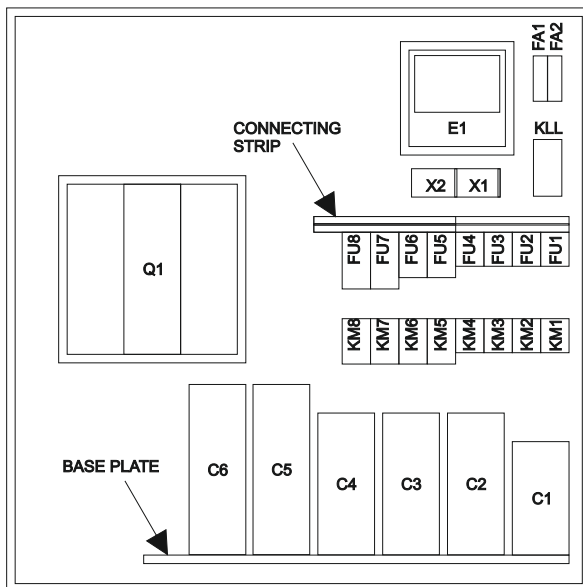
The controller digitally processes measured values and calculates harmonics. Based on the calculation it switches each compensation level. The controller is also equipped with galvanically isolated communication line RS485. Interconnected with another computer it can remotely monitor all measured values and set parameters of the controller.

The switchboard is also equipped with two knife fuse circuit breakers FU7, 8 serving as a reserve for additional compensation levels with a maximum size of 60 kVAr set for each compensation level.

Technical parameters of RK1:

Design	High risk areas
Main circuits voltage	3x400VAC/50Hz
Control and auxiliary circ. voltage	230VAC/50Hz
Connect. cables cross-section	0,08 to 4,00mm ²
Ambient temperature	0°C to +40°C
Relative humidity	95% max. without condensation
Protection	IP 54/20

RK1



Assembly of RK1



Switchboard cabinet RK1

The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.