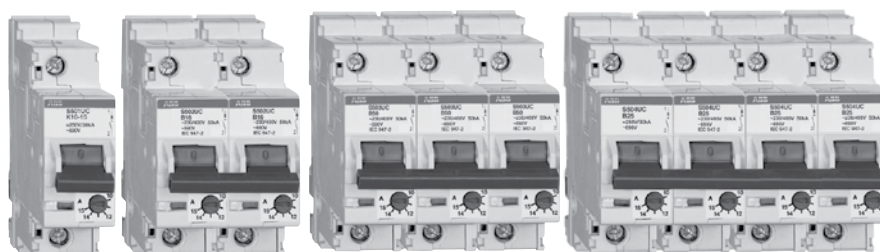


# S500

# Miniature Circuit Breakers



**S500 Series**  
UL 1077



## Description

The S500 high performance MCB offers a compact solution to circuit protection. The S500 devices are UL tested current limiting and DIN rail mounted. The S500 is available with application-specific trip characteristics to provide maximum circuit protection.

The breakers offer thermal-magnetic trip protection according to B and K characteristics.

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

## Features

- High breaking capacity
- Fast breaking time (2.3 - 2.5 ms)
- Adjustable trip unit
- DIN rail mounting
- Finger safe terminals
- Multi-functional terminals
- Wide range of accessories
- UL 1077 recognized 600 VAC and 600 VDC versions
- UL1077 AC adjustable K
- UL1077 DC adjustable B, K
- UL File # E167556
- IEC #E60497-2

|                             | <b>S500</b>                        | <b>S500UC</b>                      |
|-----------------------------|------------------------------------|------------------------------------|
| <b>Amperage</b>             | 0.1 – 45 A                         | 0.1 – 63 A                         |
| <b>Voltage</b>              | UL: 600Y/277 VAC<br>IEC: 690 VDC   | UL: 600 VDC<br>IEC: 750 VDC        |
| <b>Poles</b>                | 1, 2, 3                            | 1, 2, 3, 4                         |
| <b>Trip characteristics</b> | K                                  | B, K                               |
| <b>Interrupting ratings</b> | 30 kA: UL 1077<br>30 kA: CSA C22.2 | 30 kA: UL 1077<br>30 kA: CSA C22.2 |
| <b>Auxiliary contacts</b>   | Yes                                | Yes                                |
| <b>Bell alarm</b>           | Yes                                | Yes                                |
| <b>Shunt trip</b>           | No                                 | No                                 |
| <b>Undervoltage release</b> | No                                 | No                                 |
| <b>Bus bar</b>              | Yes                                | Yes                                |

# S500UC-K, UL 600 VDC / IEC 750 VDC

## Supplemental protectors

### UL1077, CSA 22.2, IEC

# K



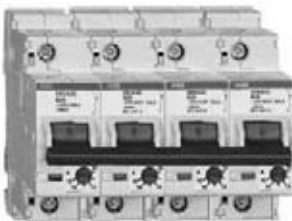
S501UC-K



S502UC-K



S503UC-K



S504UC-K

| No. of poles | Rated current | Catalog number | No. of poles | Rated current | Catalog number |
|--------------|---------------|----------------|--------------|---------------|----------------|
| 1            | 0.1 – 0.15    | S501UC-K0.15   | 3            | 0.1 – 0.15    | S503UC-K0.15   |
|              | 0.14 – 0.21   | S501UC-K0.21   |              | 0.14 – 0.21   | S503UC-K0.21   |
|              | 0.2 – 0.3     | S501UC-K0.3    |              | 0.2 – 0.3     | S503UC-K0.3    |
|              | 0.28 – 0.42   | S501UC-K0.42   |              | 0.28 – 0.42   | S503UC-K0.42   |
|              | 0.38 – 0.58   | S501UC-K0.58   |              | 0.38 – 0.58   | S503UC-K0.58   |
|              | 0.53 – 0.8    | S501UC-K0.8    |              | 0.53 – 0.8    | S503UC-K0.8    |
|              | 0.73 – 1.1    | S501UC-K1.1    |              | 0.73 – 1.1    | S503UC-K1.1    |
|              | 1 – 1.5       | S501UC-K1.5    |              | 1 – 1.5       | S503UC-K1.5    |
|              | 1.4 – 2.1     | S501UC-K2.1    |              | 1.4 – 2.1     | S503UC-K2.1    |
|              | 2 – 3         | S501UC-K3      |              | 2 – 3         | S503UC-K3      |
|              | 2.8 – 4.2     | S501UC-K4.2    |              | 2.8 – 4.2     | S503UC-K4.2    |
|              | 3.8 – 5.8     | S501UC-K5.8    |              | 3.8 – 5.8     | S503UC-K5.8    |
|              | 5.3 – 8       | S501UC-K8      |              | 5.3 – 8       | S503UC-K8      |
|              | 7.3 – 11      | S501UC-K11     |              | 7.3 – 11      | S503UC-K11     |
|              | 10 – 15       | S501UC-K15     |              | 10 – 15       | S503UC-K15     |
|              | 14 – 20       | S501UC-K20     |              | 14 – 20       | S503UC-K20     |
|              | 18 – 26       | S501UC-K26     |              | 18 – 26       | S503UC-K26     |
|              | 23 – 32       | S501UC-K32     |              | 23 – 32       | S503UC-K32     |
|              | 29 – 37       | S501UC-K37     |              | 29 – 37       | S503UC-K37     |
|              | 34 – 41       | S501UC-K41     |              | 34 – 41       | S503UC-K41     |
|              | 38 – 45       | S501UC-K45     |              | 38 – 45       | S503UC-K45     |
| 2            | 0.1 – 0.15    | S502UC-K0.15   | 4            | 0.1 – 0.15    | S504UC-K0.15   |
|              | 0.14 – 0.21   | S502UC-K0.21   |              | 0.14 – 0.21   | S504UC-K0.21   |
|              | 0.2 – 0.3     | S502UC-K0.3    |              | 0.2 – 0.3     | S504UC-K0.3    |
|              | 0.28 – 0.42   | S502UC-K0.42   |              | 0.28 – 0.42   | S504UC-K0.42   |
|              | 0.38 – 0.58   | S502UC-K0.58   |              | 0.38 – 0.58   | S504UC-K0.58   |
|              | 0.53 – 0.8    | S502UC-K0.8    |              | 0.53 – 0.8    | S504UC-K0.8    |
|              | 0.73 – 1.1    | S502UC-K1.1    |              | 0.73 – 1.1    | S504UC-K1.1    |
|              | 1 – 1.5       | S502UC-K1.5    |              | 1 – 1.5       | S504UC-K1.5    |
|              | 1.4 – 2.1     | S502UC-K2.1    |              | 1.4 – 2.1     | S504UC-K2.1    |
|              | 2 – 3         | S502UC-K3      |              | 2 – 3         | S504UC-K3      |
|              | 2.8 – 4.2     | S502UC-K4.2    |              | 2.8 – 4.2     | S504UC-K4.2    |
|              | 3.8 – 5.8     | S502UC-K5.8    |              | 3.8 – 5.8     | S504UC-K5.8    |
|              | 5.3 – 8       | S502UC-K8      |              | 5.3 – 8       | S504UC-K8      |
|              | 7.3 – 11      | S502UC-K11     |              | 7.3 – 11      | S504UC-K11     |
|              | 10 – 15       | S502UC-K15     |              | 10 – 15       | S504UC-K15     |
|              | 14 – 20       | S502UC-K20     |              | 14 – 20       | S504UC-K20     |
|              | 18 – 26       | S502UC-K26     |              | 18 – 26       | S504UC-K26     |
|              | 23 – 32       | S502UC-K32     |              | 23 – 32       | S504UC-K32     |
|              | 29 – 37       | S502UC-K37     |              | 29 – 37       | S504UC-K37     |
|              | 34 – 41       | S502UC-K41     |              | 34 – 41       | S504UC-K41     |
|              | 38 – 45       | S502UC-K45     |              | 38 – 45       | S504UC-K45     |

### Tripping characteristic K

| UL 1077 | IEC     |
|---------|---------|
| 600 VAC | 750 VAC |
| 30 kA   | 30 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 71

Technical data – See page 76 - 82

