## HERG<sup>®</sup>华仪

## VS1-12/24 Indoor Vacuum Circuit Breaker (Side Installation)

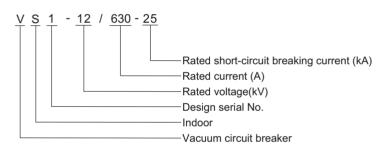
#### Summary

VS1-12/24 indoor side-mounting AC and High-voltage VCB is a type of indoor switchgear applied to electric system of rated voltage 7.2~12kV, three-phase 50/60Hz to protect and control apparatus. It is especially applicable in occasion with frequent operation; it can break short- circuit continuously. This HV VCB is of fixed mounting, mainly used in stationary switch cabinet. It can work separately or in ring network power supply, prefabricated substation as well as in non-standard power supply system.

#### Ambient condition

- 1. Altitude: ≤1000m;
- 2. Ambient temperature: -25°C~+40°C;
- 3. Relative humidity: daily average  $\leq 95\%$ , monthly average  $\leq 90\%$ ;
- 4. Earthquake intensity: ≤8 degree;
- 5. Applicable occasions should free from inflammables, explosives, corrosives and severe vibration.

#### Model



#### Product feature

The arc-chamber can be mounted in common insulation bushing, or encapsulated within epoxy resin by APG technology. The VCB features with small volume, aesthetic appearance, reliable operation and long mechanical life.

#### Technical specification

| No. | Item                                       |   | Unit | Data                                   |          |      |
|-----|--|---|------|--|----------|------|
| 1   | Rated voltage                              |   |      | 12/24                                  |          |      |
| 2   | Rated                                      | Rated short-time P.F. withstand voltage(1min.)  | kV   | 42                                     |          |      |
| 3   | insulation<br>level                        | Rated lightning impulse withstand voltage(peak) |      | 75                                     |          |      |
| 4   | Rated power frequency                      |   | Hz   | 50/60                                  |          |      |
| 5   | Rated current                              |   | А    | 630,1250                               | 630,1250 | 1250 |
| 6   | Rated short-circuit breaking current       |   | kA   | 20                                     | 25       | 31.5 |
| 7   | Rated short-time withstand current         |   |      | 20                                     | 25       | 31.5 |
| 8   | Rated peak withstand current               |   |      | 50                                     | 63       | 80   |
| 9   | Rated short-circuit making current(peak)   |   |      | 50                                     | 63       | 80   |
| 10  | 4s thermal steady current                  |   |      | 20                                     | 25       | 31.5 |
| 11  | Rated movable steady current               |   |      | 50                                     | 63       | 80   |
| 12  | Rated capacitor bank making current        |   |      | 12.5(frequency not higher than 1000Hz) |          |      |
| 13  | Rated unit/capacitor bank breaking current |   | А    | 630/400                                |          |      |



# HERG<sup>°</sup>华仪

| 14 | Rated short-circuit duration                  |                  | s    | 4                    |  |
|----|---|------------------|------|----------------------|--|
| 15 | P.F. withstand voltage for secondary loop     |                  |      | 2000                 |  |
| 16 | Rated<br>operating<br>voltage                 | Making winding   |      | AC110/220, DC110/220 |  |
|    |   | Breaking winding | V    | AC110/220, DC110/220 |  |
|    |   | Storage motor    |      | AC110/220, DC110/220 |  |
| 17 | Breaking time of rated voltage                |                  |      | 20~50                |  |
| 18 | Making time of rated voltage                  |                  | ms   | 35~70                |  |
| 19 | Wearing thickness of moving & fixing contacts |                  | mm   | ≤3                   |  |
| 20 | Storage time                                  |                  | s    | ≤15                  |  |
| 21 | Contact opening distance                      |                  | mm   | 11 ± 1               |  |
| 22 | Contact travel                                |                  |      | 3~4                  |  |
| 23 | Contact closing tripping time                 |                  | ms   | ≤2                   |  |
| 24 | Three-phase closing and opening asynchronous  |                  |      | ≤2                   |  |
| 25 | Average opening speed                         |                  | ms   | 0.9~1.3              |  |
| 26 | Average closing speed                         |                  |      | 0.4~0.8              |  |
| 27 | Contact opening rebound                       |                  | mm   | ≤3                   |  |
| 28 | Main circuit resistance                       |                  | μΩ   | ≤50(630A)            |  |
|    |   |                  | μ 52 | ≤45(1250A)           |  |
| 29 | Contact closing press                         |                  | N    | 3100 ± 200(31.5kA)   |  |
| 30 | Rated operating sequence                      |                  |      | O-0.3s-CO-180s-CO    |  |

### Outline dimension

