



### Description

The S200 Series miniature circuit breaker offers a compact solution for protection requirements. The S200 devices are UL tested current limiting and DIN rail mounted. The S200 is available with application-specific trip characteristics to provide maximum circuit protection. The breakers offer thermal-magnetic trip protection according to B, C, D, K and Z characteristics.

For the worldwide market, the breakers carry UL, CSA, IEC, CE and many other agency approvals and certifications.

### Features

- Current limiting
- Fast breaking time (2.3 – 2.5 ms)
- Bus connection system
- Wide range of accessories
- Available with variable depth handle mechanism
- CE certified and marked
- DIN rail mounting
- Finger safe terminals
- Multi-function terminals
- Suitable for reverse feed
- UL1077 Listed-supplemental protective device. UL file # E76126

|                             | S200   | S200P                            | S280UC                         | S290                           |
|-----------------------------|--|----------------------------------|--------------------------------|--------------------------------|
| <b>Amperage</b>             | 0.5 – 63 A   | 0.2 – 63 A                       | 0.2 – 63 A                     | 80 - 125 A                     |
| <b>Voltage</b>              | 480Y/277 VAC   | 480Y/277 VAC                     | 500 VDC                        | 480Y/277 VAC                   |
| <b>Poles</b>                | 1, 2, 3, 4   | 1, 2, 3, 4                       | 1, 2, 3                        | 1, 2, 3, 4                     |
| <b>Trip characteristics</b> | B, C, D, K   | K, Z                             | K, Z                           | C                              |
| <b>Interrupting ratings</b> | 6 kA: IEC 60898<br>6 kA: UL 1077<br>6 kA: CSA C22.2 #235 | 10kA: IEC 947-2<br>10kA: UL 1077 | 10kA: IEC 947<br>10kA: UL 1077 | 6 kA: IEC 898<br>6 kA: UL 1077 |
| <b>Auxiliary contacts</b>   | Yes  | Yes                              | Yes                            | Yes                            |
| <b>Bell alarm</b>           | Yes  | Yes                              | Yes                            | Yes                            |
| <b>Shunt trip</b>           | Yes  | Yes                              | Yes                            | Yes                            |
| <b>Undervoltage release</b> | Yes  | Yes                              | Yes                            | No                             |
| <b>Bus bar</b>              | Yes  | Yes                              | Yes                            | No                             |

## S200-B, 480Y/277 VAC Supplemental protectors UL 1077, CSA 22.2

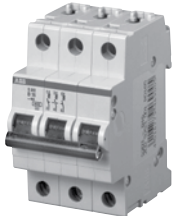
# B



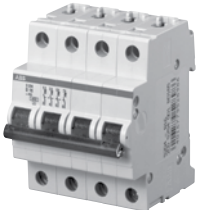
S201-B



S202-B



S203-B



S204-B



S201-BNA



S203-BNA

| No. of poles | Rated current | Catalog number | No. of poles | Rated current | Catalog number |
|--------------|---------------|----------------|--------------|---------------|----------------|
| 1            | 6             | S201-B6        | 3            | 6             | S203-B6        |
|              | 10            | S201-B10       |              | 10            | S203-B10       |
|              | 13            | S201-B13       |              | 13            | S203-B13       |
|              | 16            | S201-B16       |              | 16            | S203-B16       |
|              | 20            | S201-B20       |              | 20            | S203-B20       |
|              | 25            | S201-B25       |              | 25            | S203-B25       |
|              | 32            | S201-B32       |              | 32            | S203-B32       |
|              | 40            | S201-B40       |              | 40            | S203-B40       |
|              | 50            | S201-B50       |              | 50            | S203-B50       |
|              | 63            | S201-B63       |              | 63            | S203-B63       |
| 1 + NA       | 6             | S201-B6NA      | 3 + NA       | 6             | S203-B6NA      |
|              | 10            | S201-B10NA     |              | 10            | S203-B10NA     |
|              | 13            | S201-B13NA     |              | 13            | S203-B13NA     |
|              | 16            | S201-B16NA     |              | 16            | S203-B16NA     |
|              | 20            | S201-B20NA     |              | 20            | S203-B20NA     |
|              | 25            | S201-B25NA     |              | 25            | S203-B25NA     |
|              | 32            | S201-B32NA     |              | 32            | S203-B32NA     |
|              | 40            | S201-B40NA     |              | 40            | S203-B40NA     |
|              | 50            | S201-B50NA     |              | 50            | S203-B50NA     |
|              | 63            | S201-B63NA     |              | 63            | S203-B63NA     |
| 2            | 6             | S202-B6        | 4            | 6             | S204-B6        |
|              | 10            | S202-B10       |              | 10            | S204-B10       |
|              | 13            | S202-B13       |              | 13            | S204-B13       |
|              | 16            | S202-B16       |              | 16            | S204-B16       |
|              | 20            | S202-B20       |              | 20            | S204-B20       |
|              | 25            | S202-B25       |              | 25            | S204-B25       |
|              | 32            | S202-B32       |              | 32            | S204-B32       |
|              | 40            | S202-B40       |              | 40            | S204-B40       |
|              | 50            | S202-B50       |              | 50            | S204-B50       |
|              | 63            | S202-B63       |              | 63            | S204-B63       |

### Tripping characteristic B

UL 1077  
480Y/277VAC  
6 kA

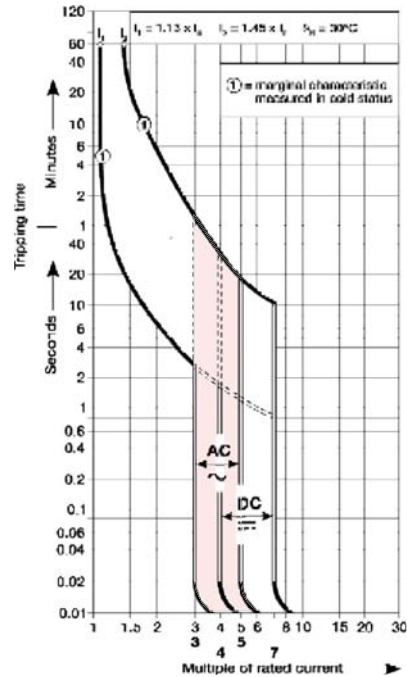
#### Resistive loads

- B Curve
- Designed for use in cable protection applications
- Example: control circuits, lighting

### Accessories & technical data

Accessories – See page 15.26

Technical data – See page 15.76 - 15.82



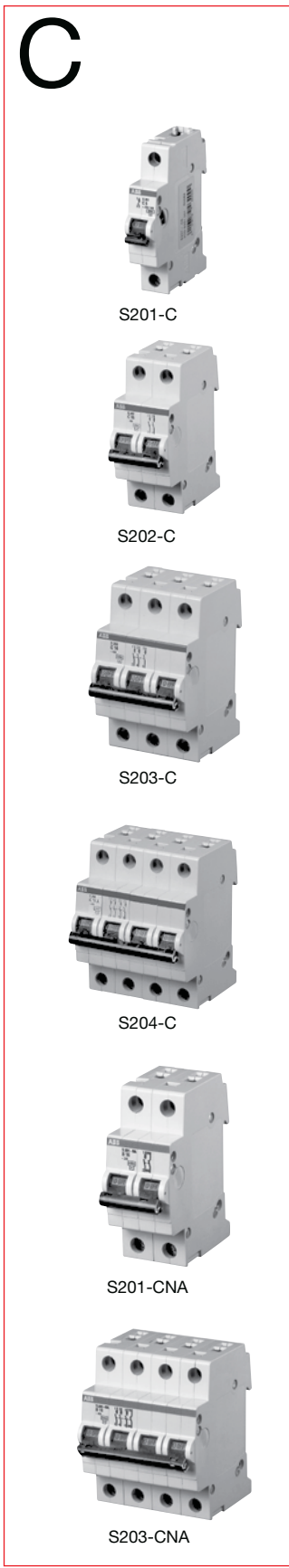
Note: This breaker for AC use only. Switching neutral is noted by "NA" in the catalog number.

# S200-C, 480Y/277 VAC

## Supplemental protectors

### UL 1077, CSA 22.2

Miniature  
circuit breakers



| No. of poles | Rated current | Catalog number | No. of poles | Rated current | Catalog number |
|--------------|---------------|----------------|--------------|---------------|----------------|
| 1            | 0.5           | S201-C0.5      | 3            | 0.5           | S203-C0.5      |
|              | 1             | S201-C1        |              | 1             | S203-C1        |
|              | 1.6           | S201-C1.6      |              | 1.6           | S203-C1.6      |
|              | 2             | S201-C2        |              | 2             | S203-C2        |
|              | 3             | S201-C3        |              | 3             | S203-C3        |
|              | 4             | S201-C4        |              | 4             | S203-C4        |
|              | 6             | S201-C6        |              | 6             | S203-C6        |
|              | 8             | S201-C8        |              | 8             | S203-C8        |
|              | 10            | S201-C10       |              | 10            | S203-C10       |
|              | 13            | S201-C13       |              | 13            | S203-C13       |
|              | 16            | S201-C16       |              | 16            | S203-C16       |
|              | 20            | S201-C20       |              | 20            | S203-C20       |
|              | 25            | S201-C25       |              | 25            | S203-C25       |
|              | 32            | S201-C32       |              | 32            | S203-C32       |
| 40           | S201-C40      | 40             | S203-C40     |               |                |
| 50           | S201-C50      | 50             | S203-C50     |               |                |
| 63           | S201-C63      | 63             | S203-C63     |               |                |
| 1 + NA       | 0.5           | S201-C0.5NA    | 3 + NA       | 0.5           | S203-C0.5NA    |
|              | 1             | S201-C1NA      |              | 1             | S203-C1NA      |
|              | 1.6           | S201-C1.6NA    |              | 1.6           | S203-C1.6NA    |
|              | 2             | S201-C2NA      |              | 2             | S203-C2NA      |
|              | 3             | S201-C3NA      |              | 3             | S203-C3NA      |
|              | 4             | S201-C4NA      |              | 4             | S203-C4NA      |
|              | 6             | S201-C6NA      |              | 6             | S203-C6NA      |
|              | 8             | S201-C8NA      |              | 8             | S203-C8NA      |
|              | 10            | S201-C10NA     |              | 10            | S203-C10NA     |
|              | 13            | S201-C13NA     |              | 13            | S203-C13NA     |
|              | 16            | S201-C16NA     |              | 16            | S203-C16NA     |
|              | 20            | S201-C20NA     |              | 20            | S203-C20NA     |
|              | 25            | S201-C25NA     |              | 25            | S203-C25NA     |
|              | 32            | S201-C32NA     |              | 32            | S203-C32NA     |
| 40           | S201-C40NA    | 40             | S203-C40NA   |               |                |
| 50           | S201-C50NA    | 50             | S203-C50NA   |               |                |
| 63           | S201-C63NA    | 63             | S203-C63NA   |               |                |
| 2            | 0.5           | S202-C0.5      | 4            | 0.5           | S204-C0.5      |
|              | 1             | S202-C1        |              | 1             | S204-C1        |
|              | 1.6           | S202-C1.6      |              | 1.6           | S204-C1.6      |
|              | 2             | S202-C2        |              | 2             | S204-C2        |
|              | 3             | S202-C3        |              | 3             | S204-C3        |
|              | 4             | S202-C4        |              | 4             | S204-C4        |
|              | 6             | S202-C6        |              | 6             | S204-C6        |
|              | 8             | S202-C8        |              | 8             | S204-C8        |
|              | 10            | S202-C10       |              | 10            | S204-C10       |
|              | 13            | S202-C13       |              | 13            | S204-C13       |
|              | 16            | S202-C16       |              | 16            | S204-C16       |
|              | 20            | S202-C20       |              | 20            | S204-C20       |
|              | 25            | S202-C25       |              | 25            | S204-C25       |
|              | 32            | S202-C32       |              | 32            | S204-C32       |
| 40           | S202-C40      | 40             | S204-C40     |               |                |
| 50           | S202-C50      | 50             | S204-C50     |               |                |
| 63           | S202-C63      | 63             | S204-C63     |               |                |

### Tripping characteristic C

UL 1077  
480Y/277 VAC  
6 kA

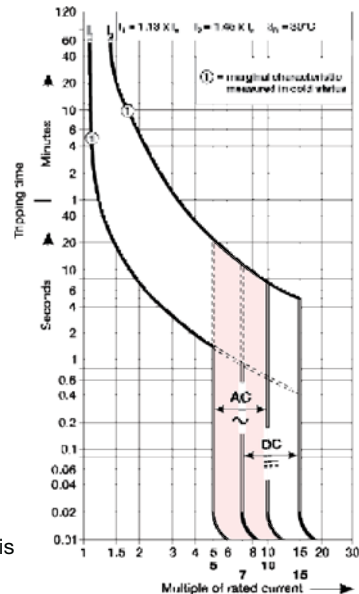
#### Resistive loads

- C Curve
- Designed for use with medium magnetic start up currents
- Example: lighting, control panels

#### Accessories & technical data

Accessories – See page 15.26

Technical data – See page 15.76 - 15.82



Note: This breaker for AC use only. Switching neutral is noted by "NA" in the catalog number.

## S200-D, 480Y/277 VAC Supplemental protectors UL 1077, CSA 22.2

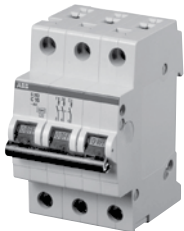
# D



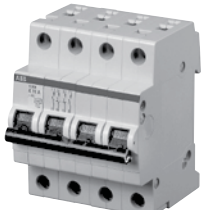
S201-D



S202-D



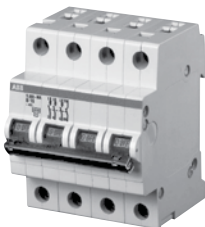
S203-D



S204-D



S201-DNA



S203-DNA

| No. of poles | Rated current | Catalog number | No. of poles | Rated current | Catalog number |
|--------------|---------------|----------------|--------------|---------------|----------------|
| 1            | 0.5           | S201-D0.5      | 3            | 0.5           | S203-D0.5      |
|              | 1             | S201-D1        |              | 1             | S203-D1        |
|              | 1.6           | S201-D1.6      |              | 1.6           | S203-D1.6      |
|              | 2             | S201-D2        |              | 2             | S203-D2        |
|              | 3             | S201-D3        |              | 3             | S203-D3        |
|              | 4             | S201-D4        |              | 4             | S203-D4        |
|              | 6             | S201-D6        |              | 6             | S203-D6        |
|              | 8             | S201-D8        |              | 8             | S203-D8        |
|              | 10            | S201-D10       |              | 10            | S203-D10       |
|              | 13            | S201-D13       |              | 13            | S203-D13       |
|              | 16            | S201-D16       |              | 16            | S203-D16       |
|              | 20            | S201-D20       |              | 20            | S203-D20       |
|              | 25            | S201-D25       |              | 25            | S203-D25       |
|              | 32            | S201-D32       |              | 32            | S203-D32       |
| 40           | S201-D40      | 40             | S203-D40     |               |                |
| 50           | S201-D50      | 50             | S203-D50     |               |                |
| 63           | S201-D63      | 63             | S203-D63     |               |                |
| 1<br>+<br>NA | 0.5           | S201-D0.5NA    | 3<br>+<br>NA | 0.5           | S203-D0.5NA    |
|              | 1             | S201-D1NA      |              | 1             | S203-D1NA      |
|              | 1.6           | S201-D1.6NA    |              | 1.6           | S203-D1.6NA    |
|              | 2             | S201-D2NA      |              | 2             | S203-D2NA      |
|              | 3             | S201-D3NA      |              | 3             | S203-D3NA      |
|              | 4             | S201-D4NA      |              | 4             | S203-D4NA      |
|              | 6             | S201-D6NA      |              | 6             | S203-D6NA      |
|              | 8             | S201-D8NA      |              | 8             | S203-D8NA      |
|              | 10            | S201-D10NA     |              | 10            | S203-D10NA     |
|              | 13            | S201-D13NA     |              | 13            | S203-D13NA     |
|              | 16            | S201-D16NA     |              | 16            | S203-D16NA     |
|              | 20            | S201-D20NA     |              | 20            | S203-D20NA     |
|              | 25            | S201-D25NA     |              | 25            | S203-D25NA     |
|              | 32            | S201-D32NA     |              | 32            | S203-D32NA     |
| 40           | S201-D40NA    | 40             | S203-D40NA   |               |                |
| 50           | S201-D50NA    | 50             | S203-D50NA   |               |                |
| 63           | S201-D63NA    | 63             | S203-D63NA   |               |                |
| 2            | 0.5           | S202-D0.5      | 4            | 0.5           | S204-D0.5      |
|              | 1             | S202-D1        |              | 1             | S204-D1        |
|              | 1.6           | S202-D1.6      |              | 1.6           | S204-D1.6      |
|              | 2             | S202-D2        |              | 2             | S204-D2        |
|              | 3             | S202-D3        |              | 3             | S204-D3        |
|              | 4             | S202-D4        |              | 4             | S204-D4        |
|              | 6             | S202-D6        |              | 6             | S204-D6        |
|              | 8             | S202-D8        |              | 8             | S204-D8        |
|              | 10            | S202-D10       |              | 10            | S204-D10       |
|              | 13            | S202-D13       |              | 13            | S204-D13       |
|              | 16            | S202-D16       |              | 16            | S204-D16       |
|              | 20            | S202-D20       |              | 20            | S204-D20       |
|              | 25            | S202-D25       |              | 25            | S204-D25       |
|              | 32            | S202-D32       |              | 32            | S204-D32       |
| 40           | S202-D40      | 40             | S204-D40     |               |                |
| 50           | S202-D50      | 50             | S204-D50     |               |                |
| 63           | S202-D63      | 63             | S204-D63     |               |                |

### Tripping characteristic D

UL 1077  
480Y/277 VAC  
6 kA

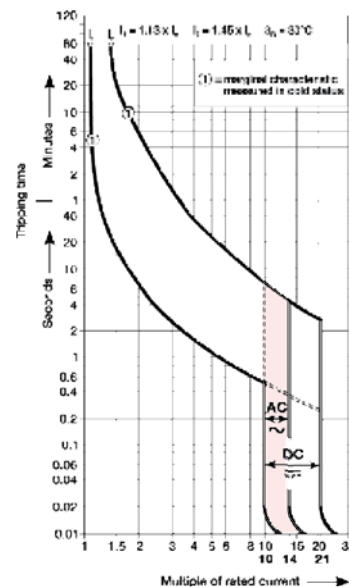
#### Inductive loads

- D Curve
- Designed for allowing higher in-rush currents during system start up
- Example: motors, transformers

#### Accessories & technical data

Accessories – See page 15.26

Technical data – See page 15.76 - 15.82



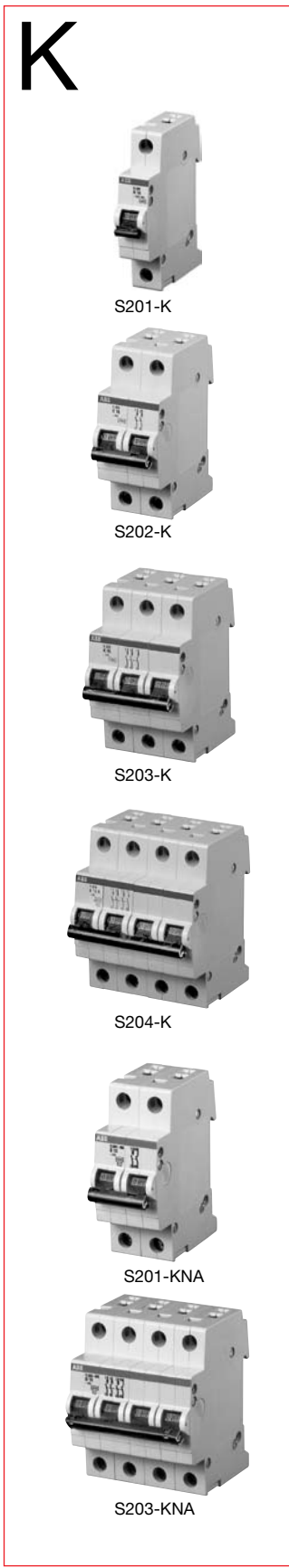
Note: This breaker for AC use only

# S200-K, 480Y/277 VAC

## Supplemental protectors

### UL 1077, CSA 22.2

Miniature  
circuit breakers



| No. of poles | Rated current | Catalog number | No. of poles | Rated current | Catalog number |
|--------------|---------------|----------------|--------------|---------------|----------------|
| 1            | 0.5           | S201-K0.5      | 3            | 0.5           | S203-K0.5      |
|              | 1             | S201-K1        |              | 1             | S203-K1        |
|              | 1.6           | S201-K1.6      |              | 1.6           | S203-K1.6      |
|              | 2             | S201-K2        |              | 2             | S203-K2        |
|              | 3             | S201-K3        |              | 3             | S203-K3        |
|              | 4             | S201-K4        |              | 4             | S203-K4        |
|              | 6             | S201-K6        |              | 6             | S203-K6        |
|              | 8             | S201-K8        |              | 8             | S203-K8        |
|              | 10            | S201-K10       |              | 10            | S203-K10       |
|              | 13            | S201-K13       |              | 13            | S203-K13       |
|              | 16            | S201-K16       |              | 16            | S203-K16       |
|              | 20            | S201-K20       |              | 20            | S203-K20       |
|              | 25            | S201-K25       |              | 25            | S203-K25       |
|              | 32            | S201-K32       |              | 32            | S203-K32       |
| 40           | S201-K40      | 40             | S203-K40     |               |                |
| 50           | S201-K50      | 50             | S203-K50     |               |                |
| 63           | S201-K63      | 63             | S203-K63     |               |                |
| 1 + NA       | 0.5           | S201-K0.5NA    | 3 + NA       | 0.5           | S203-K0.5NA    |
|              | 1             | S201-K1NA      |              | 1             | S203-K1NA      |
|              | 1.6           | S201-K1.6NA    |              | 1.6           | S203-K1.6NA    |
|              | 2             | S201-K2NA      |              | 2             | S203-K2NA      |
|              | 3             | S201-K3NA      |              | 3             | S203-K3NA      |
|              | 4             | S201-K4NA      |              | 4             | S203-K4NA      |
|              | 6             | S201-K6NA      |              | 6             | S203-K6NA      |
|              | 8             | S201-K8NA      |              | 8             | S203-K8NA      |
|              | 10            | S201-K10NA     |              | 10            | S203-K10NA     |
|              | 13            | S201-K13NA     |              | 13            | S203-K13NA     |
|              | 16            | S201-K16NA     |              | 16            | S203-K16NA     |
|              | 20            | S201-K20NA     |              | 20            | S203-K20NA     |
|              | 25            | S201-K25NA     |              | 25            | S203-K25NA     |
|              | 32            | S201-K32NA     |              | 32            | S203-K32NA     |
| 40           | S201-K40NA    | 40             | S203-K40NA   |               |                |
| 50           | S201-K50NA    | 50             | S203-K50NA   |               |                |
| 63           | S201-K63NA    | 63             | S203-K63NA   |               |                |
| 2            | 0.5           | S202-K0.5      | 4            | 0.5           | S204-K0.5      |
|              | 1             | S202-K1        |              | 1             | S204-K1        |
|              | 1.6           | S202-K1.6      |              | 1.6           | S204-K1.6      |
|              | 2             | S202-K2        |              | 2             | S204-K2        |
|              | 3             | S202-K3        |              | 3             | S204-K3        |
|              | 4             | S202-K4        |              | 4             | S204-K4        |
|              | 6             | S202-K6        |              | 6             | S204-K6        |
|              | 8             | S202-K8        |              | 8             | S204-K8        |
|              | 10            | S202-K10       |              | 10            | S204-K10       |
|              | 13            | S202-K13       |              | 13            | S204-K13       |
|              | 16            | S202-K16       |              | 16            | S204-K16       |
|              | 20            | S202-K20       |              | 20            | S204-K20       |
|              | 25            | S202-K25       |              | 25            | S204-K25       |
|              | 32            | S202-K32       |              | 32            | S204-K32       |
| 40           | S202-K40      | 40             | S204-K40     |               |                |
| 50           | S202-K50      | 50             | S204-K50     |               |                |
| 63           | S202-K63      | 63             | S204-K63     |               |                |

### Tripping characteristic K

UL 1077

480Y/277 VAC

6 kA

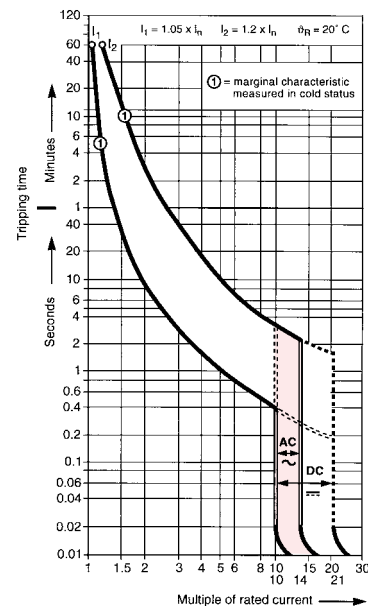
### Inductive loads

- K Curve
- Designed for allowing higher in-rush currents during system start up
- Example: motors, transformers

### Accessories & technical data

Accessories – See page 15.26

Technical data – See page 15.76 - 15.82



Note: This breaker for AC use only

## S200P-K, 480Y/277 VAC Supplemental protectors UL 1077, CSA 22.2

# K



S201P-K



S202P-K



S203P-K

| No. of poles | Rated current | Catalog number | No. of poles | Rated current | Catalog number |      |             |
|--------------|---------------|----------------|--------------|---------------|----------------|------|-------------|
| 1            | 0.2           | S201P-K0.2     | 3            | 0.2           | S203P-K0.2     |      |             |
|              | 0.3           | S201P-K0.3     |              | 0.3           | S203P-K0.3     |      |             |
|              | 0.5           | S201P-K0.5     |              | 0.5           | S203P-K0.5     |      |             |
|              | 0.75          | S201P-K0.75    |              | 0.75          | S203P-K0.75    |      |             |
|              | 1             | S201P-K1       |              | 1             | S203P-K1       |      |             |
|              | 1.6           | S201P-K1.6     |              | 1.6           | S203P-K1,6     |      |             |
|              | 2             | S201P-K2       |              | 2             | S203P-K2       |      |             |
|              | 3             | S201P-K3       |              | 3             | S203P-K3       |      |             |
|              | 4             | S201P-K4       |              | 4             | S203P-K4       |      |             |
|              | 6             | S201P-K6       |              | 6             | S203P-K6       |      |             |
|              | 8             | S201P-K8       |              | 8             | S203P-K8       |      |             |
|              | 10            | S201P-K10      |              | 10            | S203P-K10      |      |             |
|              | 13            | S201P-K13      |              | 13            | S203P-K13      |      |             |
|              | 16            | S201P-K16      |              | 16            | S203P-K16      |      |             |
| 2            | 20            | S201P-K20      | 3            | 20            | S203P-K20      |      |             |
|              | 25            | S201P-K25      |              | 25            | S203P-K25      |      |             |
|              | 32            | S201P-K32      |              | 32            | S203P-K32      |      |             |
|              | 40            | S201P-K40      |              | 40            | S203P-K40      |      |             |
|              | 50            | S201P-K50      |              | 50            | S203P-K50      |      |             |
|              | 63            | S201P-K63      |              | 63            | S203P-K63      |      |             |
|              | 2             | 0.2            |              | S202P-K0.2    | 3              | 0.2  | S203P-K0.2  |
|              |               | 0.3            |              | S202P-K0.3    |                | 0.3  | S203P-K0.3  |
|              |               | 0.5            |              | S202P-K0.5    |                | 0.5  | S203P-K0.5  |
|              |               | 0.75           |              | S202P-K0.75   |                | 0.75 | S203P-K0.75 |
|              |               | 1              |              | S202P-K1      |                | 1    | S203P-K1    |
|              |               | 1.6            |              | S202P-K1,6    |                | 1.6  | S203P-K1,6  |
|              |               | 2              |              | S202P-K2      |                | 2    | S203P-K2    |
|              |               | 3              |              | S202P-K3      |                | 3    | S203P-K3    |
| 4            |               | S202P-K4       | 4            | S203P-K4      |                |      |             |
| 6            |               | S202P-K6       | 6            | S203P-K6      |                |      |             |
| 8            |               | S202P-K8       | 8            | S203P-K8      |                |      |             |
| 10           |               | S202P-K10      | 10           | S203P-K10     |                |      |             |
| 13           |               | S202P-K13      | 13           | S203P-K13     |                |      |             |
| 16           |               | S202P-K16      | 16           | S203P-K16     |                |      |             |
| 2            | 20            | S202P-K20      | 3            | 20            | S203P-K20      |      |             |
|              | 25            | S202P-K25      |              | 25            | S203P-K25      |      |             |
|              | 32            | S202P-K32      |              | 32            | S203P-K32      |      |             |
|              | 40            | S202P-K40      |              | 40            | S203P-K40      |      |             |
|              | 50            | S202P-K50      |              | 50            | S203P-K50      |      |             |
|              | 63            | S202P-K63      |              | 63            | S203P-K63      |      |             |

### Tripping characteristic K

UL 1077  
480Y/277 VAC  
10 kA

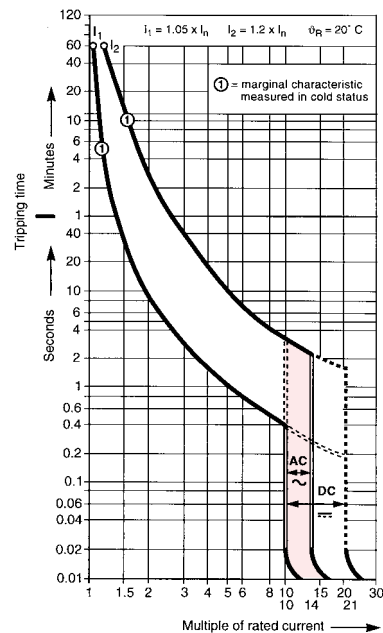
#### Inductive loads

- K Curve
- Designed for allowing higher in-rush currents during system start up
- Example: motors, transformers

#### Accessories & technical data

Accessories – See page 15.26

Technical data – See page 15.76 - 15.82



Note: This breaker for AC use only

## S200P-Z, 480Y/277 VAC Supplemental protectors UL 1077, CSA 22.2

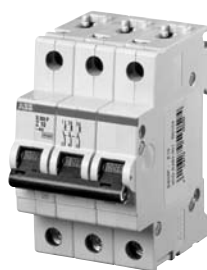
# Z



S201P-Z



S202P-Z



S203P-Z

| No. of poles | Rated current | Catalog number | No. of poles | Rated current | Catalog number |
|--------------|---------------|----------------|--------------|---------------|----------------|
| 1            | 0.5           | S201P-Z0.5     | 3            | 0.5           | S203P-Z0.5     |
|              | 1             | S201P-Z1       |              | 1             | S203P-Z1       |
|              | 1.6           | S201P-Z1.6     |              | 1.6           | S203P-Z1.6     |
|              | 2             | S201P-Z2       |              | 2             | S203P-Z2       |
|              | 3             | S201P-Z3       |              | 3             | S203P-Z3       |
|              | 4             | S201P-Z4       |              | 4             | S203P-Z4       |
|              | 6             | S201P-Z6       |              | 6             | S203P-Z6       |
|              | 8             | S201P-Z8       |              | 8             | S203P-Z8       |
|              | 10            | S201P-Z10      |              | 10            | S203P-Z10      |
|              | 16            | S201P-Z16      |              | 16            | S203P-Z16      |
|              | 20            | S201P-Z20      |              | 20            | S203P-Z20      |
|              | 25            | S201P-Z25      |              | 25            | S203P-Z25      |
|              | 32            | S201P-Z32      |              | 32            | S203P-Z32      |
| 40           | S201P-Z40     | 40             | S203P-Z40    |               |                |
| 50           | S201P-Z50     | 50             | S203P-Z50    |               |                |
| 63           | S201P-Z63     | 63             | S203P-Z63    |               |                |
| 2            | 0.5           | S202P-Z0.5     |              |               |                |
|              | 1             | S202P-Z1       |              |               |                |
|              | 1.6           | S202P-Z1.6     |              |               |                |
|              | 2             | S202P-Z2       |              |               |                |
|              | 3             | S202P-Z3       |              |               |                |
|              | 4             | S202P-Z4       |              |               |                |
|              | 6             | S202P-Z6       |              |               |                |
|              | 8             | S202P-Z8       |              |               |                |
|              | 10            | S202P-Z10      |              |               |                |
|              | 16            | S202P-Z16      |              |               |                |
|              | 20            | S202P-Z20      |              |               |                |
|              | 25            | S202P-Z25      |              |               |                |
|              | 32            | S202P-Z32      |              |               |                |
| 40           | S202P-Z40     |                |              |               |                |
| 50           | S202P-Z50     |                |              |               |                |
| 63           | S202P-Z63     |                |              |               |                |

### Tripping characteristic Z

UL 1077  
480Y/277 VAC  
10 kA

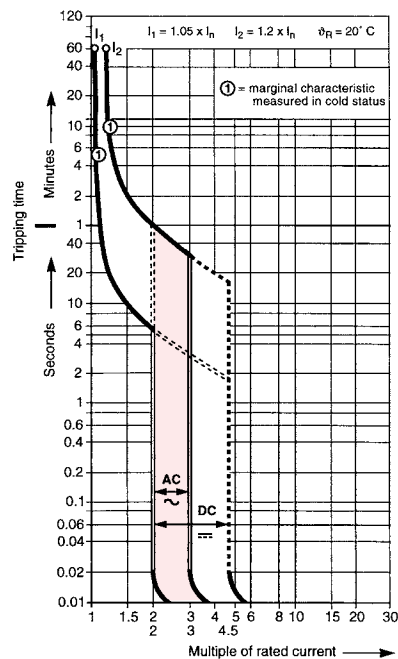
#### Resistive loads

- Z Curve
- Designed to provide maximum protection with a very low short circuit trip setting
- Example: semiconductors

#### Accessories & technical data

Accessories – See page 15.26

Technical data – See page 15.76 - 15.82



Note: This breaker for AC use only

## Technical data

### S200, S200P, S280UC, S280W, S290 UL 1077, CSA 22.2

| Technical data                         | S200  | S200P    | S290   |
|--|---|----------|--|
| Specifications:                        | UL 1077, CSA C 22.2, VDE 0660, IEC 898, 947     |          | UL 1077, IEC 898                               |
| UL File-Number:                        | E 76126 UL CL                                   |          |  |
| No. of poles:                          | 1, 2, 3 & 4                                     |          | 1, 2, 3 & 4                                    |
| Tripping characteristics:              | B, C & D  | K & Z    | C  |
| Rated current:                         | 0.5-63 A  | 0.2-63 A | 80-125A  |
| Rated voltage:                         | Multi pole: 480Y/277 VAC                        |          | 230Y/440VAC                                    |
| Short circuit capacity:                | S200 6kA; S200P 10 kA                           |          | —  |
| Frequency:                             | 50/60 Hz  |          | 50/60 Hz                                       |
| Degree of protection:                  | IP 20   |          | IP 20  |
| Mounting position:                     | Vertical, horizontal                            |          | Vertical, horizontal                           |
| Fixing:                                | 35mm DIN rail                                   |          | 35mm DIN rail                                  |
| Clamps only for Cu:                    | 18 ... 4 AWG                                    |          | 14-1/0 AWG                                     |
| Service life, mech. and at rated load: | 20,000 operations                               |          | 10,000   |
| Tightening torque:                     | 17.5 in. lbs (1.978 Nm)                         |          | 4.5 in. lbs                                    |
| Ambient temperature:                   | - 25°C ... - 13°F / 70°C ... 158°F              |          | -5°C... 23°F / 45°C... 113                     |
| Shock resistance:                      | 10 g at least 2 impacts shock duration of 13 ms |          | 30g min. of 2 impacts, shock duration of 13 ms |

#### Auxiliary contact S2C-H6RU and Signal contact S2C-S6RU for S200U and S200UP

|  |   |
|--|---|
| Rated current:                           | 10  |
| Rated voltage AC / DC:                   | 24  |
| Contact:                                 | 1 pole, single throw  |
| Connection capacity mm <sup>2</sup>      | 18 – 14 AWG (0.75...2.5)  |
| Tightening torque:                       | 11 in. lbs (1.2 Nm)   |
| Shock resistance acc. to DIN IEC 68-2-6: | 5 g, 20 frequency cycles 5...150...5 Hz at 24 VAC/DC, 5 mA auto-reclosing < 10 ms |
| Mechanical service life:                 | 10,000 operations   |

#### Shunt trip

|                        |    | S2C-A1U                              | S2C-A2U                              |
|------------------------|----|--------------------------------------|--------------------------------------|
| Rated voltage          | AC | 12 ... 60 V                          | 110 ... 415 V                        |
|                        | DC | 12 ... 60 V                          | 110 ... 250 V                        |
| Max. release duration  |    | < 10 ms                              | < 10 ms                              |
| Min. release voltage   | AC | 7 V                                  | 55 V                                 |
|                        | DC | 10 V                                 | 80 V                                 |
| Consumption on release | AD | 40 ... 200 VA                        | 55 ... 210 VA                        |
|                        | DC | 40 ... 200 VA                        | 55 ... 110 VA                        |
| Coil resistance        |    | 3.7 Ω                                | 225 Ω                                |
| Terminals              |    | 18...6/0.75 – 16 AWG/mm <sup>2</sup> | 18...6/0.75 – 16 AWG/mm <sup>2</sup> |
| Tightening torque      |    | 18/2 in.lbs/Nm                       | 18/2 in.lbs/Nm                       |

#### Undervoltage release

|                         |    | S2C-UA<br>12 DC  | S2C-UA<br>24 AC | S2C-UA<br>24 DC | S2C-UA<br>48 AC | S2C-UA<br>48 DC | S2C-UA<br>110 AC | S2C-UA<br>110 DC | S2C-UA<br>230 AC | S2C-UA<br>230 DC | S2C-UA<br>400 AC |
|-------------------------|----|--|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| Standards               |    | IEC/EN 60947-1   |                 |                 |                 |                 |                  |                  |                  |                  |                  |
| Rated voltage           | AC | 12 V   | 24 V            | 24 V            | 48 V            | 48 V            | 110 V            | 110 V            | 230 V            | 230 V            | 400 V            |
|                         | DC |  |                 |                 |                 |                 |                  |                  |                  |                  |                  |
| Frequency               |    | 50 ... 60 Hz   |                 |                 |                 |                 |                  |                  |                  |                  |                  |
| Release trip            |    | 0.35 UnOVO 0.7 Un V  |                 |                 |                 |                 |                  |                  |                  |                  |                  |
| Terminals               |    | 2 x 16/2 x 1.5 AWG/mm <sup>2</sup>   |                 |                 |                 |                 |                  |                  |                  |                  |                  |
| Consumption             |    | 0.2 VA   | 3.6 VA          | 2 VA            | 3.6 VA          | 2.1 VA          | 3.5 VA           | 2.2 VA           | 3.7 VA           | 2.3 VA           | 2.4 VA           |
| Resistance to corrosion |    | constant atmosphere: 23/83 – 40/93 – 55/20; variable atmosphere: 25/95 – 40/93 °C/RH |                 |                 |                 |                 |                  |                  |                  |                  |                  |
| Protection degree       |    | IPXXB/IP2X   |                 |                 |                 |                 |                  |                  |                  |                  |                  |
| Tightening torque       |    | 3.5/0.4 in.lbs/Nm  |                 |                 |                 |                 |                  |                  |                  |                  |                  |



# Technical data

## S200 & S200P

### UL 1077, CSA 22.2

Miniature  
circuit breakers

#### Internal resistance and power loss

Internal resistance per pole in mΩ, power loss per pole in W

| Type            | Rated current<br>A | Device series<br>B, C, D <sup>①</sup> |      | Device series<br>K |      | Device series<br>Z |      |
|-----------------|--------------------|---------------------------------------|------|--------------------|------|--------------------|------|
|                 |                    | mΩ                                    | W    | mΩ                 | W    | mΩ                 | W    |
| S200 &<br>S200P | 0.5                | 5500                                  | 1.4  | 6340               | 1.6  | 10100              | 2.5  |
|                 | 1                  | 1440                                  | 1.4  | 1550               | 1.6  | 2270               | 2.3  |
|                 | 1.6                | 630                                   | 1.6  | 695                | 1.8  | 1100               | 2.8  |
|                 | 2                  | 460                                   | 1.8  | 460                | 1.9  | 619                | 2.5  |
|                 | 3                  | 150                                   | 1.3  | 165                | 1.5  | 202                | 1.8  |
|                 | 4                  | 110                                   | 1.8  | 120                | 2.0  | 149                | 2.4  |
|                 | 6                  | 55                                    | 2.0  | 52                 | 1.9  | 104                | 3.7  |
|                 | 8                  | 15                                    | 1.0  | 38                 | 2.5  | 53.9               | 3.45 |
|                 | 10                 | 13.3                                  | 1.3  | 12.6               | 1.26 | 17.5               | 1.7  |
|                 | 13                 | 13.3                                  | 2.3  | 12.6               | 1.26 | -                  | -    |
|                 | 16                 | 7.0                                   | 1.8  | 7.7                | 2.0  | 10.9               | 2.8  |
|                 | 20                 | 6.25                                  | 2.5  | 6.7                | 2.7  | 6.0                | 2.4  |
|                 | 25                 | 5.0                                   | 3.2  | 4.6                | 2.9  | 4.1                | 2.6  |
|                 | 32                 | 3.6                                   | 3.7  | 3.5                | 3.6  | 2.8                | 2.9  |
| 40              | 3.0                | 4.8                                   | 2.8  | 4.5                | 2.5  | 4.1                |      |
| 50              | 1.3                | 3.25                                  | 1.25 | 2.9                | 1.8  | 4.4                |      |
| 63              | 1.2                | 4.8                                   | 0.7  | 5.2                | 1.3  | 5.2                |      |

① Current intensities 0.5 - 4 apply exclusively to C-type trip characteristics

#### Temperature derating

Max operating current depending on the ambient temperature of a circuit breaker characteristics type B, C and D

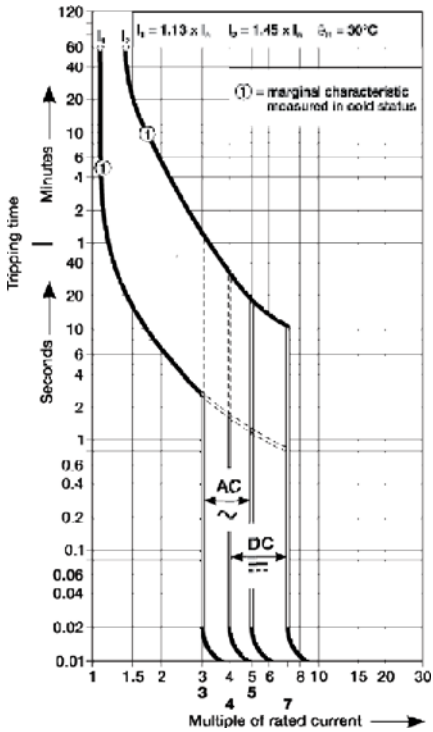
| B,C & D | Ambient Temperatures T (C°/F°) |         |        |        |       |       |       |       |        |        |        |        |
|---------|--------------------------------|---------|--------|--------|-------|-------|-------|-------|--------|--------|--------|--------|
|         | -40/-40                        | -30/-22 | -20/-4 | -10/14 | 0/32  | 10/50 | 20/68 | 30/86 | 40/104 | 50/122 | 60/140 | 70/158 |
| Amps    | 0.67                           | 0.65    | 0.62   | 0.60   | 0.58  | 0.55  | 0.53  | 0.50  | 0.47   | 0.44   | 0.41   | 0.37   |
|         | 1.33                           | 1.29    | 1.25   | 1.20   | 1.15  | 1.11  | 1.05  | 1.00  | 0.94   | 0.88   | 0.82   | 0.75   |
|         | 2.13                           | 2.07    | 2.00   | 1.92   | 1.85  | 1.77  | 1.69  | 1.60  | 1.51   | 1.41   | 1.31   | 1.19   |
|         | 2.67                           | 2.58    | 2.49   | 2.40   | 2.31  | 2.21  | 2.11  | 2.00  | 1.89   | 1.76   | 1.63   | 1.49   |
|         | 4.0                            | 3.9     | 3.7    | 3.6    | 3.5   | 3.3   | 3.2   | 3.0   | 2.8    | 2.6    | 2.4    | 2.2    |
|         | 5.3                            | 5.2     | 5.0    | 4.8    | 4.6   | 4.4   | 4.2   | 4.0   | 3.8    | 3.5    | 3.3    | 3.0    |
|         | 8.0                            | 7.7     | 7.5    | 7.2    | 6.9   | 6.6   | 6.3   | 6.0   | 5.7    | 5.3    | 4.9    | 4.5    |
|         | 10.7                           | 10.3    | 10.0   | 9.6    | 9.2   | 8.8   | 8.4   | 8.0   | 7.5    | 7.1    | 6.5    | 6.0    |
|         | 13.3                           | 12.9    | 12.5   | 12.0   | 11.5  | 11.1  | 10.5  | 10.0  | 9.4    | 8.8    | 8.2    | 7.5    |
|         | 17.3                           | 16.8    | 16.2   | 15.6   | 15.0  | 14.4  | 13.7  | 13.0  | 12.3   | 11.5   | 10.6   | 9.7    |
|         | 21.3                           | 20.7    | 20.0   | 19.2   | 18.5  | 17.7  | 16.9  | 16.0  | 15.1   | 14.1   | 13.1   | 11.9   |
|         | 26.7                           | 25.8    | 24.9   | 24.0   | 23.1  | 22.1  | 21.1  | 20.0  | 18.9   | 17.6   | 16.3   | 14.9   |
|         | 33.3                           | 32.3    | 31.2   | 30.0   | 28.9  | 27.6  | 26.4  | 25.0  | 23.6   | 22.0   | 20.4   | 18.6   |
|         | 42.7                           | 41.3    | 39.9   | 38.5   | 37.0  | 35.4  | 33.7  | 32.0  | 30.2   | 28.2   | 26.1   | 23.9   |
|         | 53.3                           | 51.6    | 49.9   | 48.1   | 46.2  | 44.2  | 42.2  | 40.0  | 37.7   | 35.3   | 32.7   | 29.8   |
|         | 66.7                           | 64.5    | 62.4   | 60.1   | 57.7  | 55.3  | 52.7  | 50.0  | 47.1   | 44.1   | 40.8   | 37.3   |
|         | 84.0                           | 81.3    | 78.6   | 75.7   | 72.7  | 69.6  | 66.4  | 63.0  | 59.4   | 55.6   | 51.4   | 47.0   |
|         | 112.6                          | 107.2   | 102.1  | 97.2   | 92.6  | 88.2  | 84.0  | 80.0  | 76.0   | 72.2   | 68.6   | 65.2   |
|         | 140.7                          | 134.0   | 127.6  | 121.6  | 115.8 | 110.3 | 105.0 | 100.0 | 95.0   | 90.3   | 85.7   | 81.5   |
|         | 175.9                          | 167.5   | 159.5  | 151.9  | 144.7 | 137.8 | 131.3 | 125.0 | 118.8  | 112.8  | 107.2  | 101.8  |

# Technical data

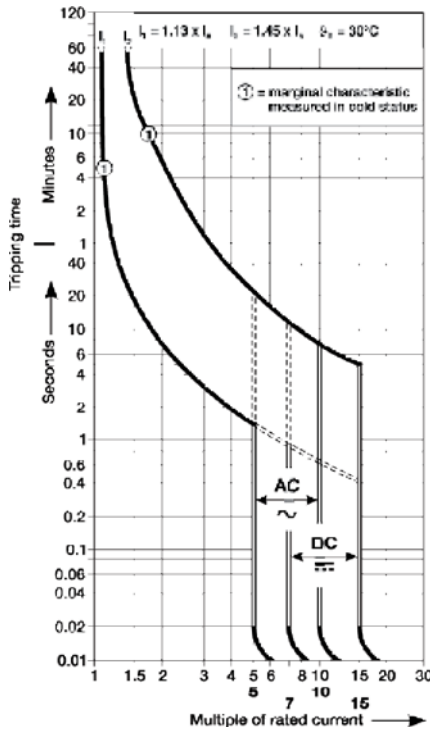
## S200, S200P, S280UC, S280W, S290

### UL 1077, CSA 22.2

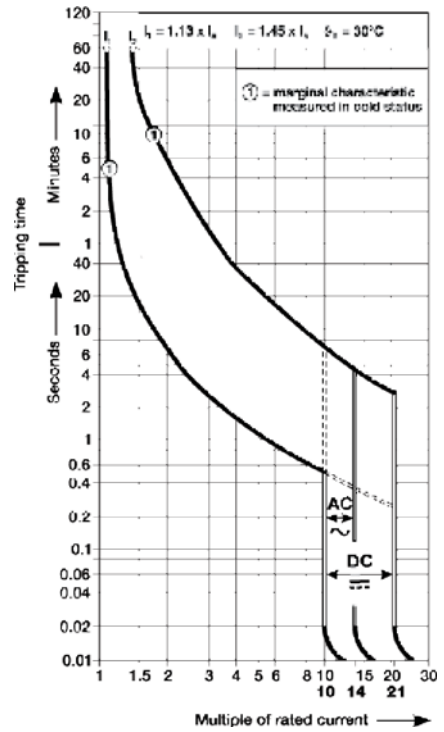
Tripping characteristic B



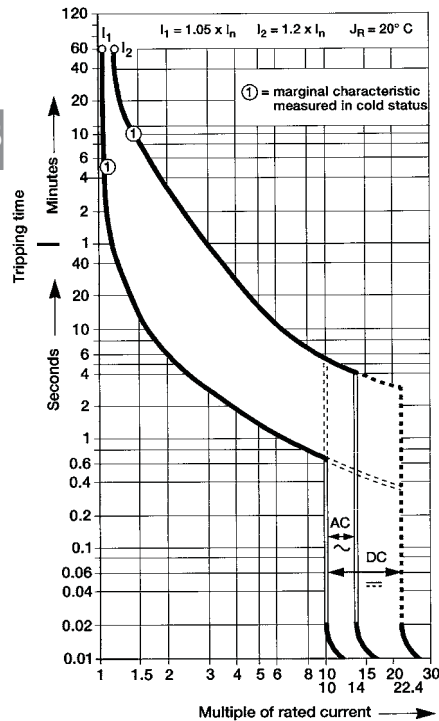
Tripping characteristic C



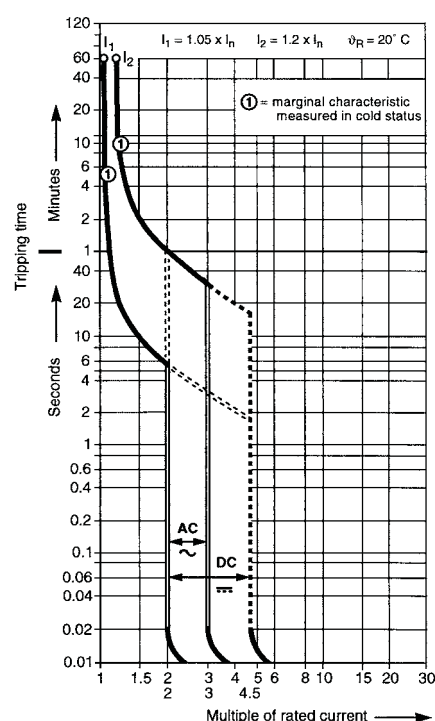
Tripping characteristic D



Tripping characteristic K



Tripping characteristic Z



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