

Three-pole load break switch RW 12 kV / 24 kV / 42 kV

APPLICATION

Indoor load break switches type RW and set of switch disconnectors with fuses type RW are used in indoor switchgears (voltage of 7,2-42 kV). They are designed to turn on and off currents do not exceed their rated current. The switch disconnectors with fuses type RWB have the ability to turn off short-circuit currents by cooperating with fuse disconnectors.

In the open state switches create the visible isolating clearance.

ADVANTAGES

- » modular design
- » the possibility of building the drives of plane and rotary motion of the string
- » the possibility of choosing the side of mounting the drive (left-right)
- » cooperation with motor drives NS-EL 30-03, NSP 30-04 and manual drives NR-1, NRW-4, NR-3
- » reliability
- » high technical parameters
- » possibility of equipping the switch with reactance insulators 12; 17,5; 24, 42 kV, electromagnetic release 24; 48; 110; 220 V AC/DC, auxiliary contacts showing the position of the device



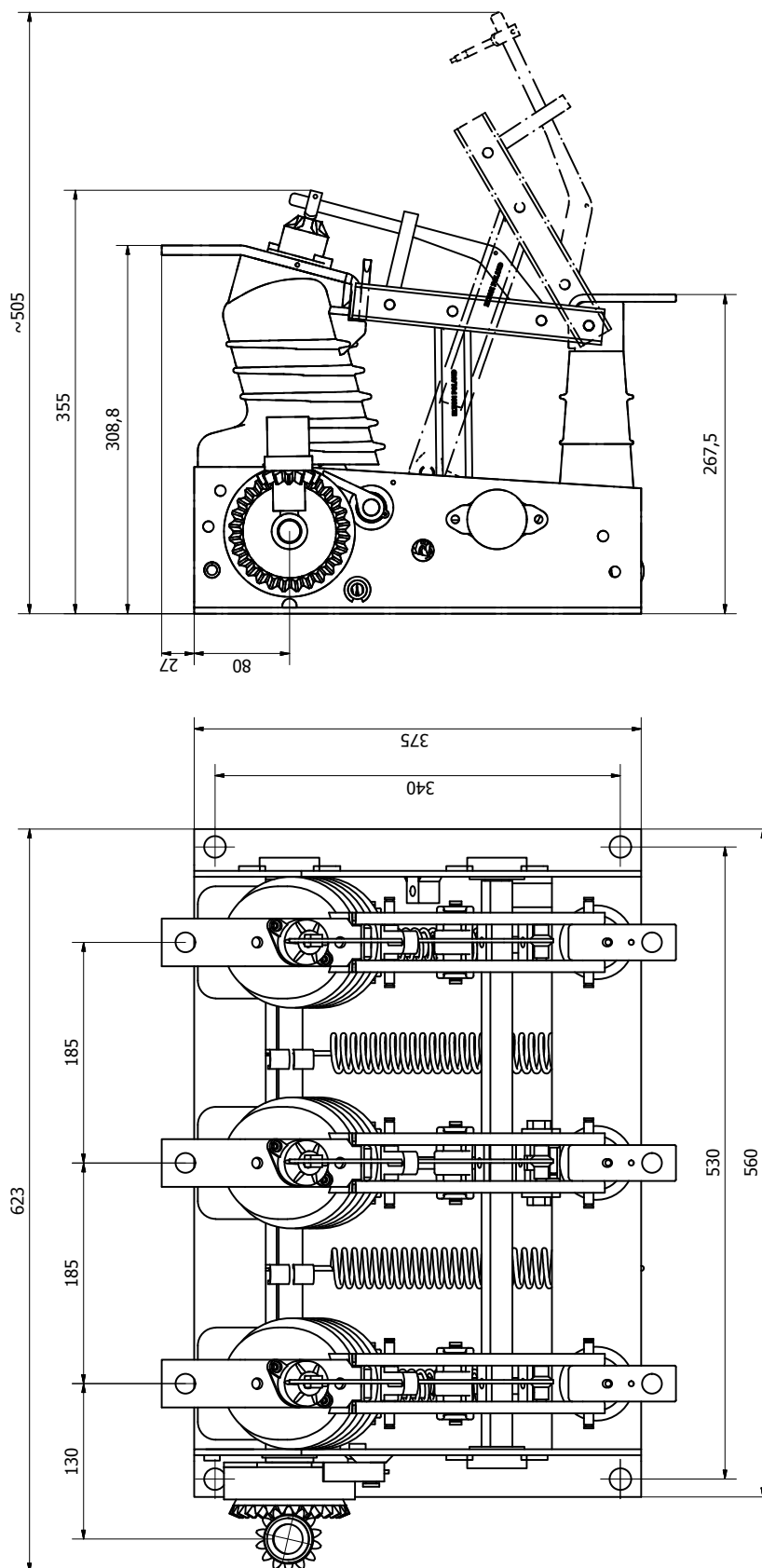
TECHNICAL DATA

PARAMETER	VALUE		
	RW/RWB 12 kV	RW/RWB 24 kV	RW/RWB 42 kV
Rated operating voltage	12 kV	24 kV	42 kV
Rated frequency	50 Hz		
Rated continuous current	630 A		
Operating switching capacity:			
» in circuit with low inductance	» 630 A	» 630 A	
» in circuit of ring network	» 630 A	» 630 A	
» charging cables of outdoor lines	» 50 A	» 25 A	
» off load transformers of low power	» 1250 kVA	» 1250 kVA	
Max. current of fuse switch disconnecter	200 A		
Rated short-circuit current	63 kA		
Withstand peak current	63 kA		
Withstand peak current 3 s.	25 kA		
Resistance of the current path	65 $\mu\Omega$		
Test voltage (50Hz) for insulation:			
» to earth and interpolar	» 28 kV	» 50 kV	» 70 kV
» between the contacts	» 32 kV	» 60 kV	» 85 kV
Impulse test voltage for insulation:			
» to earth and interpolar	» 75 kV	» 125 kV	» 170 kV
» between the contacts	» 85 kV	» 145 kV	» 195 kV
Mechanical durability	2000 cycles		
Weight:			
» load break switch	» 26 kg	» 36 kg	» 50 kg
» load break switch with earthing switch	» 30 kg	» 40 kg	» 54 kg
» load break switch with fuses (RWB)	» 37 kg	» 47 kg	» 61 kg

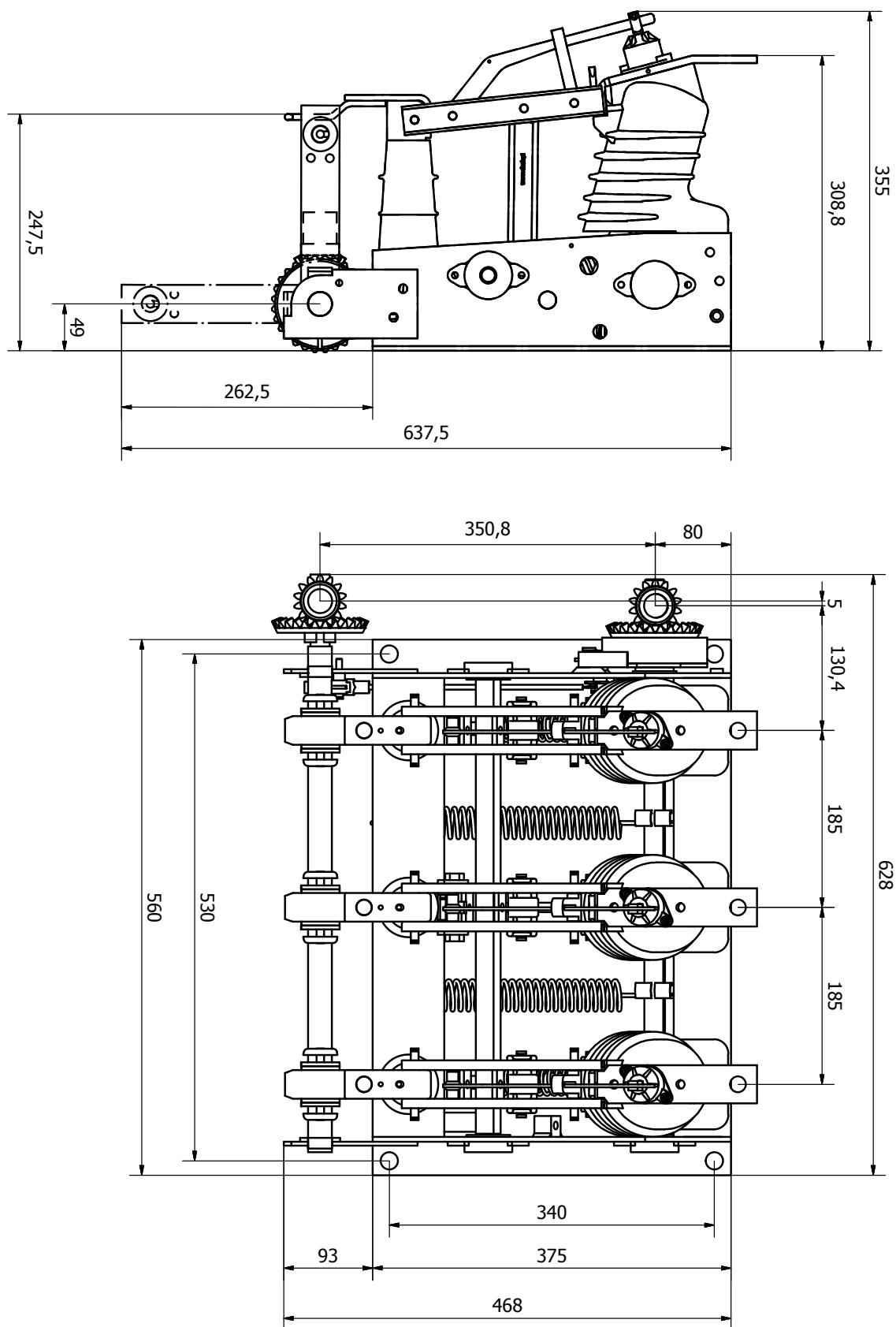
CONSTRUCTION AND OPERATION

RW-type switches are three-pole devices with secant movement of blade of current path. The apparatus has modular design. The permanent contacts are made of copper flat, covered with a layer of silver. High technical parameters are the result of the applied solution of the main path coupled with arcing contact. Opening and closing the arcing contacts is delayed compared to the main contacts (movable). During the shutdown process, arc quenching occurs at the arcing contact. Quenching occurs due to the compressed air outlet, through a nozzle (automatically when opening) connected by rapid stretching of the arc.

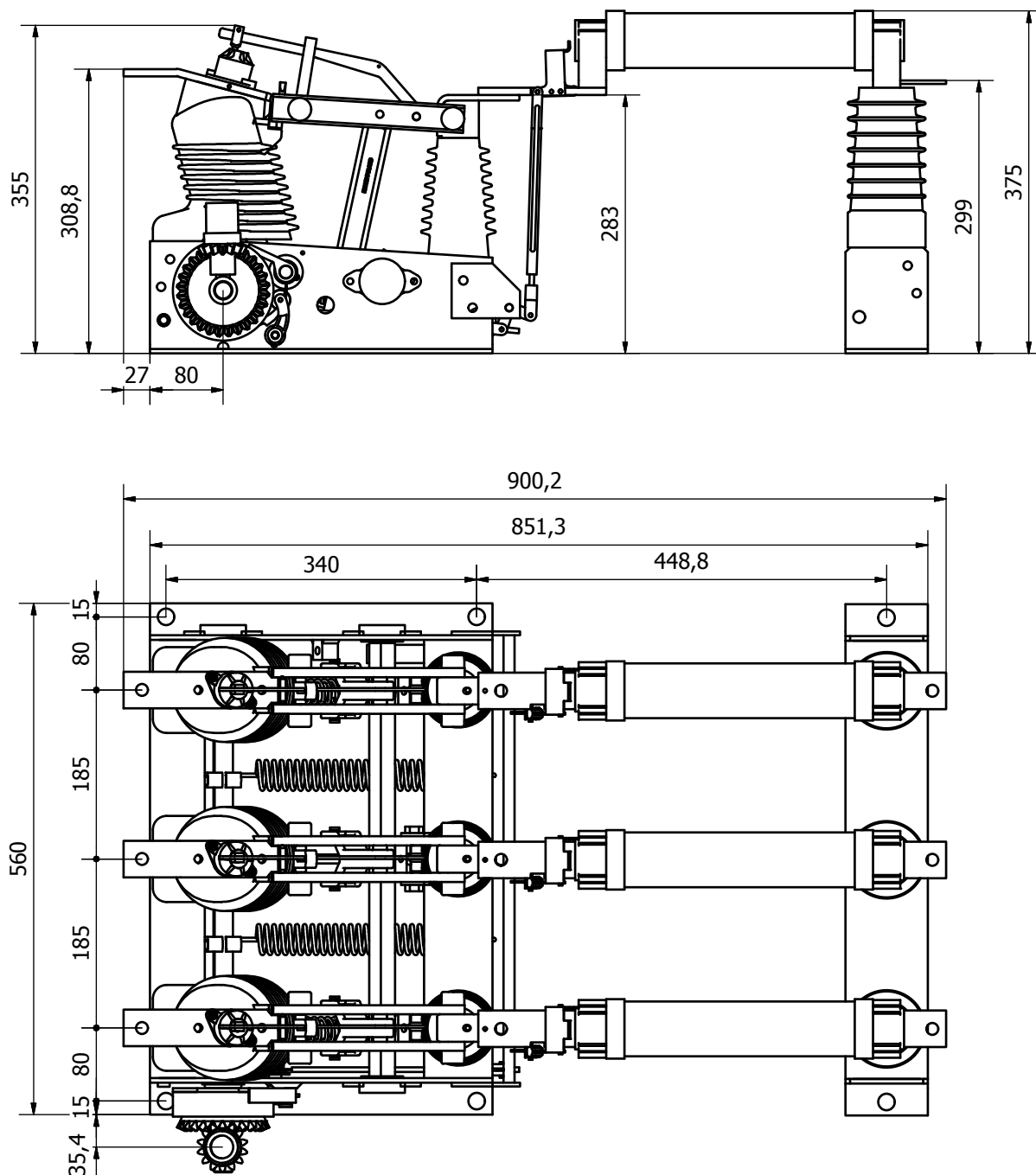
The speed of closing and opening of the disconnecter is independent of the operating speed. This is ensured by a step mechanism when closing and a spring mechanism when opening. Reinforcement of the step and storage mechanism is carried out by means of a motor or manual drive, after which both mechanisms are simultaneously reinforced during the closing process. The load break switches RW can be driven by manual drives NR1-01, NRW-4, NR-3 as well as by motor drives NS-EL 30-03, NSP 30-04.



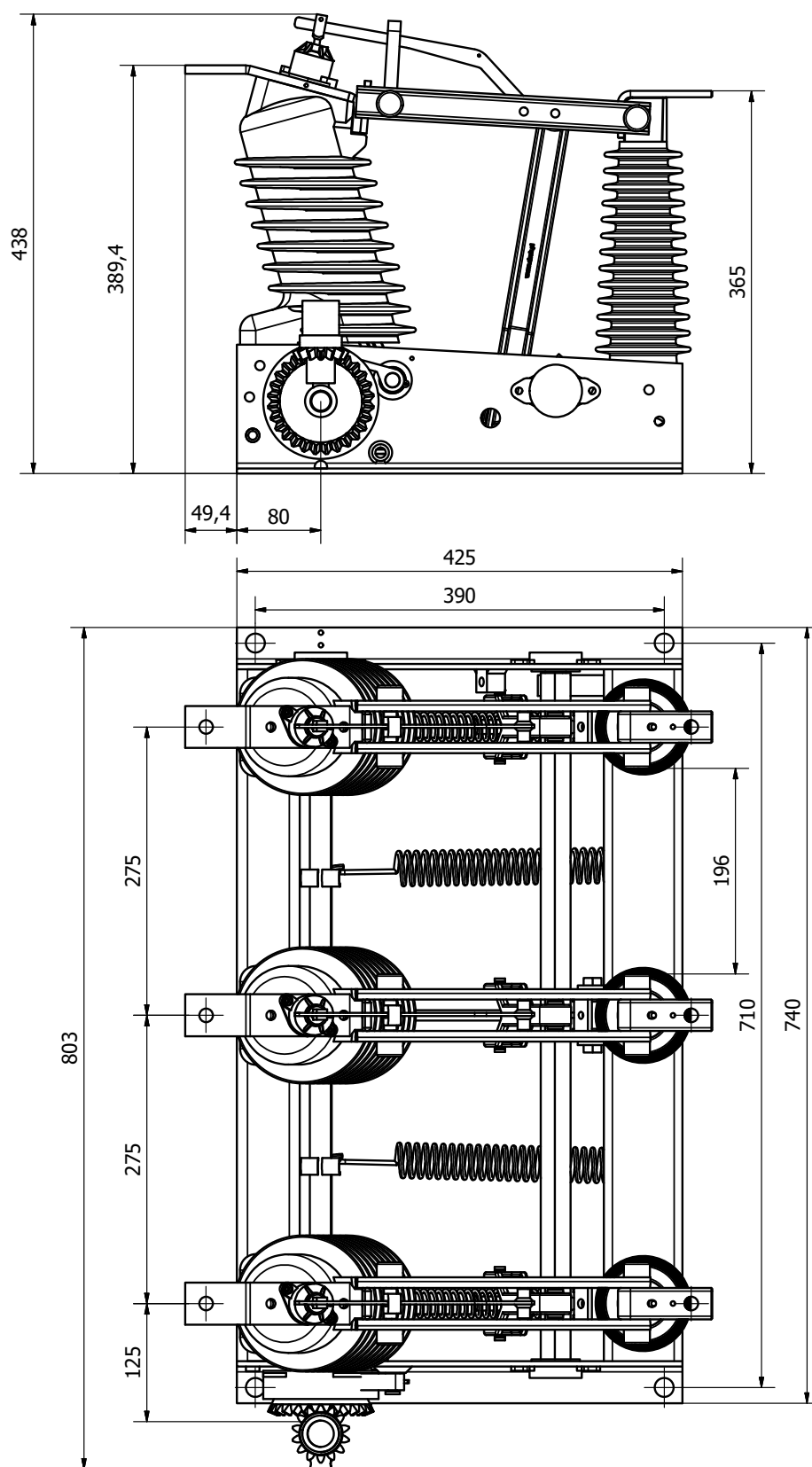
Dimensions of load break switch RW 12 kV



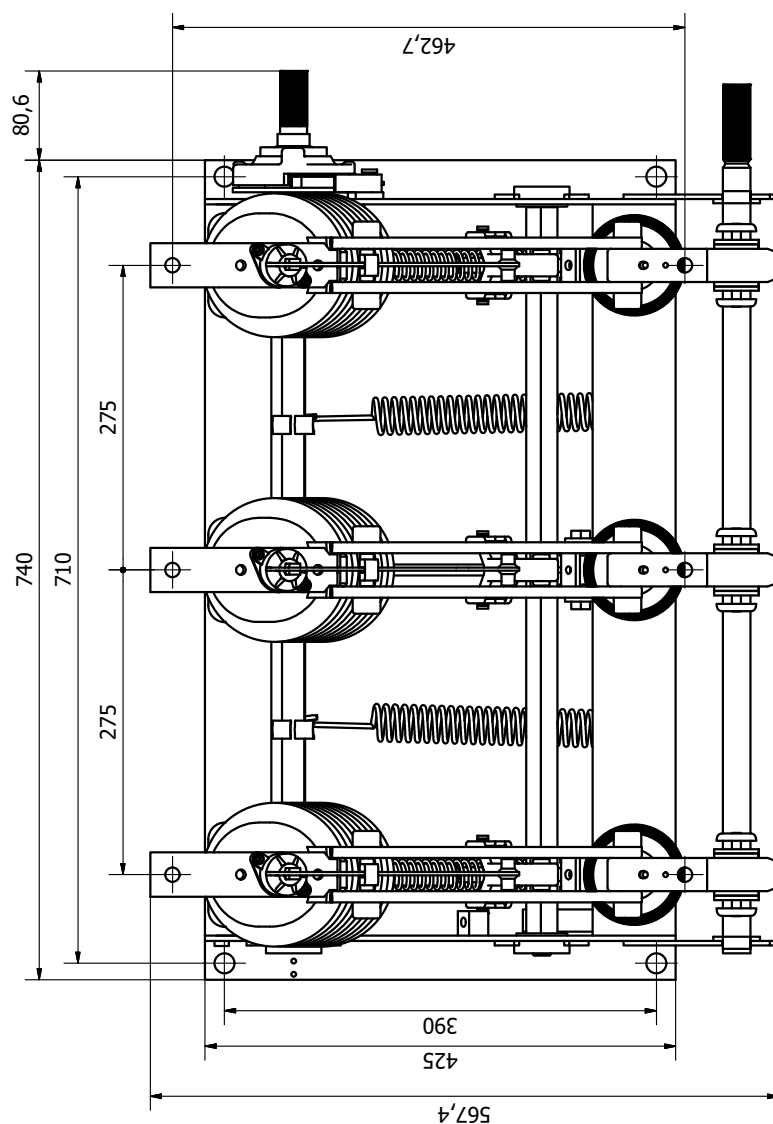
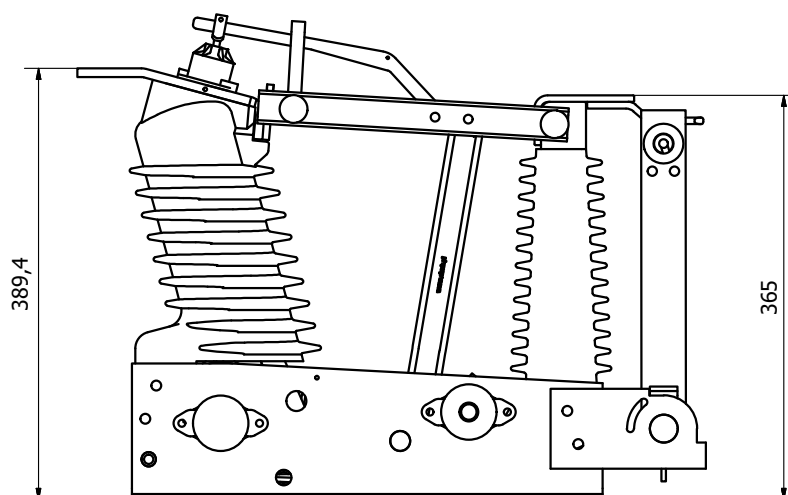
Dimensions of load break switch RW 12 kV with lower earthing switch (UD)



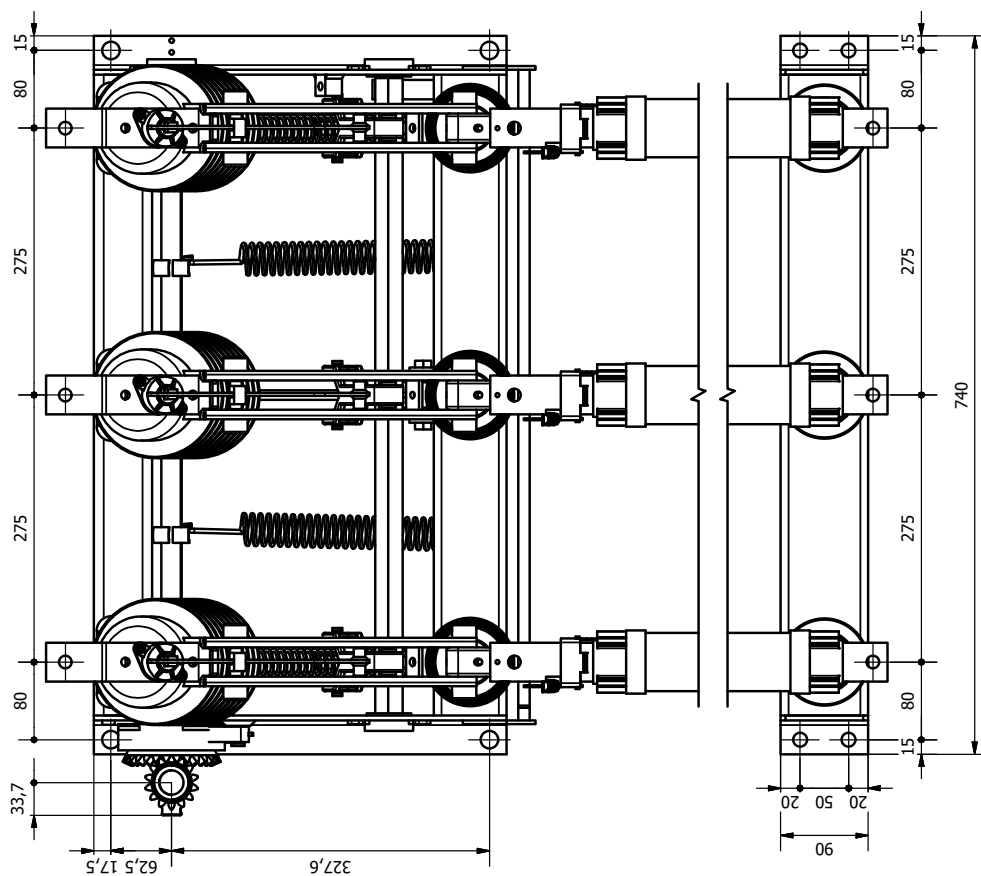
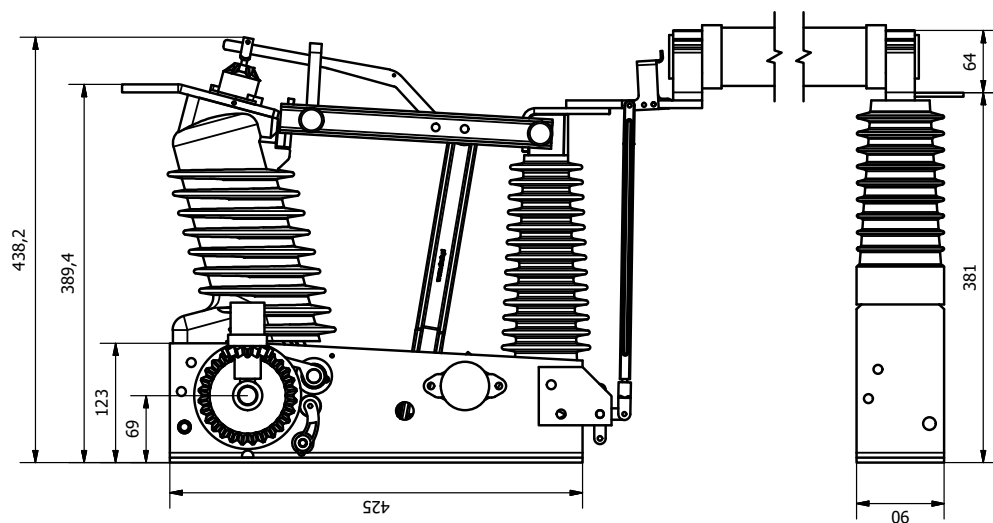
Dimensions of load break switch RW 12 kV with fuses (RWB)



Dimensions of load break switch RW 24 kV



Dimensions of load break switch RW 24 kV with lower earthing switch (UD)



Dimensions of load break switch RW 24 kV with fuses (RWB)