# About Himel

Himel is a multinational manufacturer and provider of electrical products successfully combining global expertise with local knowledge.

Founded by a Spanish entrepreneur in 1958, the company pioneered in exporting quality electrical enclosures, establishing Himel brand globally. Today, our global footprint and technology enable us to provide the best combination of affordable and reliable offers for Low Voltage Power distribution, Industry Automation and Home Electric to our long-term customers and partners in over 50 countries where we are present.

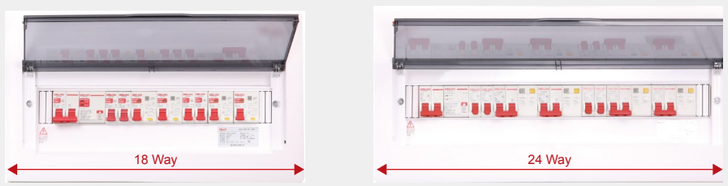
**Himel. Reliable made affordable**

**THIẾT BỊ ĐIỆN HOÀNG PHƯƠNG**
**Hotline: 086.6798.886**
**Website: Hoangphuong.com.vn**

## Compact structure

- Size reduce 30%~50%

- Smaller DB, Cost saving > 5%



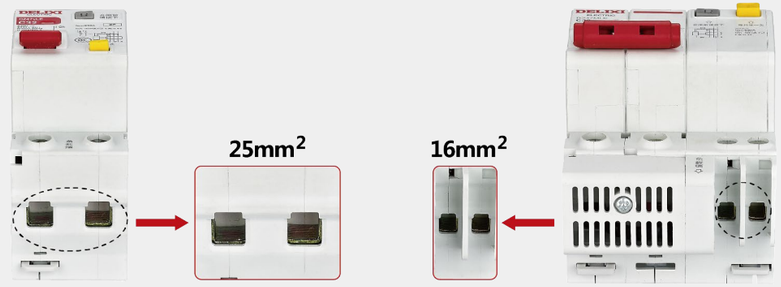

HDB3LE Competitor

- Modularity

HDB3LE: 3 Sizes Competitor:10 Sizes

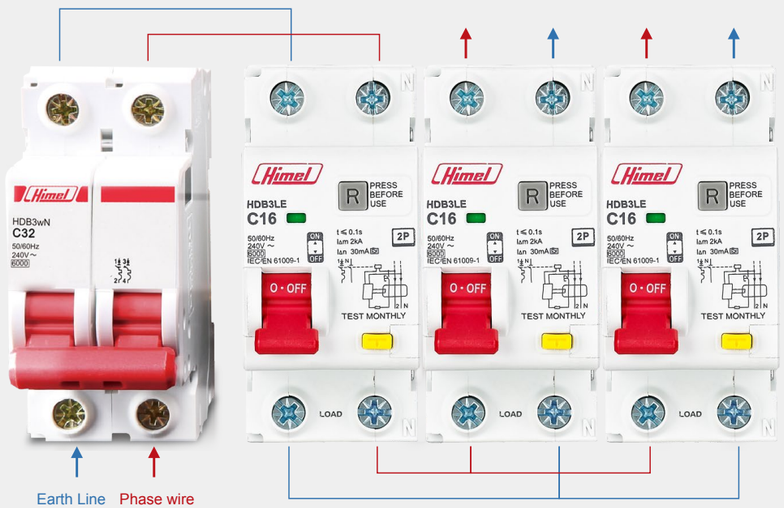
## Easy wiring

- Full range has bigger wiring terminal which can reach 25mm².



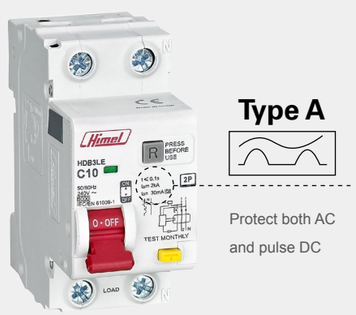

HDB3LE (Full range) Competitor(<32A)

- HDB3LE 2P add bottom line references, to fit different application, easy wiring.



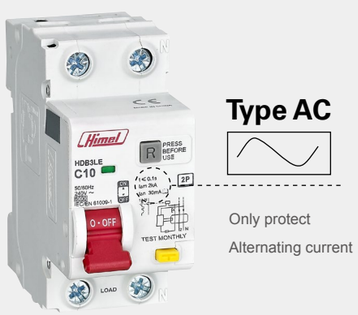
## Much safe with variety protection

- Type A protection



**Type A**

Protect both AC and pulse DC

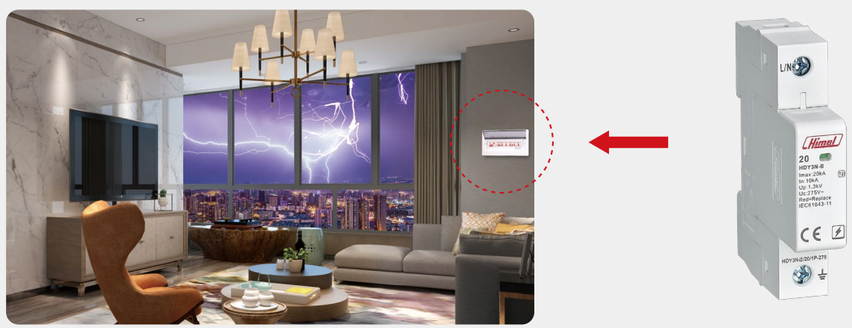


**Type AC**

Only protect Alternating current

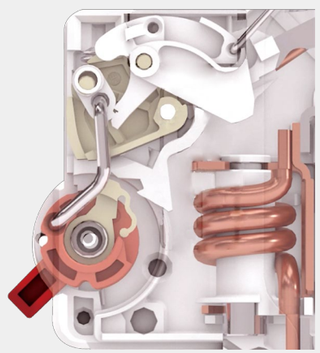
- Pulse DC happens in

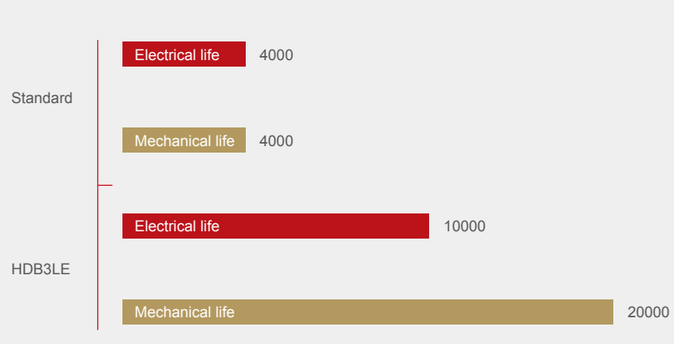
- New power surge protector, better lightning protection.



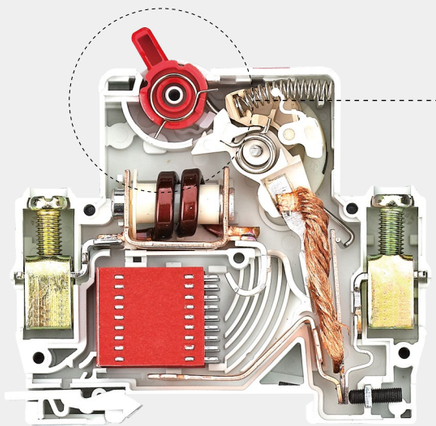
## Quick connect more reliable

- Quick connect, reduce the arc, increase the electrical and mechanical life






- New design with patent to prevent the arc out, ensure the safety of the operators.



**Patent:** ZL 2012 1 0580406.2

# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Function

HDB3LE Residual Current Operated Circuit Breaker has the following features:

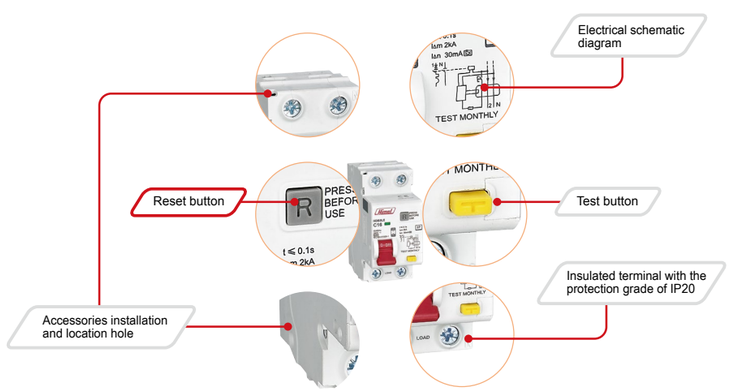
- Short circuit protection
- Overload protection
- Isolating function
- Earthleakage protection function
- Residual Current Operated Circuit Breaker over voltage protection function

| Main features | |
|---|---|
| Rated operating voltage (V) Ue | 2P:230V; 3P, 4P:400AC |
| Rated current A | 6-63 |
| Rated frequency Hz | 50/60 |
| Number of poles | 2P, 3P, 4P |
| Breaking capacity kA | 6 |
| Rated residual operating current mA | 10( 2P), 30, 50, 75, 100, 300 |
| Over-voltage protection function | 280 5% VAC (only for products 2P) |

## HDB3LE Selection Guide

| Product name | Incoming mode | Number of poles | Trip type | Rated current | Residual current | Other functions |
|---|---|---|---|---|---|---|
| **HDB3LE** | **R** | **2** | **C** | **16** | **R10** | **A** |
| **HDB3LE** | **Default:** Line<br>**R:** Bottom | **2:**2P<br>**3:**3P<br>**4:**4P | **C:**C type<br>**D:**D type | **6:** 6A<br>**10:** 10A<br>**16:** 16A<br>**20:** 20A<br>**25:** 25A<br>**32:** 32A<br>**40:** 40A<br>**50:** 50A<br>**63:** 63A | **Default:**30mA<br>**R10:** 10mA<br>**R50:** 50mA<br>**R75:** 75mA<br>**R100:** 100mA<br>**R300:** 300mA | **Default:** AC type<br>**A:** A type |

## Product Detail Display






# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

| Functions and Features | | | |
|---|---|---|---|
| **Electrical Characteristics** | | | |
| Nominal insulation voltage Ui | | (V) | 500 (phase-to-phase) |
| Maximum working voltage $UB_{max}$ | 2P | (V) | 230AC |
| | 3P,4P | (V) | 400AC |
| Rated short-circuit capacity Icn (IEC/EN60898) | | (kA) | 6 |
| Rated impulse withstand voltage Uimp (1.2/50) | | (kV) | 4 |
| Dielectric test voltage | | | 2kV (50/60HZ, 1min) |
| Isolating function | | | Available |
| Pollution class | | | 2 |
| Electric shock protection grade | | | II |
| Trip type | | | Thermal magnetic trip |
| Thermal magnetic trip characteristics | Type B curve (3In~5In) | | - |
| | Type C curve (5In~10In) | | ■ |
| | Type D curve (10In~14In) | | ■ |
| Electrical and mechanical accessories | | | ■ |
| **Mechanical Characteristics** | | | |
| Trip indication | | | Upspring of the reset button indicates leakage of trip |
| Handle | | | Red, pad printing indicating ON-OFF position |
| Mechanical endurance | | | Times 20,000 |
| Electrical endurance | | | Times 10,000 |
| Protection grade | | | Installed in distribution box IP40<br>Installed directly IP20 |
| Mechanical shock resistance | | | 30g, 3 shocks, lasting 11ms (No significant vibration or shock) |
| Anti-vibration(IEC/EN 60068-2-6) | | | No significant vibration or shock |
| High temperature humidity resistant | | | Category 2, 28 cycles |
| | | | Relative humidity 90%~96% at 55° C |
| | | | Relative humidity 95%~100% at 25° C |
| Rated ambient temperature | | | 30° C |
| Operating ambient temperature (daily mean temperature ≤ +35° C) | | | -35° C~+70° C |
| Storage temperature | | | -40° C~+85° C |
| **Installation Features** | | | |
| Terminal form | | | U type |
| Wiring capacity | | (A) | $25mm^2$ |
| Ultimate torque | | | 2.5N.m |
| Tool | | | Cross head screwdriver or flat head screwdriver |
| Installation | | | Installed on standard DIN guide rail (35mm) |
| Line incoming mode | | | Top ( all items); Bottom (only for 1P+N, 2P) |

# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Order Information

| Type Name | Number of poles | Trip type | Rated current | Residual current | Type AC | Type A |
|---|---|---|---|---|---|---|
| HDB3LE | 2P | C | 6 | 30mA | HDB3LE2C6 | HDB3LE2C6A |
| | | | | 10mA | HDB3LE2C6R10 | |
| | | | | 50mA | HDB3LE2C6R50 | |
| | | | | 75mA | HDB3LE2C6R75 | |
| | | | | 100mA | HDB3LE2C6R100 | |
| | | | | 300mA | HDB3LE2C6R300 | |
| | | | 10 | 30mA | HDB3LE2C10 | HDB3LE2C10A |
| | | | | 10mA | HDB3LE2C10R10 | |
| | | | | 50mA | HDB3LE2C10R50 | |
| | | | | 75mA | HDB3LE2C10R75 | |
| | | | | 100mA | HDB3LE2C10R100 | |
| | | | | 300mA | HDB3LE2C10R300 | |
| | | | 16 | 30mA | HDB3LE2C16 | HDB3LE2C16A |
| | | | | 10mA | HDB3LE2C16R10 | |
| | | | | 50mA | HDB3LE2C16R50 | |
| | | | | 75mA | HDB3LE2C16R75 | |
| | | | | 100mA | HDB3LE2C16R100 | |
| | | | | 300mA | HDB3LE2C16R300 | |
| | | | 20 | 30mA | HDB3LE2C20 | HDB3LE2C20A |
| | | | | 10mA | HDB3LE2C20R10 | |
| | | | | 50mA | HDB3LE2C20R50 | |
| | | | | 75mA | HDB3LE2C20R75 | |
| | | | | 100mA | HDB3LE2C20R100 | |
| | | | | 300mA | HDB3LE2C20R300 | |
| | | | 25 | 30mA | HDB3LE2C25 | HDB3LE2C25A |
| | | | | 10mA | HDB3LE2C25R10 | |
| | | | | 50mA | HDB3LE2C25R50 | |
| | | | | 75mA | HDB3LE2C25R75 | |
| | | | | 100mA | HDB3LE2C25R100 | |
| | | | | 300mA | HDB3LE2C25R300 | |
| | | | 32 | 30mA | HDB3LE2C32 | HDB3LE2C32A |
| | | | | 10mA | HDB3LE2C32R10 | |
| | | | | 50mA | HDB3LE2C32R50 | |
| | | | | 75mA | HDB3LE2C32R75 | |
| | | | | 100mA | HDB3LE2C32R100 | |
| | | | | 300mA | HDB3LE2C32R300 | |
| | | | 40 | 30mA | HDB3LE2C40 | HDB3LE2C40A |
| | | | | 10mA | HDB3LE2C40R10 | |
| | | | | 50mA | HDB3LE2C40R50 | |
| | | | | 75mA | HDB3LE2C40R75 | |
| | | | | 100mA | HDB3LE2C40R100 | |
| | | | | 300mA | HDB3LE2C40R300 | |
| | | | 50 | 30mA | HDB3LE2C50 | HDB3LE2C50A |
| | | | | 10mA | HDB3LE2C50R10 | |
| | | | | 50mA | HDB3LE2C50R50 | |
| | | | | 75mA | HDB3LE2C50R75 | |
| | | | | 100mA | HDB3LE2C50R100 | |
| | | | | 300mA | HDB3LE2C50R300 | |
| | | | 63 | 30mA | HDB3LE2C63 | HDB3LE2C63A |
| | | | | 10mA | HDB3LE2C63R10 | |
| | | | | 50mA | HDB3LE2C63R50 | |
| | | | | 75mA | HDB3LE2C63R75 | |
| | | | | 100mA | HDB3LE2C63R100 | |
| | | | | 300mA | HDB3LE2C63R300 | |



# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Order Information

| Type Name | Number of poles | Trip type | Rated current | Residual current | Type AC |
|---|---|---|---|---|---|
| HDB3LE | 2P | D | 6 | 30mA | HDB3LE2D6 |
| | | | | 50mA | HDB3LE2D6R50 |
| | | | | 75mA | HDB3LE2D6R75 |
| | | | | 100mA | HDB3LE2D6R100 |
| | | | | 300mA | HDB3LE2D6R300 |
| | | | 10 | 30mA | HDB3LE2D10 |
| | | | | 50mA | HDB3LE2D10R50 |
| | | | | 75mA | HDB3LE2D10R75 |
| | | | | 100mA | HDB3LE2D10R100 |
| | | | | 300mA | HDB3LE2D10R300 |
| | | | 16 | 30mA | HDB3LE2D16 |
| | | | | 50mA | HDB3LE2D16R50 |
| | | | | 75mA | HDB3LE2D16R75 |
| | | | | 100mA | HDB3LE2D16R100 |
| | | | | 300mA | HDB3LE2D16R300 |
| | | | 20 | 30mA | HDB3LE2D20 |
| | | | | 50mA | HDB3LE2D20R50 |
| | | | | 75mA | HDB3LE2D20R75 |
| | | | | 100mA | HDB3LE2D20R100 |
| | | | | 300mA | HDB3LE2D20R300 |
| | | | 25 | 30mA | HDB3LE2D25 |
| | | | | 50mA | HDB3LE2D25R50 |
| | | | | 75mA | HDB3LE2D25R75 |
| | | | | 100mA | HDB3LE2D25R100 |
| | | | | 300mA | HDB3LE2D25R300 |
| | | | 32 | 30mA | HDB3LE2D32 |
| | | | | 50mA | HDB3LE2D32R50 |
| | | | | 75mA | HDB3LE2D32R75 |
| | | | | 100mA | HDB3LE2D32R100 |
| | | | | 300mA | HDB3LE2D32R300 |
| | | | 40 | 30mA | HDB3LE2D40 |
| | | | | 50mA | HDB3LE2D40R50 |
| | | | | 75mA | HDB3LE2D40R75 |
| | | | | 100mA | HDB3LE2D40R100 |
| | | | | 300mA | HDB3LE2D40R300 |
| | | | 50 | 30mA | HDB3LE2D50 |
| | | | | 50mA | HDB3LE2D50R50 |
| | | | | 75mA | HDB3LE2D50R75 |
| | | | | 100mA | HDB3LE2D50R100 |
| | | | | 300mA | HDB3LE2D50R300 |
| | | | 63 | 30mA | HDB3LE2D63 |
| | | | | 50mA | HDB3LE2D63R50 |
| | | | | 75mA | HDB3LE2D63R75 |
| | | | | 100mA | HDB3LE2D63R100 |
| | | | | 300mA | HDB3LE2D63R300 |

# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Order Information

| Type Name | Number of poles | Trip type | Rated current | Residual current | Type AC |
|---|---|---|---|---|---|
| HDB3LE | 3P | C | 6 | 30mA | HDB3LE3C6 |
| | | | | 50mA | HDB3LE3C6R50 |
| | | | | 75mA | HDB3LE3C6R75 |
| | | | | 100mA | HDB3LE3C6R100 |
| | | | | 300mA | HDB3LE3C6R300 |
| | | | 10 | 30mA | HDB3LE3C10 |
| | | | | 50mA | HDB3LE3C10R50 |
| | | | | 75mA | HDB3LE3C10R75 |
| | | | | 100mA | HDB3LE3C10R100 |
| | | | | 300mA | HDB3LE3C10R300 |
| | | | 16 | 30mA | HDB3LE3C16 |
| | | | | 50mA | HDB3LE3C16R50 |
| | | | | 75mA | HDB3LE3C16R75 |
| | | | | 100mA | HDB3LE3C16R100 |
| | | | | 300mA | HDB3LE3C16R300 |
| | | | 20 | 30mA | HDB3LE3C20 |
| | | | | 50mA | HDB3LE3C20R50 |
| | | | | 75mA | HDB3LE3C20R75 |
| | | | | 100mA | HDB3LE3C20R100 |
| | | | | 300mA | HDB3LE3C20R300 |
| | | | 25 | 30mA | HDB3LE3C25 |
| | | | | 50mA | HDB3LE3C25R50 |
| | | | | 75mA | HDB3LE3C25R75 |
| | | | | 100mA | HDB3LE3C25R100 |
| | | | | 300mA | HDB3LE3C25R300 |
| | | | 32 | 30mA | HDB3LE3C32 |
| | | | | 50mA | HDB3LE3C32R50 |
| | | | | 75mA | HDB3LE3C32R75 |
| | | | | 100mA | HDB3LE3C32R100 |
| | | | | 300mA | HDB3LE3C32R300 |
| | | | 40 | 30mA | HDB3LE3C40 |
| | | | | 50mA | HDB3LE3C40R50 |
| | | | | 75mA | HDB3LE3C40R75 |
| | | | | 100mA | HDB3LE3C40R100 |
| | | | | 300mA | HDB3LE3C40R300 |
| | | | 50 | 30mA | HDB3LE3C50 |
| | | | | 50mA | HDB3LE3C50R50 |
| | | | | 75mA | HDB3LE3C50R75 |
| | | | | 100mA | HDB3LE3C50R100 |
| | | | | 300mA | HDB3LE3C50R300 |
| | | | 63 | 30mA | HDB3LE3C63 |
| | | | | 50mA | HDB3LE3C63R50 |
| | | | | 75mA | HDB3LE3C63R75 |
| | | | | 100mA | HDB3LE3C63R100 |
| | | | | 300mA | HDB3LE3C63R300 |



# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Order Information

| Type Name | Number of poles | Trip type | Rated current | Residual current | Type AC |
|---|---|---|---|---|---|
| HDB3LE | 3P | D | 6 | 30mA | HDB3LE3D6 |
| | | | | 50mA | HDB3LE3D6R50 |
| | | | | 75mA | HDB3LE3D6R75 |
| | | | | 100mA | HDB3LE3D6R100 |
| | | | | 300mA | HDB3LE3D6R300 |
| | | | 10 | 30mA | HDB3LE3D10 |
| | | | | 50mA | HDB3LE3D10R50 |
| | | | | 75mA | HDB3LE3D10R75 |
| | | | | 100mA | HDB3LE3D10R100 |
| | | | | 300mA | HDB3LE3D10R300 |
| | | | 16 | 30mA | HDB3LE3D16 |
| | | | | 50mA | HDB3LE3D16R50 |
| | | | | 75mA | HDB3LE3D16R75 |
| | | | | 100mA | HDB3LE3D16R100 |
| | | | | 300mA | HDB3LE3D16R300 |
| | | | 20 | 30mA | HDB3LE3D20 |
| | | | | 50mA | HDB3LE3D20R50 |
| | | | | 75mA | HDB3LE3D20R75 |
| | | | | 100mA | HDB3LE3D20R100 |
| | | | | 300mA | HDB3LE3D20R300 |
| | | | 25 | 30mA | HDB3LE3D25 |
| | | | | 50mA | HDB3LE3D25R50 |
| | | | | 75mA | HDB3LE3D25R75 |
| | | | | 100mA | HDB3LE3D25R100 |
| | | | | 300mA | HDB3LE3D25R300 |
| | | | 32 | 30mA | HDB3LE3D32 |
| | | | | 50mA | HDB3LE3D32R50 |
| | | | | 75mA | HDB3LE3D32R75 |
| | | | | 100mA | HDB3LE3D32R100 |
| | | | | 300mA | HDB3LE3D32R300 |
| | | | 40 | 30mA | HDB3LE3D40 |
| | | | | 50mA | HDB3LE3D40R50 |
| | | | | 75mA | HDB3LE3D40R75 |
| | | | | 100mA | HDB3LE3D40R100 |
| | | | | 300mA | HDB3LE3D40R300 |
| | | | 50 | 30mA | HDB3LE3D50 |
| | | | | 50mA | HDB3LE3D50R50 |
| | | | | 75mA | HDB3LE3D50R75 |
| | | | | 100mA | HDB3LE3D50R100 |
| | | | | 300mA | HDB3LE3D50R300 |
| | | | 63 | 30mA | HDB3LE3D63 |
| | | | | 50mA | HDB3LE3D63R50 |
| | | | | 75mA | HDB3LE3D63R75 |
| | | | | 100mA | HDB3LE3D63R100 |
| | | | | 300mA | HDB3LE3D63R300 |

# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Order Information

| Type Name | Number of poles | Trip type | Rated current | Residual current | Type AC |
|---|---|---|---|---|---|
| HDB3LE | 4P | C | 6 | 30mA | HDB3LE4C6 |
| | | | | 50mA | HDB3LE4C6R50 |
| | | | | 75mA | HDB3LE4C6R75 |
| | | | | 100mA | HDB3LE4C6R100 |
| | | | | 300mA | HDB3LE4C6R300 |
| | | | 10 | 30mA | HDB3LE4C10 |
| | | | | 50mA | HDB3LE4C10R50 |
| | | | | 75mA | HDB3LE4C10R75 |
| | | | | 100mA | HDB3LE4C10R100 |
| | | | | 300mA | HDB3LE4C10R300 |
| | | | 16 | 30mA | HDB3LE4C16 |
| | | | | 50mA | HDB3LE4C16R50 |
| | | | | 75mA | HDB3LE4C16R75 |
| | | | | 100mA | HDB3LE4C16R100 |
| | | | | 300mA | HDB3LE4C16R300 |
| | | | 20 | 30mA | HDB3LE4C20 |
| | | | | 50mA | HDB3LE4C20R50 |
| | | | | 75mA | HDB3LE4C20R75 |
| | | | | 100mA | HDB3LE4C20R100 |
| | | | | 300mA | HDB3LE4C20R300 |
| | | | 25 | 30mA | HDB3LE4C25 |
| | | | | 50mA | HDB3LE4C25R50 |
| | | | | 75mA | HDB3LE4C25R75 |
| | | | | 100mA | HDB3LE4C25R100 |
| | | | | 300mA | HDB3LE4C25R300 |
| | | | 32 | 30mA | HDB3LE4C32 |
| | | | | 50mA | HDB3LE4C32R50 |
| | | | | 75mA | HDB3LE4C32R75 |
| | | | | 100mA | HDB3LE4C32R100 |
| | | | | 300mA | HDB3LE4C32R300 |
| | | | 40 | 30mA | HDB3LE4C40 |
| | | | | 50mA | HDB3LE4C40R50 |
| | | | | 75mA | HDB3LE4C40R75 |
| | | | | 100mA | HDB3LE4C40R100 |
| | | | | 300mA | HDB3LE4C40R300 |
| | | | 50 | 30mA | HDB3LE4C50 |
| | | | | 50mA | HDB3LE4C50R50 |
| | | | | 75mA | HDB3LE4C50R75 |
| | | | | 100mA | HDB3LE4C50R100 |
| | | | | 300mA | HDB3LE4C50R300 |
| | | | 63 | 30mA | HDB3LE4C63 |
| | | | | 50mA | HDB3LE4C63R50 |
| | | | | 75mA | HDB3LE4C63R75 |
| | | | | 100mA | HDB3LE4C63R100 |
| | | | | 300mA | HDB3LE4C63R300 |



# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Order Information

| Type Name | Number of poles | Trip type | Rated current | Residual current | Type AC |
|---|---|---|---|---|---|
| HDB3LE | 4P | D | 6 | 30mA | HDB3LE4D6 |
| | | | | 50mA | HDB3LE4D6R50 |
| | | | | 75mA | HDB3LE4D6R75 |
| | | | | 100mA | HDB3LE4D6R100 |
| | | | | 300mA | HDB3LE4D6R300 |
| | | | 10 | 30mA | HDB3LE4D10 |
| | | | | 50mA | HDB3LE4D10R50 |
| | | | | 75mA | HDB3LE4D10R75 |
| | | | | 100mA | HDB3LE4D10R100 |
| | | | | 300mA | HDB3LE4D10R300 |
| | | | 16 | 30mA | HDB3LE4D16 |
| | | | | 50mA | HDB3LE4D16R50 |
| | | | | 75mA | HDB3LE4D16R75 |
| | | | | 100mA | HDB3LE4D16R100 |
| | | | | 300mA | HDB3LE4D16R300 |
| | | | 20 | 30mA | HDB3LE4D20 |
| | | | | 50mA | HDB3LE4D20R50 |
| | | | | 75mA | HDB3LE4D20R75 |
| | | | | 100mA | HDB3LE4D20R100 |
| | | | | 300mA | HDB3LE4D20R300 |
| | | | 25 | 30mA | HDB3LE4D25 |
| | | | | 50mA | HDB3LE4D25R50 |
| | | | | 75mA | HDB3LE4D25R75 |
| | | | | 100mA | HDB3LE4D25R100 |
| | | | | 300mA | HDB3LE4D25R300 |
| | | | 32 | 30mA | HDB3LE4D32 |
| | | | | 50mA | HDB3LE4D32R50 |
| | | | | 75mA | HDB3LE4D32R75 |
| | | | | 100mA | HDB3LE4D32R100 |
| | | | | 300mA | HDB3LE4D32R300 |
| | | | 40 | 30mA | HDB3LE4D40 |
| | | | | 50mA | HDB3LE4D40R50 |
| | | | | 75mA | HDB3LE4D40R75 |
| | | | | 100mA | HDB3LE4D40R100 |
| | | | | 300mA | HDB3LE4D40R300 |
| | | | 50 | 30mA | HDB3LE4D50 |
| | | | | 50mA | HDB3LE4D50R50 |
| | | | | 75mA | HDB3LE4D50R75 |
| | | | | 100mA | HDB3LE4D50R100 |
| | | | | 300mA | HDB3LE4D50R300 |
| | | | 63 | 30mA | HDB3LE4D63 |
| | | | | 50mA | HDB3LE4D63R50 |
| | | | | 75mA | HDB3LE4D63R75 |
| | | | | 100mA | HDB3LE4D63R100 |
| | | | | 300mA | HDB3LE4D63R300 |

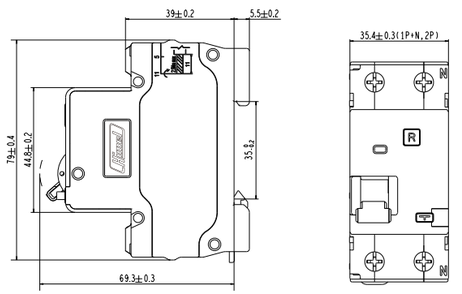
# HDB3LE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

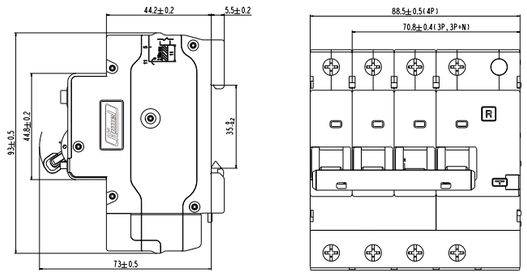
CE

## Overall Dimensions

2P




3P/4P




# HDB3PLE Phase Line + Neutral Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

## Function

HDB3LE phase line + neutral line residual current operated circuit breaker has the following features:

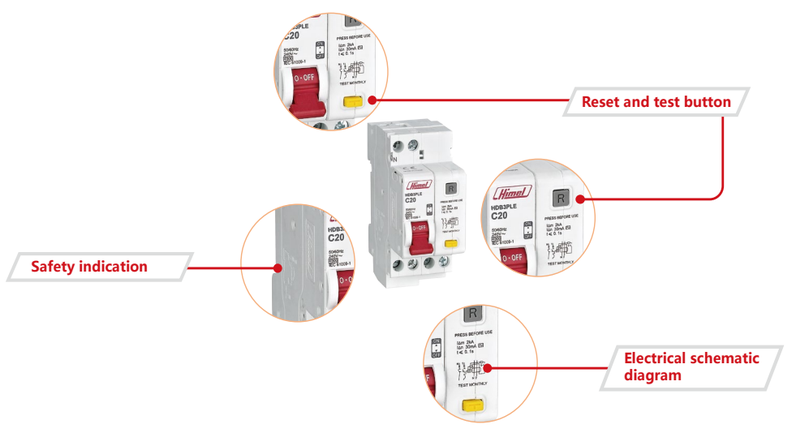
- Short circuit protection
- Overload protection
- Isolating function
- Earthleakage protection function
- Over voltage protection function (only for overvoltage protect reference)

| Main features | | |
|---|---|---|
| Rated operating voltage (V) | Ue | 230V |
| Rated current A | In | 6-40 |
| Rated frequency Hz | | 50/60 |
| Number of poles | | 1P+N |
| Breaking capacity kA | Icn | 4.5 |
| Rated residual operating current mA | I △ n | 30 |
| Over-voltage protection function | | 280 5% VAC |

## HDB3PLE Selection Guide

| Product name | Number of poles | Trip type | Rated current | Other functions |
|---|---|---|---|---|
| **HDB3PLE** | **Default:** 1P+N | **C:**C type<br>**D:**D type | **6:** 6A<br>**10:** 10A<br>**16:** 16A<br>**20:** 20A<br>**25:** 25A<br>**32:** 32A<br>**40:** 40A | **Default:** No<br>**G:** Overvoltageprotection |
| **HDB3PLE** | **Default** | **C** | **16** | **G** |

## Product Detail Display



# HDB3PLE Phase Line + Neutral Residual Current Operated Circuit Breaker

Standard: IEC61009-1

CE

| Functions and Features | | | |
|---|---|---|---|
| **Electrical Characteristics** | | | |
| Rated insulation voltage Ui | | (V) | 500 |
| Maximum working voltage $UB_{max}$ | 1P+N | (V) | 230AC |
| Rated short-circuit capacity Icn (IEC/EN61009-1) | | (kA) | 3.5 |
| Rated impulse withstand voltage Uimp (1.2/50) | | (kA) | 4 |
| Dielectric test voltage | | | 2kV (50/60Hz 1 minute) |
| Isolating function | | | Available |
| Pollution class | | | 2 |
| Electric shock protection grade | | | II |
| Tripping type | | | Thermal magnetic tripping |
| Thermal magnetic trip characteristics | C curve (5In~10In) | | ▰ |
| | D curve (10In~14In) | | ▰ |
| Electrical and mechanical accessories | | | ▰ |
| **Mechanical Characteristics** | | | |
| Handle | | | Red, pad printing indicating ON-OFF position |
| Mechanical life | | | Times 20,000 |
| Protection rating | | | Times 10,000 |
| Protection rating | | | Installed in distribution box IP40<br>Installed directly IP20 |
| Mechanical shock resistance | | | 30g, 3 shocks, last for 11ms<br>(No significant vibration or shock) |
| Anti-vibration (IEC/EN 60068-2-6) | | | No significant vibration or shock |
| High temperature humidity resistant | | ℃ /RH | Category 2, 28 cycles |
| | | | Relative humidity 90%~96% at 55° C |
| | | | Relative humidity 90%~100% at 25° C |
| Reference ambient temperature | | ℃ | 30° C |
| Operating ambient temperature (daily mean temperature +35°) | | ℃ | -35° C~+70° C |
| Storage temperature | | ℃ | -40° C~+85° C |
| **Installation Features** | | | |
| Terninal form | | | U type |
| Wiring capacity | | (A) | $25mm^2$ |
| Ultimate torque | | | 2.5N.m |
| Tool | | | Cross head screwdriver or flat head screwdriver |
| Installation | | | Installed on standard DIN guide rail (35mm) |
| Line incoming mode | | | Top |



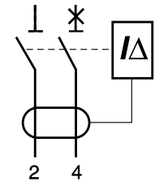
# HDB3PLE Phase Line + Neutral Residual Current Operated Circuit Breaker

Standard: IEC61009-1

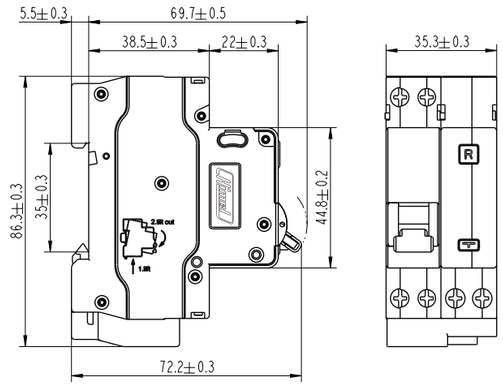
CE

## Order Information

| Type Name | Number of poles | Trip type | Rated current | Type AC | Type AC |
|---|---|---|---|---|---|
| HDB3PLE | 1P+N | C | 6 | HDB3PLEC6 | HDB3PLEC6G |
| | | | 10 | HDB3PLEC10 | HDB3PLEC10G |
| | | | 16 | HDB3PLEC16 | HDB3PLEC16G |
| | | | 20 | HDB3PLEC20 | HDB3PLEC20G |
| | | | 25 | HDB3PLEC25 | HDB3PLEC25G |
| | | | 32 | HDB3PLEC32 | HDB3PLEC32G |
| | | | 40 | HDB3PLEC40 | HDB3PLEC40G |
| | | D | 6 | HDB3PLED6 | HDB3PLED6G |
| | | | 10 | HDB3PLED10 | HDB3PLED10G |
| | | | 16 | HDB3PLED16 | HDB3PLED16G |
| | | | 20 | HDB3PLED20 | HDB3PLED20G |
| | | | 25 | HDB3PLED25 | HDB3PLED25G |
| | | | 32 | HDB3PLED32 | HDB3PLED32G |
| | | | 40 | HDB3PLED40 | HDB3PLED40G |




## Overall Dimensions

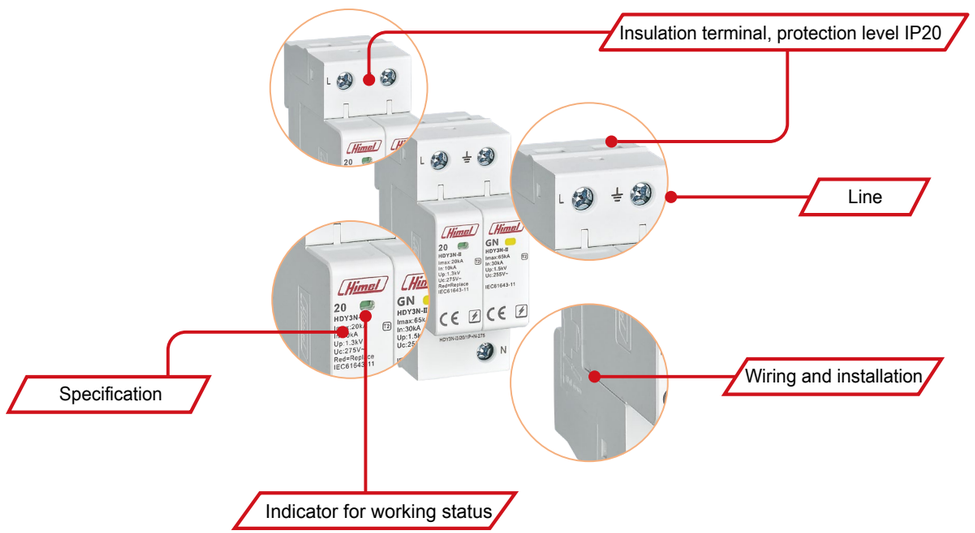


# HDY3N Power Surge Protector

Standard: IEC61643-1

| Main features | | | | | | |
|---|---|---|---|---|---|---|
| Rated voltage Uo | 230V | | | | | |
| Poles | 1P, 2P, 3P, 4P, 1P+N. 3P+N | | | | | |
| Protection rating | II | | | | | |
| Waveform | 8/20us | | | | | |
| Product model | HDY3N-20 | HDY3N-40 | HDY3N-65 | HDY3N-80 | HDY3N-120 | HDY3N-160 |
| Nominal discharge current In | 10kA | 20kA | 30kA | 40kA | 60kA | 80kA |
| Maximum discharge current Imax | 20kA | 40kA | 65kA | 80kA | 120kA | 160kA |
| Maximum allowable backup fuse strength(gL) | 50A | 100A | 125A | 160A | 200A | 250A |
| Maximum continuous operating voltage Uc | 275/385/440V | 275/385/440V | 275/385/440V | 275/385/440V | 275/385/440V | 275/385/440V |
| Protection level Up | 1.3/1.6/1.8kV | 1.5/1.8/2.0kV | 1.6/2.0/2.2kV | 1.8/2.2/2.2kV | 2.2/2.5/2.5kV | 3.2/3.3/3.4kV |
| Response time | ≤25ns | | | | | |
| Operating state indicator | Green: normal; red: fault | | | | | |
| Terminal wiring capacity | Solid line≤35mm², soft line 2.5-25mm²,torque 3.5N.m | | | | | |
| Optional accessories | Available (YX remote signaling) | | | | | |

## Product Detail Display






# HDY3N Power Surge Protector

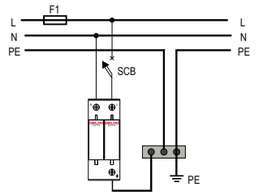
Standard: IEC61643-1

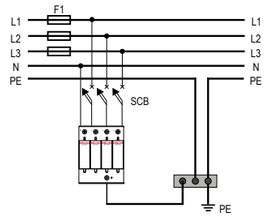
## HDY3N Selection Guide

| Product name | Protection Type | Maximum discharge current | Poles | Maximum continuous voltage | Accessories |
|---|---|---|---|---|---|
| **HDY3N** | **Default** | **65** | **2** | **275** | **YX** |
| **HDY3N** | **Default:** II | **20:** 20kA<br>**40:** 40kA<br>**65:** 65kA<br>**80:** 80kA<br>**120:** 120kA<br>**160:** 160kA | **1:** 1P<br>**2:** 2P<br>**3:** 3P<br>**4:** 4P<br>**5:** 1P+N<br>**6:** 3P+N | **Default:** 385V<br>**275:** 275V<br>**440:** 440V | **YX:** Remote signaling<br>**Default:** No remote signaling |

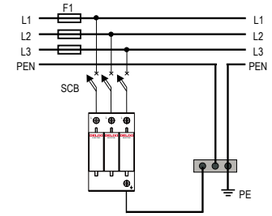
## HDY3N Wiring Diagram

TN-S System Installation Diagram

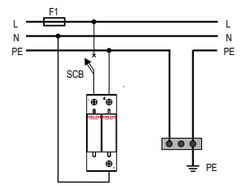


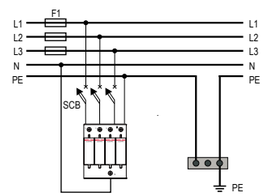




TN-C System Installation Diagram




TT System Installation Diagram



# HDY3N Power Surge Protector

Standard: IEC61643-1

CE

## Order Information

| Protection Type | Maximum discharge current | Poles | Maximum continuous voltage | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 275 | | 385 | | 440 | |
| Default | 20 | 1P | HDY3N201275 | | HDY3N201 | | HDY3N201440 | |
| | | 2P | HDY3N202275 | HDY3N202275YX | HDY3N202 | HDY3N202YX | HDY3N202440 | HDY3N202440YX |
| | | 3P | HDY3N203275 | HDY3N203275YX | HDY3N203 | HDY3N203YX | HDY3N203440 | HDY3N203440YX |
| | | 4P | HDY3N204275 | HDY3N204275YX | HDY3N204 | HDY3N204YX | HDY3N204440 | HDY3N204440YX |
| | | 1P+N | HDY3N205275 | HDY3N205275YX | HDY3N205 | HDY3N205YX | HDY3N205440 | HDY3N205440YX |
| | | 3P+N | HDY3N206275 | HDY3N206275YX | HDY3N206 | HDY3N206YX | HDY3N206440 | HDY3N206440YX |
| | 40 | 1P | HDY3N401275 | | HDY3N401 | | HDY3N401440 | |
| | | 2P | HDY3N402275 | HDY3N402275YX | HDY3N402 | HDY3N402YX | HDY3N402440 | HDY3N402440YX |
| | | 3P | HDY3N403275 | HDY3N403275YX | HDY3N403 | HDY3N403YX | HDY3N403440 | HDY3N403440YX |
| | | 4P | HDY3N404275 | HDY3N404275YX | HDY3N404 | HDY3N404YX | HDY3N404440 | HDY3N404440YX |
| | | 1P+N | HDY3N405275 | HDY3N405275YX | HDY3N405 | HDY3N405YX | HDY3N405440 | HDY3N405440YX |
| | | 3P+N | HDY3N406275 | HDY3N406275YX | HDY3N406 | HDY3N406YX | HDY3N406440 | HDY3N406440YX |
| | 65 | 1P | HDY3N651275 | | HDY3N651 | | HDY3N651440 | |
| | | 2P | HDY3N652275 | HDY3N652275YX | HDY3N652 | HDY3N652YX | HDY3N652440 | HDY3N652440YX |
| | | 3P | HDY3N653275 | HDY3N653275YX | HDY3N653 | HDY3N653YX | HDY3N653440 | HDY3N653440YX |
| | | 4P | HDY3N654275 | HDY3N654275YX | HDY3N654 | HDY3N654YX | HDY3N654440 | HDY3N654440YX |
| | | 1P+N | HDY3N655275 | HDY3N655275YX | HDY3N655 | HDY3N655YX | HDY3N655440 | HDY3N655440YX |
| | | 3P+N | HDY3N656275 | HDY3N656275YX | HDY3N656 | HDY3N656YX | HDY3N656440 | HDY3N656440YX |
| | 80 | 1P | HDY3N801275 | HDY3N801275YX | HDY3N801 | HDY3N801YX | HDY3N801440 | HDY3N801440YX |
| | | 2P | HDY3N802275 | HDY3N802275YX | HDY3N802 | HDY3N802YX | HDY3N802440 | HDY3N802440YX |
| | | 3P | HDY3N803275 | HDY3N803275YX | HDY3N803 | HDY3N803YX | HDY3N803440 | HDY3N803440YX |
| | | 4P | HDY3N804275 | HDY3N804275YX | HDY3N804 | HDY3N804YX | HDY3N804440 | HDY3N804440YX |
| | | 1P+N | HDY3N805275 | HDY3N805275YX | HDY3N805 | HDY3N805YX | HDY3N805440 | HDY3N805440YX |
| | | 3P+N | HDY3N806275 | HDY3N806275YX | HDY3N806 | HDY3N806YX | HDY3N806440 | HDY3N806440YX |
| | 120 | 1P | HDY3N1201275 | HDY3N1201275YX | HDY3N1201 | HDY3N1201YX | HDY3N1201440 | HDY3N1201440YX |
| | | 2P | HDY3N1202275 | HDY3N1202275YX | HDY3N1202 | HDY3N1202YX | HDY3N1202440 | HDY3N1202440YX |
| | | 3P | HDY3N1203275 | HDY3N1203275YX | HDY3N1203 | HDY3N1203YX | HDY3N1203440 | HDY3N1203440YX |
| | | 4P | HDY3N1204275 | HDY3N1204275YX | HDY3N1204 | HDY3N1204YX | HDY3N1204440 | HDY3N1204440YX |
| | | 1P+N | HDY3N1205275 | HDY3N1205275YX | HDY3N1205 | HDY3N1205YX | HDY3N1205440 | HDY3N1205440YX |
| | | 3P+N | HDY3N1206275 | HDY3N1206275YX | HDY3N1206 | HDY3N1206YX | HDY3N1206440 | HDY3N1206440YX |
| | 160 | 1P | HDY3N1601275 | HDY3N1601275YX | HDY3N1601 | HDY3N1601YX | HDY3N1601440 | HDY3N1601440YX |
| | | 2P | HDY3N1602275 | HDY3N1602275YX | HDY3N1602 | HDY3N1602YX | HDY3N1602440 | HDY3N1602440YX |
| | | 3P | HDY3N1603275 | HDY3N1603275YX | HDY3N1603 | HDY3N1603YX | HDY3N1603440 | HDY3N1603440YX |
| | | 4P | HDY3N1604275 | HDY3N1604275YX | HDY3N1604 | HDY3N1604YX | HDY3N1604440 | HDY3N1604440YX |
| | | 1P+N | HDY3N1605275 | HDY3N1605275YX | HDY3N1605 | HDY3N1605YX | HDY3N1605440 | HDY3N1605440YX |
| | | 3P+N | HDY3N1606275 | HDY3N1606275YX | HDY3N1606 | HDY3N1606YX | HDY3N1606440 | HDY3N1606440YX |



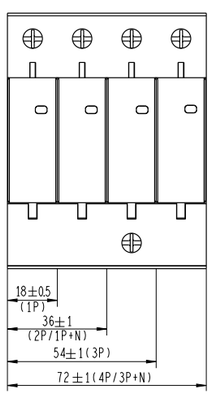
# HDY3N Power Surge Protector

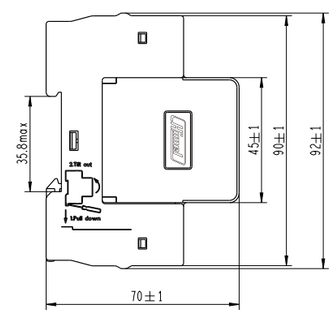
Standard: IEC61643-1

CE

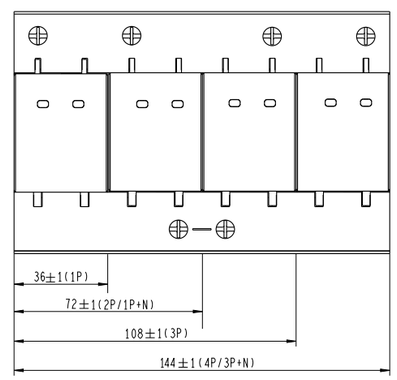
## Overall Dimensions

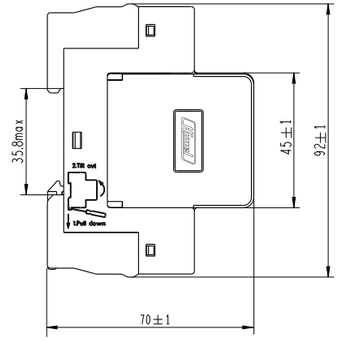
HDY3N 20/40/65kA



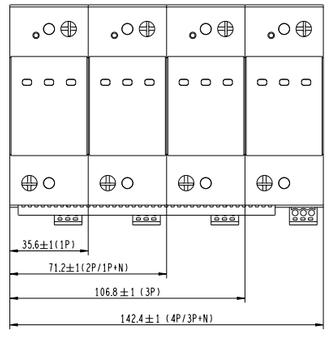



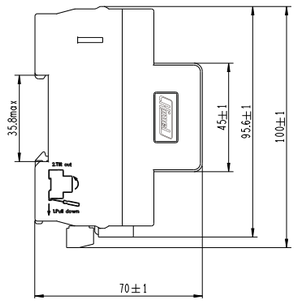

HDY3N 80/120kA




HDY3N 160kA



# HEDB Series Distribution Box

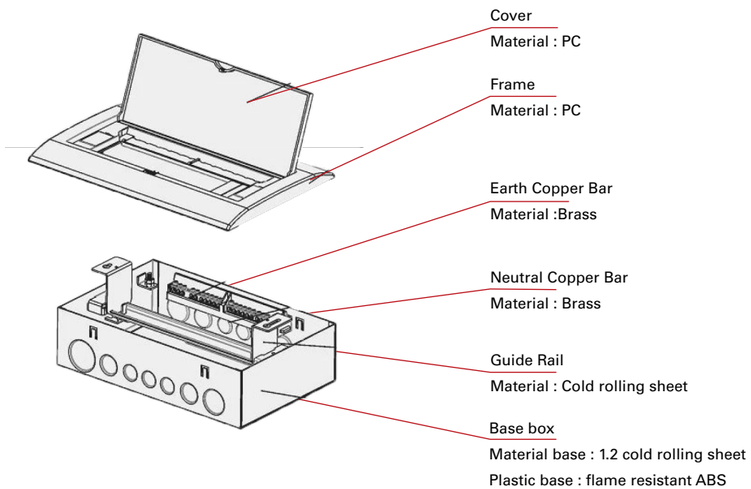
Standard:IEC/EN60439

## Function

HEDB distribution box provide:
Control, monitoring, measurement and protection for the electric power loops and main power
Controlling equipment

| Main Features | | |
|---|---|---|
| | **full plastic** | **Metal base and plastic cover** |
| Standard | IEC/EN60439 | IEC/EN60439 |
| Number of ways | 2-4,4-6,7-9,10-13 | 2-4,4-6,7-9,10-13,14-17,17-20,20-26 |
| Installation method | Surface/Flush installation | Flush installation |
| Color | White box, grey cover | White box, grey cover |
| Rated volatge | AC 230/400V | AC 230/400V |
| Frequency | 50/60Hz | 50/60Hz |
| Rated current | 100A/one phase 63A/three phase | 100A/one phase 63A/three phase |
| IP grade | IP30 | IP30 |
| Temperature | - 25~50℃ | - 25~50℃ |
| Material of cover | PP | PP |
| Material of base | PVC | Cold rolled steel |
| Thickness of cover | 1.5mm | 1.5mm |
| Thickness of base | 1.5mm | 2~20 ways/0.6mm,20~26ways.0.8mm |

## Product Detail Display








# HEDB Series Distribution Box

Standard:IEC/EN60439

## HEDB Selection Guide

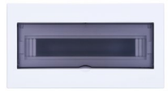
| HEDB | M | F | 4 |
|---|---|---|---|
| **Econimic DB** | **M:** Metal base&plastic cover<br>**P:** Full plastic | **F:** Flush installation<br>**S:** Surface installation | **4:** 2~4 ways<br>**6:** 4~6 ways<br>**9:** 7~9 ways<br>**13:** 10~13 ways<br>**17:** 14~17 ways<br>**20:** 17~20 ways<br>**26:** 20~26 ways |

| | Picture | Description | Dimension(mm) |
|---|---|---|---|
| HEDBPF4 | | 2~4ways full plastic flush installation | 160.1(A)*185.1(B)*90.7(C)<br>138(D)*159(E)*76(F) |
| HEDBPF6 | | 4~6ways full plastic flush installation | 200.1(A)*215.1(B)*90.7(C)<br>178(D)*184(E)*76(F) |
| HEDBPF9 | | 7~9ways full plastic flush installation | 254.1(A)*215.1(B)*90.7(C)<br>232(D)*184(E)*76(F) |
| HEDBPF13 | | 10~13ways full plastic flush installation | 326.1(A)*215.1(B)*90.7(C)<br>303(D)*184(E)*76(F) |
| HEDBPS4 | | 2~4ways full plastic surface installation | 140(A)*160(B)*90.7(C)<br>138(D)*159(E)*76(F) |
| HEDBPS6 | | 4~6ways full plastic surface installation | 180(A)*185(B)*90.7(C)<br>178(D)*184(E)*76(F) |
| HEDBPS9 | | 7~9ways full plastic surface installation | 234(A)*185(B)*90.7(C)<br>232(D)*184(E)*76(F) |
| HEDBPS13 | | 10~13ways full plastic surface installation | 305(A)*185(B)*90.7(C)<br>303(D)*184(E)*76(F) |

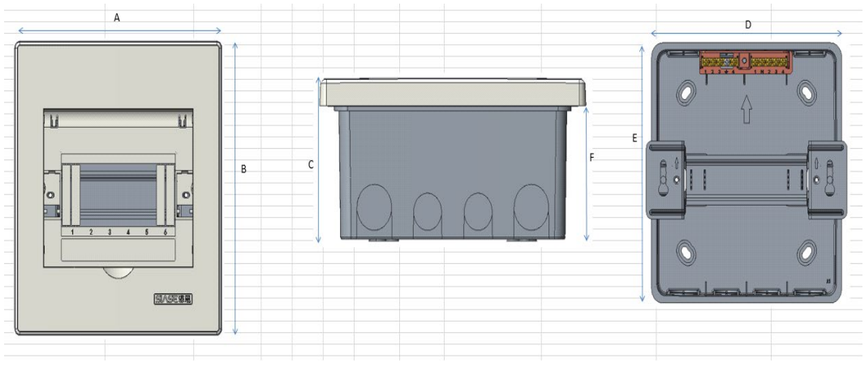
# HEDB Series Distribution Box

Standard:IEC/EN60439

CE

| | Picture | Description | Dimension(mm) |
|---|---|---|---|
| HEDBMF4 | | 2~4ways metal box and plastic cover flush installation | 160.1(A)*185.1(B)*90.7(C)<br>130(D)*165(E)*78(F) |
| HEDBMF6 | | 4~6ways metal box and plastic cover flush installation | 200.1(A)*215.1(B)*90.7(C)<br>168(D)*196(E)*78(F) |
| HEDBMF9 | | 7~9ways metal box and plastic cover flush installation | 254.1(A)*215.1(B)*90.7(C)<br>222(D)*196(E)*78(F) |
| HEDBMF13 | | 10~13ways metal box and plastic cover installation | 326.1(A)*215.1(B)*90.7(C)<br>294(D)*196(E)*78(F) |
| HEDBMF17 | | 14~17ways metal box and plastic cover flush installation | 395.1(A)*215.1(B)*90.7(C)<br>365(D)*196(E)*78(F) |
| HEDBMF20 |  | 17~20ways metal box and plastic cover flush installation | 449.1(A)*215.1(B)*90.7(C)<br>419(D)*196(E)*78(F) |
| HEDBMF26 | | 20~26ways metal box and plastic cover flush installation | 324.1(A)*429.1(B)*90.7(C)<br>294(D)*412(E)*78(F) |

## Overall Dimensions



**Himel**
www.himel.com

**Oct 2021**