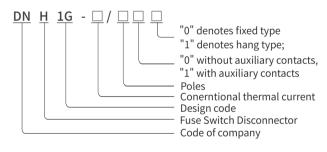


#### **Application scope**

DNH1 series fuse-switch-disconnector (chere inafter refered to switch) is designed for the distribution circuit and electromot of circuit with high short circuit current, with rated AC voltage 400V and 690V, conventional thermal current up to 630A. It is used as power switch, switch disconnector and emergent switch, and with the function of circuit protection, but not used as a direct open or close single electromotor popularly.

This product is in conformity with standard GB14048.3(idt IEC60947-3).

#### **Model & Meaning**



# Normal work conditions and Installation conditions

- Ambient temperatue: -5°C~40°C .
- \* Altitude: shall not exceed 2000m.
- \*\* The atmosphere condition: The relative humidity shall not exceed 50% when the environmental temperatue is +40°C in installing place; And the relative humidity may be higher at the lowertemperature condition. Such as when the humidity is 90% when the temperature is +20°C .It shall take some special management to avoid the dew occurs on the product surface due to temperature change.
- ※ Pollution grade: III
- \*\* The product shall be installed in the place without remarkable shake, strike and quiver, rain and snow, in the medium without danger of exploding, and in the places without gas and conductive dust, which can make the metal go rust and affect insulation performances.

#### Other

Structure Characteritic:

The switch is composed of base, cover and arc chute, all these parts are made of arc-resisting plastics, it is whole plastic structure. The static contact is directly installed on thebase, the arc chute is rasily mounted and dismounted, each arc chute has two parts: inner room and outer room, it adopts multi-pieces of metal arc-blowout grid which increase the arc-blowout capacity and prolong the service life of the contact.

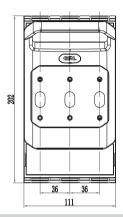
NT type fusing unit is fixed inside the cover, the cover can be rotated along the supporting unit in fan shape, it has a relative big electric isolation distance which can meet the demands of the isolating seitch; The cover can be dismounted from the base easily chich make the installation and replacement of the fusing unit easy There are three group of installation hote on the base, which and meet the installation requirements of various switchgear cubicle and panel. Auxiliary contact can be mounted at the two side of the switch on demands, it can give out the signal of opening and closing the switch.

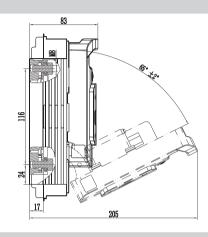
### **Technical parameters**

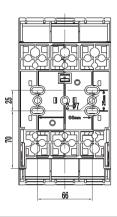
|            |        |   |      |        | DNH1-160 DNH1-250                       |       | DNH1-400 |       | DNH1-630 |              |        |       |  |
|------------|--------|---|------|--------|---|-------|----------|-------|----------|--------------|--------|-------|--|
|            |        | Rated Voltage   | Ue   | V      | AC400                                   | AC690 | AC400    | AC690 | AC400    | AC690        | AC400  | AC690 |  |
|            |        | Rate Current  | le   | Α      | 160                                     | 160   | 250      | 250   | 400      | 400          | 630    | 630   |  |
|            |        | Rated insulation voltage  | Ui   | V      | 1000                                    | 1000  | 1000     | 1000  | 1000     | 1000         | 1000   | 1000  |  |
|            | Fuse   | Agreed heating current  | Ith  | Α      | 160                                     | 100   | 250      | 200   | 400      | 315          | 630    | 500   |  |
|            |        | Rated impulse withstand voltage                                   | Uimp | kV     | 12                                      | 12    | 12       | 12    | 12       | 12           | 12     | 12    |  |
|            |        | Rated limiting short-circuit current                              | Iq   | kA     | 100                                     | 50    | 50       | 100   | 100      | 50           | 100    | 50    |  |
|            |        | Usage category  |      |        | AC-23B(AC400)/AC-21B(AC690)             |       |          |       |          |              |        |       |  |
| Electrical |        | Electrical endurance Times Second                                 |      | Second | 200                                     |       | 200      |       | 200      |              | 200    |       |  |
| parameter  | Copper | Rated Voltage   | Ue V |        | AC380                                   |       | AC380    |       | AC400    |              | AC400  |       |  |
|            |        | Rated Current   | le   | Α      | 1                                       | 60    | 250      |       | 630      |              | 630    |       |  |
|            |        | Rated insulation voltage  | Ui   | V      | 690                                     |       | 690      |       | 1000     |              | 1000   |       |  |
|            |        | Agreed heating current  | lth  | Α      | 160                                     |       | 250      |       | 630      |              | 630    |       |  |
|            |        | Rated impulse withstand voltage                                   | Uimp | kV     | 8                                       |       | 8        |       | 12       |              | 12     |       |  |
|            |        | Rated limiting short-circuit current                              | lcw  | kA/1s  | 8                                       |       | 10       |       | 15       |              | 15     |       |  |
|            |        | Usage category  |      |        | AC-21B                                  |       | AC-21B   |       | AC-23B   |              | AC-23B |       |  |
|            |        | Electrical endurance Times  |      | Second | 200                                     |       | 200      |       | 200      |              | 200    |       |  |
|            |        | Rated frequency   |      | Hz     | 50\60                                   |       | 50\60    |       | 50\60    |              | 50\60  |       |  |
|            |        | Poles   |      |        | 3                                       |       | 3        |       | 3        |              | 3      |       |  |
| _          |        | Size(RT16/NT/NH)<br>IEC 60269-2 GB/T 13539.2                      |      |        | 00                                      |       | 1        |       | 2        |              | 3      |       |  |
| Fuse       |        | Working Current   | In   | Α      | 160                                     | 160   | 250      | 250   | 400      | 400          | 630    | 630   |  |
|            |        | Power Dissipation   | Р    | W      | 12                                      | 12    | 18       | 32    | 28       | 45           | 40     | 50    |  |
| Mecha      | nism   | Mechanical endurance Se   |      | Second | 14                                      | 100   | 1400     |       | 800      |              | 800    |       |  |
| Prote      | ction  | Frontal   |      |        | On: IP20 \ Off: IP30                    |       |          |       |          |              |        |       |  |
| Other      | r      | Signal feedback for opening and closing the switch (micro switch) |      |        | Can be added Can be added Can be added  |       |          |       | added    | Can be added |        |       |  |
|            |        |   |      |        |   |       |          |       |          |              |        |       |  |
|            |        | Surrounding air temperature °C                                    |      |        | -5 ~ +40                                |       |          |       |          |              |        |       |  |
| Working    |        | Rated working hours   |      |        | Uninterrupted working system            |       |          |       |          |              |        |       |  |
|            |        | Operation method  |      |        | Handle operation  Vertical installation |       |          |       |          |              |        |       |  |
|            | _      | Installation method   |      |        | vertical installation  ≤ 2000           |       |          |       |          |              |        |       |  |
| Condi      | itions | Altitude m Installation category                                  |      | m      | ≈ 2000<br>III、IV                        |       |          |       |          |              |        |       |  |
|            |        | Pollution level   |      |        | 3                                       |       |          |       |          |              |        |       |  |
|            |        | Transportation and storage  |      | °C     | -25 ~ +55                               |       |          |       |          |              |        |       |  |
|            |        |   |      |        | -23. 4.23                               |       |          |       |          |              |        |       |  |

### Appearance and installation dimensions (mm)

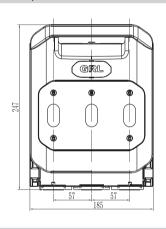
### DNH1-160/30G Fixed

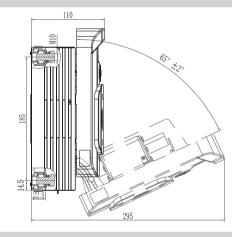


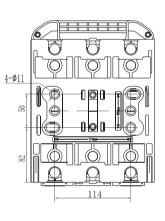




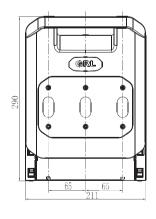
### DNH1-250/30G Fixed

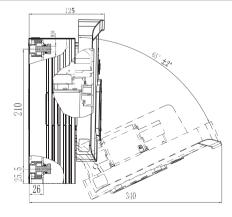


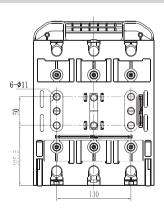


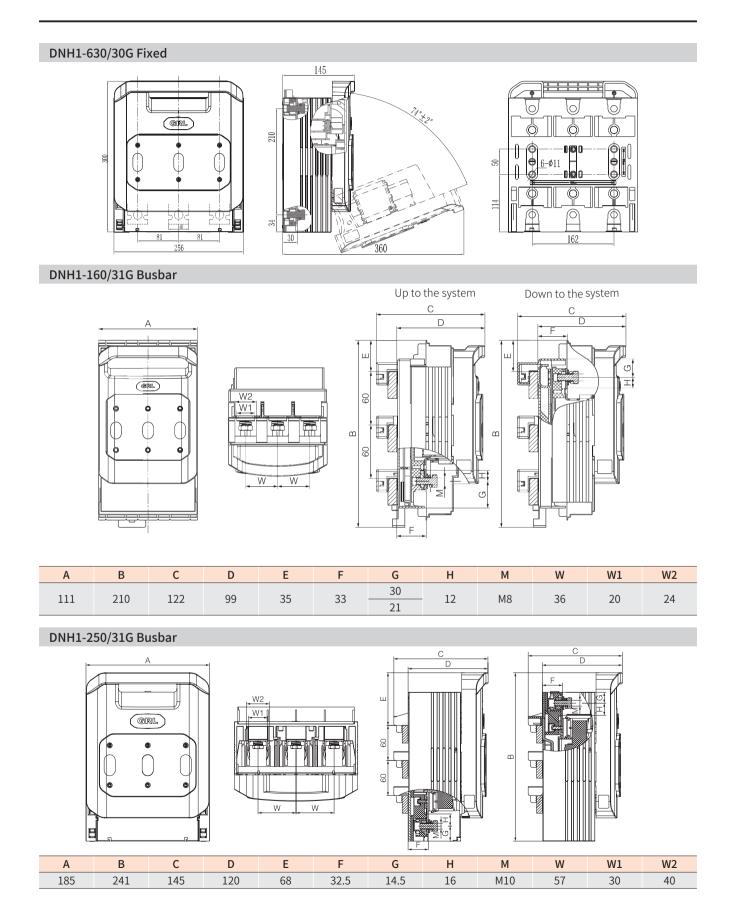


### DNH1-400/30G Fixed

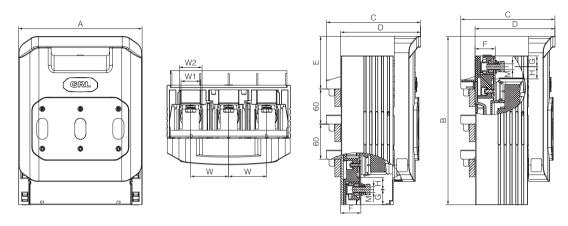






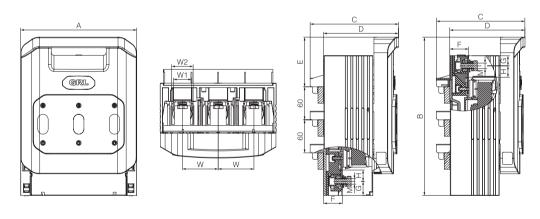


### DNH1-400/31G Busbar



| Α   | В   | С   | D   | Е  | F    | G    | Н  | М   | W  | W1 | W2 |
|-----|-----|-----|-----|----|------|------|----|-----|----|----|----|
| 211 | 288 | 161 | 137 | 73 | 34.5 | 25.5 | 19 | M10 | 65 | 33 | 50 |
|     |     |     |     |    |      | 18.5 |    |     |    |    |    |

### DNH1-630/31G Busbar



| Α   | В   | С   | D   | Е  | F    | G    | Н  | М   | W  | W1 | W2 |
|-----|-----|-----|-----|----|------|------|----|-----|----|----|----|
| 256 | 313 | 178 | 154 | 90 | 41.5 | 37.5 | 21 | M12 | 81 | 45 | 59 |