# DNH40 Series Disconnector Switch

Product Catalog

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# About GRL

- Founded in 2003
- 24 Invention Patents,83 Utility Model Patents
- National High-Tech Enterprise
- Zhejiang Provincial "Specialized, Sophisticated, Distinctive, and Innovative" SME
- Zhejiang Provincial Invisible Champion Enterprise
- Zhejiang Provincial (Key) Enterprise Research Institute
- Zhejiang Provincial Industrial Design Center
- Wenzhou Green Factory

Zhejiang GRL Electric Co., Ltd.Established in 2003, GRL specializes in R&D, production, and sales of fuses, enclosed busway systems, and disconnectors. Our core products include high/low-voltage fuses, disconnectors, enclosed busway systems, new energy copper connections, and surge protectors. These products are widely used in energy storage, charging stations, power grids, photovoltaic/wind power generation, automotive manufacturing, machinery, marine power distribution, and building infrastructure. GRL has provided thousands of electrical components and solutions for new energy, industrial control, power systems, and new infrastructure, establishing itself as a leading brand in electrical connection and protection.

The company operates modern factory facilities spanning over 43,000 square meters, equipped with more than 150 machining equipment units, over 30 specialized production lines, and more than 80 testing devices—including fuse comprehensive characteristic test benches, switch temperature rise test benches, mechanical life test benches, and salt spray test chambers. By implementing scientific production processes and a rigorous quality management system, the company's products have achieved performance standards comparable to international industry benchmarks. Building upon the full adoption of process-oriented and standardized management frameworks, the corporation is actively advancing the development of lean digitalization and a comprehensive employee performance management system.

GRL is committed to advancing electrical safety, reliability, and efficiency while adhering to green development principles and social responsibility. We continuously improve to become a globally respected electrical brand.

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# DNH40 Series Disconnector Switch

## Product Overview

The DNH40 series disconnector switch (hereinafter referred to as "the switch") is suitable for industrial power distribution systems with AC 50Hz/60Hz and rated insulation voltage up to 1000V. It is designed for infrequent circuit connection/disconnection and electrical isolation, widely used in construction, power, petroleum, chemical, and automation systems.

Note: Installation, debugging, and maintenance must be performed by qualified personnel in suitable environments. All operations must comply with this manual.

## Applicable Standards

GB/T 14048.1、GB/T 14048.3

## Certifications

TÜV、CCC、CE、CB 、CCS（2000A~4000A）

## Model Designation

DN H 40 - □ / □ J

- J: External Cabinet Operation (Internal operation not labeled)
- □ (Poles): 3: 3-pole (mechanism on left)
  4: 4-pole (mechanism on left)
  30: 3-pole (mechanism on right)
  40: 4-pole (mechanism on right)
  12: 3-pole (mechanism between poles)
  22: 4-pole (mechanism between poles)
- □ (Current Rating): Current Rating (A)
- 40: Design Code
- H: Disconnector Switch
- DN: Company Code

## Ordering Instructions

Provide the following details:
Product name, model, specifications, and quantity.
Special installation conditions or technical requirements must be communicated in advance.
Example: DNH40-250/3J Disconnector Switch, 250A, 3-pole, external cabinet operation.

# DNH40 Series
# Disconnector Switch

## DNH40-160~250


## Key Technical Parameters

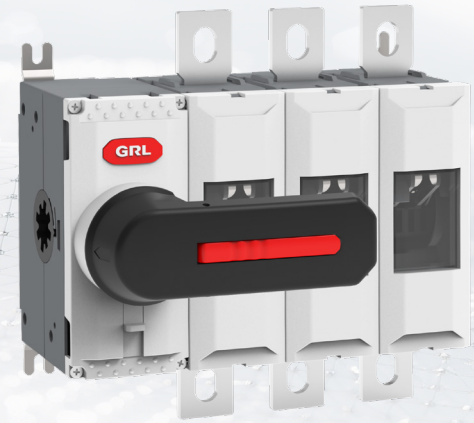
| Model | | DNH40-160 | DNH40-200 | DNH40-250 |
|---|---|---|---|---|
| Conventional thermal current and rated operational current | A | 160 | 200 | 250 |
| Rated operational voltage (AC-20/DC-20) | V | 1000 | | |
| Rated insulation voltage (Installation category IV) Ui | V | 1000 | | |
| Dielectric strength 50Hz 1min | kV | 10 | | |
| Rated impulse withstand voltage Uimp | kV | 12 | | |
| Rated operational current (AC-21A) 690V | A | 160 | 200 | 250 |
| Rated operational current (AC-22A) 690V | A | 160 | 200 | 250 |
| Rated operational current (AC-23A) 690V | A | 160 | 200 | 250 |
| Power loss per pole (at rated operational current) | W | 3.2 | 4 | 6.5 |
| Rated short-time withstand current ⩽690V1s | kA | 8 | | |
| Rated short-circuit making capacity ⩽ 690V | kA | 30 | | |
| Mechanical life | Oper | 20000 | | |
| Operating torque (3-pole) | Nm | 7 | | |
| Terminal screw specification | mm | M8×25 | | |
| Terminal tightening torque Locking torque | Nm | 15 ～ 22 | | |

| Normal Operating Conditions | |
|---|---|
| **Ambient Temperature** | Range: -5°C to +40°C, with a 24-hour average temperature not exceeding +35°C |
| **Humidity** | At maximum temperature (+40°C), relative humidity ⩽50%.At lower temperatures (e.g., +20°C), higher humidity (up to 90%) is permissible.Special measures must be taken to address occasional condensation caused by temperature fluctuations. |
| **Altitude** | ⩽2000m |
| **Pollution Degree** | III |
| **Installation Category** | IV |
| **Installation Requirements** | The switch must be installed in a location free from significant vibration, mechanical shock, or exposure to rain/snow.The installation site must be free of explosive hazardous substances and corrosive gases/dust that could damage metal or insulation. |

**Note: If the switch is intended for use in ambient temperatures exceeding +40℃ or below -5℃ , the user must consult the manufacturer.**

# DNH40 Series
# Disconnector Switch

## DNH40-315~400




## Key Technical Parameters

| Model | | DNH40-315 | DNH40-400 |
|---|---|---|---|
| Conventional thermal current and rated operational current | A | 315 | 400 |
| Rated operational voltage (AC-20/DC-20) | V | 1000 | |
| Rated insulation voltage (Installation category IV) Ui | V | 1000 | |
| Dielectric strength 50Hz 1min | kV | 10 | |
| Rated impulse withstand voltage Uimp | kV | 12 | |
| Rated operational current (AC-21A) 690V | A | 315 | 400 |
| Rated operational current (AC-22A) 690V | A | 315 | 400 |
| Rated operational current (AC-23A) 690V | A | 315 | 400 |
| Power loss per pole (at rated operational current) | W | 6.5 | 10 |
| Rated short-time withstand current ⩽690V1s | kA | 15 | |
| Rated short-circuit making capacity ⩽690V | kA | 65 | |
| Mechanical life | Oper | 16000 | |
| Operating torque (3-pole) | Nm | 16 | |
| Terminal screw specification | mm | M10×30 | |
| Terminal tightening torque Locking torque | Nm | 30～44 | |

| Normal Operating Conditions | |
|---|---|
| Ambient Temperature | Range: -5°C to +40°C, with a 24-hour average temperature not exceeding +35°C |
| Humidity | At maximum temperature (+40°C), relative humidity ⩽50%.At lower temperatures (e.g., +20°C), higher humidity (up to 90%) is permissible.Special measures must be taken to address occasional condensation caused by temperature fluctuations. |
| Altitude | ⩽2000m |
| Pollution Degree | III |
| Installation Category | IV |
| Installation Requirements | The switch must be installed in a location free from significant vibration, mechanical shock, or exposure to rain/snow.The installation site must be free of explosive hazardous substances and corrosive gases/dust that could damage metal or insulation. |

**Note: If the switch is intended for use in ambient temperatures exceeding +40°C or below -5°C , the user must consult the manufacturer.**

# DNH40 Series
# Disconnector Switch

## DNH40-630~800


## Key Technical Parameters

| Model | | DNH40-630 | DNH40-800 |
|---|---|---|---|
| Conventional thermal current and rated operational current | A | 630 | 800 |
| Rated operational voltage (AC-20/DC-20) | V | 1000 | |
| Rated insulation voltage (Installation category IV) | Ui V | 1000 | |
| Dielectric strength | 50Hz 1min kV | 10 | |
| Rated impulse withstand voltage | Uimp kV | 12 | |
| Rated operational current (AC-21A) | 690V A | 630 | 800 |
| Rated operational current (AC-22A) | 690V A | 630 | 800 |
| Rated operational current (AC-23A) | 690V A | 630 | 800 |
| Power loss per pole (at rated operational current) | W | 25 | 40 |
| Rated short-time withstand current | ⩽690V1s kA | 20 | |
| Rated short-circuit making capacity | ⩽690V kA | 80 | |
| Mechanical life | Oper | 6000 | |
| Operating torque (3-pole) | Nm | 27 | |
| Terminal screw specification | mm | M12×40 | |
| Terminal tightening torque | Locking torque Nm | 50 ～ 75 | |

| Normal Operating Conditions | |
|---|---|
| **Ambient Temperature** | Range: -5°C to +40°C, with a 24-hour average temperature not exceeding +35°C |
| **Humidity** | At maximum temperature (+40°C), relative humidity ⩽50%.At lower temperatures (e.g., +20°C), higher humidity (up to 90%) is permissible.Special measures must be taken to address occasional condensation caused by temperature fluctuations. |
| **Altitude** | ⩽2000m |
| **Pollution Degree** | III |
| **Installation Category** | IV |
| **Installation Requirements** | The switch must be installed in a location free from significant vibration, mechanical shock, or exposure to rain/snow.The installation site must be free of explosive hazardous substances and corrosive gases/dust that could damage metal or insulation. |

**Note: If the switch is intended for use in ambient temperatures exceeding +40°C or below -5°C , the user must consult the manufacturer.**

# DNH40 Series
# Disconnector Switch

## DNH40-1000~1600

## Key Technical Parameters

| Model | | DNH40-1000 | DNH40-1250 | DNH40-1600 |
|---|---|---|---|---|
| Conventional thermal current and rated operational current | A | 1000 | 1250 | 1600 |
| Rated operational voltage (AC-20/DC-20) | V | 1000 | | |
| Rated insulation voltage (Installation category IV) | Ui V | 1000 | | |
| Dielectric strength | 50Hz 1min kV | 10 | | |
| Rated impulse withstand voltage | Uimp kV | 12 | | |
| Rated operational current (AC-21A) | 690V A | 1000 | 1250 | 1600 |
| Rated operational current (AC-22A) | 690V A | 1000 | 1250 | 1600 |
| Rated operational current (AC-23A) | 690V A | 1000 | 1250 | 1250 |
| Power loss per pole (at rated operational current) | W | 19 | 29 | 48 |
| Rated short-time withstand current | ⩽690V1s kA | 50 | | |
| Rated short-circuit making capacity | ⩽690V kA | 110 | | |
| Mechanical life | Oper | 6000 | | |
| Operating torque (3-pole) | Nm | 70 | | |
| Terminal screw specification | mm | M12 | | |
| Terminal tightening torque | Locking torque Nm | 50 ~ 75 | | |

| Normal Operating Conditions | |
|---|---|
| Ambient Temperature | Range: -5°C to +40°C, with a 24-hour average temperature not exceeding +35°C |
| Humidity | At maximum temperature (+40°C), relative humidity ⩽50%.At lower temperatures (e.g., +20°C), higher humidity (up to 90%) is permissible.Special measures must be taken to address occasional condensation caused by temperature fluctuations. |
| Altitude | ⩽2000m |
| Pollution Degree | III |
| Installation Category | IV |
| Installation Requirements | The switch must be installed in a location free from significant vibration, mechanical shock, or exposure to rain/snow.The installation site must be free of explosive hazardous substances and corrosive gases/dust that could damage metal or insulation. |

**Note: If the switch is intended for use in ambient temperatures exceeding +40°C or below -5°C , the user must consult the manufacturer.**

# DNH40 Series
# Disconnector Switch

## DNH40-2000~2500

## Key Technical Parameters

| Model | | DNH40-2000 | DNH40-2500 |
|---|---|---|---|
| Conventional thermal current and rated operational current | A | 2000 | 2500 |
| Rated operational voltage (AC-20/DC-20) | V | 1000 | |
| Rated insulation voltage (Installation category IV) | Ui V | 1000 | |
| Dielectric strength | 50Hz 1min kV | 10 | |
| Rated impulse withstand voltage | Uimp kV | 12 | |
| Rated operational current (AC-21A) | 690V A | 2000 | 2500 |
| Rated operational current (AC-22A) | 690V A | 2000 | 2500 |
| Power loss per pole (at rated operational current) | W | 55 | 85 |
| Rated short-time withstand current | ⩽690V1s kA | 55 | |
| Rated short-circuit making capacity | ⩽690V kA | 176 | |
| Mechanical life | Oper | 6000 | |
| Operating torque (3-pole) | Nm | 70 | |
| Terminal screw specification | mm | M12 | |
| Terminal tightening torque | Locking torque Nm | 50 ～ 75 | |

| Normal Operating Conditions | |
|---|---|
| **Ambient Temperature** | Range: -5°C to +40°C, with a 24-hour average temperature not exceeding +35°C |
| **Humidity** | At maximum temperature (+40°C), relative humidity ⩽50%.At lower temperatures (e.g., +20°C), higher humidity (up to 90%) is permissible.Special measures must be taken to address occasional condensation caused by temperature fluctuations. |
| **Altitude** | ⩽2000m |
| **Pollution Degree** | III |
| **Installation Category** | IV |
| **Installation Requirements** | The switch must be installed in a location free from significant vibration, mechanical shock, or exposure to rain/snow.The installation site must be free of explosive hazardous substances and corrosive gases/dust that could damage metal or insulation. |

**Note: If the switch is intended for use in ambient temperatures exceeding +40°C or below -5°C , the user must consult the manufacturer.**

# DNH40 Series
# Disconnector Switch

## DNH40-3200~4000

## Key Technical Parameters

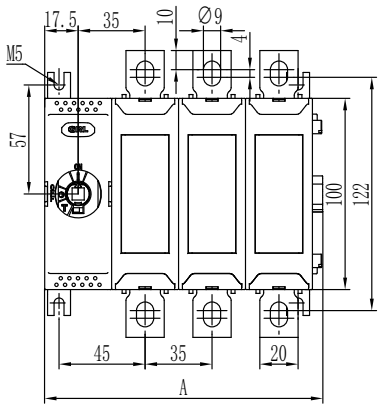
| Model | | | DNH40-3200 | DNH40-4000 |
|---|---|---|---|---|
| Conventional thermal current and rated operational current | | A | 3200 | 4000 |
| Rated operational voltage (AC-20/DC-20) | | V | 1000 | |
| Rated insulation voltage (Installation category IV) | Ui | V | 1000 | |
| Dielectric strength | 50Hz 1min | kV | 10 | |
| Rated impulse withstand voltage | Uimp | kV | 12 | |
| Rated operational current (AC-21B) | 400/415/500V | A | 3200 | 4000 |
| Rated operational current (AC-22B) | 400/415/500V | A | 3200 | 4000 |
| Power loss per pole (at rated operational current) | | W | 95 | 130 |
| Rated short-time withstand current | ⩽690V1s | kA | 60 | |
| Rated short-circuit making capacity | ⩽690V | kA | 176 | |
| Mechanical life | | Oper | 5000 | |
| Operating torque (3-pole) | | Nm | 70 | |
| Terminal screw specification | | mm | M12 | |
| Terminal tightening torque | Locking torque | Nm | 50 ～ 75 | |

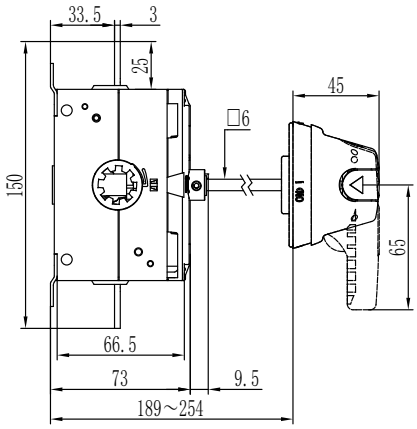
| Normal Operating Conditions | |
|---|---|
| **Ambient Temperature** | Range: -5°C to +40°C, with a 24-hour average temperature not exceeding +35°C |
| **Humidity** | At maximum temperature (+40°C), relative humidity ⩽50%.At lower temperatures (e.g., +20°C), higher humidity (up to 90%) is permissible.Special measures must be taken to address occasional condensation caused by temperature fluctuations. |
| **Altitude** | ⩽2000m |
| **Pollution Degree** | III |
| **Installation Category** | IV |
| **Installation Requirements** | The switch must be installed in a location free from significant vibration, mechanical shock, or exposure to rain/snow.The installation site must be free of explosive hazardous substances and corrosive gases/dust that could damage metal or insulation. |

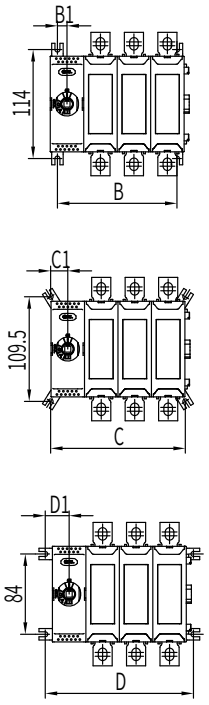
**Note: If the switch is intended for use in ambient temperatures exceeding +40°C or below -5°C , the user must consult the manufacturer.**

# DNH40 Series
# Disconnector Switch

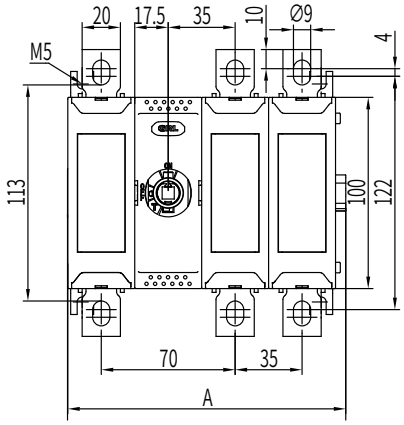
## DNH40-160～250/2～4
## Outline Dimensions and Installation Dimensions

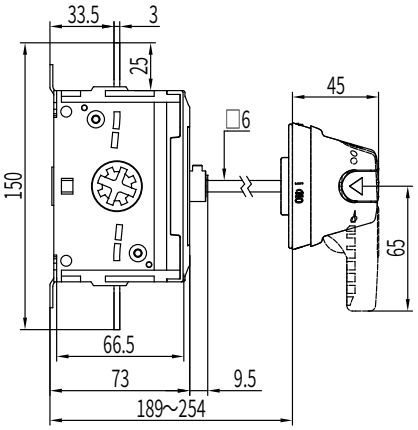


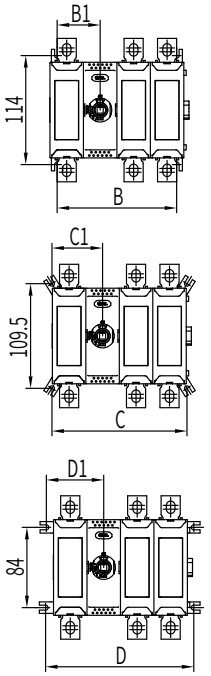




## DNH40-160～250/11～22
## Outline Dimensions and Installation Dimensions



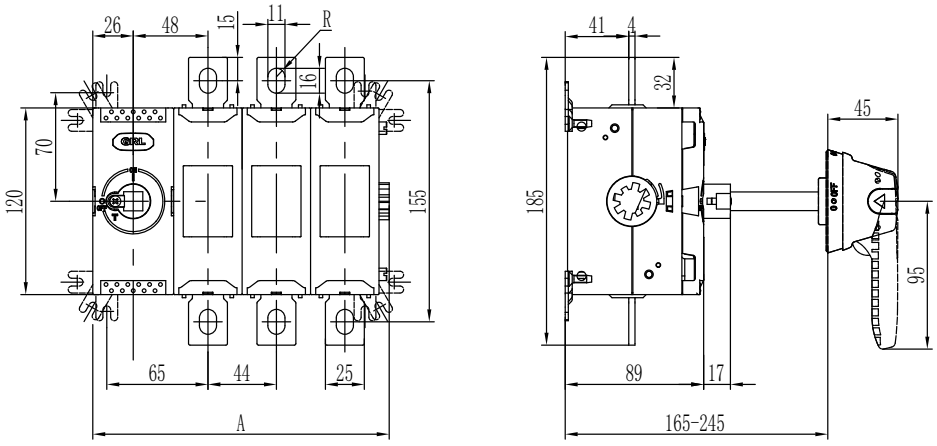



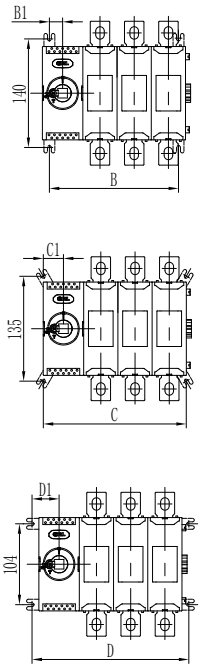




| Model | Outline Dimensions | Installation Dimensions | | | Operating Position | | |
|---|---|---|---|---|---|---|---|
| In | A | B | C | D | B1 | C1 | D1 |
| DNH40-160、200、250/2 | 110.5 | 90 | 106 | 120 | 10 | 18 | 25 |
| DNH40-160、200、250/3 | 145.5 | 125 | 141 | 155 | 10 | 18 | 25 |
| DNH40-160、200、250/4 | 180.5 | 160 | 176 | 190 | 10 | 18 | 25 |
| DNH40-160、200、250/12 | 145.5 | 125 | 141 | 155 | 45 | 53 | 60 |
| DNH40-160、200、250/13 | 180.5 | 160 | 176 | 190 | 45 | 53 | 60 |
| DNH40-160、200、250/22 | 180.5 | 160 | 176 | 190 | 80 | 88 | 95 |

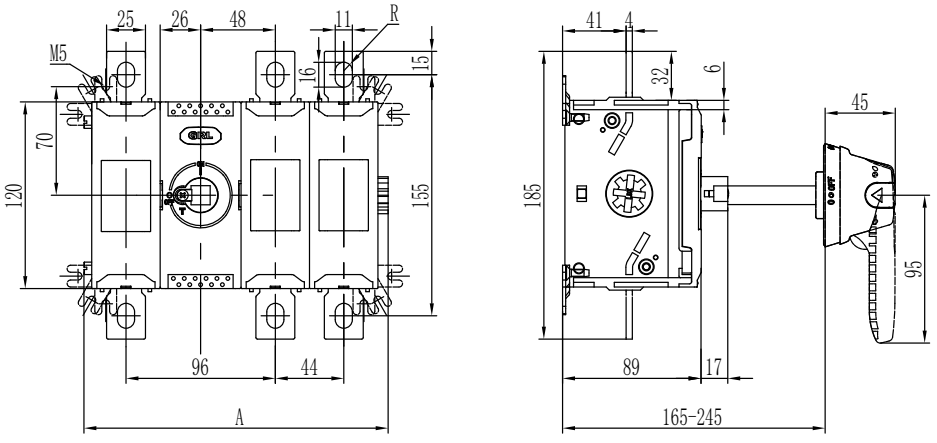
# DNH40 Series
# Disconnector Switch

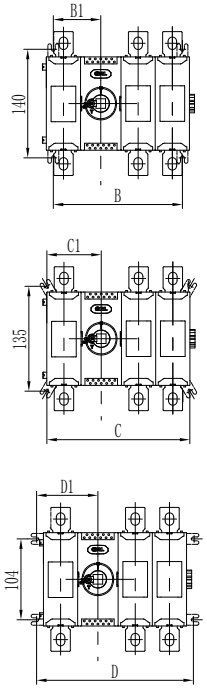
## DNH40-315～400/2～4
## Outline Dimensions and Installation Dimensions




## DNH40-315～400/11～33
## Outline Dimensions and Installation Dimensions

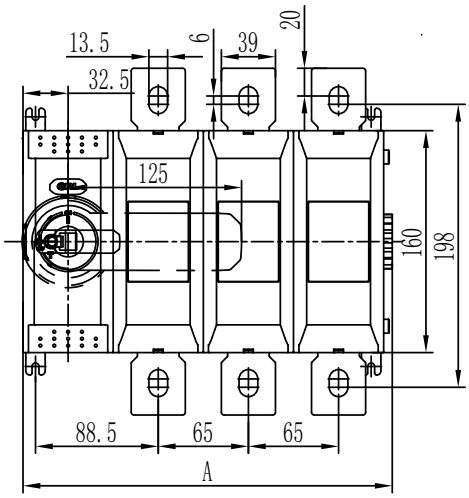


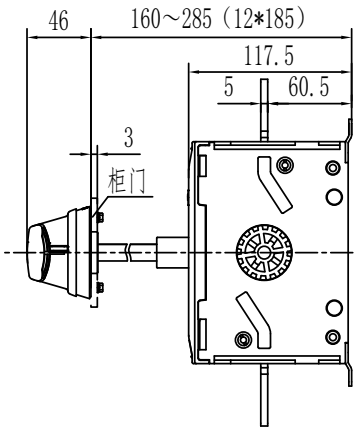



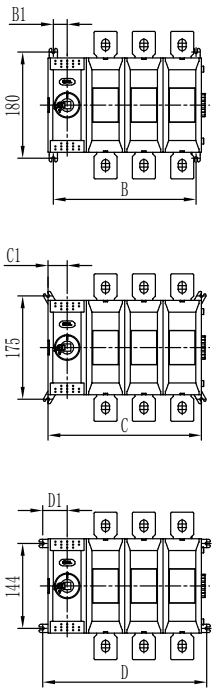

| Model | Outline Dimensions | Installation Dimensions | | | Operating Position | | |
|---|---|---|---|---|---|---|---|
| In | A | B | C | D | B1 | C1 | D1 |
| DNH40-315、400/2 | 147 | 122 | 140 | 158 | 17 | 26 | 35 |
| DNH40-315、400/3 | 191 | 166 | 184 | 202 | 17 | 26 | 35 |
| DNH40-315、400/4 | 235 | 210 | 228 | 246 | 17 | 35 | 35 |
| DNH40-315、400/12 | 196 | 166 | 184 | 202 | 61 | 70 | 79 |
| DNH40-315、400/13 | 240 | 210 | 228 | 246 | 61 | 70 | 79 |
| DNH40-315、400/22 | 240 | 210 | 228 | 246 | 105 | 114 | 123 |
| DNH40-315、400/23 | 284 | 254 | 272 | 290 | 105 | 114 | 123 |
| DNH40-315、400/33 | 328 | 298 | 316 | 334 | 149 | 158 | 167 |

# DNH40 Series
# Disconnector Switch

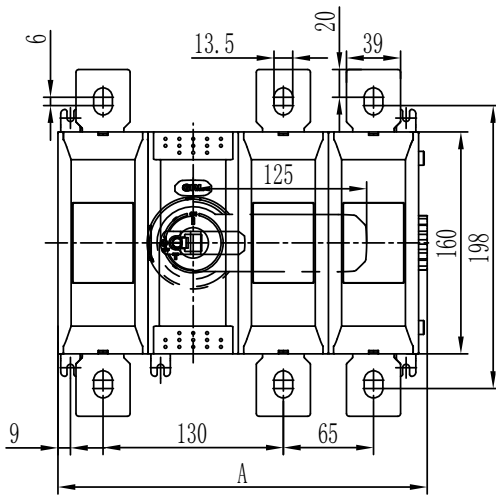
## DNH40-630～800/3～4
## Outline Dimensions and Installation Dimensions

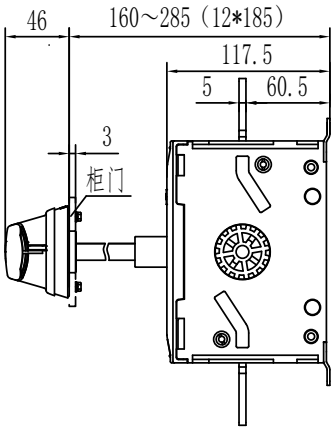


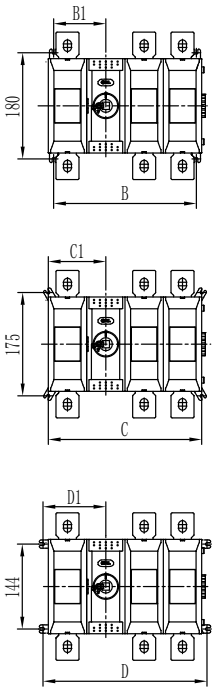




## DNH40-630～800/12～22
## Outline Dimensions and Installation Dimensions



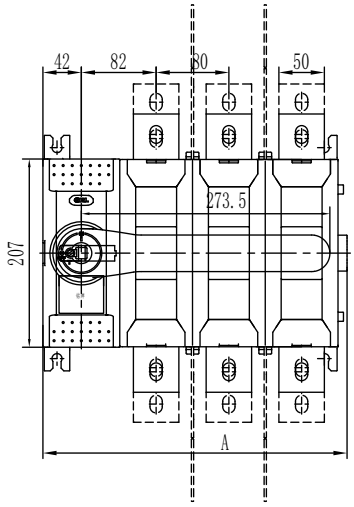



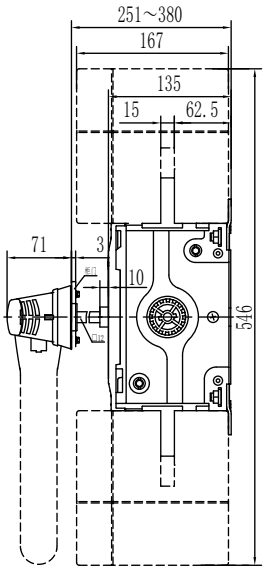



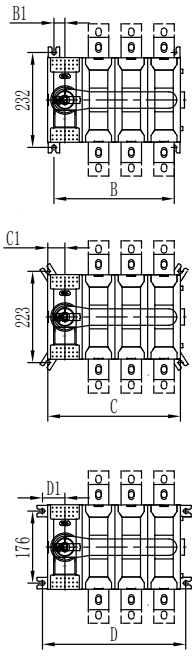

| Model | Outline Dimensions | Installation Dimensions | | | Operating Position | | |
|---|---|---|---|---|---|---|---|
| In | A | B | C | D | B1 | C1 | D1 |
| DNH40-630、800/30 | 266 | 242 | 260 | 278 | 218.5 | 227.5 | 236.5 |
| DNH40-630、800/3 | 266 | 242 | 260 | 278 | 23.5 | 32.5 | 41.5 |
| DNH40-630、800/12 | 266 | 242 | 260 | 278 | 88.5 | 97.5 | 106.5 |
| DNH40-630、800/4 | 331 | 307 | 325 | 343 | 23.5 | 32.5 | 41.5 |
| DNH40-630、800/22 | 331 | 307 | 325 | 343 | 153.5 | 162.5 | 171.5 |
| DNH40-630、800/40 | 331 | 307 | 325 | 343 | 283.5 | 292.5 | 301.5 |

# DNH40 Series
# Disconnector Switch

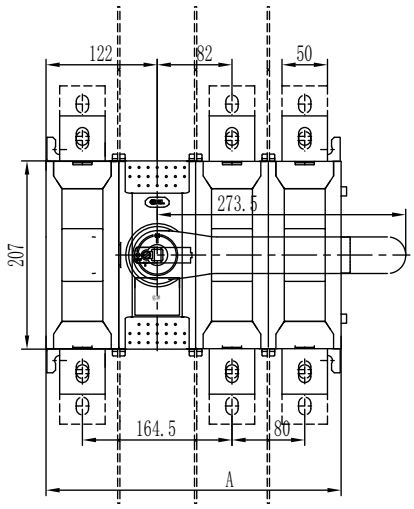
## DNH40-1000～1600/3～4
## Outline Dimensions and Installation Dimensions

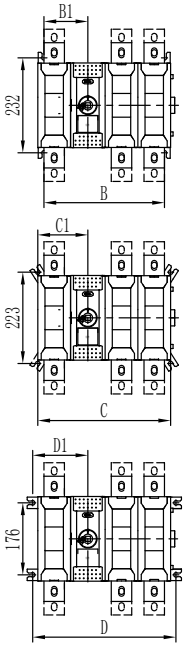


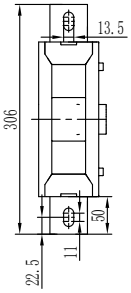

## DNH40-1000～1600/12～22
## Outline Dimensions and Installation Dimensions



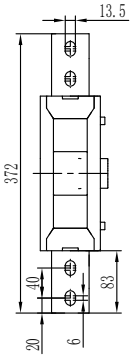




## DNH40-1000～1600
## Single-Pole Outline Dimensions and Installation Dimensions

DNH40-1000～ 1250



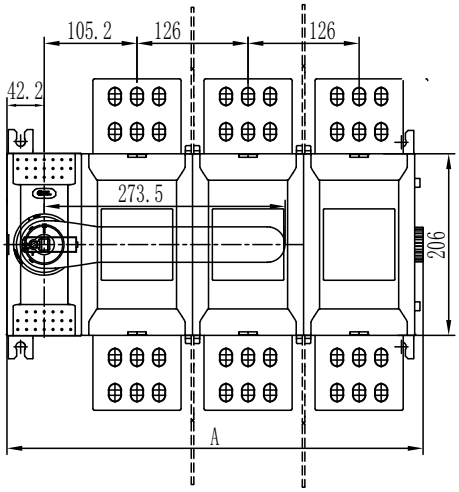

DNH40-1600

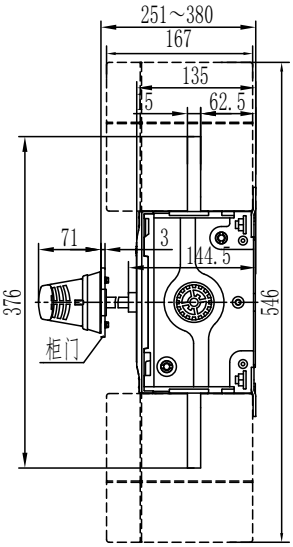


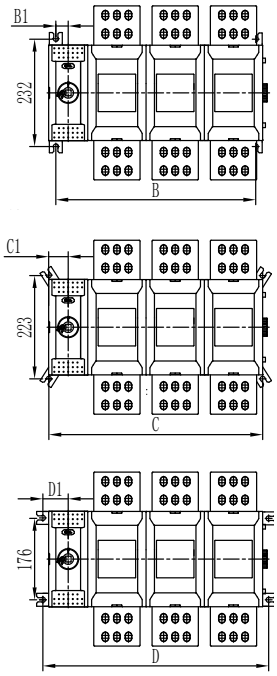

| Model | Outline Dimensions | Installation Dimensions | | | Operating Position | | |
|---|---|---|---|---|---|---|---|
| In | A | B | C | D | B1 | C1 | D1 |
| DNH40-1000、1250、1600/30 | 334.5 | 294 | 324 | 350 | 267 | 282 | 295 |
| DNH40-1000、1250、1600/3 | 334.5 | 294 | 324 | 350 | 27 | 42 | 55 |
| DNH40-1000、1250、1600/12 | 334.5 | 294 | 324 | 350 | 107 | 122 | 135 |
| DNH40-1000、1250、1600/4 | 414.5 | 374 | 404 | 430 | 27 | 42 | 55 |
| DNH40-1000、1250、1600/22 | 414.5 | 374 | 404 | 430 | 187 | 202 | 215 |
| DNH40-1000、1250、1600/40 | 414.5 | 374 | 404 | 430 | 347 | 362 | 375 |

# DNH40 Series
# Disconnector Switch

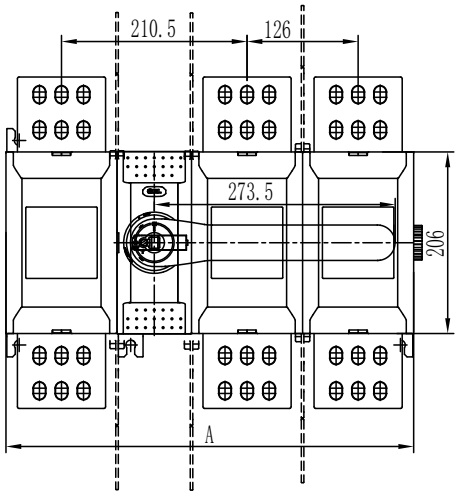
## DNH40-2000～2500/3～4
## Outline Dimensions and Installation Dimensions

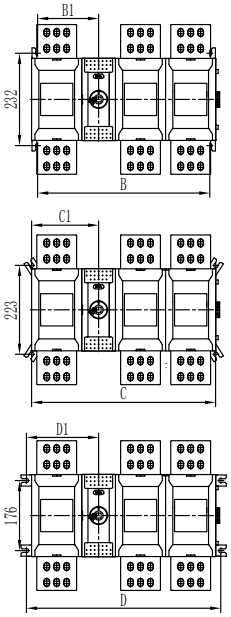


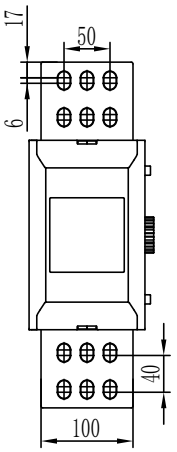




## DNH40-2000～2500/12～22
## Outline Dimensions and Installation Dimensions



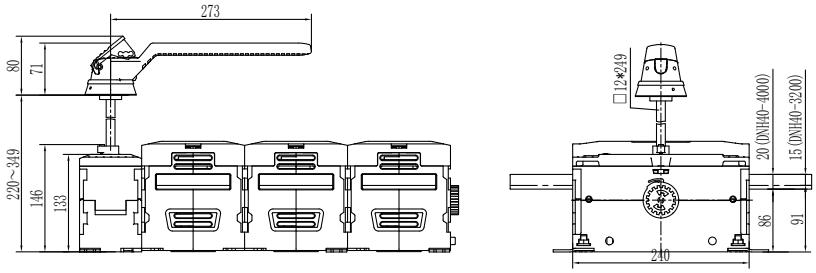

DNH40-2000～2500
Single-Pole Outline Dimensions and Installation Dimensions



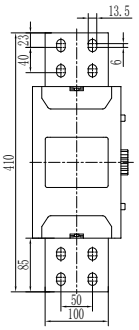

| Model | Outline Dimensions | Installation Dimensions | | | Operating Position | | |
|---|---|---|---|---|---|---|---|
| In | A | B | C | D | B1 | C1 | D1 |
| DNH40-2000、2500/3 | 472 | 432 | 462 | 488 | 405 | 420 | 433 |
| DNH40-2000、2500/12 | 472 | 432 | 462 | 488 | 27 | 42 | 55 |
| DNH40-2000、2500/30 | 472 | 432 | 462 | 488 | 153 | 168 | 181 |
| DNH40-2000、2500/4 | 598 | 558 | 588 | 614 | 27 | 42 | 55 |
| DNH40-2000、2500/22 | 598 | 558 | 588 | 614 | 279 | 294 | 307 |
| DNH40-2000、2500/40 | 598 | 558 | 588 | 614 | 513 | 546 | 559 |

# DNH40 Series
# Disconnector Switch

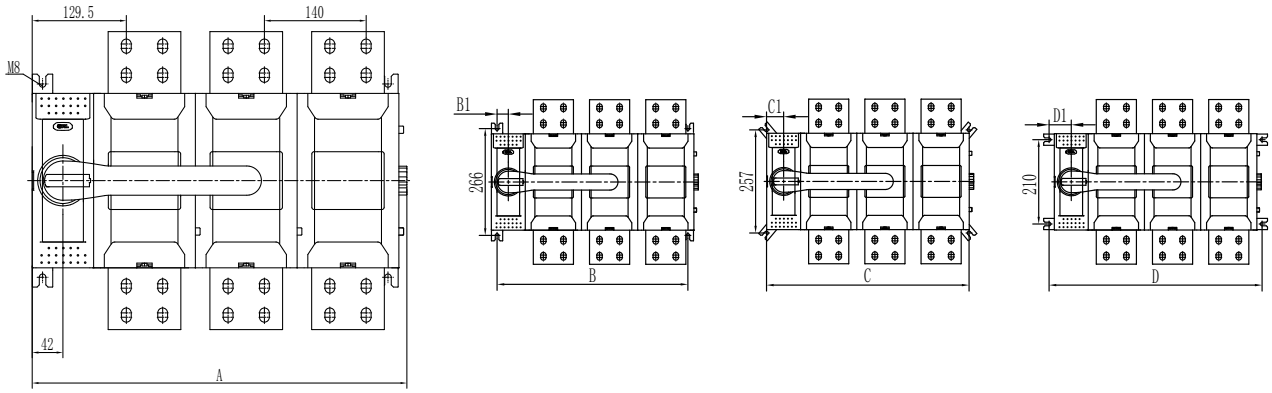
## DNH40-3200～4000
## Outline Dimensions and Installation Dimensions



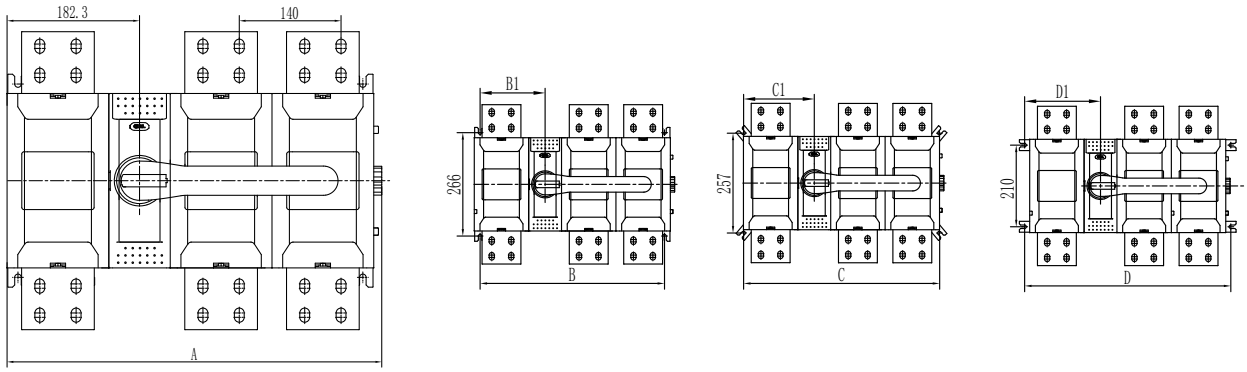

## DNH40-2000～2500
## Single-Pole Outline Dimensions and Installation Dimensions




## DNH40-3200～4000/3～4 Outline Dimensions and Installation Dimensions




## DNH40-3200～4000/12～22 Outline Dimensions and Installation Dimensions




| Model | Outline Dimensions | Installation Dimensions | | | Operating Position | | |
|---|---|---|---|---|---|---|---|
| In | A | B | C | D | B1 | C1 | D1 |
| DNH40-3200、4000/3 | 514 | 475 | 506.5 | 532.5 | 28 | 42.5 | 55 |
| DNH40-3200、4000/12 | 514 | 475 | 506.5 | 532.5 | 167 | 181.5 | 195 |
| DNH40-3200、4000/4 | 654 | 615 | 646 | 672 | 28 | 42.5 | 55 |
| DNH40-3200、4000/22 | 654 | 615 | 646 | 672 | 307 | 321.5 | 355 |

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