## TGHD Series Switch Disconnector



## 1 Overview

TGHD series is a new product developed by our company on the basis of HD series，and is an ideal substitute product for HD series，greatly improving the personal safety protection to prevent accidental electric shock．
This series of products is primarily used in low－voltage power distribution equipment for infrequent manual disconnection，disconnection and isolation of switch．

2 Type Designation



## 3 Technical Parameters

| Resistive current Ith（A） | 160 | 250 | 400 | 630 | 1000 | 1600 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated operating current Ie（A） | $\begin{aligned} 63, & 80 \\ 100, & 160 \end{aligned}$ | $\begin{aligned} & 200 \\ & 250 \end{aligned}$ | 400 | $\begin{aligned} & 600 \\ & 630 \end{aligned}$ | $\begin{gathered} 800 \\ 1000 \end{gathered}$ | $\begin{aligned} & 1250 \\ & 1600 \end{aligned}$ |
| Rated short time withstand current Icw（kA／s） | 5 | 10 | 15 | 25 | 12 | 19.2 |
| Rated operating voltage Ue <br> （V） | 415／690／800 |  |  |  |  |  |
| Rated insulation voltage Ui $(\mathrm{V})$ | 1000 |  |  |  |  |  |
| Rated impulse withstand voltage Uimp（kV） | 12 |  |  |  |  |  |
| Usage category | AC－20A／AC－21A |  |  |  | AC－20A／AC－21B |  |
| Mechanical life（times） | 10000 |  |  |  |  |  |

Note：TGHD11N series has 160 frame，and TGHD13N has no 160 frame．

## 4 Operating Conditions

4．1 The ambient air temperature is not higher than $+40^{\circ} \mathrm{C}$ ，and not below $5^{\circ} \mathrm{C}$ ．
4．2 The altitude at the installation site does not exceed 2000 m ．

## 4．3 Humidity：

When the maximum temperature is $+40^{\circ} \mathrm{C}$ ，the relative humidity of air does not exceed $50 \%$ ．A higher relative humidity is allowed at low temperatures，such as up to $90 \%$ at $20^{\circ} \mathrm{C}$ ．Special measures are taken for condensation occurred occasionally due to temperature changes．

4．4 The Pollution degree of the surrounding environment is Level 3；
4．5 The switch shall be vertically installed in a place where there is no obvious shaking，impact vibration and rain and snow immersion and where there is no explosive danger medium that there is no gas or dust sufficient to cause metal corrosion and damage to the insulation．

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## 5 Outline and Installation Dimensions

5．1 TGHD11N Outline and Installation Dimensions（see Fig．1，Table 2）


Fig． 1

Table 2

| Model \＆ Spec． | 160 |  |  | 250 |  | 400 |  | 630 | 1000 | 1600 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 P | 3P | 4P | 3P | 4P | 3P | 4P | 3 P | 3P | 3 P |
| A | 78 | 118 | 158 | 170 | 200 | 195 | 235 | 225 | 280 | 320 |
| B | 160 | 160 | 160 | 195 | 195 | 250 | 250 | 255 | 325 | 370 |
| C | 1 | 40 | 80 | 60 | 100 | 70 | 120 | 80 | 100 | 110 |
| D | 100 | 100 | 100 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| E | 40 | 40 | 40 | 60 | 50 | 70 | 60 | 80 | 100 | 110 |
| F | 120 | 120 | 120 | 158 | 158 | 180 | 180 | 195 | 280 | 320 |
| H | 178 | 178 | 178 | 210 | 210 | 260 | 260 | 265 | 320 | 360 |
| I | － | － | － | － | － | － | － | － | 205 | 220 |
| h | 82 | 82 | 82 | 105 | 105 | 115 | 115 | 125 | 150 | 173 |
| M | 6 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 12 |
| $\varphi$ | 7 | 7 | 7 | 6.5 | 6.5 | 6.5 | 6.5 | 8.5 | 9 | 9 |

Note：The dimensions of TGHD11N－100 product are same as those of TGHD11N－160．

## TGHD Series Switch Disconnector

5．2 TGHD13N－250～1600 Outline and Installation Dimensions（see Fig．2，Table 3）

Fig． 2


Table 3

| Model \＆Spec． | 250 | 400 | 630 | 1000 | 1600 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $3 P$ | $3 P$ | $3 P$ | $3 P$ | $3 P$ |
| A | 180 | 204 | 232 | 282 | 322 |
| B | 150 | 200 | 224 | 300 | 340 |
| C | 60 | 70 | 80 | 100 | 110 |
| D | 160 | 160 | 160 | 160 | 160 |
| E | 60 | 70 | 80 | 100 | 110 |
| F | 178 | 200 | 224 | 185 | 195 |
| H | 160 | 185 | 190 | 235 | 260 |
| I | - | - | - | 225 | 240 |
| L | 78 | 80 | 80 | 82 | 83 |
| R | 180 | 180 | 180 | 230 | 230 |
| M | 8 | 10 | 12 | 12 | 12 |

## TGHD Series Switch Disconnector

5．3 Fixed Thickness of TGHD11N Mounting Plate and Distance from the Busbar to the Mounting Plate（Fig．3， Table 4）


Fig． 3

Table 4

| Model \＆Spec． | 160 | 250 | 400 | 630 | 1000 | 1600 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| h 1 | 25 | 24 | 24 | 25 | 30 | 30 |
| h 2 | 7 | 7 | 22 | 22 | 11 | 14 |
| t | 1.5 | 1.5 | 2 | 3 | 7 | 8 |
| Busbar width | 18 | 20 | 30 | 40 | 50 | 70 |

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5．4 Fixed Thickness of TGHD13N Mounting Plate and Distance from the Busbar to the Mounting Plate（Fig．4， Table 5）


Fig． 4

Table 5

| Model \＆Spec． | 250 | 400 | 630 | 1000 | 1600 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| h1 | 25 | 25 | 25 | 30 | 30 |
| h2 | 8 | 19 | 22 | 11 | 14 |
| t | 1.5 | 2 | 3 | 7 | 8 |
| Busbar width | 20 | 30 | 40 | 50 | 70 |

## 6 Ordering Notice

Please specify the model，features，voltage grade，current grade，number of poles，operation method，and quantity of the switch when ordering．For special orders，please contact the company＇s technical department．

For example：TGHD11N－100／38B 10 units．
TGHD13N－250／ 3110 units

