Low Voltage
Brief Catalogue
The operation concept of CHINT is to “Create Values for Client, Seek Development for Staff and Shoulder Responsibility for Society”.

The constant brand spirit of CHINT is “Empower the World”.

CHINT involves new energy, PTD equipment, low-voltage apparatus, instrument, industrial automation, building electric, automotive electrical appliance and etc.
CHINT GLOBAL PRESENCE
China Based, World Visioned

- 3 global R&D centers: Prague (Czech Republic); Los Angeles (USA); Shanghai (China)
- 6 international marketing & sales areas: Asia Pacific, West Asia and Africa, Europe, Latin America, North America and China
- 7 manufacturing bases: Wenzhou, Hangzhou, Shanghai, Xianyang, Jiuquan, Cairo and Frankfurt (Oder)
- 18 logistics centers: Overseas - Los Angeles, Sao Paulo, Prague, Madrid, Moscow
  China - East China, North China, Shandong, South China, Southwest China, Hubei, Henan, Hunan, Northwest China, Xinjiang, Ganning and Guangxi
- 14 international subsidiaries
- More than 300 brand flagship stores
- More than 1,000 sales companies
Founded in 1984, CHINT GROUP has been providing the world with safe, reliable and stable industrial electrical equipments and solutions for energy efficiency management system; After 30 years' development, it has been grown from Asia's largest low-voltage electrical products supplier into the leading brand of the whole industry chain in industrial electric in Asia. CHINT's sales revenue has exceeded 5 billion Euros in the year of 2014. With 3 R&D centers located in Europe, US and China, branches in over 20 countries and more than 30000 employees over the whole world, CHINT has provided reliable products, system solutions and services for more than 100 countries worldwide.

CHINT's sub-brands include CHINT, NOARK, ASTRONERGY, XINHUA, CHITIC and others, covering photovoltaic power generation, industrial automation, power transmission and distribution equipment, low voltage electrical apparatus, instruments and meters, building electrical appliance, automotive electrics and other fields. Forming the leading superiority in the whole industry chain in electric from the generation, transmission, substation, distribution of electrical power to the terminal uses, CHINT is providing systems support from products to solutions services to customers worldwide.
Intelligent Measurement-Control Unit
Automatic monitoring and management power system
Modular Din-Rail Device
DCS
Intelligent Meter
DP Contactor
Switch and Socket
Transformer
Control Relay
Soft Starter
Inverter
Motor
Motor Protection Device
Push-button/Indicator Light
Change-over Switch
LV  Switchgear Switch Disconnector
LV Power Factor Compensation
LV Capacitor
LV Current Transformer
Panel Meter
Indoor LV AC Disconnector
LV AC Disconnector
Power Distribution Apparatus
VRA
AC Contactor
Control Transformer
Soft Starter
Welding Machine
Motor
Smart Motor Control and Protection Device
CHINT - Empower the World
R&D, QUALITY, SALES, LOGISTICS

Great Quality

By providing reliable products and service for clients, CHINT puts forward the concept “Great Quality.” Quality control and upgrade is divided into four systems: scientific research, quality control, marketing service and logistics distribution. These methods and strategies make a comprehensive upgrade to product quality and services. Emphasis on “prevention first, continuous improvement” is the basis of an effective quality inspection system. Leading the management process of “Great Quality” in the production process controls each link of production accurately and realizes the institutional operation of quality improvement.

“Great Quality” is not just a slogan, but a belief rooted in each employee's work. High-quality and accuracy are the basic requirement. Starting from a routine operation by each staff to implementing a high-quality of production and service, CHINT is your most reliable partner.

- **Service Concept**
  Sincerely care for customers, quality creates value

- **Service Purpose**
  Innovative and progressive, satisfying the customers

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**Integrated Vertical R&D**

- By gathering the global industry elites to provide safe and stable energy-saving green and advanced electric products.
- 5% of revenue is invested in research and development

**Great Quality System**

- Ensuring flaw-free and trouble-free products, the multi-dimensional and multilevel control is conducted through procurement, inspection, quality control and certification.

**One-stop Services**

- CHINT's concept is that it is not difficult to fulfill a high-quality logistics distribution at one time, while it is difficult to stay as accurate and prompt as the first-time. High-efficiency and high-precision accuracy are our requirement.

**48-Hour Response**

- Providing end-to-end one-stop services for customers with complaints, business consulting and technical support by solving problems immediately and including any possible problems in advance.
Qualifications

Our products are certificated through UL, CE, TUV, EAC, KEMA, RCM and RCC.
<table>
<thead>
<tr>
<th>Low Voltage Brief Catalogue</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modular DIN Rail Product</td>
<td>01</td>
</tr>
<tr>
<td>MCCB</td>
<td>25</td>
</tr>
<tr>
<td>ACB</td>
<td>29</td>
</tr>
<tr>
<td>Contactors, Relays, Starters</td>
<td>31</td>
</tr>
<tr>
<td>Pushbuttons &amp; Indicator Lights &amp; Buzzers</td>
<td>37</td>
</tr>
<tr>
<td>Inverter &amp; Soft-starter</td>
<td>40</td>
</tr>
<tr>
<td>Relay</td>
<td>42</td>
</tr>
<tr>
<td>LV Capacitor</td>
<td>57</td>
</tr>
<tr>
<td>Low Voltage VT &amp; AVR &amp; CT &amp; PT</td>
<td>59</td>
</tr>
<tr>
<td>Switch Disconnector, Fuse-switch Disconnector, Changeover Switch</td>
<td>64</td>
</tr>
<tr>
<td>Fuses, Travel Switches, Universal Change-over Switches, Connection Terminals</td>
<td>67</td>
</tr>
</tbody>
</table>
NB1-63(H) Miniature Circuit Breaker

**● General**
- Short circuit protection
- Overload protection
- Switch
- Isolation
- Contact position indicator
- Advanced current-limit technology
- Heat dissipation gap for better cooling
- Extendable DIN-rail holder for easy installation

**● Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60898-1</th>
<th>IEC/EN 60947-2</th>
<th>UL1077</th>
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</thead>
<tbody>
<tr>
<td>Rated current In</td>
<td>A 1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63</td>
<td>1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63</td>
<td>1P, 2P, 3P, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 230/400–240/415</td>
<td>277/480</td>
<td>110/125</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>Hz AC 50/60</td>
<td>DC</td>
<td></td>
</tr>
<tr>
<td>Rated breaking capacity</td>
<td>A 6000/10000</td>
<td>6000</td>
<td>5000</td>
</tr>
<tr>
<td>Energy limiting class</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated impulse withstand voltage (1.2/50) Uimp</td>
<td>V 6000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C, D (8-12)In</td>
<td>B, C, D (4-7)In, (7-15)In</td>
<td></td>
</tr>
<tr>
<td>Electrical life</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical life</td>
<td>20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td></td>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
<td></td>
</tr>
<tr>
<td>Connection</td>
<td></td>
<td>From top and bottom</td>
<td></td>
</tr>
<tr>
<td>Auxiliary contact</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shunt release</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under voltage release</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarm contact</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**● Curve**

B, C, D curve
NB1-63DC DC Circuit Breaker

**General**
- Excellent breaking capacity
- Double connection function of lead wire and bus bar
- Stored energy operation, fast closing, long service life
- Convenient installation, disassembly
- Contact on-off indication, higher security
- Green environmental protection and energy saving

**Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60947-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In</td>
<td>A</td>
</tr>
<tr>
<td>Poles</td>
<td>1P, 2P, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>1P: 250V; 2P: 500V; 4P: 1000V</td>
</tr>
<tr>
<td>Electrical life</td>
<td>1,500</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>20,000</td>
</tr>
</tbody>
</table>

**Curve**

C curve
NB7 Miniature Circuit Breaker

● General
  ● Short circuit protection
  ● Overload protection
  ● Switch
  ● Isolation

● Technical features

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60898-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In In (A)</td>
<td>A</td>
</tr>
<tr>
<td>Poles</td>
<td>1P, 2P, 3P, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue V</td>
<td>240/415</td>
</tr>
<tr>
<td>Rated frequency Hz</td>
<td>50</td>
</tr>
<tr>
<td>Electrical life</td>
<td>4, 000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>10, 000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rated current In (A)</th>
<th>Number of poles</th>
<th>Rated voltage Ue (V)</th>
<th>Rated short circuit capacity Icn (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B, C type: 1—40</td>
<td>1</td>
<td>240/415</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>2, 3, 4</td>
<td>240/415</td>
<td></td>
</tr>
<tr>
<td>B, C type: 50 63</td>
<td>1</td>
<td>240/415</td>
<td>4500</td>
</tr>
<tr>
<td></td>
<td>2, 3, 4</td>
<td>240/415</td>
<td></td>
</tr>
<tr>
<td>D type: 1—63</td>
<td>1</td>
<td>240/415</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2, 3, 4</td>
<td>240/415</td>
<td></td>
</tr>
</tbody>
</table>

● Curve

B, C, D curve
**eBC eB eBG Miniature Circuit Breaker**

- **General**
  - Short circuit protection
  - Overload protection
  - Switch
  - Isolation
  - Economic type breaker
  - High cost-effective

- **Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60898-1</th>
<th>IEC/EN 60947-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In</td>
<td>A 1, 2, 3, 4, 5, 6, 10, 15, 16, 20, 25, 32, 40, 50, 63</td>
<td></td>
</tr>
<tr>
<td>Poles</td>
<td>1P, 2P, 3P, 4P</td>
<td></td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 230/400~240/415</td>
<td></td>
</tr>
<tr>
<td>Rated frequency</td>
<td>Hz 50/60</td>
<td></td>
</tr>
<tr>
<td>Rated breaking capacity</td>
<td>kA 3 (1A~63A) eBC</td>
<td>4.5 (1A~63A) eB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 (B,C 1~40A) eBG</td>
</tr>
<tr>
<td>Rated impulse withstand voltage (1.25k V) (μs)</td>
<td>V 4000</td>
<td></td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C, D</td>
<td>(8-12)ln</td>
</tr>
<tr>
<td>Electrical life</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Mechanical life</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Terminal connection type</td>
<td>Cable/Pin-type busbar</td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (25mm) by means of fast clip device</td>
<td>From top and bottom</td>
</tr>
</tbody>
</table>

- **Curve**

```
B, C, D curve
```

![Graph showing B, C, D curve]

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**Empower the World >> 04**
**UB Miniature Circuit Breaker**

- **General**
  - Short circuit protection
  - Overload protection
  - Switch
  - Isolation
  - Various wiring solutions: U-type/pin-type/Comb-type Busbar/Cable

- **Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60898-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In</td>
<td>A 6, 10, 16, 20, 25, 32, 40</td>
</tr>
<tr>
<td>Poles</td>
<td>1P, 2P, 3P, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 230/400–240/415</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>Hz 50/60</td>
</tr>
<tr>
<td>Rated breaking capacity</td>
<td>A 6000</td>
</tr>
<tr>
<td>Rated impulse withstand voltage</td>
<td>V 4000</td>
</tr>
<tr>
<td>Thermo-magnetic release</td>
<td>B, C</td>
</tr>
<tr>
<td>Electrical life</td>
<td>4,000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>10,000</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm) by means of fast dip device</td>
</tr>
<tr>
<td>Connection</td>
<td>From top and bottom</td>
</tr>
</tbody>
</table>

- **Curve**

  B, C curve
NBH8 Miniature Circuit Breaker

**General**
- Short circuit protection
- Overload protection
- Switch
- Isolation
- 1P+N in one module.
- Contact position indicator

**Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60898-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In</td>
<td>A 1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40</td>
</tr>
<tr>
<td>Poles</td>
<td>1P+N</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 230–240</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>Hz 50/60</td>
</tr>
<tr>
<td>Rated breaking capacity</td>
<td>A 4500/6000</td>
</tr>
<tr>
<td>Rated impulse withstand voltage(1.2/50) Uimp</td>
<td>V 4000</td>
</tr>
<tr>
<td>Electrical life</td>
<td>8, 000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>20, 000</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
</tr>
<tr>
<td>Terminal connection type</td>
<td>Cable/Pin-type busbar</td>
</tr>
<tr>
<td>Auxiliary contact</td>
<td>Yes</td>
</tr>
<tr>
<td>Shunt release</td>
<td>Yes</td>
</tr>
<tr>
<td>Under voltage release</td>
<td>Yes</td>
</tr>
<tr>
<td>Alarm contact</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Curve**

B, C curve
DZ158 Moulded Case Circuit Breaker

**General**
- Short circuit protection
- Overload protection
- Switch
- Isolation
- Contact position indicator

**Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60947-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In</td>
<td>A</td>
</tr>
<tr>
<td>Poles</td>
<td>1P, 2P, 3P, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>Hz</td>
</tr>
<tr>
<td>Rated breaking capacity</td>
<td>kA</td>
</tr>
<tr>
<td>Rated impulse withstand voltage(1.2/50) Uimp</td>
<td>V</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>(8-12)In</td>
</tr>
<tr>
<td>Electrical life</td>
<td>1,500 (In=63A, 80A, 100A)</td>
</tr>
<tr>
<td></td>
<td>1,000 (In=125A)</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>8,500 (In=63A, 80A, 100A)</td>
</tr>
<tr>
<td></td>
<td>7,000 (In=125A)</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
</tr>
<tr>
<td>Connection</td>
<td>From top and bottom</td>
</tr>
</tbody>
</table>

**Curve**

![Curve Diagram](image_url)
NL1 Residual Current Operated Circuit Breaker without Over-current Protection (Magnetic)

● General
- Protect people against indirect contacts and additional protection against direct contacts.
- Protect installations against fire hazard due to insulation faults.

● Detectable wave form
- AC Class
  Tripping is ensured for slowly increasing sinusoidal AC residual currents.
- A Class
  Tripping is ensured for sinusoidal AC residual currents and for pulsed DC residual currents, whether applied suddenly or increasing slowly.
- A-SI Class
  Tripping is ensured not only for sinusoidal AC residual currents but also for pulsed DC residual currents whether applied suddenly or increasing slowly. A type with filters against spurious tripping caused by harmonics and transient surges.
  With the impact of 8/20us surge 3000A, this high immunity RCCB will still be in stable status.

● Tripping sensitivity
  10mA - precision instrument leakage protection and bathroom use.
  30mA - additional protection against direct contact.
  100mA - co-ordinated with the earth system according to the formula \( I_{\Delta n} < 50/R \), to provide protection against indirect contacts.
  300mA - protection against indirect contacts, as well as fire hazard.

● Tripping time
- Instantaneous
  It ensures instantaneous tripping (without time-delay).
- Short time delay
  It ensures any tripping at least 10ms.
- Selective
  It ensures total discrimination with a nonselective RCCB placed downstream.

● Fault current indicator

● Technical features

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61088-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In</td>
<td>A 25, 40, 63, 80, 100</td>
</tr>
<tr>
<td>Poles</td>
<td>2P, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 230/400–240/415</td>
</tr>
<tr>
<td>Rated sensitivity I_{\Delta n}</td>
<td>A 0.01 for 25A, 0.03, 0.1, 0.3</td>
</tr>
<tr>
<td>Short-circuit current I_{cn}= I_{\Delta c}</td>
<td>A 6000/10000</td>
</tr>
<tr>
<td>Electrical life</td>
<td>2, 000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>2, 000</td>
</tr>
<tr>
<td>Terminal connection type</td>
<td>Cable/U-type busbar/Pin-type busbar</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm)</td>
</tr>
<tr>
<td>Connection</td>
<td>From top and bottom</td>
</tr>
</tbody>
</table>
NL210 Residual Current Operated Circuit Breaker without over-current protection

● General
  ● protect people against indirect contacts and additional protection against direct contacts.
  ● protect installations against fire hazard due to insulation faults.

● Detectable wave form
  ● B Class
    Tripping is ensured for sinusoidal AC residual currents pulsed DC residual currents, alternating residual sinusoidal currents up to 1000Hz, pulsating direct residual currents and for smooth direct residual currents, whether applied suddenly or increasing slowly.

● Tripping sensitivity
  30mA - additional protection against direct contact.

● Tripping time
  ● Instantaneous
    It ensures instantaneous tripping (without time-delay).

● Fault current indicator

● Technical features

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61008-1</th>
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</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>B</td>
</tr>
<tr>
<td>Rated current In</td>
<td>A 25, 40, 63</td>
</tr>
<tr>
<td>Poles</td>
<td>4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 400</td>
</tr>
<tr>
<td>Rated sensitivity $I_{\Delta n}$</td>
<td>A 0.03</td>
</tr>
<tr>
<td>Short-circuit current $I_{cn}=I_{\Delta c}$</td>
<td>A 10000</td>
</tr>
<tr>
<td>Electrical life</td>
<td>2, 000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>10000</td>
</tr>
<tr>
<td>Terminal connection type</td>
<td>Cable/U-type busbar/Pin-type busbar</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
</tr>
<tr>
<td>Connection</td>
<td>From top and bottom</td>
</tr>
</tbody>
</table>
Low Voltage Brief Catalogue

RCBO

NB1L Residual Current Operated Circuit Breaker with Over-current Protection (Magnetic)

● General

- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit
- Contact position indicator

● Technical features

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61009-1</th>
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</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>AC, A</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C</td>
</tr>
<tr>
<td>Rated current In A</td>
<td>1, 2, 3, 4, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63</td>
</tr>
<tr>
<td>Combined</td>
<td>1−25/6−40</td>
</tr>
<tr>
<td>MCB+add-on RCCB block</td>
<td>1P+N, 2P, 3P, 3P+N, 4P</td>
</tr>
<tr>
<td>Combined</td>
<td>1P+N, 2P</td>
</tr>
<tr>
<td>Rated voltage Ue V</td>
<td>230/400−240/415</td>
</tr>
<tr>
<td>Rated sensitivity IΔn A</td>
<td>0.03, 0.1, 0.3</td>
</tr>
<tr>
<td>Rated short-circuit capacity lcn A</td>
<td>6,000/10,000</td>
</tr>
<tr>
<td>Break time under IΔn s</td>
<td>≤0.1</td>
</tr>
<tr>
<td>Electrical life</td>
<td>2,000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>2,000</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
</tr>
<tr>
<td>Connection</td>
<td>From top and bottom (for combined type)</td>
</tr>
<tr>
<td></td>
<td>From top (MCB+add-on RCCB block)</td>
</tr>
</tbody>
</table>

● Curve

B, C curve
NB7LE Residual Current Operated Circuit Breaker

- **General**
  - Protection against risk of fire
  - Protection against risk of electric shock
  - Protection against overload
  - Protection against short circuit
  - Contact position indicator

- **Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61009-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current In In</td>
<td>A</td>
</tr>
<tr>
<td>Poles</td>
<td>1P+N, 2P, 3P, 3P+N, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>230(1P+N, 2P), 415(3P, 3P+N, 4P)</td>
</tr>
<tr>
<td>Rated frequency Hz</td>
<td>50</td>
</tr>
<tr>
<td>Rated breaking capacity A</td>
<td>6000(C6-C40), 4500(D6-D63, C50, C63)</td>
</tr>
<tr>
<td>Electrical life</td>
<td>2000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>2000</td>
</tr>
</tbody>
</table>

- **Curve**

C, D curve
**Low Voltage Brief Catalogue**

**RCBO**

---

**NB3LE Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)**

- **General**
  - Protection against risk of fire
  - Protection against risk of electric shock
  - Protection against overload
  - Protection against short circuit
  - 1P+N in one module
  - Contact position indicator

- **Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61009-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>AC</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C</td>
</tr>
<tr>
<td>Rated current In</td>
<td>A</td>
</tr>
<tr>
<td>Poles</td>
<td>6, 10, 16, 20, 25, 32</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V</td>
</tr>
<tr>
<td>Rated sensitivity Iₙₙ</td>
<td>A</td>
</tr>
<tr>
<td>Short-circuit current Icn</td>
<td>A</td>
</tr>
<tr>
<td>Break time under Iₙₙ</td>
<td>s</td>
</tr>
<tr>
<td>Electrical life</td>
<td>≤0.1</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>2,000</td>
</tr>
<tr>
<td>Terminal connection type</td>
<td>Cable/U-type busbar/Pin-type busbar</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm)</td>
</tr>
<tr>
<td>Connection</td>
<td>From top</td>
</tr>
</tbody>
</table>

- **Curve**

  - B, C curve
Low Voltage Brief Catalogue

NB3LEU Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)

- **General**
  - Protection against risk of fire
  - Protection against risk of electric shock
  - Protection against overload
  - Protection against short circuit
  - 1P+N in one module
  - Contact position indicator

- **Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61009-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>AC</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C</td>
</tr>
<tr>
<td>Rated current In</td>
<td>A 6, 10, 13, 16, 20, 25, 32, 40</td>
</tr>
<tr>
<td>Poles</td>
<td>1P+N</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>240</td>
</tr>
<tr>
<td>Rated sensitivity I△n</td>
<td>A 0.03</td>
</tr>
<tr>
<td>Short-circuit current Icn</td>
<td>A 10,000</td>
</tr>
<tr>
<td>Break time under I△n</td>
<td>s ≤0.1</td>
</tr>
<tr>
<td>Electrical life</td>
<td>2,000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>2,000</td>
</tr>
<tr>
<td>Terminal connection type</td>
<td>Cable/U-type busbar/Pin-type busbar</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
</tr>
<tr>
<td>Connection</td>
<td>From bottom</td>
</tr>
</tbody>
</table>

- **Curve**

B, C curve
NBH8LE Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)

● General
  ● Protection against risk of fire
  ● Protection against risk of electric shock
  ● Protection against overload
  ● Protection against short circuit

● Technical features

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61009-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>AC</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>C</td>
</tr>
<tr>
<td>Rated current In</td>
<td>A</td>
</tr>
<tr>
<td>Poles</td>
<td>1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V</td>
</tr>
<tr>
<td>Rated sensitivity Iₚₙ</td>
<td>A</td>
</tr>
<tr>
<td>Short-circuit current Icn</td>
<td>A</td>
</tr>
<tr>
<td>Electrical life</td>
<td>4, 000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>20, 000</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm)</td>
</tr>
<tr>
<td></td>
<td>by means of fast clip device</td>
</tr>
<tr>
<td>Connection</td>
<td>From top</td>
</tr>
</tbody>
</table>

● Curve

C curve
DZ158LE Residual Current Operated Circuit Breaker

● General
- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit

● Technical features

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 60947-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>AC</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>8–12In</td>
</tr>
<tr>
<td>Rated current In</td>
<td>A 63, 80, 100</td>
</tr>
<tr>
<td>Poles</td>
<td>1P+N, 2P, 3P, 3P+N, 4P</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 230/400</td>
</tr>
<tr>
<td>Rated sensitivity I△n</td>
<td>A 0.03, 0.1, 0.3</td>
</tr>
<tr>
<td>Short-circuit current Icn</td>
<td>A 6,000</td>
</tr>
<tr>
<td>Electrical life</td>
<td>1, 500</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>8,500</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
</tr>
<tr>
<td>Connection</td>
<td>From top</td>
</tr>
</tbody>
</table>

● Curve

Curve
NB2LE Residual Current Operated Circuit Breaker

● General

● Protection against risk of fire
● Protection against risk of electric shock
● Protection against overload
● Protection against short circuit

● Technical features

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61009-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>AC, A</td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C</td>
</tr>
<tr>
<td>Rated current In</td>
<td>A 6, 10, 16, 20, 25</td>
</tr>
<tr>
<td>Poles</td>
<td>TP+N</td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>V 240</td>
</tr>
<tr>
<td>Rated sensitivity I_{n,n}</td>
<td>A 0.03</td>
</tr>
<tr>
<td>Short-circuit current I_{cn}</td>
<td>A 4,500</td>
</tr>
<tr>
<td>Electrical life</td>
<td>2,000</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>2,000</td>
</tr>
<tr>
<td>Mounting</td>
<td>On DIN rail EN 60715 (35mm)</td>
</tr>
<tr>
<td>Connection</td>
<td>From top and bottom</td>
</tr>
<tr>
<td>Connection</td>
<td></td>
</tr>
</tbody>
</table>

● Curve

B, C curve

![Curve Diagram]
**NB310L Residual Current Operated Circuit Breaker with Over-current Protection (Magnetic)**

**General**
- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit
- Contact position indicator

**Technical features**

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEC/EN 61009-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (wave form of the earth leakage sensed)</td>
<td>A, AC</td>
</tr>
<tr>
<td>Poles</td>
<td>2P</td>
</tr>
<tr>
<td>3PN</td>
<td></td>
</tr>
<tr>
<td>Thermo-magnetic release characteristic</td>
<td>B, C</td>
</tr>
<tr>
<td>Rated current In</td>
<td>A</td>
</tr>
<tr>
<td>2P</td>
<td></td>
</tr>
<tr>
<td>3P+N</td>
<td></td>
</tr>
<tr>
<td>Rated voltage Ue</td>
<td>230/240</td>
</tr>
<tr>
<td>Rated sensitivity I_n</td>
<td>A</td>
</tr>
<tr>
<td>6-40</td>
<td></td>
</tr>
<tr>
<td>Rated short-circuit capacity Icn</td>
<td>A</td>
</tr>
<tr>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Break time under Icn</td>
<td>s</td>
</tr>
<tr>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Mechanical life</td>
<td>2,000</td>
</tr>
<tr>
<td>On DIN rail EN 60715 (35mm) by means of fast clip device</td>
<td>10000</td>
</tr>
<tr>
<td>Mounting</td>
<td></td>
</tr>
<tr>
<td>Connection</td>
<td>From top and bottom</td>
</tr>
</tbody>
</table>

**Curve**

- B, C curve
 XF9 (Auxiliary Contact for NB1, NBH8, NB1L, NBH8LE)

● General
  ● General: Indication of the position of the device’s contacts.
  ● Manufactured according to IEC/EN 60947-5-1
  ● Rated voltage: DC 24V, 48V, 130V; AC 240V, 415V
  ● Configurations: 1N/O + 1N/C
  ● Mounted on the left of the MCBs/RCBOs.

 XF9J (Alarm Auxiliary Contact for NB1, NBH8, NB1L,NBH8LE)

● General
  ● General: Indication of the position of the device’s contacts only after the automatic release of the MCBs/RCBOs due to overload or short circuit.
  ● Manufactured according to IEC/EN 60947-5-1
  ● Rated voltage: DC 24V, 48V, 130V; AC 240V, 415V
  ● Configurations: 1N/O + 1N/C
  ● Mounted on the left of the MCBs/RCBOs.

 S9 (Shunt Release for NB1, NBH8, NB1L, NBH8LE)

● General
  ● General: Remote opening of the device when a voltage is applied.
  ● Manufactured according to IEC/EN 60947-5-1
  ● Rated voltage: AC/DC 24V, 48V; AC 230V, 400V
  ● Mounted on the left of the MCBs/RCBOs.

 V9 (Under Voltage Release for NB1, NBH8, NB1L, NBH8LE)

● General
  ● General: Reliable break the device in the case of a voltage drop (between 35% and 70% of its rated value)
  ● Manufactured according to IEC/EN 60947-5-1
  ● Rated voltage: AC 230V
  ● Mounted on the left of the MCBs/RCBOs.

 AX-1 (Auxiliary Contact for DZ158, DZ158LE)

● General
  ● General: Indication of the position of the device’s contacts.
  ● Manufactured according to IEC/EN 60947-5-1
  ● Rated voltage: DC 125V; AC 415V
  ● Configurations: 1N/O + 1N/C
  ● Mounted on the left of the MCBs/RCBOs.
NH2 Switch Disconnector

- **General**
  - Isolation
  - Designed match DZ series MCBs/RCBOs

- **Technical features**
  - Manufactured according to IEC/EN 60947-3
  - Electric ratings: 32A, 63A, 100A, 125A, 230/400V~240/415V, 50/60Hz
  - Rated short circuit breaking capacity: 20klA, t=0.1s
  - Electric life: 1500
  - Mechanical life: 8500
  - Connection: From top and bottom

NH4 Switch Disconnector

- **General**
  - Isolation
  - Designed match N series MCBs/RCBOs

- **Technical features**
  - Manufactured according to IEC/EN 60947-3
  - Electric ratings: 32A, 63A, 100A, 125A, 230/400V~240/415V, 50/60Hz
  - Rated short circuit breaking capacity: 20klA, t=0.1s
  - Electric life: 1500
  - Mechanical life: 8500
  - Connection: From top and bottom
NZK1-32 Change-over Switch

● General
  ● Electric ratings: AC 50/60Hz;
  ● Rated voltage up to 250V, rated current 32A;
  ● Standard: IEC/EN 60669-1

● Technical features
  ● Poles: 1P, 2P
  ● Rated frequency: 50Hz/60Hz;
  ● Rated operating current Ie: 32A;
  ● Rated voltage Ue: 250V;
  ● Rated making and breaking capacity:
    1.1Ue; 1.25Ie; COSΦ = 0.3±0.05; 200 times
  ● Operational performance:
    Ue; 1.5%Ie; COSΦ = 0.6±0.05; 10000 times

NZK2-32 Change-over Switch

● General
  ● Electric ratings: AC 50/60Hz;
  ● Rated voltage up to 250V, rated current 32A;
  ● Standard: IEC/EN 60669-1

● Technical features
  ● Poles: 1P, 2P
  ● Rated frequency: 50Hz/60Hz;
  ● Rated operating current Ie: 32A;
  ● Rated voltage Ue: 250V;
  ● Rated making and breaking capacity:
    1.1Ue; 1.25Ie; COSΦ = 0.3±0.05; 200 times
  ● Operational performance:
    Ue; 1.5%Ie; COSΦ = 0.6±0.05; 10000 times
**NU6-Ⅱ**

Low-voltage Surge Arrester

- **General**
  - Manufactured according to IEC 61643-1, EN 61643-11
  - Composed by two independent components
  - With remote control port
  - Electric ratings: 230/400V, AC50/60Hz, Single-phase or 3-phase
  - Maximum discharge current (kA): 40kA, 60kA, 100kA.
  - Max. continuous operational voltage Uc (V): 385V, 460V

---

**NU6-Ⅲ**

Low-voltage Surge Arrester

- **General**
  - Manufactured according to IEC 61643-1, EN 61643-11
  - Composed by two independent components
  - With remote control port
  - Electric ratings: 230V, AC50/60Hz, Single-phase
  - Uoc (1.2/50μs)(kV): 10kV
  - Max. continuous operational voltage Uc (V): 275V, 320V, 385V
**NP9 Pushbutton**

- **General**
  - For controlling electrical circuit either directly or via starters, contactors, relays etc. And pushbutton with lamp could also be used as indicator.

- **Technical features**
  - Type: Pushbutton without illuminated lamp
    - Electric ratings: 6A, 230V, AC50/60Hz
    - Electric life: 100,000
    - Mechanical life: 250,000
  - Type: Pushbutton with illuminated lamp
    - Electric ratings: 20mA, AC/DC 6.3/12/24/110/230V
    - Assembly of contact: 1N/C+2N/O, 2N/C+1N/O, 3N/O, 2N/C+2N/O
    - Mounting on Din rail (TH35-7.5)

**ND9 Indicator Light**

- **General**
  - Indication of signal, pre-set signal, malfunction signal etc.

- **Technical features**
  - Manufactured according to IEC/EN 60947-5-1
  - Two types: single lamp & dual lamps
  - Electric ratings: 20mA, AC/DC 6.3/12/24/110/230V
  - Mounting on Din rail (TH35-7.5)
NX8 Consumer Unit (Body)

- **General**
  - For installing the modular DIN-rail products together to control the electric system

- **Technical features**
  - Manufactured according to IEC/EN 60439-3 (IEC/EN 60670-24)
  - Electric ratings: up to 100A, 230V, AC50/60Hz
  - On-load current(A): 100/1-phase, 63/3-phase
  - No. of mounted units: 5, 8, 12, 15, 20, 24
  - Flush mounting

NX2 Consumer Unit (Body)

- **General**
  - For installing the modular DIN-rail products together to control the electric system

- **Technical features**
  - Manufactured according to IEC/EN 60439-3 (IEC/EN 60670-24)
  - Electric ratings: up to 100A, 230V, AC50/60Hz
  - On-load current(A): 100/1-phase, 63/3-phase
  - No. of mounted units: 8, 10, 14, 18, 28, 36
  - Surface mounting

NXW1 Consumer Unit (Body) for Outdoor Application

- **General**
  - For installing the modular DIN-rail products together to control the electric system

- **Technical features**
  - Manufactured according to IEC/EN 60439-3 (IEC/EN 60670-24)
  - Electric ratings: up to 63A, 230V, AC50/60Hz
  - No. of mounted units: 3, 5
  - High protection degree up to IP65
  - Surface mounting

NXW5 Wall Mounting Enclosure

- **General**
  - For installing the modular DIN-rail products together to control the electric system

- **Technical features**
  - Manufactured according to IEC/EN 62208
  - Designed for three phases circuit system
  - Electric ratings: 220…240/380…415V, AC50/60Hz
  - Max. incoming current (A): 630A
  - Protection degree: IP54
  - Surface mounting for outdoor installation.

MCB Shield (For eB, NH2)

- **General**
  - Guarantee MCBs’ wiring safety.

- **Technical features**
  - Electrical ratings: up to 100A, 220…240/380…415V, AC 50/60Hz
  - Poles of mounted units: 1P, 3P
CBB-2 Busbar

- **Main application and naming rule**
  - Busbar is mainly applied to low-voltage distribution equipment for assembly of 18mm wide modularized products.

- **Operating conditions:**
  - Operating temperature range: -5°C ~ +40°C
  - Relative air humidity in 20°C: 90%
  - Altitude: ≤2000m
  - Pollution degree: 2

- **Main Technical Parameter**

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Numeric value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of poles</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>Rated voltage, V</td>
<td>230/400</td>
</tr>
<tr>
<td>Rated impulse withstand voltage Uimp, V</td>
<td>4000</td>
</tr>
</tbody>
</table>

Table 1

CBB-2 Busbar

- CBB-2101
- CBB-2102
- CBB-211310
- CBB-211410
- CBB-211510
- CBB-211610
- CBB-2201
- CBB-2202
- CBB-2301
- CBB-2302
- CBB-2301
- CBB-231110
- CBB-231110
- CBB-2401
- CBB-2402
- CBB-2402
- CBB-241310
- CBB-241410
- CBB-241510
- CBB-241610
NM8, NM8S
Adjustable type MCCB

- Rated current from 16 to 1600A
- Thermal-magnetic type / Electronic type / Magnetic-only type
- Adjustable thermal & adjustable magnetic trip
- 2P 3P 4P available
- 3-class breaking capacity from 50kA to 150kA
- Ics = 100%Icu(In ≤ 630A), Ics = 50%Icu(In > 630A)
- Circuit breakers and auxiliaries comply with the following international standard:
  - IEC/EN 60947-1: general rules
  - IEC/EN 60947-2: circuit breakers
  - IEC/EN 60947-3: switches, disconnectors, switch-disconnectors, etc.
  - IEC/EN 60947-4: contactor and motor starters
  - IEC/EN 60947-5.1 and following: control circuit devices and switching elements, automatic control components. NM8 also comply with the specifications of the marine classification companies.
- Certified for operation in pollution-degree III environments as defined by IEC standard 60947 (industrial environments).
- Wide temperature range from -5°C to +55°C
- A complete system of add-on modules for NM8
NM7
Thermomagnetic Dual Adjustable

● General
NM7 new series moulded case circuit breaker (Thermal and magnetic dual adjustable) is a new type breaker developed with international advanced technology.

The breaking capacity includes 18kA, 25kA and 36kA, which appropriately meets the needs of low-breaking application market. The overload current and short-circuit current can be adjusted. It can also be used for frequent motor start and for motor overload, and under-voltage protections.

● Standard: IEC 60947-2
● Certificate: CE
● Main size parameters:
  Range available: 125A, 250A
  Rated operation range: 25A~250A
  Available in 3 poles & 4 poles
  Installation types: fixed type

● Operating conditions
  ● Ambient air temperature:
    The upper limit for the ambient air temperature is +40℃, lower limit -5℃, and the average temperature is not higher than +35℃ within 24 hours.

  ● Altitude:
    Not higher than 2000m at the installation site.

  ● Atmospheric conditions:
    When the ambient air temperature is +40℃, the relative humidity of the air shall not be higher than 50%; a higher relative humidity is allowed at a lower temperature; for the wettest month, the maximum relative humidity averaged shall be 90% while the lowest temperature averaged in that month +25℃, and the condensation produced due to temperature change shall be taken into consideration.

  ● Class of pollution: 3
NM7
Moulded Case Circuit Breaker

● **General**
  - Rated operation range 10A~1250A
  - Several modes available:
    - 3P, 4P, fixed type, plug-in type,
  - Front connection; Rear connection.
  - Vertical/horizontal installation
  - Standard: IEC 60947-2
  - Certificate: KEMA

● **Operating conditions**
  - Ambient air temperature
  - The upper limit for the ambient air temperature is +40°C, lower limit -5°C, and the average temperature is not higher than +35°C within 24 hours.
  - Altitude: not higher than 2000m for the installation site.
  - Atmospheric conditions:
    - When the ambient air temperature is +40°C, the relative humidity of the air shall not be higher than 50%; a higher relative humidity is allowed at a lower temperature; for the wettest month, the maximum relative humidity averaged shall be 90% while the lowest temperature averaged in that month +25°C, and the condensation produced due to temperature change shall be taken into consideration.
  - Class of pollution: 3
NM1
Fixed type MCCB

- Rated current from 10 to 1250A
- Employing a fixed thermal and fixed magnetic trip.
- Frames made of rigid materials of engineering plastics
- Complete range of two, three and four-pole version
- 4-class breaking capacity from 10kA to 70kA
- Vertical/horizontal installation
- Circuit breakers and auxiliaries comply with the following international standard:
  IEC/EN 60947-1: general rules
  IEC/EN 60947-2: circuit breakers
  automatic control components.
- Certified for operation in pollution-degree III environments as defined by IEC standard 60947 (industrial environments).
- Temperature range from -5℃ to +40℃
- A complete system of add-on modules for NM1

1. MCCB (fixed type)
2. Under-voltage release
3. Shunt release
4. Alarm contact
5. Auxiliary contact
6. Motor-driven operation mechanism
7. Extended manual operation handle
8. Mechanical interlock
9. Cage clamp terminal
10. Short terminal cover
11. Front connection plate
NA8G Air Circuit Breaker

- **General**
  - Rated current: 200A to 6300A
  - Rated operational voltage: AC 415V, 690V (specifications 6300 AC 690V in trial production)
  - Mainly used in distribution networks
  - Frequency: 50Hz/60Hz
  - Class of pollution: 3
  - Temperature range from -5°C to +40°C
  - Standard: IEC/EN 60947-2
NA1 Air Circuit Breaker

- Rated current from 200 to 6300A
- Modulized mechanical part and accessories
- The terminal of the control circuit on the front enables easy handling
- Minimized arc space
- 3P 4P available
- Max. breaking capacity up to 120kA at 400V
- Drawout type / fixed type
- Power supplied from either top or bottom does no reduction in performance
- Circuit breakers comply with IEC/EN 60947-2
- Certified for operation in pollution-degree III environments as defined by IEC standard 60947 (industrial environments).
- Temperature range from -5°C to +40°C
- A complete system of add-on modules for NA1
NC8 AC Contactor

- The NC8 series AC contactor is used for remote making & breaking circuits, and can also be used with proper thermal overload relay together as an electromagnetic starter to protect circuits from overload.
- Rating up to 690V, 500A, AC 50/60Hz
- Standard: IEC/EN 60947-4-1
- Utilization category: AC-1, AC-3, AC-4
- Mounting conditions: inclination between mounting plane and vertical plane not exceed ±5°

NC7 AC Contactor

- The NC7 series AC contactor is mainly used for remotely closing and breaking circuits, and can be combined with an appropriate thermal overload relay to form a electromagnetic starter so as to protect the circuits likely to be overloaded in operation; the contact is well suited for frequently starting and controlling AC motors.
- Rating up to 690V, 620A, AC 50/60Hz, usage category of AC-3/400V
- This product meets the standard of IEC60947-4-1
- Side mounting auxiliary contacts: NCF1-11C (1NO & 1NC)
- Top mounting auxiliary contacts: AX-3-02 & AX-3-11 (2NO or 2NC or 1NO & 1NC) AX-3-13 & AX-3-31 (1NO & 3NC or 3NO & 1NC) AX-3-40 & AX-3-04 & AX-3-22 (4NO or 4NC or 2NO & 2NC)
- Top mounting time delay block: F5-T (making time delay); F5-D (breaking time delay)
- Assemble with Thermal overload Relay NR2 (or NRE8) to be a DOL Starter.
- Assemble with another one & AX-3 & F5 & NR2 (or NRE8) to be a Star-Delta Starter called QJX2;
- Assemble with a current limiting block to be a Capacitor Contactor.
- Assemble with another one to be a reversing contactor.

NC100 Contactor

- The NC100 Series Contactor is used in remote motor (≤45kW) control application.
- Standard: IEC/EN 60947-4-1
- Ambient temp: -25°C ~ +55°C
- Side mounting auxiliary contacts: NCF1-11C (1NO & 1NC)
- Top mounting auxiliary contacts: F4-02 & F4-11 (2NO or 2NC or 1NO & 1NC) F4-13 & F4-31 (1NO & 3NC or 3NO & 1NC) F4-40 & F4-04 & F4-22 (4NO or 4NC or 2NO & 2NC)
- Top mounting time delay block: F5-T (making time delay); F5-D (breaking time delay)
- Assemble with Thermal overload Relay NR2 (or NRE8) to be a DOL Starter.
- Assemble with another one & F4 & F5 & NR2 (or NRE8) to be a Star-Delta Starter called QJX2;
- Assemble with a current limiting block to be a Capacitor Contactor.
- Assemble with another one to be a reversing contactor.
**NC6 Contactor**

- The NC6 Series Mini Contactor is used in remote motor (≤4kW) control application.
- Rating up to 690V, 9A (AC-3). ----- (06A, 09A)
- Standard: IEC/EN 60947-4-1
- Two kinds of mounting available: Normal type (without pins); Pin type (with pins)
- Ambient temp: -5℃ ~ +40℃
- Auxiliary contacts: NCF6-20 & NCF6-02 (2NO or 2NC)
  - NCF6-13 & NCF6-31 (1NO & 3NC or 3NO & 1NC)
  - NCF6-40 & NCF6-04 (4NO or 4NC)
- Assemble with Thermal overload Relay NR2-11.5 to be a DOL Starter.

**NC1 Contactor**

- The NC1 Series Contactor is used in remote motor (≤45kW) control application.
- Standard: IEC/EN 60947-4-1
- Ambient temp: -25℃ ~ +55℃
- Coil voltage (DC): 24V, 36V, 48V, 110V, 220V;
- Side mounting auxiliary contacts: NCF1-11C (1NO & 1NC)
- Top mounting auxiliary contacts: F4-20 & F4-02 & F4-11 (1NO or 2NC or 1NO & 1NC)
  - F4-13 & F4-31 (1NO & 3NC or 3NO & 1NC)
  - F4-40 & F4-04 & F4-22 (4NO or 4NC or 2NO & 2NC)
- Top mounting time delay block: F5-T (making time delay);
  - F5-D (breaking time delay)
- Assemble with Thermal overload Relay NR2 (or NRE8) to be a DOL Starter.
- Assemble with another one & F4 & F5 & NR2 (or NRE8) to be a Star-Delta Starter called QJX2;
- Assemble with a current limiting block to be a Capacitor Contactor.
- Assemble with another one to be a reversing contactor.
NC1-Z(N) DP Contactor

- Used for long-distance circuit making and breaking
- Rated working voltage up to 690V, 25A and 40A (AC-3)
- 2 NO 2 NC main contacts
- Compliance standards: IEC/EN 60947-4-1
- Ambient air temperature: -25°C ~ +55°C
- 24-hour average temperature not exceeding +35°C
- Altitude: ≤ 2000m
- Coil voltage: DC 48V
- Can form into reversible contactor with other AC contactors

NC2 Contactor

- The NC2 Series Contactor is used in remote motor (≤475kW) control application.
- Rating up to 690V, 800A (AC3).
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5°C ~ +40°C
- Top mounting auxiliary contacts: F4-20 & F4-02 & F4-11 (2NO or 2NC or 1NO & 1NC)
  F4-13 & F4-31 (1NO & 3NC or 3NO & 1NC)
  F4-40 & F4-04 & F4-22 (4NO or 4NC or 2NO & 2NC)
- Top mounting time delay block: F5-T (making time delay);
  F5-D (breaking time delay)
- Assemble with Thermal overload Relay NR2 to be a DOL Starter.
- Assemble with another one to be a reversing contactor.
**NCK3 DP Contactor**

- The NCK3 Series DP Contactor is used in remote motor of air-conditioner (<60HP) control application.
- Rating up to 630V, 90A. ----- (25A, 30A, 32A, 40A, 50A, 60A, 75A, 90A)
- Standard: UL508
- Poles: 1P+1NC, 1P+N, 2P, 3P
- Ambient temp: -5℃ ~ +40℃
- Coil voltage (AC): 24V, 110V, 120V, 220V, 240V (50/60Hz).

**NCH8 Modular AC Contactor**

- Manufactured according to IEC/EN 61095
- Utilization category: AC-1, AC-7a, AC-7b
- Various contact assembly are available

**CJ19 Capacitor Switching Contactor**

- The CJ19 Series Contactor is used in remote capacitor (130kvar) switch application.
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5℃ ~ +40℃
- CJ19-25: Rating current 17A (AC-6b/380V);
  - Power of controlled capacitor ≤ 12.5kvar.
- CJ19-32: Rating current 23A (AC-6b/380V);
  - Power of controlled capacitor ≤ 20kvar.
- CJ19-43: Rating current 29A (AC-6b/380V);
  - Power of controlled capacitor ≤ 25kvar.
- CJ19-63: Rating current 43A (AC-6b/380V);
  - Power of controlled capacitor ≤ 33.3kvar.
- CJ19-95: Rating current 72.2A (AC-6b/400V);
  - Power of controlled capacitor ≤ 50kvar.
- CJ19-115: Rating current 87A (AC-6b/400V);
  - Power of controlled capacitor ≤ 60kvar.
- CJ19-150: Rating current 115A (AC-6b/400V);
  - Power of controlled capacitor ≤ 80kvar.
- CJ19-170: Rating current 130A (AC-6b/400V);
  - Power of controlled capacitor ≤ 90kvar.
NR8 Thermal Overload Relay

- NR8 series thermal overload relay is used to provide overload and phase failure protection for AC motors.
- Frequency: AC 50Hz/60Hz
- Voltage: up to 690V
- Current: 0.1A~38A
- Standard: IEC 60947-4-1.

NRE8 Electronic Overload Relay

- The NRE8 Series Electronic Overload Relay is used in remote motor control application for overload function.
- Rating up to 690V, 630A (AC3). ——— (25A, 40A, 100A, 200A, 630A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5°C ~ +40°C
- Assemble with Contactor NC1, NC2, NC7, NC8 to be a DOL Starter.

NR2 Thermal Overload Relay

- NR2 series thermal overload relay is used to provide overload and phase failure protection for AC motors.
- Rating up to 690V, 630A. ——— (11.5A, 25A, 36A, 93A, 150A, 200A, 630A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5°C ~ +40°C
- Assemble with Contactor NC1, NC2, NC7 to be a DOL Starter.

NS2 Manual Motor Starter

- The NS2 Series Manual Motor Starter is used in remote motor control application for overload, short circuit & phase failure.
- Rating up to 690V, 80A(AC3). ——— (0.1~0.16A, 0.16~0.25A, 0.25~0.4A, 0.4~0.63A, 0.63~1A, 1~1.6A, 1.6~2.5A, 2.5~4A, 4~6.3A, 6~10A, 9~14A, 13~18A, 17~23A, 20~25A, 24~32A, 16~25A, 25~40A, 40~63A, 56~80A)
- Standard: IEC/EN 60947-2, IEC/EN 60947-4-1
- Ambient temp: -5°C ~ +40°C
- Side mounting auxiliary contacts: NS2-AU20(2NO)
  NS2-AU11(1NO & 1NC)
- Front mounting auxiliary contacts: NS2-AE20(2NO)
  NS2-AE11(1NO & 1NC)
- Under-voltage release: NS2-UV110, NS2-UV220, NS2-UV380;
- Shunt release: NS2-SH110, NS2-SH220, NS2-SH380;
- Fault signal contact & instantaneous auxiliary contact: NS2-FA0110 (1NC &1NO)
  NS2-FA0101 (1NC & 1NC)
  NS2-FA1010 (1NO & 1NO)
  NS2-FA1001 (1NO & 1NC)
NQ2 Direct On-line Motor Starter

- The NQ2 Series DOL Motor Starter is used in remote motor (≤33kW) start & control application.
- Rating up to 660V, 68A (AC3). ---- (0.1~0.16A,0.16~0.25A,0.25~0.4A,0.4~0.63A, 0.63~1A,1~1.6A,1.6~2A,2~2.5A,2.5~4A,4~6A,6~8A,8~10A,10~13A,13~18A, 17~25A, 23~32A,28~36A,30~40A,40~50A,48~65A,55~70A,63~80A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5℃ ~ +40℃
  - NQ2-15(P, N, NB)/1: Rating current 12A (AC3), Motor power (start & control) ≤ 5.5kW
  - NQ2-15(P, N, NB)/2: Rating current 18A (AC3), Motor power (start & control) ≤ 7.5kW
  - NQ2-15(P, N, NB)/3: Rating current 25A (AC3), Motor power (start & control) ≤ 11kW
  - NQ2-15(P, N, NB)/4: Rating current 32A (AC3), Motor power (start & control) ≤ 15kW
  - NQ2-33(P)/1: Rating current 52A (AC3), Motor power (start & control) ≤ 25kW
  - NQ2-33(P)/2: Rating current 68A (AC3), Motor power (start & control) ≤ 33kW

Note: P (with pushbutton), N (reversing), NB (reversing but without thermal relay)

NQ3 DOL Electromagnetic Starter

- The NQ3 Series DOL Motor Starter is used in remote motor (≤11kW) start & control application.
- Rating up to 660V, 22A (AC3). ---- (0.1~0.16A,0.16~0.25A,0.25~0.4A,0.4~0.63A, 0.63~1A,1~1.6A,1.6~2A,2~2.5A,2.5~4A,4~6A,6~8A,8~10A,9~13A,12~18A, 17~25A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5℃ ~ +40℃
  - NQ2-5.5P: Rating current 12A (AC3), Motor power (start & control) ≤ 5.5kW (400V)
  - NQ2-11P: Rating current 22A (AC3), Motor power (start & control) ≤ 11kW (400V)

Note: P (with pushbutton)
NP8 Pushbutton
- The NP8 Series Pilot Device is used in remote circuit control and indication.
- Rating up to 415V, 1.9A (AC-15) or 250V, 0.27A (DC-13)
- Standard: IEC/EN 60947-5-1, IP65; Drill plan: Φ22mm
- Electrical endurance: 1000 ×10^3 circles for Flush & mushroom head type;
  100 ×10^3 circles for Flush & mushroom other head type;
- Ambient temp: -5°C ~ +40°C; Contact blocks: 3pcs (max);
- Illuminated: Either illuminated or Non-illuminated available.
- Button: Either Momentary or Maintained type available
- Holder: Plastic available
- Head available: Flush head, Mushroom head, selector switch, double-head switch, indicator
- Head colors available: Red, Black, Green, Blue, Yellow.

NP2 Pushbutton
- The NP2 Series Pilot Device is used in remote circuit control and indication.
- Rating up to 230V, 4.5A (AC-15) or 110V, 0.6A (DC-13)
- Standard: IEC/EN 60947-5-1, IP40; Drill plan: Φ22mm
- Electrical endurance: 500×10^3 circles for Flush & mushroom head type;
  100×10^3 circles for Flush & mushroom other head type;
- Ambient temp: -5°C ~ +40°C; Contact blocks: 2pcs (max);
- Illuminated: Either illuminated or Non-illuminated available.
- Button: Either Momentary or Maintained type available
- Holder: Either metal or plastic available
- Head available: Flush head, Mushroom head, selector switch, double-head switch, indicator
- Head colors available: Red, Black, Green, Blue, Yellow.
NP6 Pushbutton

- The NP6 Series Pilot Device is used in remote circuit control and indication.
- Rating up to 220V, 0.5A (AC-15) or 220V, 0.1A (DC-13)
- Standard: IEC/EN 60947-5-1
- IP40; Drill plan: Φ16mm
- Electrical endurance: $500 \times 10^3$ circles for Flush & mushroom head type;
  $100 \times 10^3$ circles for Flush & mushroom other head type;
- Ambient temp: $-5^\circ C \sim +40^\circ C$
- Button: Either Momentary or Maintained type available
- Head available: Flush head, Mushroom head, selector switch, indicator
- Head colors available: Red, Black, Green, Blue, Yellow.

NPH1 Pushbutton Box

- The NPH1 Series Pushbutton enclosure is designed for NP8 Series Pushbutton.
- Rating up to AC 415V or DC 250V;
- Standard: IEC/EN 60947-5-1 IP65;
- Electrical endurance: $500 \times 10^3$ circles for Flush & mushroom head type;
  $100 \times 10^3$ circles for Flush & mushroom other head type;
- Ambient temp: $-5^\circ C \sim +40^\circ C$
NP3 Pushbutton
- The NP3 Series Pilot Device is used in remote circuit control.
- Rating up to AC 380V or DC 220V
- Standard: IEC/EN 60947-5-1
- IP65;
- Electrical endurance: 500 × 10^6 circles for Flush & mushroom head type;
- Ambient temp: -5°C to +40°C
- Button: Momentary type available
  NP3-1 (↑, ↓);
  NP3-1A (ON/OFF, ↑, ↓)
  NP3-1K (ON/Emergency Stop, ↑, ↓);
  NP3-2 (↑, ←, →);
  NP3-2A (ON/OFF, ↑, ↓, ←, →)
  NP3-2K (ON/Emergency Stop, ↑, ↓, ←, →);
  NP3-3 (↑, ↓, ←, →);
  NP3-3A (ON/OFF, ↑, ↓, ←, →)
  NP3-3K (ON/Emergency Stop, ↑, ↓, ←, →);
  NP3-4 (↑, ↓, ←, →, ≮, ≯);
  NP3-4A (ON/OFF, ↑, ↓, ←, →, ≮, ≯, ∩, ∪)
  NP3-4K (ON/Emergency Stop, ↑, ↓, ←, →, ≮, ≯, ∩, ∪)

ND16 Indicator Light
- The ND16 Series Indicator is used in remote indication.
- Rating up to 400V (AC/DC)
- Standard: IEC/EN 60947-5-1
- IP65, IP40;
- Drill plan: Φ22mm
- Electrical endurance: 30 × 10^6 Hours
- Ambient temp: -5°C to +40°C
- Head colors available: Red, Green, Blue, Yellow, White;
  ND16-22A(S)/2: For AC/DC application, Flat-platform lampshade;
  ND16-22A(S)/4: For AC application, Flat-platform lampshade;
  ND16-22B(S)/2: For AC/DC application, Flat-round platform lampshade;
  ND16-22B(S)/4: For AC application, Flat-round platform lampshade;
  ND16-22C(S)/2: For AC/DC application, Arc-surface ripple lampshade;
  ND16-22C(S)/4: For AC application, Arc-surface ripple lampshade;
  ND16-22D(S)/2: For AC/DC application, Arc-surface round lampshade;
  ND16-22D(S)/4: For AC application, Arc-surface round lampshade;
  ND16-22BK: Fast connection type
- Note: (S) for compact type.

ND16 Buzzer
- Rating up to AC/DC 110V, AC 380V
- IP20
- ND16-22F, ND16-22FS
- ND16-22L, ND16-22LC
- Head colors: Red, Black
NVF2G Inverter

- Superior starting capability: Current vector control technology, 0.5Hz/150% (starting torque)
- More powerful overload, 180% rated current to maintain 5s
- Stable operation at high speed: speed accuracy of 0.5%
- Maximum speed deviation speed ratio: Vector Control without PG 1:100; V/F 1:50
- Significant energy saving:
  - Automatic energy-saving operation, effect up to 20% -50%
  - Simple and smooth appearance, low inductance design, strong anti-interference

NVF300M Inverter

- Use of advanced high-precision magnetic flux vector control technology to achieve precise and smooth starting of motor
- Good environmental adaptability, allowing the voltage fluctuation range of - 15%, ~ + 10% Circuit board adopted "three preventions" treatment
- Starting torque: 0.25Hz/180% rated torque
- Speed range: 1:100 (control without PG); 1:1000 (control with PG)
- Two-level DC-DC drive design, which make the product more stable and reliable
- High-speed pulse input and pulse output functions, suitable for applications where precision requirements for speed control are very high.
- Aesthetic design appearance, the main circuit low inductance design, and powerful product anti-interference capability
- Automatic energy-saving operation, automatic current limiting, automatic voltage regulator, PID control functions, provide better equipment protection for customers and achieve energy saving
- More than 20 kinds of protection functions e.g. over-current, over-voltage, under-voltage, overload, phase loss, and overheating
- Widely used in electrical drive and automation and control of papermaking, textile, water supply, municipal administration, food and machinery.
**NJR2-T Soft-starter**

- Three-phase 220V voltage class, dual CPU control, smooth starting and stopping
- Built-in with multiple protection features, perfect protection for soft starting of the motor
- Product specifications covering 7.5kW-160kW (squirrel cage)
  - Three-phase AC induction motor
- Multiple overload curves in line with national standards, better overload protection
- Widely used in electrical drive equipment in many fields
- Ideal replacement for traditional star-delta starters, and auto voltage starting
- Starting current: 0.5-5 times the starting current limit.
- Kickstart time: 0.1S

**NJR2-D Soft-starter**

- Three-phase 380V voltage class, dual-CPU control, smooth starting and stopping
- All-aluminum design patents, good heat dissipation
- 75kW or less full-aluminum design, the radiator and shell in one, increased heat dissipation area
- Powerful starting function and perfect protection function:
  - Built-in 6 kinds of starting modes, adaptable to loads of different occasions
  - Built-in with multiple protection features, perfect protection on motor and soft starting
  - Multiple overload curves in line with national standards for, better overloading protection
- RS485 communication (external communication module) function, facilitating networking control and automated transformation

**NJR2-ZX In-line Soft-starter**

- Without requiring bypass contactor, online operation, built-in fan with feedback signal
- Dual-CPU chips, fast response to protection, smooth starting and stopping
- Aluminum casing patented design, desirable cooling effect
- Powerful starting ability, perfect protection function
- Built-in with six kinds of starting modes, suitable for loads on different occasions
- Multiple overload curves in line with national standards, better overloading protection
- RS485 communication (external communication module)
- Shield design for wiring, without requiring bypass contactor
NJB1-YW  Floatless Relay

- NJB1-YW Floatless Relay is applicable for water level automatic control in industrial facilities & equipments, civil water tower, high cistern, underground conservation pool, etc.
- The control of automatic water supply or drainage may be achieved by a single operation of the function switch without modifying the user's connection conditions.
- This product is not applicable for water level control of flammable and explosive liquid, such as oil, chemical liquid, etc.

NJB1-X Relay (Three-Phase Unbalance, Phase Sequence, Phase Failure Protection)

- NJB1-X relay are applied in AC380V~480V control circuits at a frequency of 50Hz/60Hz as protection elements of phase sequence, phase failure and phase unbalance, making or breaking circuits.
- The relay with the true effective value of three phase AC voltage provides more reliable operating protection. The products meet the requirements of standard IEC 60947-5-1.

NJB1-X1 Relay (Phase Sequence, Phase Failure Protection)

- NJB1-X1 relay is used as a phase sequence and phase failure protection device in control circuits with an AC voltage of 200V~500V and a frequency of 50Hz or 60Hz to make and break the circuit.
- It cannot monitor the phase failure of motor load.
- The products meet the requirement of standard IEC 60947-5-1

NJB1-Y Single-Phase Voltage Relay

- NJB1-Y single phase voltage relays are applied in AC 220V, 110V, 24V, frequency 50Hz (or 60Hz) and DC 24V control circuits as single phase over-voltage protection or under-voltage protection and indication elements, making or breaking circuits as intended operating values and time.
- The product are in compliance with requirements of standard IEC 60947-5-1
**NJB1-S Time Delay Relay**
- NJB1-S Series Time Delay Relay is applicable for controlling circuit at A.C. 50Hz/ 60Hz, up to 380V rated supply voltage and up to D.C.24V supply voltage as monitoring protection element to make or break circuit according to preset value.
- NJB1-S time-delay relay is used in controlling circuit as time delay element to make or break circuit according to preset time.

**NJBK10 Motor Protection Relay**
- NJBK10 motor protection relay (hereinafter referred to as protector) is applicable for overload, phase-failure and three-phase unbalance protection of AC motor @A.C.50Hz, less than AC690V rated insulation voltage and 1A ~ 200A rated operating current for its continuous working or discontinuous working. Protector and AC contactor are generally used cooperatively.
- This product meets the requirements of IEC 60947- 4-1

**NJBK7 Motor Protection Relay**
- NJBK7 series motor protection relay (hereinafter referred to as protector) is used to provide overload, locked rotor, phase failure, three-phase current unbalance, ground and PTC temperature protection for AC motors with a frequency of AC 50Hz, a rated insulation voltage of up to 690V and a rated operational current of 1A-800A that operate continuously or intermittently.
- The protector uses flexible Rogowski coil to acquire current and features wide setting current range, high accuracy and convenient installation. The protector has RS485 interface and 4mA-20mA analog transmission interface, permits network communication and can realize remote monitor and control and fault inquiry of motors by means of upper computer. The protector is generally used in combination with AC contactor.
- Standards: IEC 60947-4-1

**NJBK6 Motor Protection Relay**
- NJBK6 series motor protection relay is used to provide overload, phase failure, three-phase current unbalance and locked rotor protection for AC motors with a frequency of AC 50Hz, a rated insulation voltage of below 690V and a rated operational current of 1A~36A that operate continuously or intermittently.
- Standards: IEC 60947-4-1

**NJBK1 Series Motor Protector**
- Standards compliant: GB 14048.4, IEC 60947-4-1
- Rated control supply voltage: 50Hz AC380V, AC220V
- Maximum rated working current up to 400A
- Trip grade: Level 5, level 10A, level 10, level 20 and level 30 adjustable
- Overload, open phase and three-phase current imbalance and other protection functions
- Nixie tube displays the motor working condition and the maximum phase current value
- Linear scale knob adjustment
- With test/reset buttons
- Pluggable terminal blocks
- With the function of protection contact will release with no control supply voltage
NJBK2 Motor Protection Relay

- NJBK2 series motor protection relay (hereinafter referred to as protector) is applicable for overload, locked-rotor, phase-failure, three-phase current unbalance, earthing and PTC temperature protection of AC motor @ A.C.50Hz, less than 690V rated insulation voltage and 1A~800A rated operating current for its continuous working or discontinuous working.
- This product meets the requirements of IEC 60947-4-1

NJBK5 Motor Controller

- NJBK5 series motor controller (hereinafter referred to as controller) is mainly used in circuits with a frequency of AC 50Hz (or 60Hz), a rated operational voltage of up to 380V and a rated control power of up to 11kW (current up to 22A) to control the direct start and stop of water pumps or motors, provide motors with overload and phase failure protection, and realize automatic liquid level control for civil water towers and reservoirs.
- This product is not applicable to the liquid level control of low-conductivity liquids, such as oil, purified water, inflammable and explosive chemical liquids and high-density sewage.
- Standards: IEC 60947-4-1

NJBK5-5 Motor Controller

- NJBK5-5 motor controller (hereinafter referred to as controller) is mainly used in circuits with a frequency of AC 50Hz/60Hz, a rated operational voltage of up to 220V and a rated control power of up to 2.2kW (current up to 20A) to control the direct start and stop of single-phase water pumps or motors, provide motors with overload and phase failure protection, and realize automatic liquid level control for civil water towers and reservoirs.
- This product is not applicable to the liquid level control of oil, purified water, inflammable and explosive chemical liquids, corrosive liquids and high-density sewage.
- Standards: IEC 60947-4-1

JD-5A Integrated Motor Protector

- JD-5A Integrated Motor Protector (hereinafter referred to as protector) is applicable for overload, phase failure and three-phase current unbalance protection of AC motor @ A.C.50Hz, less than AC380V rated operating voltage and 1A~400A rated operating current for its continuous working or discontinuous working.
- Protector and AC contactor are generally used cooperatively.
- This product meets the requirements of IEC 60947-4-1.
NJYB3 relay is used to provide overvoltage, undervoltage, phase failure, phase sequence and three-phase unbalance control in three-phase three-wire 380V circuits and three-phase four-wire 220V circuits with a frequency of AC 50Hz (or 60Hz). For example, it is used for power control systems, air conditioning systems and motors.

JD-5E Integrated Motor Protector

- JD-5E Integrated Motor protector (hereinafter referred to as protector) is applicable for overload and phase-failure protection of AC motor @ A.C.50Hz, less than AC690V rated insulation voltage and 1A-400A rated operating current for its continuous working or discontinuous working. Protector and AC contactor are generally used cooperatively.
- This product meets the requirements of IEC 60947-4-1.

JD-5 Integrated Motor Protector

- JD-5 Integrated Motor Protector (hereinafter referred to as protector) is applicable for overload and phase-failure protection of AC motor @ A.C.50Hz, less than AC690V rated insulation voltage and 0.5A-400A rated operating current for its continuous working or discontinuous working. Protector and AC contactor are generally used cooperatively.
- This product meets the requirements of IEC 60947-4-1.

JD-8 Integrated Motor Protector

- JD-8 Integrated Motor protector (hereinafter referred to as protector) is applicable for overload and phase-failure protection of AC motor @ A.C.50Hz, less than AC690V rated insulation voltage and 0.5A-160A rated operating current for its continuous working or discontinuous working. Protector and AC contactor are generally used cooperatively.
- This product meets the requirements of IEC 60947-4-1.
NJYB1 Voltage Protection Relay

- This product is used in AC 50Hz three-phase four wire 220V circuit.
- It can detect fault state as overvoltage, undervoltage, phase-failure and phase-sequence through advanced electronic circuit check, and provide reliable protection.

NJYB5 Relay

- The relay is suitable for AC 50Hz/60Hz three-phase three-wire system while protecting the occasion of the AC380V power system supply-side and load-side. It control power supply-side over-voltage, under-voltage, phase failure, phase sequence, phase unbalance protection, load-side with phase failure and phase imbalance protection. Applies to the use of air conditioning compressors, fans, and pumps etc..

NJXB3 Relay

- NJXB3 relay is used as an overvoltage, undervoltage, phase failure, phase sequence, three-phase voltage unbalance and PTC temperature protection device in three-phase three-wire 380V circuits and three-phase four-wire 220V circuits with a frequency of AC 50Hz(or 60Hz). For example, it is used for power control systems, air conditioning systems and motors.

XJ3 Phase-Failure and Phase-Sequence Protective Relay

- XJ3 series phase failure and phase sequence protection relay is used to provide overvoltage, undervoltage and phase failure protection in three-phase AC circuits and phase sequence protection in irreversible transmission devices and features reliable performance, wide application and convenient use.
- The protector starts to function when it is connected to the power control circuit in accordance with the drawing.
- When the fuse of any phase of the three-phase circuit is open or when there is a phase failure in the power supply circuit, the XJ3 operates immediately to control the contact to cut off the power supply of the AC contactor coil of the main circuit so that the main contact of the AC contactor operates to provide the load with phase failure protection.
- When the phases of a three-phase irreversible device with predetermined phase sequence are connected incorrectly due to maintenance or change of the power supply circuit, the XJ3 series will identify the phase sequence, stop supplying power to the power supply circuit and achieve the goal of protecting the device.
NJS1-H Time Delay Relay

- NJS1-H series time delay relay (hereinafter referred to as relay) is used as a time control element in control circuits with an AC voltage of 240V or below and a frequency of 50Hz/60Hz and control circuits with a DC voltage of 240V or below to make and break the circuit according to the schedule.

NJS1-M Time Delay Relay

- NJS1-M Series Time Delay Relay is applicable for controlling circuit @ A.C. 50Hz/60Hz, up to 240V rated supply voltage and up to D.C. 240V rated supply voltage as delay element to make or break circuit according to preset time.

NJS1 Time Delay Relay

- NJS1 Series Time-Delay Relay is applicable for controlling circuit @ A.C. 50Hz/60Hz, up to 380V rated voltage or up to D.C.240V rated voltage as delay element to make or break circuit according to preset time.

NJS5 Time Delay Relay

- NJS5 series time relay mainly used as time control component for control circuit with AC 50Hz/60Hz, rated control power supply voltage to 400V, make or break the circuit at a preset time.
- Indication of operational states with LEDs.
- DIN rail mounting and compact 18 mm design.

NJS5-M2 time relay

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Rated control supply voltage: AC 110V, AC 220V, AC 230V, AC 240V, 380V, 400V, DC24V
- Delay range: 0.1s~100h, 7 adjustable gears
- Delay function: on-delay, off-delay, interval delay, off-delay/interval delay, equal period cyclical delay (ON start), equal period cyclical delay (OFF start), Trigger/interval delay, 7 adjustable gears
- Dual LED indicator (Power indicator and action indicator)
- 18mm modularized design, can be installed to distribution box
**Low Voltage Brief Catalogue**

**Control Relay**

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### NJS3 Time Delay Relay

- NJS3 series time relay mainly used as time control component for control circuit with AC 50Hz/60Hz, rated control power supply voltage to 220V, make or break the circuit at a preset time.
- DIN rail mounting and compact 18 mm design.

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### NJS3-D Time Delay Relay

- NJS3-D time relay is mainly used as a delay control switch for control circuit with AC frequency 50Hz, and rated control supply voltage to 240V.
- Typical application: Suitable for metal halide lamps, 15 minutes lockout cool down timer.
- DIN rail mounting and compact 18mm design.

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### NTE8 Time Delay Relay

- NTE8 Series time delay relay is applicable for controlling circuit @AC 50Hz/60Hz, up to 230V rated voltage or up to DC 24V rated voltage as delay element to make or break circuit according to preset time.
- This product meets the requirements of IEC60947-5-1.

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### JSS48B Time Delay Relay

- JSS48B Time Delay Relay is applicable for controlling circuit @ A.C. 50Hz/60Hz, up to 380V rated supply voltage and up to D.C. 240V rated supply voltage as delay element to make or break circuit according to preset time.
JSS48A Time Delay Relay

- JSS48A Time Delay Relay is applicable for controlling circuit @ A.C. 50Hz/60Hz, up to 380V rated control supply voltage and up to D.C. 240V rated control supply voltage as delay element to make/break circuit according to preset time.

JSZ3 Time Delay Relay

- JSZ3 Time Delay Relay is applicable for automatic control system, such as machine automatic control, and complete equipment automatic control, etc.

JSZ6 Time Delay Relay

- JSZ6 Time Delay Relay is applicable for automatic control system, such as machine tool automatic control, complete equipment automatic control, etc.

NKG3 Time Switch

- NKG3 time switch (hereinafter referred to as time control switch) is used in automatic control circuits with a frequency of AC 50Hz (or 60Hz), a rated control supply voltage of up to 220V and a rated operational current of 3A to provide timed on-off control for street lamps, advertising lamps and similar equipment.
NKG3-M Time Switch

- NKG3-M time switch (hereinafter referred to as time control switch) is used in automatic control circuits with a frequency of AC 50Hz (or 60Hz), a rated control supply voltage of up to 220V and a rated operational current of 0.75A to provide timed on-off control for street lamps, advertising lamps and similar equipment.

NKG1 Time Switch

- NKG1 Time Switch is control element with time as control unit and can automatically turn on or turn off power supply of various consumer equipments according to preset time by user. The controlled objects are circuit equipments and household appliances such as street lamps, neon lamps, advertising lamps, manufacturing equipments, broadcast & television equipments, etc., which requires turning on and off at definite time.

KG10D Time Switch

- KG10D Time Switch can automatically turn on or turn off power supply of various consumer equipments according to preset time by user.
- The controlled objects are circuit equipments and household appliances such as street lamps, neon lamps, advertising lamps, manufacturing equipments, broadcast & television equipments, etc., which requires turning on and off at definite time.

KG10M Time Switch

- KG10M Time Switch can automatically turn on or turn off power supply of various consumer equipments according to preset time by user. The controlled objects are circuit equipments and household appliances such as street lamps, neon lamps, advertising lamps, manufacturing equipments, broadcast & television devices etc., which requires turning on and off at definite time.
**KG316T Time Switch**

- KG316T Time Switch can automatically turn on or turn off power supply of various consumer equipments according to preset time by user. The controlled objects are circuit equipments and household appliances such as street lamps, neon lamps, advertising lamps, manufacturing equipments, broadcast & television equipments, etc., which requires turning on and off at definite time.

**NJJ6 Counting Relay**

- NJJ6 counting relay is used to provide counting and counting control in control circuits with an AC frequency of 50Hz or 60Hz and a rated control voltage of up to 240V and control circuits with a DC rated control supply voltage of up to 240V.

**NJJ5-J Electronic Counter**

- This product adopts microminiature design and is applicable for counting in various circuits.
- Rated voltage: AC50Hz/60Hz, AC/DC100V-240V, DC24V
- Current failure memory: >10 years
- Power consumption: About 1.5VA
- Installation mode: Panel type
- Ambient temperature: -5℃ ~ +40℃

**NJJ5-L Electronic Timer**

- This product adopts microminiature design and is applicable for accumulating time in various circuits.
NJJ3 Counting Relay

- NJJ3 Counting Relay is applicable for controlling circuit A.C. 50Hz/60Hz, 240V rated voltage of control power supply and D.C. 240V rated voltage of control power supply as counting or counting control element.

NJJ1 Counting Relay

- NJJ1 Counting Relay is applicable for controlling circuit A.C. 50Hz/60Hz, 240V rated voltage of control power supply and D.C. 240V rated voltage of control power supply as counting or counting control element.

JDM15G Counting Relay

- JDM15G counting relay is used as a counting or counting control element in control circuits with an AC frequency of 50Hz or 60Hz and a rated control supply voltage of up to 240V and control circuits with a DC rated control supply voltage of up to 240V.

JDM1-48 Counting Relay

- JDM1 series counting relay is used as a counting or counting control element in control circuits with an AC frequency of 50Hz or 60Hz and a rated control supply voltage of up to 380V and control circuits with a DC rated control supply voltage of up to 240V.
JDM3 Electronic Counter

- JDM3 electronic counter has built-in lithium battery and small overall dimensions and is used to provide counting in various types of circuits.

SC3L Electronic Timer

- SC3L electronic Timer has built-in lithium battery and small overall dimensions and is used to provide time accumulation in various types of circuits.

NJYW1 Floatless Relay

- NJYW1 Series Floatless Relay is used in control circuit @A.C. 50Hz/60Hz, up to 380V rated supply voltage for liquid level automatic control at places of civil water tower, high cistern, and underground conservation pool, etc.
- It is capable to realize automatic water supply control or water drainage control according to wiring requirement of user.
- This product is not applicable for level control for liquid with poor conductivity such as oil, pure water, flammable & explosive chemical liquid and high density sewage, etc.

JYB-714 Floatless Relay

- JYB-714 Series Floatless Relay is used in liquid level automatic control circuit @AC 50Hz/60Hz, up to 380V rated supply voltage for liquid level automatic control at places of civil water tower, high cistern, and underground conservation pool etc.

Time Relay Socket

- Various kinds of socket for different relays
NJX-13FW Miniature Power Relay
- 3A, 5A, 10A switching capacity
- Wide range of coil ratings
- Fully sealed
- Certificate: CE, UL

NJDC-17 Miniature Power Relay
- 3A, 5A, 10A switching capacity
- Wide range of coil ratings
- Fully sealed
- Certificate: CE
- Push-to-test button allows for manual operation of relay without the need for coil power
- Lock-down door holds pushbutton and contacts in the operate position when activated

JZX-22F Miniature Power Relay
- 3A, 5A switching current
- Various sockets available
- With indicator to be selected
- Full range of AC and DC coil
- Certificate: CE, UL
- Models of the same type: MY2N-J, HH52P(-L)
NJDC-12 Mainature Power Relay

- 7.5A switching current
- Various sockets available
- Wide range of coil ratings
- Certificate: CE
- Push-to-test button allows for manual operation of relay without the need for coil power
- Lock-down door holds position of button and contacts in the operate position when activated

JQX-10F Mainature Power Relay

- 10A switching current
- Various sockets available
- Wide range of coil ratings
- Certificate: CE, UL

JTX Mainature Power Relay

- 10A switching current
- Various sockets available
- Wide range of coil ratings
- Certificate: CE, UL

JMK Mainature Power Relay

- 10A switching current
- With indicator to be selected
- Full range of AC and DC coil
- Certificate: CE, UL
NJMC1 Pulse Relay

- Contact switching current of up to 16A and 32A; a complete range of AC/DC specifications;
- NJMC1 pulse relay is a mechanical bistable relay that changes the contact state by inputting pulse signals.

Power Relay Socket

- Various kinds of socket for different relays
BZMJ Self-healing Shunt Capacitor

- Electric ratings: ≤AC1000V;
- Application: For improvement of power factor and power quality;
- Standards: IEC/EN 60831-1:2002
- Rated capacity: 1~60kvar
- Capacity error: -5~+10%
- Filling with innoxious substance

NWC1 Self-healing Shunt Capacitor

- Electric ratings: ≤AC1000V;
- Application: For improvement of power factor and power quality;
- Standards: IEC/EN 60831-1: 2002
- Rated capacity: 5~100kvar
- Capacity error: -5~+10%
- Filling with innoxious substance
NWC5 Self-healing Shunt Capacitor

- Electric ratings: ≤AC1000V;
- Application: Newly developed energy-saving product for improvement of power factor and power quality;
- Standards: IEC/EN 60831-1:2002;
- Rated capacity: 5~30kvar;
- Capacity error: -5~+10%;
- Filling with innoxious substance.

NWC6 Series Dry-type Low Voltage Shunt Capacitor

- Electric ratings: ≤AC1000V;
- Application: For improvement of power factor and power quality;
- Standards: IEC/EN 60831-1:2002;
- Rated capacity: 5~30 kvar;
- Capacity error: -5~+10%;
- The use of flame retardant materials, non-toxic, environmentally friendly.

JKF8 Intelligent Low-voltage Reactive Power Compensation Controller

- JKF8 Intelligent Low-Voltage Reactive Power Compensation Controller (hereinafter referred to as “controller”) is a dedicated controller which can make compensations for the reactive power of low voltage distribution system;
- Operation voltage: 400±10%.
**NDK Control Transformer**
- Electric ratings: AC 50Hz/60Hz;
- Application: for control power supply of apparatus, partial illumination and indicator light of machine tool and other mechanic equipments.
- Standards: Q/ZT258.

**JBK5 Control Transformer**
- Application: JBK5 series control transformers are suitable for AC circuit of 50Hz/60Hz, used as control sources for various mechanical equipment and general electrical appliances, and used as power supplies for work lighting and signal lamps.
- Standards: Q/ZT205.
- Maximum capacity: 2500VA

**JBK6 Control Transformer**
- Application: JBK6 series control transformers are suitable for AC circuit of 50Hz/60Hz, used as control sources for various mechanical equipment and general electrical appliances, and used as power supplies for work lighting and signal lamps.
- Standards: Q/ZT205.
- Maximum capacity: 3000VA

**SG Three-phase Air-immersed Transformer**
- Application: SG series Three-phase Air-immersed Transformer, is natural cooling indoor, it is applicable to the circuit of AC 50Hz/60Hz, 1000V and below.
- It can be used in control power of machine tool and mechanical equipment small type power as well as work lighting and signal lamp power.
TND1 Single-phase Automatic AC Voltage Regulator
TNS1 Three-phase Automatic AC Voltage Regulator

- TND1/TNS1 series full-automatic AC voltage regulator collects sample and amplifies it and automatically control circuit, and drives the servomotor to rotate the rocker arm and brush in required direction, and finally adjusts the output voltage to the rated value, finally reaches the aim of stabilizing the voltage.
- Elegant appearance, compact structure, light weight, low power waste, complete protection functions, stable and reliable, low output waveform distortion and so on.
- Ambient temperature: -5℃~+40℃.
- Relative humidity ≤90%(at +25℃).
- Altitude: ≤2000m.
- Working environment: Indoors, be free from chemical deposition, dirt, harmful corrosive medium, or flammable or explosive gas.

TND3 Automatic AC Voltage Regulator

- TND3 series automatic AC voltage regulator supplies power for equipment such as computers, duplicating machines, industrial precision equipment, medical apparatuses, household electrical appliances, etc.
- Ambient temperature: -5℃~+40℃.
- Working environment: Indoors, be free from chemical deposition, dirt, harmful corrosive medium, or flammable or explosive gas.

TND6 Automatic AC Voltage Regulator

- Standard compliant: Q/ZT 78
- Input voltage range: 130V~250V, the output voltage: 220V×(1±4%).
- Wide input voltage range of 130V~250V; strong load-carrying capacity.
- Low voltage stabilization function: it can still output 220V at the lowest input voltage of 130V.
- Adopt the dual protection system for output and input, overheat protection breaking input, overvoltage and undervoltage protection breaking output; complete protection functions.
- Wide applicable load types; suitable for areas with large voltage fluctuation of power network or low voltage of power network.

TM Ultra-low Voltage Automatic AC Voltage Regulator

- TM Ultra-low Voltage Automatic AC Voltage Regulator adopts electronic circuitry and control relay to change the transformer tap to adjust the output voltage. The product of series has various functions of protecting for over-voltage and short circuit and so on. It is small volume, elegant appearance and has been widely used in the area where the mains voltage has sharp fluctuation or has sharp seasonal variation. It is the ideal protective device for a great variety of instrument.
- Ambient temperature: -5℃~+40℃.
- Altitude: ≤3000m.
- Rated frequency: 50Hz.
**TNDZ(DBW), TNSZ(SBW) Series Pillar Type AC Automatic Regulator with Compensated**

- Used in the application requiring stable voltage, such as telecommunication, broadcasting & TV, elevator, silicone controlled apparatus, numerical control machine tool, and various production lines, etc.
- Rated capacity: 30KVA~600KVA
- Rated output current: 45.5A~912A
- Temperature: -5℃~+40℃;
- Altitude: ≤1000m;
- Relative humidity: 15%~90%(20℃).

**DBW-JW, SBW-JW Industrial-grade Contactless intelligent voltage Regulator**

- Standard compliant: YD/T 1270
- CPU intelligent control, stable and reliable digital circuit.
- Intelligent instrument displays voltage and current values in real time clearly and accurately.
- Three-phase modulation; unbalance degree of the output voltage is less than 1% to ensure the accuracy of each phase output voltage is unchanged; no contact, no wear and maintenance-free.
- High-speed response: Voltage stabilization response time is within 40ms; it does not affect the voltage of any computer automation, equipment and apparatus.
- High precision. Output voltage stabilization accuracy of the product can be set within ±1%~±5%; the maximum voltage stabilization accuracy is ±1%.
- Strong anti-interference and purification ability makes the output power completely pure.
- Complete protection functions. It is provided with overload, overvoltage, undervoltage, short circuit and other fault display and protection functions to ensure the safe operation of voltage stabilizer and load; overcurrent protection limit can be set arbitrarily.
- Strong adaptability to power grid and load; reliably, continuously and stably operate under various severe power grids and complex loads.

**TDGC2, TDGC2J Single-phase Contact Voltage Regulator**

- TDGC2, TDGC2J, TSGC2, TSGC2J type contact voltage regulators are of dry type and self-cooling automatic coupling mode, can be widely applied to industries (metallurgy, chemical, instruments and meters, electromechanical manufacturing, light industry, etc.), scientific experiments, public facilities, household electrical appliances and so on to realize voltage regulation, temperature control, light adjustment, powercontrol, etc.
- Standards: Q/ZT130.
- Rated capacity: 0.2KVA~20KVA
- Rated output current: 0.8A~80A
BH-0.66 | Current Transformers

- For busbar and cable
- To be used in combination, with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 660 V
- Secondary current Isn: 5A
- Standards: IEC 60044-1

BH(SDH)-0.66 | Current Transformers

- For busbar
- To be used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 660 V
- Secondary current Isn: 5A
- Standards: IEC 60044-1

BH-0.66 | Current Transformers

- For busbar and cable
- To be used in combination, with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 660 V
- Secondary current Isn: 5A
- Standards: IEC 60044-1
RCT Current Transformers

- To be used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating $U_{e}$: 660 V
- Secondary current $I_{sn}$: 5A
- Standards: IEC 60044-1

MES Current Transformers

- To be used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating $U_{e}$: 660 V
- Secondary current $I_{sn}$: 5A
- Instrument security factor (FS): 10
- Standards: IEC 60044-1

JDZ-1 Voltage Transformers

- Adopting the value of voltage on the primary to the characteristics of metering or protection devices by supplying a secondary voltage that is proportional and lower;
- Used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating $U_{e}$: 1.14kV
- Standards: IEC 60044-2

JDG4-0.5 Voltage Transformers

- Adopting the value of voltage on the primary to the characteristics of metering or protection devices by supplying a secondary voltage that is proportional and lower;
- Used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating $U_{e}$: 0.5kV
- Standards: IEC 60044-2
HH15-QA/QP Switch Disconnector

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Standard: IEC/EN 60947-3
- Rated current: 125~3150A

NH40 Switch Disconnector

- NH40 series switch-disconnector is applicable for AC 50Hz, rated voltage AC 690V and below, DC 440V and below, rated current up to 3150A.
- It can be applied for manually infrequent making & breaking and disconnecting of the circuit. Products with Ith under 1000A can be used as load break switch. They provide safety isolation for any Low voltage circuit.
- Rated current: 16~630A

HH15-QSA Fuse-switch Disconnector

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Rated current: 63~630A
NHR17 Fuse-switch Disconnector

- NHR17 series fuse-switch disconnector is a new product developed by our company.
- Rated insulation voltage up to 800V, rated operational voltage up to 690V.
- Rated operational current up to 630A, rated frequency 50Hz, in the distribution circuit and motor circuit which has high short-circuit current as the power switch, isolating switch, emergency switch as well as circuit protection, but normally it is not used to make and break a single motor directly.
- Rated current: 160~630A

NHR40 Fuse-switch Disconnector

- NHR40 series switch-disconnector with fuse is applicable in the circuit of AC50Hz, rated voltage AC690V and below, DC440V and below, rated current up to 630A.
- NHR40 series are infrequently manually operated multipolar fuse combination switches.
- They break or switch off on load and provide safely isolation and protection against overcurrent for any voltage electrical circuit.
- Rated current: 160~630A

NHRT40 Vertical Fuse-switch Disconnector

- NHRT40 series are infrequently manually operated multipolar fuse combination switches.
- They break or switch off on load and provide safely isolation and protection against overcurrent for any voltage electrical circuit.
- Rated current: 160~630A

NZ7 Automatic Transfer Switching Equipment

- Applicable to the three-phase four-line two-circuit power supply network with an AC power frequency of 50Hz, rated operational voltage of AC400V, and rated operational current of up to 630A, the NZ7 series automatic transfer switching equipment can automatically connect one or several loads from one power source to another to ensure the normal power supply of the load circuit.
- This product is applicable to the important places such as industrial, commercial, and storied buildings, and residential houses.
- Certificate: KEMA
- Execution standard: IEC/EN 60947-6-1
HH15/QAS/QPS/QSS Changeover Switch

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Rated current: 125~3150A

NH40S Changeover Switch

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Rated current: 160~630A

NH40SZ Automatic Changeover Switch

- NH40SZ automatic changeover switch disconnector can realize automatic and manual changeover between normal and back up power supply power, and stop power supplying to load when changeover process of power supply is carried out.
- The switch is applicable for two circuits power supply and in the condition which requires high quality power supply.
- Standard: IEC/EN 60947-3. 60947-6
- Rated current: 16~1600A
NRZ28-20 Fuses for Protecting Solar Photovoltaic System

- Standards compliant: GB / T 13539.6, IEC60269-6
- Rated voltage not exceeding DC1000V
- Rated current not exceeding 20A
- Rated short-circuit capacity not exceeding 20kA
- Breaking range and use category: gPV type
- CQC, TUV, CE and other domestic and international certification have been obtained.

NRZ36 DC Fuse Protector

- Standards compliant: GB / T 13539.4
- Rated voltage: to DC1200V
- Rated current range: 10A ~ 400A
- Rated breaking capacity: 50kA
- Breaking range and use category: aR type
- Mainly used for fast fuses under DC fast protection of main return circuit and AC traction device and variable frequency speed regulation system. (Do DC fast protection for rectifier, thyristor, soft starter, DC bus, AC and DC speed control system)

CRT36-00 DC Fuse Protector

- Standards compliant: GB 13539.1, GB / T 13539.4
- Rated voltage: to DC80V
- Rated current range: 2A ~ 600A complete current specifications
- Rated breaking capacity: 25kA
- Breaking range and use category: gS type
- RX1 signal fuses can be equipped with to achieve remote function.
- Fuses special for communications industry have obtained CCC certificate and TUV certification.

NRT36D Double-indicator Fuse Protector

- Standards compliant: IEC60269-4
- Rated voltage: 500V
- Rated current range: 16~500A complete current specifications
- Breaking range and use category: gG type
- Rated breaking capacity: up to 120kA
- The double fault indicator guarantees the system faults can be detected accurately in time without the help of any additional instrument.
- Mainly used for electrical circuit overload and short circuit protection
NRT36 Knife Contact Fuse Protector

- Standards compliant: GB / T 13539.2
- Rated voltage: 690V
- Rated current range: 2A ~ 160A
- Rated breaking capacity: 120kA
- Breaking range and use category: gG type
- RX1 signal fuses can be equipped with to achieve remote function.
- Fuses special for communications industry have obtained CCC certificate and TUV certification.

NRT28 Cylindrical Contact Caps Fuse Holder

- Standards compliant: IEC60269-2
- Rated voltage: 500V
- Rated current range: 2A ~ 63A
- Rated breaking capacity: 50kA
- Breaking range and use category: gG type
- Support member of the fuse can be equipped with lamp (X), and the instruction is more clear
- Patented appearance, modular design, practical and good-looking
- Rail mounting, easy and fast
- Mainly used for electrical circuit overload and short circuit protection
- Warm reminder: this type of fuse is not recommended for capacitor cabinet; it is recommended to use RT36 type for replacement.

RT28 Cylindrical Contact Caps Fuse Protector

- Standards compliant: GB / T 13539.2, IEC60269-2
- Rated voltage: 500V
- Rated current range: 2A ~ 125A
- Rated breaking capacity: 50kA
- Breaking range and use category: gG type
- Support member of the fuse can be equipped with lamp (X), and the instruction is more clear
- Patented appearance, modular design, practical and good-looking
- Rail mounting, easy and fast
- Mainly used for electrical circuit overload and short circuit protection
- Warm reminder: this type of fuse is not recommended for capacitor cabinet; it is recommended to use RT36 type for replacement.

RT29 Fuse with Cylindrical Cap

- Standards compliant: GB / T 13539.2, IEC 60269-2
- Rated voltage: AC500V
- Rated current range: 2A ~ 125A
- Rated breaking capacity: 50kA
- Breaking range and use category: gG type
- Fuse link of the impactor is equipped with, and it has the phase loss protection function as the motor.
- Mainly used for electrical circuit overload and short circuit protection
- Warm reminder: this type of fuse is not recommended for capacitor cabinet; it is recommended to use RT36 type for replacement.
RT36 Knife Contact Fuse Protector

- Standards compliant: GB / T 13539.2, IEC60269-2
- Rated voltage: to AC690V
- Rated current range: 4A ~ 1250A complete current specifications
- Rated breaking capacity: up to 120kA safer
- Breaking range and use category: gG type
- Open structure, good heat dissipation condition
- Self design, use more confident with CHINT special models
- RX1 signal fuses can be equipped with to achieve remote function.
- Mainly used for electrical circuit overload and short circuit protection

RS1 Semiconductor Device Fuse Protector for Protection

- Standards compliant: GB 13539, IEC 60269
- Rated voltage: 500V, 690V
- Rated current range: 0.5~100A complete current specifications
- Breaking range and use category: aR type
- Mainly used for semiconductor device and short-circuit protection of supposing device with rated voltage not more than AC690V/50Hz, rated current not more than 100A

SAK Terminal Blocks

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V, DC 440V
- Rated cross-sectional area: 2.5mm² ~ 70mm²
- 10 pieces of conventional terminal are assembled into 1 strip
- TH35-type guide rail can be used for installation

JXB Terminal Blocks

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V, DC 440V
- Rated cross-sectional area: 2.5mm² ~ 70mm²
- 10 pieces of conventional terminal are assembled into 1 strip
- TH35-type guide rail can be used for installation
**JCUK Terminal Blocks**

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V, DC 440V
- Rated cross-sectional area: 2.5mm$^2$–150mm$^2$
- Built-in wiring mode, with finger protection function
- Use the high strength engineering plastic, safe and environmental protection
- TH35-type guide rail can be used for installation

**JH1 Terminal Blocks**

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V, DC 440V
- Rated cross-sectional area: 1.5mm$^2$–35mm$^2$
- 10 pieces of conventional terminal are assembled into 1 strip
- G32-type guide rail can be used for installation

**JH5 Terminal Blocks**

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V, DC 440V
- Rated cross-sectional area: 1.5mm$^2$–25mm$^2$
- 10 pieces of conventional terminal are assembled into 1 strip
- G32-type guide rail can be used for installation
JH10 Terminal Blocks

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V, DC 440V
- Rated working current: 20A
- Built-in wiring mode, with finger protection function
- Use the high strength engineering plastic, safe and environmental protection
- G32-type guide rail can be used for installation

NJD Terminal Blocks

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V
- Rated working current: 10A-100A
- 10 pieces of conventional terminal are assembled into 1 strip
- G-type guide rail can be used for installation

TK Terminal Blocks

- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 690V
- Rated working current: 15A-60A
- Built-in wiring mode, with finger protection function
- Use the high strength engineering plastic, safe and environmental protection
- G32-type guide rail can be used for installation
Low Voltage Brief Catalogue
Terminal Blocks

TB Terminal Blocks
- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 600V
- Rated working current: 15A-100A
- Conventional terminals become strips separately
- Screws are used for fixed installation

TC Terminal Blocks
- Standards compliant: GB/T 14048.7, IEC 60947-7-1
- Rated working voltage: AC 600V
- Rated working current: 60A-600A
- Conventional terminals become strips separately
- Screws are used for fixed installation

TH35-7.5(C45) Rail
CZ0 DC Contactor

- Standards compliant: GB 14048.4, IEC 60947-4-1
- Use category: DC-1, DC-3, DC-5
- Rated voltage: DC 220V
- Rated current: DC-1, DC-3, DC-5
  - 40A, 100A, 150A, 250A, 400A, 600A
- Good dynamic stability and thermal stability
- For remote making and breaking the DC circuit, can control DC motor starting

NCZ1 DC Contactor

- Standards compliant: GB 14048.4, IEC 60947-4-1
- Use category: DC-1
- Rated voltage: DC 48V
- Rated current: DC 200A, 400A
- Can be installed in the standard TH35-7.5 rails, removal is very convenient
- Used for frequency converter and soft starter

NF1 Supported Switch

- Standards compliant: GB 14048.3, IEC 60947-3
- Use category: AC-22A, AC-23A
- Rated voltage: AC-22A, AC-23A 690V
- Rated current: AC-22A 32A, AC-23A 25A
- Stored energy operation, rapid connection / breaking, various installation modes, simple and practical built-in wiring, safe and reliable, used for three-phase motor control, emergency opening and closing of the machine tool
LW8 Universal Change-over Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15, DC-13
- Rated voltage: AC-15, AC 380V
  DC-13, DC 220V
- Rated current: AC-15 2.6A, DC-13 0.27A (LW8-10)
- Mechanical life: 30 × 10^4
- Electrical life: AC-15, 10 × 10^4
- Strong conversion capability, high operating frequency, strong making and breaking capacities etc.
- Used to convert electrical control circuit (electromagnetic coil, servo motor, etc.)

LW15-16 Universal Change-over Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15, DC-13
- Rated voltage: AC-15, AC 380V
  DC-13, DC 220V
- Rated current: AC-15 2.6A, DC-13 0.27A
- Mechanical life: 60 × 10^4
- Electrical life: 20 × 10^4
- Wide application, stable making and breaking capacities etc.
- Used to convert electrical control circuit (also for small capacity three-phase cage induction motor starting, reversible conversion, transmission etc.)

LW32 Universal Change-over Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15, DC-13
- Rated voltage: AC-15, AC 380V
  DC-13, DC 220V
- Rated current: AC-15 2.6A, DC-13 0.27A
- Mechanical life: 60 × 10^4
- Electrical life: AC-15, 20 × 10^4
- Various types, wide range of uses
- Used to convert electrical control circuit (can also directly control small capacity motor starting, reversible conversion, transmission etc.)
HZ10 Combination Switch

- Standards compliant: GB 14048.3, IEC 60947-3
- Use category: AC-22A, AC-3, DC-21A
- Rated voltage: AC-22A 380V, DC-21A 220V
- Mechanical life: $2 \times 10^4$
- Electrical life: $1 \times 10^4$
- Widely used in the field of motor, with good electric stability and thermal stability, etc.
- Infrequently used for manual making and breaking of the motor circuits.

KDH Electric Welding Machine Switch

- Standards compliant: GB 14048.3, IEC 60947-3
- Use category: AC-22B
- Rated voltage: AC-22B 380V
- Rated current: AC-22B 160A
- Mechanical life: $2 \times 10^5$
- Electrical life: $1 \times 10^5$
- Many coil connections, large regulation range, strong breaking capacity etc.
- Used to change the number of turns or the connection method of the coil of electric welding machine to expand the range of current regulation.
YBLX-ME/8000 Travel Switch
- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC-15 380V DC-13 220V
- Rated current: AC-15 0.8A DC-13 0.16A
- Conventional thermal current: 5A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Compact size, quick action, diverse operating methods
- Used for the automatic control of machine tool, limiting action of motion mechanism and controlling stroke or program occasion

YBLX-WL Travel Switch
- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC-15 380V DC-13 220V
- Rated current: AC-15 0.79A DC-13 0.15A
- Conventional thermal current: 5A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- A variety of operating and installation methods meet the requirements of various occasions
- Used for the automatic control of machine tool, limiting action of motion mechanism and controlling stroke or program occasion

YBLX-CK Travel Switch
- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Protection level: IP52
- Rated working voltage: AC 380V DC220V
- Rated control current: AC 0.8A DC 0.16A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Conventional thermal current: 5A
- Used for the automatic control of machine tool, limiting action of motion mechanism and controlling stroke or program occasion
YBLX-P1 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC-15 380V, DC-13 220V
- Rated current: AC-15 5A, DC-13 0.15A
- Conventional thermal current: 5A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Compact size, quick action
- Used for the automatic control of machine tool, limiting action of motion mechanism and controlling stroke or program occasion

YBLX-K1 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC-15 380V, DC-13 220V
- Rated current: AC-15 5A, DC-13 0.15A
- Conventional thermal current: 10A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Used for the automatic control of machine tool, limiting action of motion mechanism and controlling stroke or program occasion

YBLX-K3 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC-15 380V, DC-13 220V
- Rated current: AC-15 5A, DC-13 0.15A
- Conventional thermal current: 10A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Used for the automatic control of machine tool, limiting action of motion mechanism and controlling stroke or program occasion
YBLX-2 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15
- Rated voltage: AC 380V
- Rated current: AC 2A
- Conventional thermal current: 10A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Automatic and manual reset modes
- Used to control the stroke of motion mechanism of the large planner and to transform the movement direction occasions

YBLX-10 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V DC 220V
- Rated current: AC 0.79A DC 0.091A
- Conventional thermal current: 10A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Sealing function available, meets the demand of water-proof occasions
- Used to control the stroke occasion of translation mechanism of the lifting equipment

YBLX-19 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V DC 220V
- Rated current: AC 0.79A DC 0.1A
- Conventional thermal current: 5A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- A variety of operating methods meet the requirements of various occasions
- Used for the automatic control of machine tool, limiting action of motion mechanism and controlling stroke or program occasion
YBLX-22 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V, DC 220V
- Rated current: AC 20A, DC 0.2A
- Conventional thermal current: 20A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^5$
- Using an instantaneous contact structure, large control capacity
- Used to control the stroke occasion of translation mechanism of the lifting equipment

YBLX-JW2 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC-15 380V, DC-13 220V
- Rated current: AC-15 3A, DC-13 0.42A
- Conventional thermal current: 3A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^5$
- A variety of operating and installation methods meet the requirements of various occasions
- Used for the automatic control of textile machinery, limiting action of motion mechanism and controlling stroke or program occasion

YBLX-KLT2 Travel Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15
- Rated voltage: AC 380V
- Rated current: AC 2A
- Conventional thermal current: 10A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^5$
- A protection device to stop the belt conveyor in case of on-site emergency
YBLT-2, YBLT-3, YBLT-4 Foot Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V DC 220V
- Rated current: AC 0.79A DC 0.14A
- Conventional thermal current: 3A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Used to control the machine tool electrical, medical equipment, etc.

YBLT-EKW/5A/B Foot Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V DC 220V
- Rated current: AC 0.8A DC 0.16A
- Conventional thermal current: 5A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Used to control the machine tool electrical, medical equipment, etc.

YBLT-FS/1 Foot Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V DC 220V
- Rated current: AC 0.79A DC 0.14A
- Conventional thermal current: 3A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Used to control the machine tool electrical, medical equipment, etc.

YBLT-FS/201 Foot Switch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V DC 220V
- Rated current: AC 0.8A DC 0.16A
- Conventional thermal current: 5A
- Mechanical life: $60 \times 10^4$
- Electrical life: $30 \times 10^4$
- Used to control the machine tool electrical, medical equipment, etc.
YBLXW-5/11(Z15G) Microswitch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V, DC 220V
- Rated current: AC 0.79A, DC 0.14A
- Protection level: IP52
- Mechanical life: 100 × 10^4
- Electrical life: 30×10^4
- Product features: complete model, superior performance, high performance price ratio, wide range of application, etc.
- Applications: mainly used for the stroke control, limit protection and interlocking of the mechanical equipment of machinery, textile, light industry, electronic instrument

YBLXW-6/11 Microswitch

- Standards compliant: GB 14048.5, IEC 60947-5-1
- Use category: AC-15 DC-13
- Rated voltage: AC 380V, DC 220V
- Rated current: AC 0.79A, DC 0.14A
- Protection level: IP52
- Mechanical life: 100 × 10^4
- Electrical life: 30×10^4
- Operating frequency: 40 times / min
- Product features: flexible action, high reliability, wide range of application
- Applications: mechanical automatic control, limiting movement, action or procedure control of transmission mechanism

JD, JZT, ZLK, ZTK Electromagnetic Speed-adjustable Motor Controller

- JD, JZT, ZLK, ZTK electromagnetic speed-adjustable motor controllers are products designed jointly (uniformly) nationwide by the former Ministry of Machinery Industry and used for the speed control of electromagnetic speed-adjustable motor (slip motor) to achieve constant torque stepless speed regulation. This controller applies only to slip motor, not to general motor.

ZLK-10, 11,12 Slip Clutch Control Devices

- ZLK-10, 11,12 slip clutch control devices are the main components of the automatic control of the electromagnetic speed-adjustable asynchronous motor. It provides corresponding excitation current to the slip motor according to the speed command signals and converts the speed of slip motor to the voltage signals via the tachometer generator and feeds back to the regulator of the device itself, in order to achieve the purpose of speed stability. Changing the speed command signal can realize the stepless speed regulation of motor. It is a small box made of a steel plate, meeting the dustproof level of IPSX, inside which there are integrated circuit voltage regulator, speed regulator and controllable silicon excitation device of phase shift trigger. The bottom device of the control box is equipped with a string line box and 15-pin external lead wire connector assembly. This controller applies only to slip motor, not to general motor.
Specifications and technical data are subject to change without notice.
Please contact us to confirm relevant information on ordering.

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