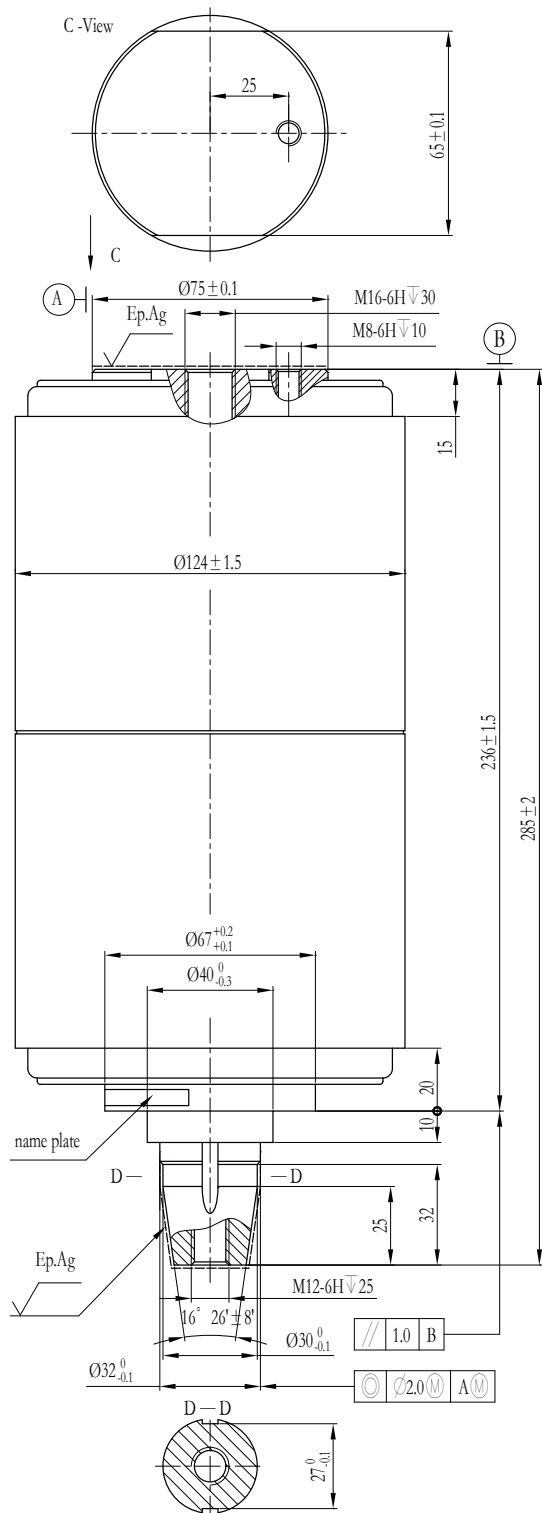


## GTD-40.5/1600-31.5A



Note 1: "☆" Within transformer oil or equivalent isolation medium;  
 Note 2: "※" Rated characteristics to be given on request;  
 Note 3: Meets or exceeds the electrical endurance requirements of class E2 for autoreclosing duty per IEC 62271-100;  
 Note 4: The movable stem of the vacuum interrupter could not suffer on more than 45N · m twisting force and in order not to damage the metal bellows, the movable stem should be prevented from rotation when assembling. For more requirements please check the Instructions of Usage.

### Main Technical Data

| Item  | Unit       | Value                     |
|---|------------|---------------------------|
| Rated Voltage   | kV         | 40.5                      |
| Lightning Impulse Withstand Voltage (Peak)                | kV         | 185☆                      |
| Short-time (1min) Power-frequency Withstand Voltage       | kV         | 70/95☆                    |
| Rated Frequency   | Hz         | 60                        |
| Rated Current   | A          | 1600                      |
| Rated Short-time Withstand Current                        | kA         | 31.5                      |
| Rated Duration of Short-circuit                           | s          | 4                         |
| Rated Peak Withstand Current                              | kA         | 80                        |
| Rated Short-circuit Making Current                        | kA         | 80                        |
| Rated Short-circuit Breaking Current                      | kA         | 31.5                      |
| Max. Dc Component   |            | 40%                       |
| Switch Operations of Rated Short-circuit Breaking Current | Operations | 20                        |
| Rated Single Capacitor Bank Breaking Current              | A          | 400※                      |
| Rated Back-to-Back Capacitor Bank Breaking Current        | A          | 400※                      |
| Mechanical Endurance                                      | Operations | 10000                     |
| Clearance Between Open Contacts                           | mm         | 18 ± 1                    |
| Contact Closed Force Due to Bellows and Atmosphere        | N          | 110 ± 40                  |
| Counterforce of Contact at Full Stroke                    | N          | 210 ± 40                  |
| Circuit Resistance at Min. Rated Contact Force            | μΩ         | ≤ 20                      |
| Contact Limit Erosion                                     | mm         | 3                         |
| Mass of Moving Parts                                      | kg         | 1.6                       |
| Internal Gas Pressure                                     | Pa         | < 1.33 × 10 <sup>-3</sup> |
| Shelf Life  | Years      | 20                        |
| Rated Operating Sequence                                  |            | Open-0.3s-CO-180s-CO      |

### Mechanical Data of Switch Equipped With Interrupter

| Item   | Unit | Value                             |
|--|------|-----------------------------------|
| Average Opening Speed (first 12mm)                 | m/s  | 1.7 ± 0.3                         |
| Average Closing Speed (last 6mm)                   | m/s  | 1.3 ± 0.3                         |
| Contact Bounce Duration at Closing Operation       | ms   | ≤ 3                               |
| Out of Simultaneity of Contact Closing and Opening | ms   | ≤ 2                               |
| Rated Contact Pressure                             | N    | 3200 <sup>+300</sup> <sub>0</sub> |
| Contact Pressure at Contact Touch Point            | N    | 2250 <sup>+210</sup> <sub>0</sub> |
| Max. Rebound of Contact at Opening Operation       | mm   | 3                                 |
| Overtravel During Opening                          | mm   | ≤ 3                               |