Medium voltage distribution components Overview of overhead distribution cutouts, overhead disconnect switches, and capacitor fuses

### **Overhead Distribution Cutouts**

| Product     | Description   | Application  | Options   |
|-------------|---|--|---|
| Type ICX    | <ul> <li>Distribution cutout for use on overhead distribution system to provide overcurrent protection</li> <li>Fusetube interchangeable with S&amp;C Type XS, Cooper Type L, and Hubbell Chance Type C cutouts</li> <li>15 kV – 38 kV, up to 20 kAIC</li> </ul>  | <ul> <li>Provides visible indication of fuse<br/>operation and a visible break<br/>sectionalizing point for maintenance<br/>personnel</li> <li>Can function as a loadbreak switch<br/>when used in conjunction with a<br/>portable loadbreak tool</li> </ul>   | <ul> <li>Porcelain, silicone rubber<br/>(110 -180 kV BIL), or polymer<br/>concrete insulator (110 and<br/>125 kV BIL)</li> <li>Stainless steel seacoast design</li> <li>Cutout/arrester combination</li> <li>100 and 200 A fuse holders<br/>available</li> <li>300 A disconnect blade</li> <li>Kickout spring (100 A only)</li> </ul> |
| Type LBU-II | <ul> <li>Distribution cutout for use on overhead distribution system to provide overcurrent protection</li> <li>Loadbreak interruption is accomplished by means of a self-contained loadbreak arc chute, which confines the arc and provides a deionizing action</li> <li>15, 27, or 20/34.5 kV, up to 20 kAIC</li> </ul> | <ul> <li>Provides overcurrent protection for<br/>capacitor banks and gives visible<br/>indication that the equipment is<br/>energized</li> <li>Used for switching the magnetizing<br/>currents of single and three-phase<br/>transformer banks and switching<br/>capacitive currents associated with<br/>underground feeder cable at the<br/>riser pole</li> </ul> | <ul> <li>Porcelain, silicone rubber<br/>(110 - 150 kV BIL), or polymer<br/>concrete insulator (110 and<br/>125 kV BIL)</li> <li>Cutout/arrester combination</li> <li>100 and 200 A fuse holders<br/>available</li> <li>300 A disconnect blade</li> </ul>  |
| Type NCX    | <ul> <li>Distribution cutout for overcurrent protection on overhead distribution systems</li> <li>15 kV – 38 kV, up to 20 kAIC</li> </ul>   | <ul> <li>Provides visible indication of fuse<br/>operation and a visible break<br/>sectionalizing point for maintenance<br/>personnel</li> <li>Can function as a loadbreak switch<br/>when used in conjunction with a<br/>portable loadbreak tool</li> </ul>   | <ul> <li>Porcelain, silicone rubber<br/>(110 - 200 kV BIL), or polymer<br/>concrete insulator (110 and 125<br/>kV BIL)</li> <li>Cutout/arrester combination</li> <li>100 and 200 A fuse holders<br/>available</li> <li>300 A disconnect blade</li> </ul>  |
|             | <ul> <li>Enclosed cutout in porcelain or<br/>polymer concrete housing</li> <li>Designed for either dropout or<br/>non-dropout operation</li> <li>For outdoor use</li> <li>8.3 kV, up to 8 kAIC</li> <li>Provides no exposed live parts</li> </ul>   | <ul> <li>Used in replacement applications in<br/>close spaces where there are increased<br/>safety needs</li> </ul>  | <ul> <li>100 A fuse holder</li> <li>200 A disconnect blade</li> </ul>   |

Type EU





## **Overhead Disconnect Switches**

| Product   | Description   | Application  | Options  |
|---|---|--|--|
|   | <ul> <li>Single insulator disconnect with a double blade door and two 2-hole extended NEMA pad terminals</li> <li>15 kV - 38 kV, 600 or 900 A continuous load with a 40 kA momentary rating</li> <li>65 kA peak and 25 kA short time current withstand</li> </ul>   | <ul> <li>Single-phase disconnect on overhead distribution feeders and in outdoor distribution substations</li> <li>Can be mounted like a standard cutout</li> <li>Loadbreak hooks allow for operation with a portable loadbreak tool</li> </ul>                                | <ul> <li>Porcelain, polymer concrete, or silicone rubber insulator (110 - 170 kV BIL)</li> <li>Mounting kit available</li> <li>90° or 160° blade stop available</li> </ul>         |
| Type SID  |   |  |  |
| A CONTRACT OF A | <ul> <li>Loadbreak single insulator disconnect<br/>with self-contained loadbreak<br/>capabilities, a double blade door, and<br/>two 2-hole NEMA pad terminals</li> <li>15.5 kV - 15/27 kV, 600 A continuous<br/>and loadbreak with a 40 kA momentary<br/>rating</li> <li>65 kA peak and 25 kA short time<br/>current withstand</li> </ul> | <ul> <li>Single-phase disconnect on overhead distribution feeders and in outdoor distribution substations</li> <li>Self-contained loadbreak enables lineman to interrupt load current with a hookstick</li> <li>Can be mounted like a standard cutout</li> </ul>               | <ul> <li>Porcelain, polymer concrete, or<br/>silicone rubber insulator<br/>(110 - 170 kV BIL)</li> <li>Mounting kit available</li> <li>90° or 160° blade stop available</li> </ul> |
| Type LSID   |   |  |  |
|   | <ul> <li>Double insulator single-phase<br/>disconnect switch</li> <li>15 kV - 38 kV, 600 or 900 A continuous<br/>loads with a 40 kA momentary rating</li> <li>65 kA peak and 25 kA short time<br/>current withstand</li> </ul>  | <ul> <li>Used for sectionalizing or isolating equipment on electrical distribution systems up to 38 kV</li> <li>Can be mounted vertical or underhung, or on a single or double crossarm</li> <li>Loadbreak hooks allow for operation with a portable loadbreak tool</li> </ul> | <ul> <li>Porcelain or silicone rubber<br/>insulator (110 - 150 kV BIL)</li> <li>90° or 160° blade stop available</li> <li>Mounting kit available</li> </ul>                        |
| Type DCD  |   |  |  |
|   | <ul> <li>Single-phase by-pass disconnect<br/>switch</li> <li>15 kV - 38 kV, 600 or 900 A continuous<br/>loads with a 40 kA momentary rating</li> <li>65 kA peak and 25 kA short time<br/>current withstand</li> </ul>   | <ul> <li>Provides a means for bypassing and disconnecting reclosers, allowing maintenance on equipment without service interruption</li> <li>Can be mounted in the following configurations: vertical or underhung, pole-mounted, or single or double crossarm</li> </ul>      | <ul> <li>Porcelain or silicone rubber<br/>insulator (110 - 150 kV BIL)</li> <li>90° or 160° blade stop available</li> <li>Mounting kit available</li> </ul>                        |
| Type RBD  |   |  |  |
| Type ITD  | <ul> <li>Single-phase, inline tension disconnect<br/>switch with silicone insulator</li> <li>Maximum voltage ratings:<br/>27 kV (150 kV BIL) or 38 kV (200 kV BIL)</li> <li>Continuous current rating - 600 A or<br/>900 A</li> <li>65 kA peak and 25 kA short time current<br/>withstand</li> </ul>                                      | <ul> <li>Used for manual switching of parallel<br/>or de-energized circuits on overhead<br/>distribution lines rated up to 38 kV</li> <li>Loadbreak hooks allow for operation<br/>with a portable loadbreak tool</li> </ul>  | <ul> <li>90° or 160° stop blade available</li> </ul>   |

# **Capacitor Fuses**

| Product  | Description  | Application   |
|----------|--|---|
|          | <ul> <li>Indoor, 1.2 - 4.3 kV current limiting</li> <li>1200, 1800, and 3000 V ratings are current limiting, indicating, and non-disconnecting</li> <li>2500 V and 4.3/2.5 kV ratings are current limiting, non-indicating, and non-disconnecting</li> </ul> | <ul> <li>Individual unit fusing of low voltage single and three-phase<br/>capacitors in metal enclosed equipment</li> </ul>   |
| Type CLC |  |   |
|          | <ul> <li>Indoor, 2.8 - 23 kV current limiting and expulsion</li> <li>Rated current: 6 - 65</li> </ul>  | <ul> <li>Two part design:</li> <li>High current section interrupts high 60 Hz fault currents and/or high frequency discharge current from parallel capacitors</li> <li>Low voltage sections consist of a standard NEMA type K fuselink mounted in a fiber tube</li> </ul>   |
| Type CIL |  |   |
|          | <ul> <li>Outdoor application</li> <li>9.7 - 26.2 kV expulsion</li> <li>Rated current: 6 - 100</li> </ul>   | <ul> <li>Individual capacitor unit fusing in outdoor capacitor equipment</li> <li>Operates in all ungrounded wye applications and in all<br/>grounded wye applications when capacitor units are connected<br/>in two or more series groups. In grounded wye applications<br/>with one series group and the available fault current does not<br/>exceed values listed in Technical Selection Guide.</li> </ul> |
| iype oxi | <ul> <li>Outdoor application</li> </ul>  | Two part design:  |
|          | <ul> <li>2.8 – 23 kV current limiting and expulsion</li> <li>Rated current: 6 - 92</li> </ul>  | <ul> <li>High current section interrupts high 60 Hz fault currents and/or<br/>high frequency discharge current from parallel capacitors</li> <li>Low voltage sections consist of a standard NEMA type K<br/>fuselink mounted in a fiber tube</li> </ul>   |
| Type COL |  |   |
|          | <ul> <li>Outdoor application</li> <li>2.5 - 25 kV current limiting and expulsion</li> <li>Rated current: 6 - 33</li> </ul>   | <ul> <li>Very high energy capability individual capacitor fuse used in<br/>outdoor banks with many parallel capacitor units</li> <li>Do not use on single series group grounded wye or single<br/>group delta connected capacitor banks</li> </ul>  |

Type CLXP

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