VHY1-12/24 Indoor Vacuum Circuit Breaker

Summary

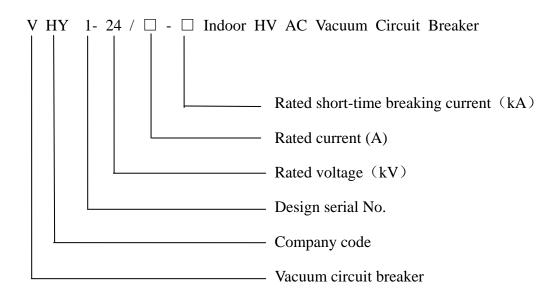
VHY1-12/24 Series Indoor AC High Voltage Vacuum Circuit Breaker is used for indoor switchgear three-phase AC 50Hz, rated voltage 12/24kV power system, as power equipment, control and protection of industrial and mining enterprises of the power equipment, is a new generation of vacuum circuit breaker in domestic and foreign markets with many years of professional production experience designed by our company. It conforms with GBI984, JB3855, DL/T402/403, IEC62271-100 and so on.



Ambient Condition

- 1 Environmental air temperature: upper limit is $+40^{\circ}$ C, lower limit is -25° C;
- 2 Altitude ≤ 1000 m:
- 3 Relative humidity: daily average value $\leq 95\%$, monthly average value $\leq 90\%$;
- 4 Vapor pressure: daily mean relative humidity $\leq 2.2 \times 10^{-3}$ MPa, monthly mean relative humidity $\leq 1.8 \times 10^{-3}$ MPa;
- 5 Earthquake intensity: not exceeding 8 degree;
- 6 Installation site: without fire risk, explosion hazard, heavy pollution, chemical corrosion and violent vibration.

Model



Technical Parameters

| No. | Item | | | Unit | Technical parameters | | |
|-----|---|--|-----------------------------------|------|-----------------------|------|------------|
| 1 | Rated voltage | | | kV | 12, 24 | | |
| 2 | Rated current | | | A | 630, 1250 |) | 2500, 3150 |
| 3 | Rated frequency | | | Hz | 50 | | |
| 4 | Rated insulation level | 1 min P.F withstand | phase to phase, phase to earth | | 65 | | |
| | | voltage | fracture | kV | 65 | | |
| | | lightning impulse withstand voltage | phase to phase, phase to earth | | 125 | | |
| | | | fracture | | 125 | | |
| 5 | 4s Rated short-time withstand current | | | kA | 20 | 25 | 31.5 |
| 6 | Rated short circuit breaking current | | | | 20 | 25 | 31.5 |
| 7 | Rated peak withstand current | | | | 50 | 63 | 80 |
| 8 | Rated short circuit making current | | | | 50 | 63 | 80 |
| 9 | Rated duration of short-circuit | | | S | 4 | | |
| 10 | Rated out phase ground fault breaking current | | | kA | 17.4 | 21.7 | 27.4 |
| 11 | Rated operation sequence | | | S | O-0.3s-CO-180s-CO | | |
| 12 | Rated operation voltage | | | V | DC(AC)220/110 | | |
| 13 | Electrical life | | | Time | E2 class ^b | | |
| 14 | Mechanical life | | | time | 10000 | | |

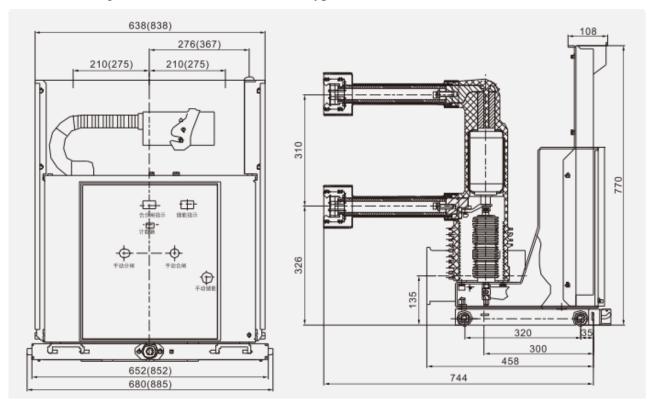
Note: when rated current is 3150A, the switchgear should be equipped with forced air cooling.

Main Feature

- 1. Adopt new generation modular spring operating mechanism. Compact structure, simple and reasonable layout, reliable transmission, easy installation;
- 2. The integrated design of the operating mechanism and the breaker body. It can be used as a fixed installation unit or a special propulsion mechanism to form a handcart unit;
- 3. The main circuit mainly adopts unique solid sealing design, or insulating cylinder;
- 4. The main circuit adopts solid insulation structure and integrated solid sealing pole to realize maintenance free, high reliability and miniaturization;
- 5. Five perfect anti-chain function after equipped with cabinet.

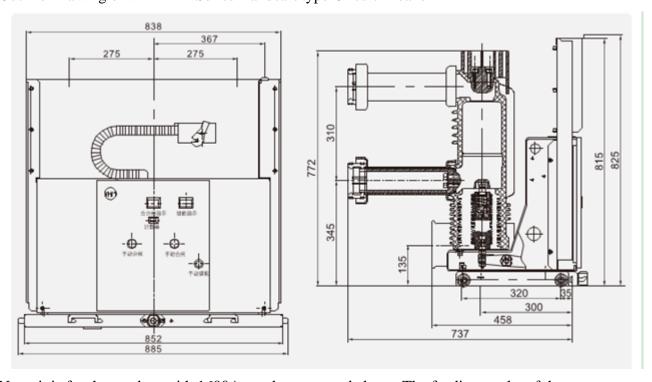
Outline Dimension

Outline Drawing of VHY1-24 Series Handcart type Circuit Breaker



Note: it is for the product with 1250A rated current and below. The feeding stroke of the handcart is 300mm.

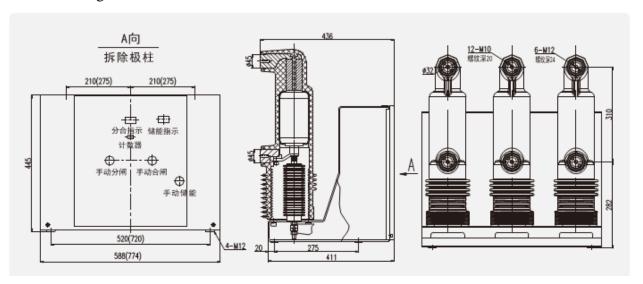
Outline Drawing of VHY1-24 Series Handcart type Circuit Breaker



Note: it is for the product with 1600A rated current and above. The feeding stroke of the

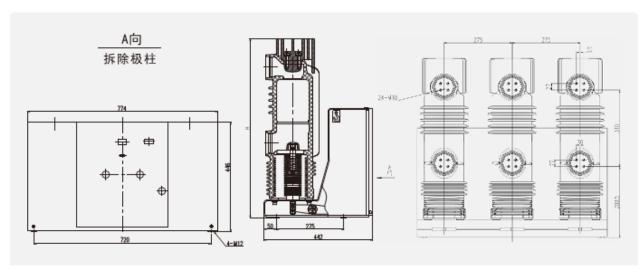
handcart is 300mm.

Outline Drawing of VHY1-24 Series Fixed Circuit Breaker



Note: it is for the product with 1250A rated current and below.

Outline Drawing of VHY1-24 Series Fixed Circuit Breaker



Note: it is for the product with 1600A rated current and above. The height of 1600A and 2000A current is 639mm, the height of 2500A and 3150A current is 728mm,