

# Circuit Protection

## Circuit Breakers

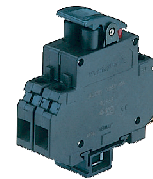
### Thermal Magnetic Type

#### CB4201-10



#### Single Pole

#### CB4202-10



#### Double Pole

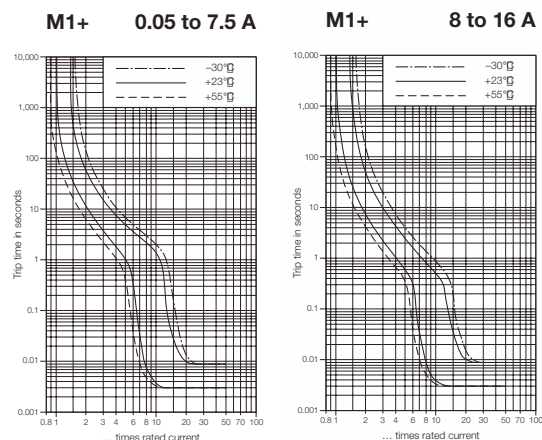
| Ordering Data                       |                        | Type: Single Pole - CB4201-10 |                 | Type: Double Pole - CB4202-10 |                 |                 |
|-------------------------------------|------------------------|-------------------------------|-----------------|-------------------------------|-----------------|-----------------|
| Internal Resistance per Pole (ohms) | Current Ratings (amps) | Part No.* TS 32               | Part No.* TS 35 | Current Ratings (amps)        | Part No.* TS 32 | Part No.* TS 35 |
| 131.00                              | 0.1                    | 9104173200                    | 9104173500      | 0.1                           | 9120353200      | 9120353500      |
| 40.00                               | 0.2                    | 9104183200                    | 9104183500      | 0.2                           | 9124243200      | 9124243500      |
| 19.30                               | 0.3                    | 9129813200                    | 9129813500      | 0.3                           | 9124263200      | 9124263500      |
| 10.40                               | 0.4                    | 9124093200                    | 9124093500      | 0.4                           | 9124273200      | 9124273500      |
| 7.10                                | 0.5                    | 9101003200                    | 9101003500      | 0.5                           | 9129583200      | 9129583500      |
| 4.30                                | 0.6                    | 9124113200                    | 9124113500      | 0.6                           | 9124283200      | 9124283500      |
| 3.58                                | 0.7                    | 9129563200                    | 9129563500      | 0.7                           | 9124293200      | 9124293500      |
| 2.50                                | 0.8                    | 9101103200                    | 9101103500      | 0.8                           | 9129593200      | 9129593500      |
| 1.67                                | 1.0                    | 9101203200                    | 9101203500      | 1.0                           | 9129613200      | 9129613500      |
| 1.22                                | 1.2                    | 9101303200                    | 9101303500      | 1.2                           | 9129623200      | 9129623500      |
| 0.61                                | 1.5                    | 9101403200                    | 9101403500      | 1.5                           | 9129633200      | 9129633500      |
| 0.55                                | 1.8                    | 9124143200                    | 9124143500      | 1.8                           | 9124333200      | 9124333500      |
| 0.38                                | 2.0                    | 9101503200                    | 9101503500      | 2.0                           | 9129643200      | 9129643500      |
| 0.24                                | 2.5                    | 9101603200                    | 9101603500      | 2.5                           | 9129653200      | 9129653500      |
| 0.19                                | 3.0                    | 9101703200                    | 9101703500      | 3.0                           | 9129663200      | 9129663500      |
| 0.16                                | 3.5                    | 9124163200                    | 9124163500      | 3.5                           | 9124343200      | 9124343500      |
| 0.09                                | 4.0                    | 9104353200                    | 9104353500      | 4.0                           | 9129713200      | 9129713500      |
| 0.09                                | 4.5                    |                               | 9124173500      | 4.5                           |                 |                 |
| 0.061                               | 5.0                    | 9101803200                    | 9101803500      | 5.0                           | 9129673200      | 9129673500      |
| 0.07                                | 5.5                    |                               | 9107833500      | 5.5                           | 9124363200      |                 |
| 0.041                               | 6.0                    | 9103813200                    | 9103813500      | 6.0                           | 9124373200      | 9124373500      |
| 0.04                                | 6.5                    |                               | 9120043500      | 6.5                           | 9124383200      |                 |
| 0.034                               | 7.0                    | 9104153200                    | 9104153500      | 7.0                           | 9124393200      | 9124393500      |
| 0.02                                | 8.0                    | 9103003200                    | 9103003500      | 8.0                           | 9104673200      | 9104673500      |
| 0.02                                | 9.0                    | 9104613200                    | 9104613500      | 9.0                           | 9124423200      | 9124423500      |
| <0.02                               | 10.0                   | 9101903200                    | 9101903500      | 10.0                          | 9129683200      | 9129683500      |
| <0.02                               | 11.0                   |                               | 9124183500      | 11.0                          | 9124433200      |                 |
| <0.02                               | 12.0                   | 9107843200                    | 9107843500      | 12.0                          | 9124443200      | 9124443500      |
| <0.02                               | 13.0                   |                               | 9124193500      | 13.0                          | 9124453200      |                 |
| <0.02                               | 14.0                   | 9107853200                    | 9107853500      | 14.0                          | 9124463200      | 9124463500      |
| <0.02                               | 15.0                   | 9102003200                    | 9102003500      | 15.0                          | 9129693200      | 9129693500      |
| <0.02                               | 16.0                   | 9124213200                    | 9124213500      | 16.0                          | 9124473200      | 9124473500      |

## Circuit Breaker – Trip Curves

### Thermal Magnetic Type

Typical time/current characteristics at 23°C

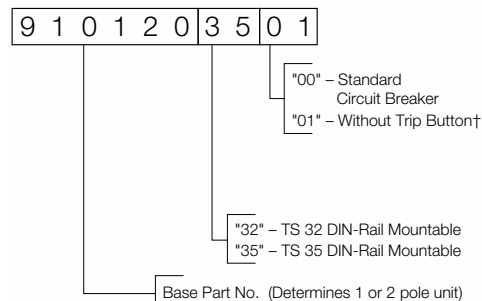
#### 4200 Series



#### \* Ordering Options - Example

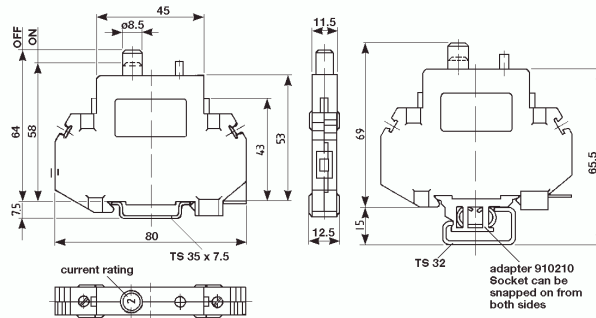
To order CB4201-10 Single Pole Circuit Breaker,  
Part No. 9101203501

- Current Rating of 1.0 amps
- Internal Resistance per Pole of 1.67 ohms
- For TS 35
- Without Trip Button



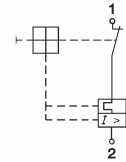
†To manually trip breaker, a plastic or wooden dowel (0.12 inch diameter) will be needed.

### CB4201-10 Single Pole

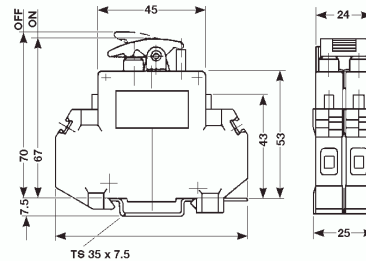


Dimensions in mm

### Internal Wiring Diagram

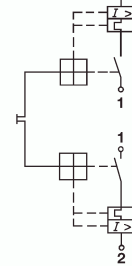


### CB4202-10 Double Pole



Dimensions in mm

### Internal Wiring Diagram



### Technical Data

|                                                          |                                                                   |                  |                  |
|----------------------------------------------------------|-------------------------------------------------------------------|------------------|------------------|
| Rated voltage & current†                                 | Voltage Ratings                                                   |                  | Current Ratings  |
| UL                                                       | AC 250 V, DC 80 V, 50/60 Hz                                       |                  | 0.05...16 A      |
| CSA                                                      | AC 250 V, DC 80 V, 50/60 Hz                                       |                  | 0.05...16 A      |
| VDE                                                      | AC 250 V, DC 65 V, 50/60 Hz                                       |                  | 0.05...16 A      |
| Creepage resistance                                      | PTI 600 to IEC 112                                                |                  |                  |
| Dielectric strength                                      | 4,000 VAC; IEC 664 & 664 A                                        |                  |                  |
| Insulation resistance                                    | > 100 MΩ (DC 500 V)                                               |                  |                  |
| Interrupting capacity<br>(VDE 0660, Part 101, P-2)       | 4201-10                                                           | maximum capacity |                  |
|                                                          | 0.05...0.8 A                                                      | self-limiting    |                  |
|                                                          | 1...2 A                                                           | 200 A            |                  |
|                                                          | 2.5...16 A                                                        | 400 A            |                  |
| Interrupting capacity; 4201-10<br>(UL 1077/EN 60934 PC1) | Rated current                                                     | Rated voltage    | maximum capacity |
|                                                          | 0.05...4.5 A                                                      | AC 250 V         | 200 A            |
|                                                          | 5...8 A                                                           | AC 250 V         | 1000 A           |
|                                                          | 9...15 A                                                          | AC 125 V         | 1000 A           |
|                                                          | 0.05...15 A                                                       | DC 65 V          | 200 A            |
| Typical life at 2 x rated current                        | 5,000 operations                                                  |                  |                  |
| Shock                                                    | 25 g (11 ms) to IEC 68-2-27, Test Ea                              |                  |                  |
| Torque                                                   | Nm (lb. in.)                                                      | 0.8 (7.1)        |                  |
| Vibration                                                | 5 g (57 to 500 Hz / ±0.38 mm, 10 to 57 Hz) to IEC 68-2-6, Test Fc |                  |                  |
| Temperature range                                        | -30°C...+55°C (-22°F...+131°F)                                    |                  |                  |
| Corrosion                                                | 96 hours at 5% salt spray, to IEC 68-2-11, Test Ka                |                  |                  |
| Humidity                                                 | 240 hours at 95% RH, to IEC 68-2-3, Test Ca                       |                  |                  |
| Weight                                                   | Approximately 60 g per pole                                       |                  |                  |
| Wire size (UL)                                           | #20...8 AWG                                                       | solid            |                  |
|                                                          | #20...10 AWG                                                      | standard         |                  |

### Accessories

|              | Type            | Part No.   |
|--------------|-----------------|------------|
| Jumpers      |                 |            |
|              | Daisy Chain 50* | BDC 50     |
|              | Straight CQB**  | CQB 2      |
|              |                 | CQB 3      |
|              |                 | CQB 4      |
| Angled CQB** |                 | CQB 10     |
|              |                 | CQB 2      |
|              |                 | CQB 3      |
|              |                 | CQB 4      |
|              |                 | CQB 10     |
| Adaptor foot | AF/TS 32        | 9102100000 |

### Marking Tags

|             |                        |           |               |
|-------------|------------------------|-----------|---------------|
| 1 2 3 4 5 6 | Special print only     | WS 8/5 MC | 1640750000*** |
|             | Consecutive horizontal | DEK 5/5   | 0473460001    |
|             | Consecutive vertical   | DEK 5/5   | 0473560001    |

Note: Part numbers are shown for a single card of pre-printed tags numbered 1-50.

†Note: Resistive and inductive loads (0.05 - 16 A)

\*BDC will accommodate 20 A per pin, 20 A total

\*\*CQB will accommodate 18 A per pin, 18 A total; dedicated to 4201 Series

\*\*\*Please specify horizontal or vertical print when ordering. Standard quantity = 144 tags per card.