



NV1-24



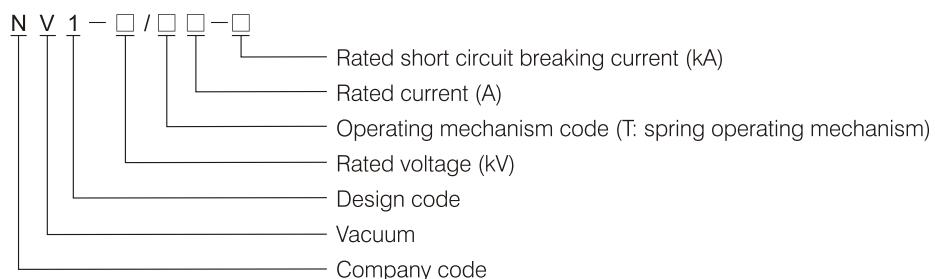
KEMA

NV1 Vacuum Circuit Breaker, Indoor Type

1. General

- 1.1 Ratings: Rated voltage 17.5kV~24kV, Rated current 630A~3150A, AC50HZ
- 1.2 Application: for the control and protection of substation and equipments; making and breaking short-circuit current under various operating status of electric network.
- 1.3 Standard: IEC62271-100

2. Type and Interpretation



3. Working Condition

- 3.1 Ambient air temperature:-25~40°C
 - 3.2 Altitude: ≤2000m
 - 3.3 No operating in such places as subject to dust, dirt, smog, corrosive/flammable gas, vapor and salt pollution.
 - 3.4 Humidity: Daily average value ≤95%
Monthly average value ≤90%
 - 3.5 Water vapor pressure: Daily average value ≤2.2kPa
Monthly average value ≤1.8kPa
 - 3.6 The external shocking and earthquake could be neglected.
 - 3.7 The amplitude of electromagnetic interference in the secondary system ≤1.6kV.
- ※ Note: Customized products are available on your requirements.

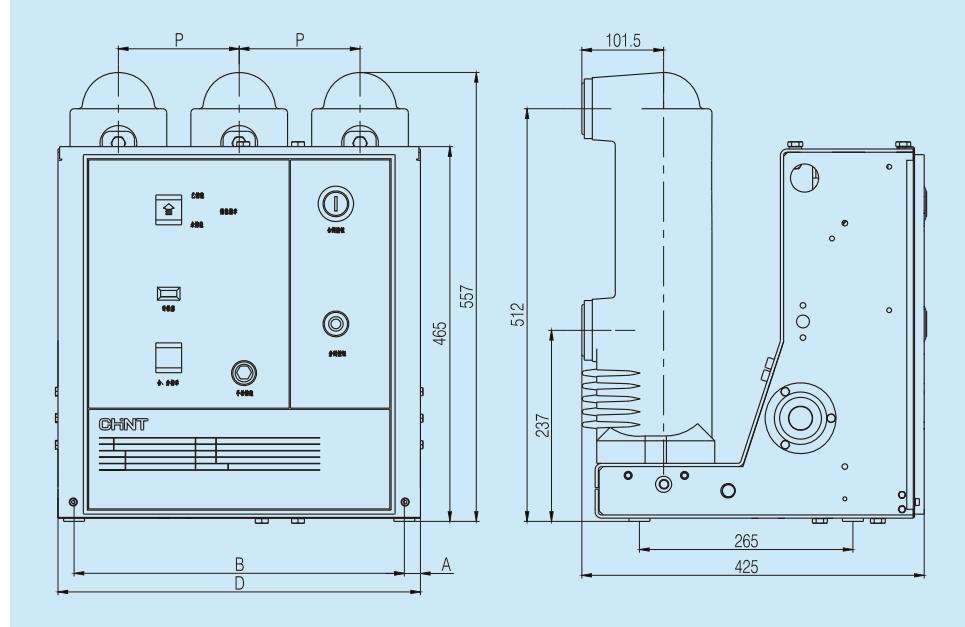
4. Main Technical Parameter

Item		Unit	Data
Rated voltage		kV	17.5 24
Rated insulation level	1 min power frequency withstand voltage(vacuum open contacts) Lightening impulse withstand voltage (vacuum open contacts)	kV	50 65(79) 95 125(145)
Rated frequency		Hz	50
Rated current		A	630, 1250 1600 2000, 2500, 3150
Rated short-time withstand current		kA	20, 25, 31.5 20, 25, 31.5
Rated withstand current(peak)		kA	50, 63, 80 50, 63, 80
Rated short-circuit breaking current		kA	20, 25, 31.5 20, 25, 31.5
Rated short-circuit making current		kA	50, 63, 80 50, 63, 80
Rated duration of short-circuit		s	4
Rated operating sequence			O-0.3s-CO-180s-CO
Mechanical life			M2 class (20000 times)
Rated voltage of operating power		V	AC 220/DC 220
Full breaking time		ms	≤70
Electrical life			E2 class

5. Overall and Installation Dimension

5.1 Overall and installation dimension of fixed type circuit breaker (Fig. 1, Fig. 2, and Fig. 3)

Fig. 1

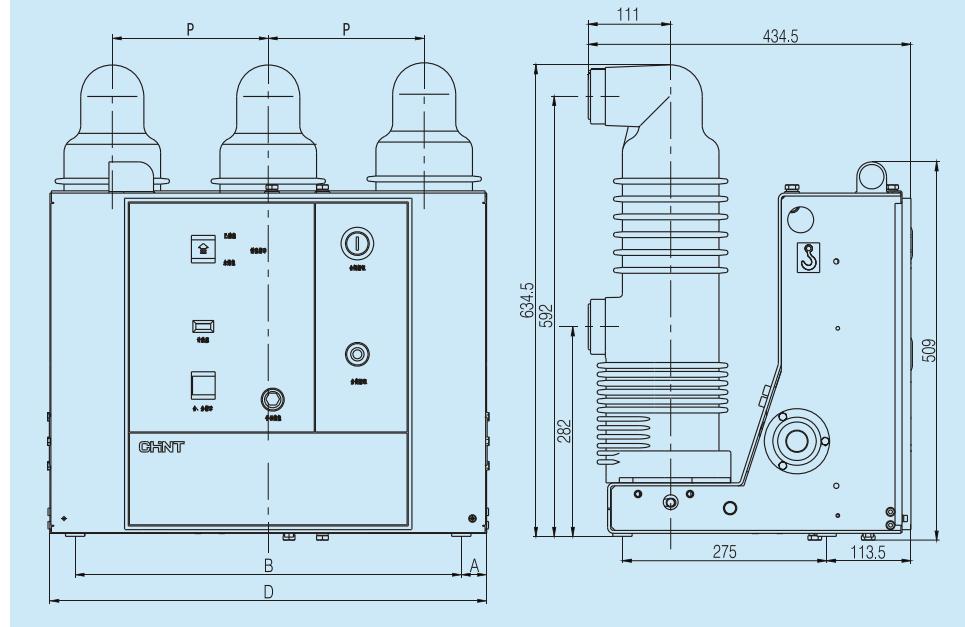


Alternative parameters

Table 1

Rated voltage kV	Rated current kA	Rated short-circuit breaking current, kA	P mm	A mm	B mm	D mm
17.5	630, 1250	20, 25, 31.5				
	1600	31.5	210	34	520	588

Fig. 2

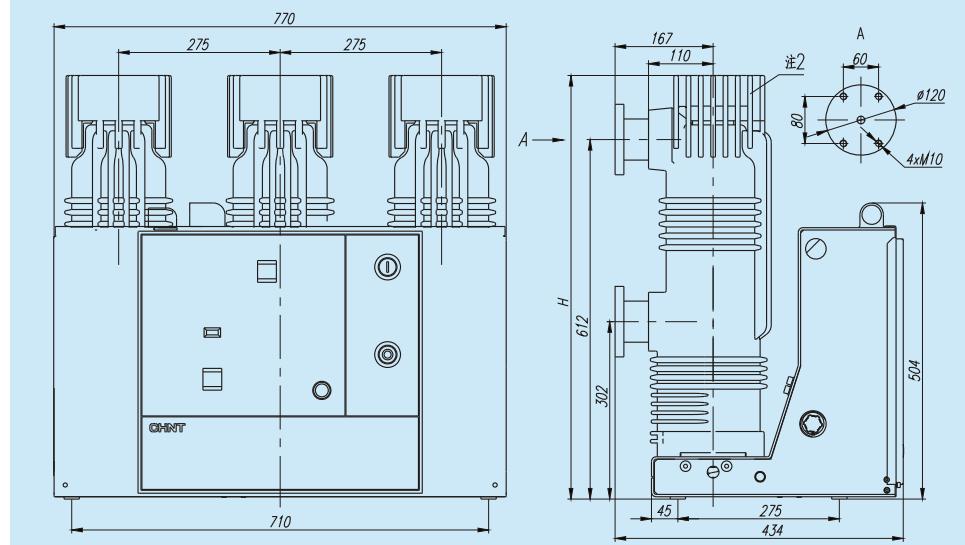


Alternative parameters

Table 2

Rated voltage kV	Rated current kA	Rated short-circuit breaking current, kA	P mm	A mm	B mm	D mm
24	630, 1250, 1600	16, 20, 25	210	34	520	588
	630, 1250, 1600	16, 20, 25	275	30	710	770

Fig. 3



* Note: There is no radiator when rated current is $\leq 2000\text{A}$.

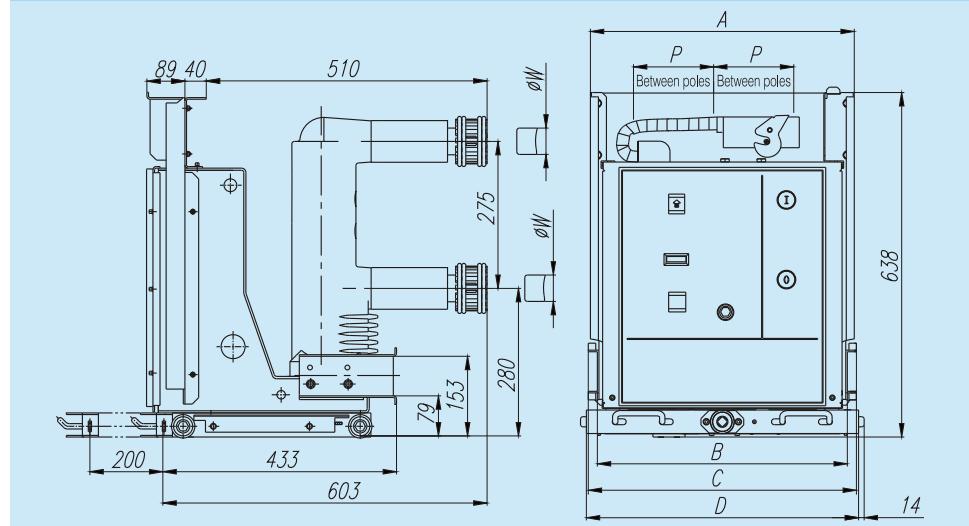
Alternative parameters

Table 3

Rated voltage kV	Rated current kA	Rated short-circuit breaking current kA	H mm
24	1600, 2000	20, 25, 31.5	658
	2500, 3150	20, 25, 31.5	721

5.2 Overall and installation dimension of trolley of withdrawable circuit breaker (Fig. 4, Fig. 5, and Fig. 6)

Fig. 4

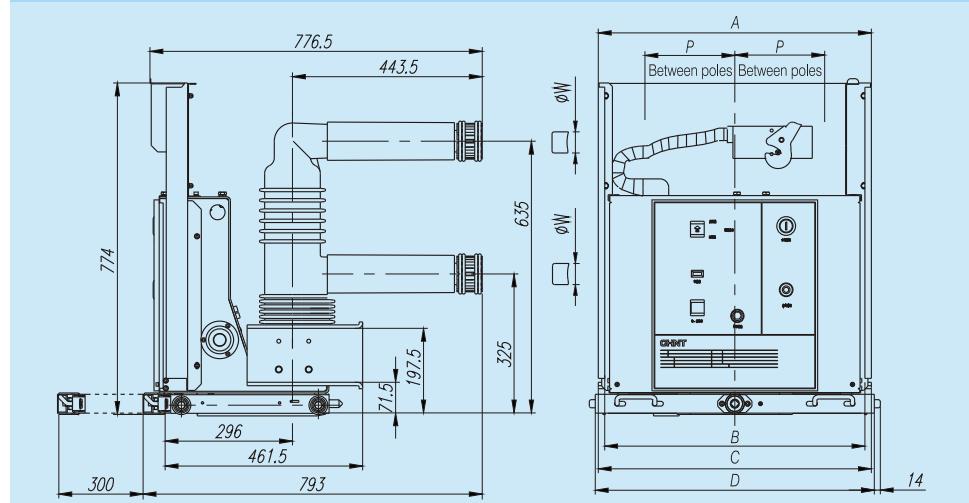


Alternative parameters

Table 4

	Rated voltage kV	Rated current kA	Rated short-circuit breaking current, kA	P mm	A mm	B mm	C mm	D mm	W mm
17.5	630	20, 25							35
	630, 1250	20, 25, 31.5		150	494	456	490	502	49
	1600	20, 25, 31.5							55
	630	20, 25							35
	630, 1250	20, 25, 31.5		210	638	591	637	652	49
	1600	20, 25, 31.5							55
	630	20, 25							35
	630, 1250	20, 25, 31.5		275	838	773	834	852	49
	1600	20, 25, 31.5							55

Fig. 5

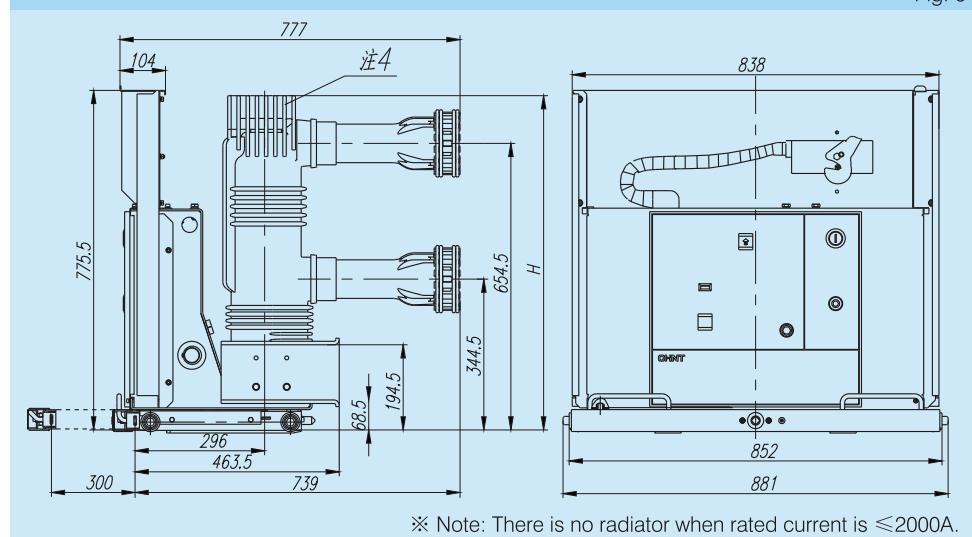


Alternative parameters

Table 5

	Rated voltage kV	Rated current kA	Rated short-circuit breaking current, kA	P mm	A mm	B mm	C mm	D mm	W mm
24	630, 1250	16, 20, 25							49
	1600	16, 20, 25		210	638	608	638	652	55
	630, 1250	16, 20, 25							49
	1600	16, 20, 25		275	838	808	838	852	55

Fig. 6



Alternative parameters

Table 6

Rated voltage kV	Rated current kA	Rated short-circuit breaking current kA	H mm
24	1600, 2000	20, 25, 31.5	703
	2500, 3150	20, 25, 31.5	764

6. Ordering Information

Please indicate the following items when order:

- 6.1 Type, name and quantity.
- 6.2 Rated voltage, rated current and rated short-circuit breaking current.
- 6.3 Rated voltage of auxiliary circuit.
- 6.4 Name and quantity of spare parts.

※ Customized products are available per your requirements.