Elektrizität

SVX12 Vacuum Circuit Breaker

SVX12 Vacuum Circuit Breaker

Product Usage

SVX12 vacuum circuit breaker is suitable for three-phase AC 50 (60) Hz, 3.6 ~ 12 kV power system, for industrial and mining enterprises, power plants and substations for control and protection, and is suitable for frequent operation occasions. This product has excellent performance and is widely used in: industry: chemical industry, metallurgy, construction industry, manufacturing industry; civil use: residential areas, hospitals, enterprise unit power distribution; transportation: subway, high-speed railway, etc.

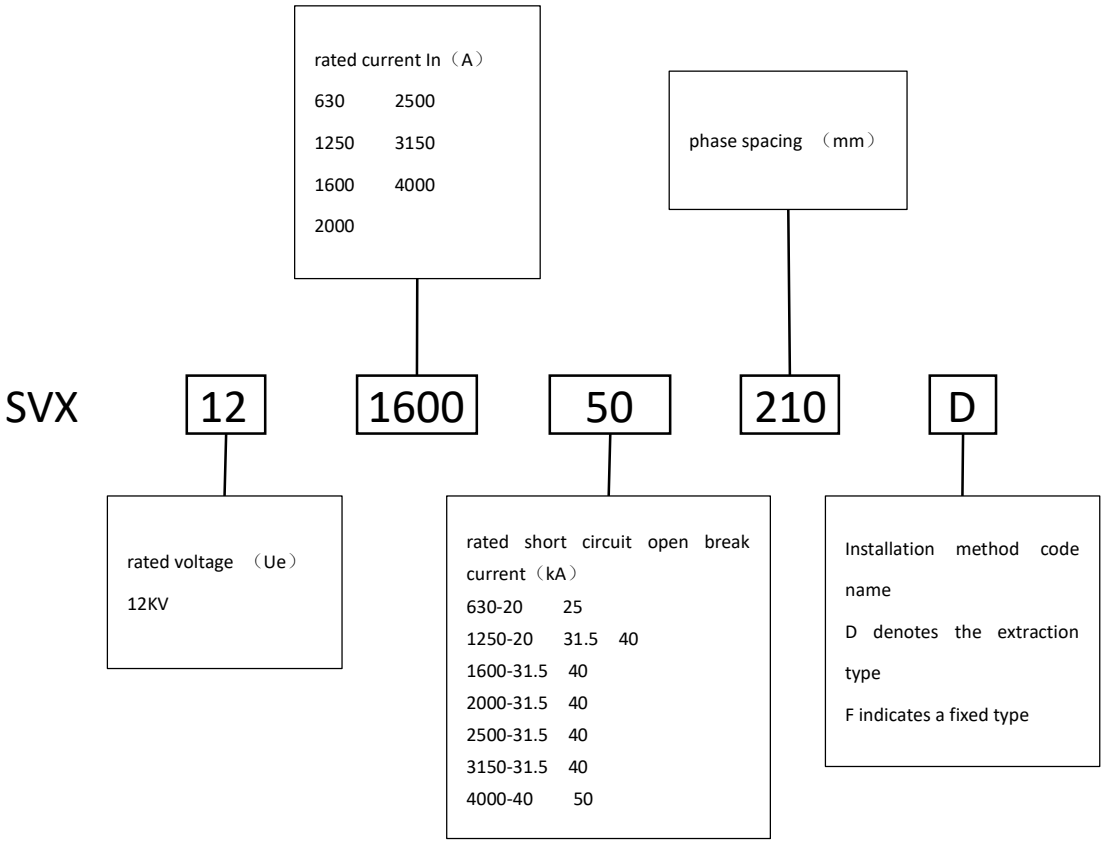
Features

1. Adopting excellent performance solid-sealed pole technology.
2. Single module integrated spring operating mechanism.
3. Imported rectangular cross-section steel wire spring, good stability and longer life.

Normal use conditions

1. Normal operating ambient temperature: -15℃~+40℃, and the average value measured within 24 hours does not exceed 35℃.
2. Altitude: The maximum altitude of the equipment installation site is ≤1000m.
3. Ambient humidity: The average relative humidity measured within 24 hours is ≤95%; the monthly average relative humidity is ≤90%.
4. Earthquake intensity: The earthquake intensity of the equipment installation site is ≤ 8 degrees.
5. The average value of water vapor pressure measured within 24 hours is ≤2.2kPa; the monthly average value of water vapor pressure is ≤1.8kPa.
6. Special environment: The surrounding air is not obviously polluted by dust, smoke, corrosive or flammable gas, steam or salt spray.

Quick Selection Table



Technical Parameters

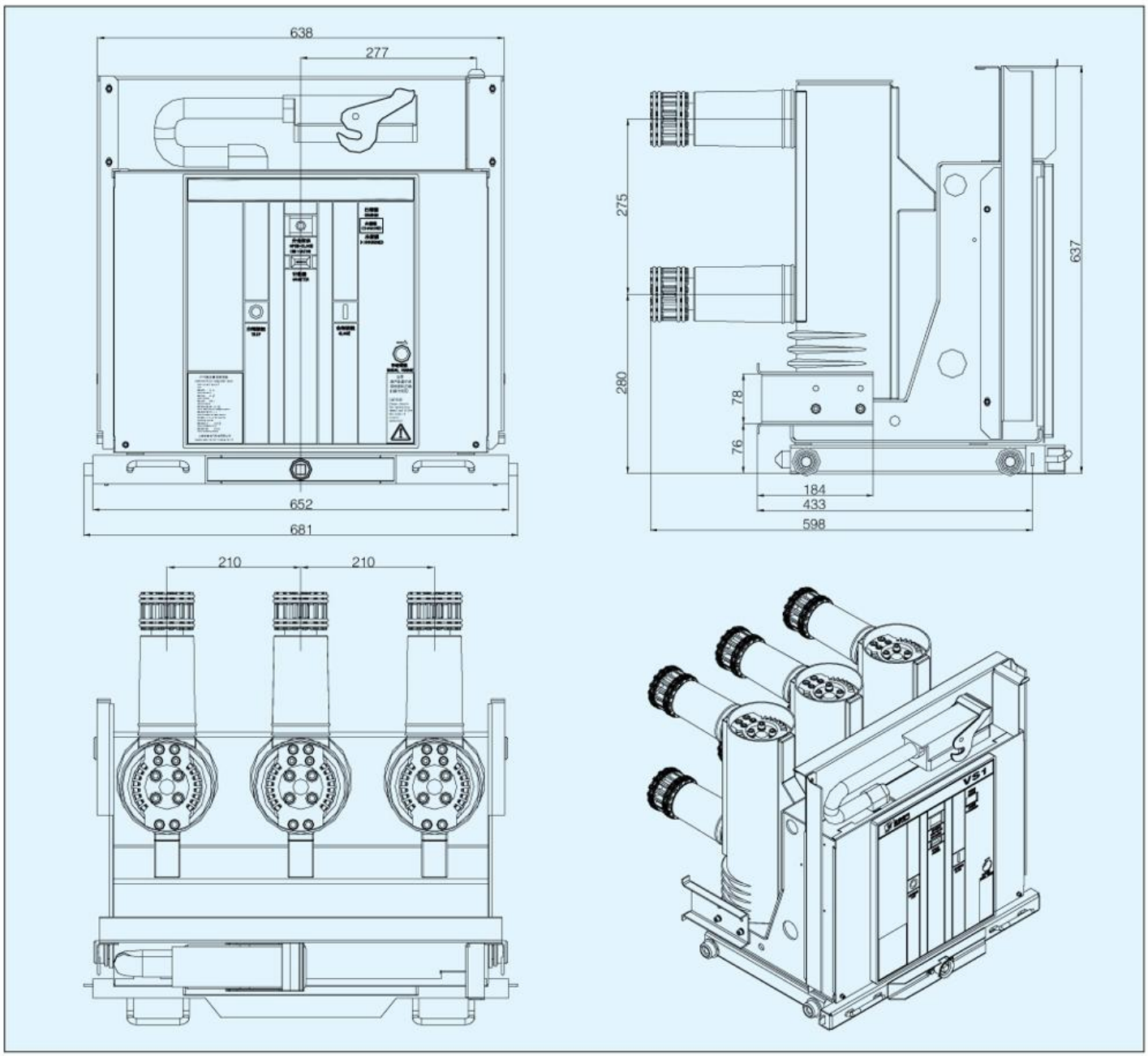
model	SVX12															
Rated voltage (KV)	12															
Rated short-time power frequency withstand voltage (1min) (KV)	42															
Rated lightning impulse withstand voltage (peak) (KV)	75															
Rated frequency (Hz)	50															
Rated current (A)	630		1250			1600			2000		2500		3150		4000	
Rated short-circuit breaking current (kA)	20	25	25	31.5	40	25	31.5	40	31.5	40	31.5	40	31.5	40	40	50
Rated short-time withstand current (kA)	20	25	25	31.5	40	25	31.5	40	31.5	40	31.5	40	31.5	40	40	50
Rated peak withstand current (kA)	50	63	63	80	100	63	80	100	80	100	80	100	100	125	100	125
Rated short-circuit making current (kA)	50	63	63	80	100	63	80	100	80	100	80	100	100	125	100	125
Secondary circuit power frequency withstand voltage (V)	2000															
Rated single /back-to-back capacitor bank switching current (A)	630/400															
Opening time (rated voltage) (ms)	20~50															
Closing time (rated voltage) (ms)	35~70															
Mechanical life (times)	30000 (40 KA , 50 KA is 10000)															
Rated short-circuit current breaking times (times)	50 (40 k A is 20, 50 k A is 12)															

Allowable cumulative wear thickness of moving and static contacts (mm)	3
Rated closing operating voltage (V)	AC110/220
Rated opening operating voltage (V)	DC110/220
Energy storage motor rated voltage (V)	AC110/220 DC110/220
Energy storage motor rated power (W)	90
Energy storage time (S)	≤ 10
Contact opening distance (mm)	9±1
Overtravel (mm)	3.5±0.5
Contact closing bounce time (ms)	≤ 2(40 k A, 50 k A ≤ 3)
Three-phase opening and closing phase difference (ms)	≤ 2
Average opening speed (contact separation ~6mm) (m/s)	1.2±0.3
Average closing speed (m/s)	0.7±0.2
Contact opening rebound amplitude (mm)	≤ 2
Contact closing contact pressure (N)	2200±100(20kA , 25kA) 3100±200(31.5kA)4800±300(40kA , 50kA)
Rated operating sequence	O-0.3s-CO-180s-CO O-180s-CO-180s-CO

Note: 4000A requires forced air cooling.

Dimensions

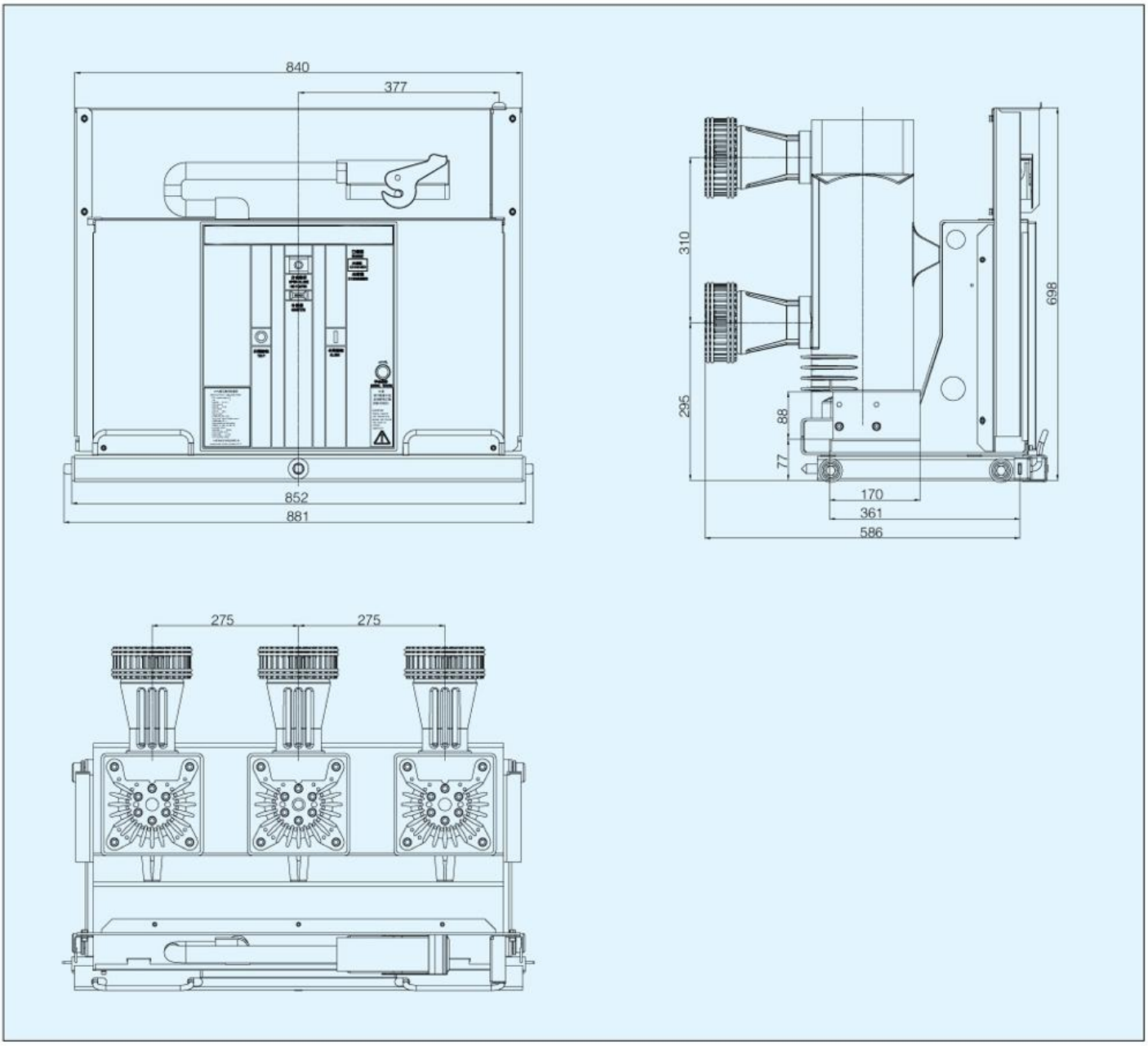
SVX12 withdrawable



Rated current(A)	630	1250	1600
Rated short-circuit breaking current (kA)	20 25	25 31.5 40	31.5
Matching static contact size (mm)	Φ35	Φ49	Φ55
Note: The meshing size of the moving and static contacts shall not be less than 15mm.			

Dimensions

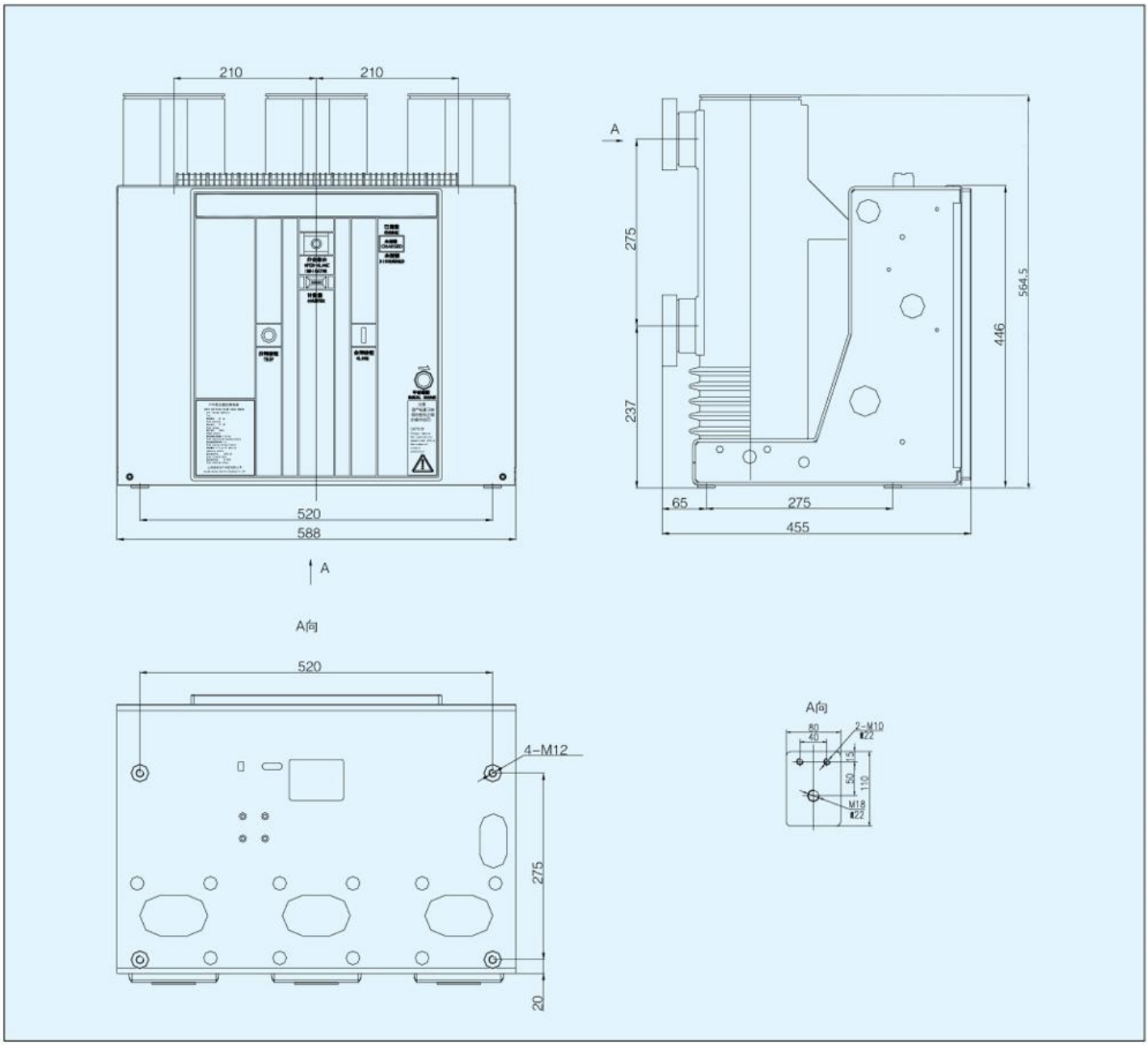
SVX12 withdrawable



Rated current(A)	1600	2000	2500	3150	4000
Rated short-circuit breaking current (kA)	40	31.5 40	31.5 40	31.5 40	40 50
Matching static contact size (mm)	Φ79		Φ109		
Note: The meshing size of the moving and static contacts is not less than 15mm, the 4000 shape is 35cm higher, and forced cooling is required.					

Dimensions

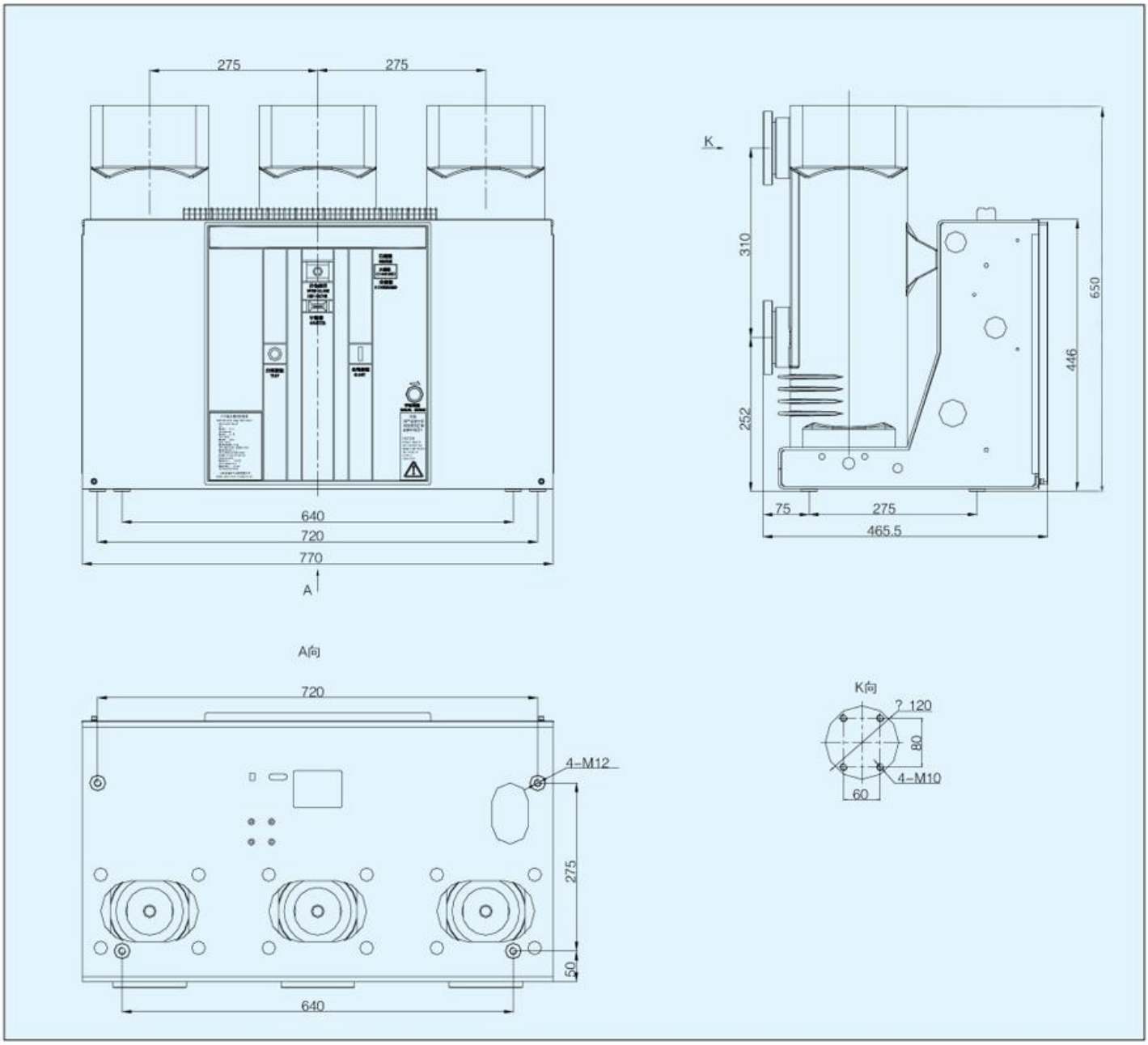
SVX12 Fixed



Rated current(A)	630	1250	1600
Rated short-circuit breaking current (kA)	20 25	25 31.5 40	31.5 40

Dimensions

SVX12 Fixed



Rated current(A)	2000 2500 3150	4000
Rated short-circuit breaking current (kA)	31.5 40	40 50