

## RCCB Residual Current Circuit Breaker series BCFO, 10kA, type AC



BC004110

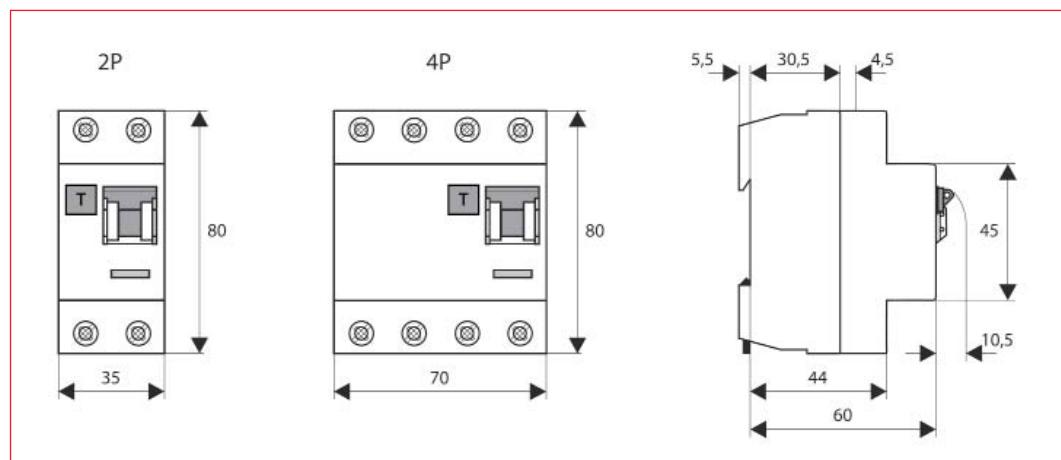
### Schrack-Info

- Sensitivity: AC-sensitive (type AC)
- Short-circuit strength 10kA
- Tripping independent of line voltage
- Contact position color indicator (red/green)
- Most common accessories: auxiliary contact 1 NO / 1 NC BD900002

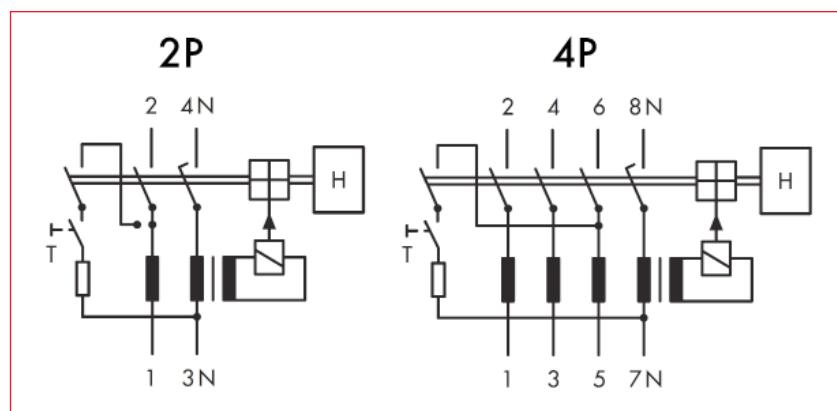
| Standards:  | IEC/EN 61008  |                       |
|---|---|-----------------------|
| Pole  | 2-pole, 4-pole  |                       |
| Rated voltage Us:   | 230V/240V   |                       |
| 2-pole  | 230/400 and 240/415V-AC   |                       |
| 4-pole  | 50/60Hz   |                       |
| Rated frequency:  | 50/60Hz   |                       |
| Rated current In:   | 25A, 40A, 63A, 80A, 100A  |                       |
| Tripping-type:  | AC (AC-sensitive)   |                       |
| Rated current IΔn:  | 30mA, 100mA, 300mA  |                       |
| Delay-type:   | undelayed   |                       |
| Surge current proof:                                      | >250A (8/20 µs)   |                       |
| Tripping:   | line voltage-independent  |                       |
| Rated insulation voltage Ui:                              | 440V  |                       |
| Rated impulse withstand voltage Uimp:                     | 4kV (1.2/50 µs)   |                       |
| Rated breaking capacity Im and rated residual making IΔm: |   |                       |
| I <sub>n</sub> = 25A                                      | 500A  |                       |
| I <sub>n</sub> = 40A                                      | 500A  |                       |
| I <sub>n</sub> = 63A                                      | 630A  |                       |
| I <sub>n</sub> = 80A                                      | 800A  |                       |
| I <sub>n</sub> = 100A                                     | 1000A   |                       |
| Rated short-circuit capacity Icn:                         | 10kA according EN 61008   |                       |
| Max. back up fuse:  | overload (OPCD):  | short circuit (SCPD): |
| I <sub>n</sub> = 25A                                      | 25A gG/gL   | 63A gG/gL             |
| I <sub>n</sub> = 40A                                      | 25A gG/gL   | 63A gG/gL             |
| I <sub>n</sub> = 63A                                      | 40A gG/gL   | 63A gG/gL             |
| I <sub>n</sub> = 80A                                      | 50A gG/gL   | 80A gG/gL             |
| I <sub>n</sub> = 100A                                     | 63A gG/gL   | 100A gG/gL            |
| back up fuse proof I <sub>n</sub> = 40A vsf.              | 40A gG/gL   | 80A gG/gL             |
| back up fuse proof I <sub>n</sub> = 63A vsf.              | 63A gG/gL   | 80A gG/gL             |
| Operating voltage test-circuit:                           | 195,5 - 440V-AC   |                       |
| Endurance:  | > 4.000 operating cycles (mechanical > 20.000)  |                       |
| Lamp strength:  |   |                       |
| 30mA  | max. 20 electronic ballasts per phase, max. 60 per RCCB (typical, commercially available)   |                       |
| 100mA, 300mA  | max. 90 electronic ballasts per phase (typical, commercially available)   |                       |
| Contact position indicator:                               | red / green   |                       |
| Rated tripping temperature:                               | -25°C up to +40°C   |                       |
| Max. ambient temperature:                                 |   |                       |
| 25A   | -35°C up to +55°C   |                       |
| 40A - 100A  | -35°C up to +60°C   |                       |
| Climatic proofing:  | according to IEC/EN 61008   |                       |
| Finger and hand touch safe:                               | according to BGV A3   |                       |
| Degree of protection:                                     | IP 20 (covered IP40)  |                       |
| Operating position:                                       | in any position   |                       |
| Terminals:  | Double clamp / lift terminal  |                       |
| Terminal cross-section:                                   | 1-35 mm <sup>2</sup> solid, 2x16 mm <sup>2</sup> stranded   |                       |
| Terminal screws:  | Pozidriv PZ2  |                       |
| Terminal tightening torque:                               | 2 - 2,4 Nm  |                       |
| Mounting:   | on DIN rail by latching snap-on mounting  |                       |
| Test interval:  | Operate test button of RCCB 1 x every 6 months. The system operator is responsible for this test! Under non-household-type conditions (e.g. humid or dusty environment), it is recommended to carry out the test in monthly intervals. Pressing the test button "T" only tests the function of the residual current (RC) circuit breaker. This test does not replace the earthing resistance measurement (RE) nor the proper protective conductor test that must be performed separately. |                       |

## RCCB Residual Current Circuit Breaker series BCF0, 10kA, type AC

### Dimensions



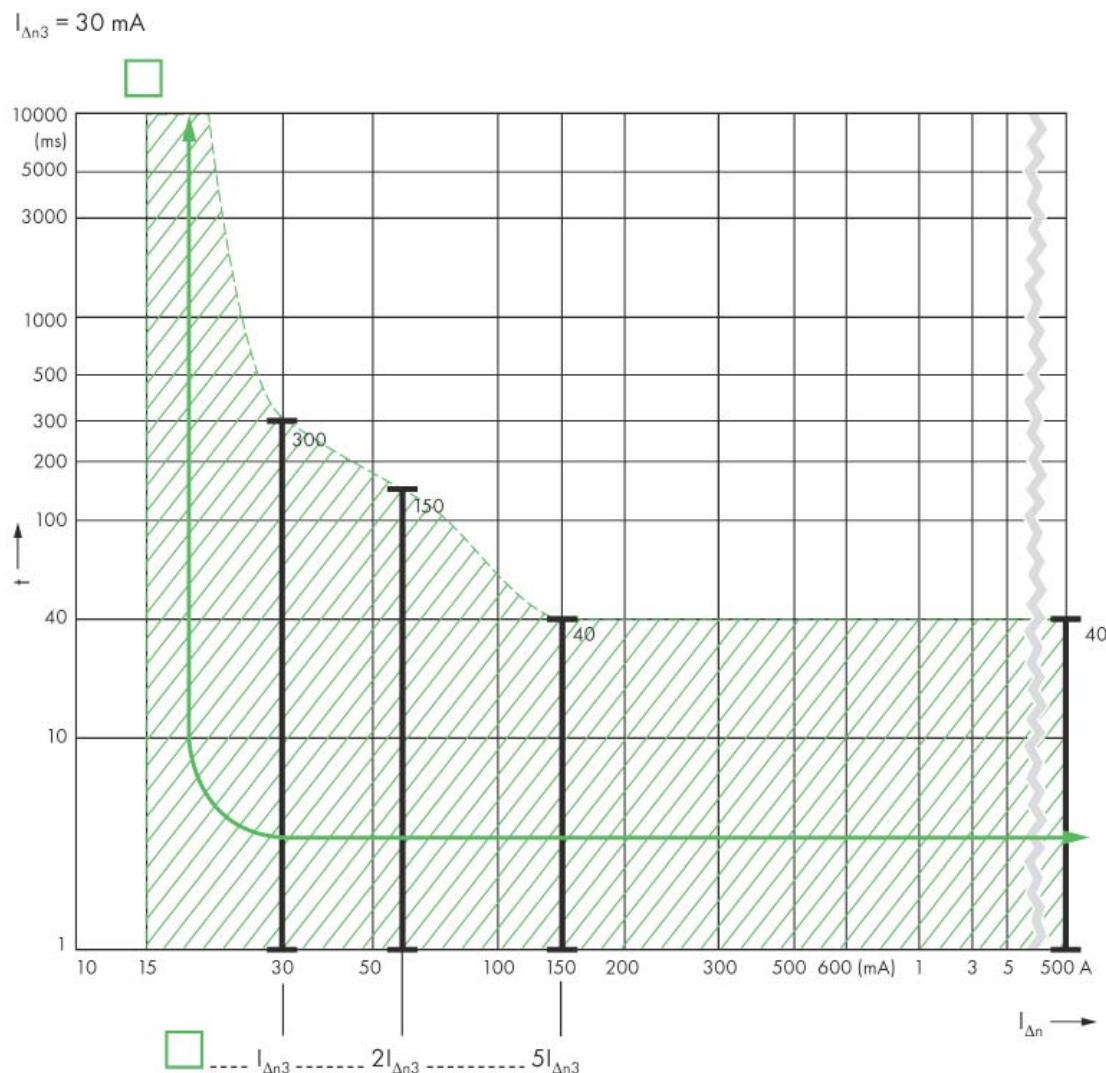
### Wiring diagram



| Ambient temperature | Type          |               |               |               |               |               |               |               |               |               |                |                |
|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
|                     | 16A<br>2-pole | 16A<br>4-pole | 25A<br>2-pole | 25A<br>4-pole | 40A<br>2-pole | 40A<br>4-pole | 63A<br>2-pole | 63A<br>4-pole | 80A<br>2-pole | 80A<br>4-pole | 100A<br>2-pole | 100A<br>4-pole |
| 40°                 | 16            | 16            | 25            | 25            | 40            | 40            | 63            | 63            | 80            | 80            | 100            | 100            |
| 45°                 | 14            | 14            | 22            | 22            | 37            | 37            | 59            | 59            | 76            | 76            | 95             | 95             |
| 50°                 | 11            | 1             | 19            | 19            | 33            | 34            | 55            | 55            | 72            | 72            | 90             | 90             |
| 55°                 | 9             | 9             | 16            | 16            | 30            | 31            | 50            | 50            | 68            | 68            | 85             | 85             |
| 60°                 | -             | -             | -             | -             | 26            | 27            | 45            | 45            | 64            | 64            | 80             | 80             |

■ RCCB Residual Current Circuit Breaker series BCF0, 10kA, type AC

■ Tripping characteristic undelayed



## RCCB Residual Current Circuit Breaker series BCF0, 10kA, type AC

| Conductor cross section<br>[mm <sup>2</sup> ] | Number of single conductors, rigid, single-wire Cu conductors |   |   |   |   |   |
|---|---|---|---|---|---|---|
|   | 1   | 2 | 3 | 4 | 5 | 6 |
| 1,5   | +   | + | + | + | + | - |
| 2,5   | +   | + | + | + | - | - |
| 4   | +   | + | + | + | - | - |
| 6   | +   | + | + | + | - | - |
| 10  | +   | + | + | - | - | - |
| 16  | +   | + | - | - | - | - |
| 25  | +   | - | - | - | - | - |
| 35  | +   | - | - | - | - | - |

| Conductor cross section<br>[mm <sup>2</sup> ] | Number of single conductors, rigid, multi-wire Cu conductors |   |   |   |   |   |
|---|--|---|---|---|---|---|
|   | 1  | 2 | 3 | 4 | 5 | 6 |
| 10  | +  | + | + | - | - | - |
| 16  | +  | + | - | - | - | - |
| 25  | +  | - | - | - | - | - |
| 35  | +  | - | - | - | - | - |

| Conductor cross section<br>[mm <sup>2</sup> ] | Number of single conductors, flexible Cu conductors without sleeves |   |   |   |   |   |
|---|---|---|---|---|---|---|
|   | 1   | 2 | 3 | 4 | 5 | 6 |
| 1,5   | -   | - | - | - | + | - |
| 2,5   | -   | - | + | + | - | - |
| 4   | -   | + | + | + | - | - |
| 6   | -   | + | + | + | - | - |
| 10  | -   | + | - | - | - | - |
| 16  | -   | + | - | - | - | - |
| 25  | -   | - | - | - | - | - |
| 35  | -   | - | - | - | - | - |

| Conductor cross section<br>[mm <sup>2</sup> ] | Number of single conductors, flexible Cu conductors with sleeves |   |   |   |   |   |
|---|--|---|---|---|---|---|
|   | 1  | 2 | 3 | 4 | 5 | 6 |
| 1,5   | +  | - | - | - | - | - |
| 2,5   | +  | - | - | - | - | - |
| 4   | +  | - | - | - | - | - |
| 6   | +  | - | - | - | - | - |
| 10  | +  | - | - | - | - | - |
| 16  | +  | - | - | - | - | - |
| 25  | +  | - | - | - | - | - |
| 35  | +  | - | - | - | - | - |

| Conductor cross section<br>[mm <sup>2</sup> ] | Number of single conductors, flexible Cu conductors<br>with different cross-sections, without sleeves |     |   |   |    |    |    |    |    |    |
|---|---|-----|---|---|----|----|----|----|----|----|
|   | 1,5   | 2,5 | 4 | 6 | 10 | 16 | 25 | 35 | 40 | 50 |
| 1,5   | +   | -   | - | - | -  | -  | -  | -  | -  | -  |
| 2,5   | +   | +   | - | - | -  | +  | -  | -  | -  | -  |
| 4   | -   | +   | + | - | -  | -  | +  | -  | -  | -  |
| 6   | -   | -   | + | + | -  | -  | +  | -  | +  | -  |
| 10  | -   | -   | - | + | +  | +  | -  | +  | -  | +  |
| 16  | -   | -   | - | - | -  | +  | -  | -  | +  | -  |
| 25  | -   | -   | - | - | -  | -  | -  | -  | -  | +  |
| 35  | -   | -   | - | - | -  | -  | -  | -  | -  | -  |

## RCCB Residual Current Circuit Breaker series BCF0, 10kA, type AC, 30mA



BC002203



BC004103

### Schrack-Info

Most common accessories: Auxiliary contact 1 NO / 1 NC  
BD900002

| DESCRIPTION                        | AVAILABLE | ORDER NO.       |
|------------------------------------|-----------|-----------------|
| <b>2-pole</b>                      |           |                 |
| 25A / 2 / 0,03A                    |           | <b>BC002203</b> |
| 40A / 2 / 0,03A                    |           | <b>BC004203</b> |
| 63A / 2 / 0,03A                    |           | <b>BC006203</b> |
| 80A / 2 / 0,03A                    |           | <b>BC008203</b> |
| <b>4-pole</b>                      |           |                 |
| 25A / 4 / 0,03A                    |           | <b>BC002103</b> |
| 40A / 4 / 0,03A                    |           | <b>BC004103</b> |
| 40A / 4 / 0,03A back-up fuse proof |           | <b>BC004403</b> |
| 63A / 4 / 0,03A                    |           | <b>BC006103</b> |
| 63A / 4 / 0,03A back-up fuse proof |           | <b>BC006603</b> |
| 80A / 4 / 0,03A                    |           | <b>BC008103</b> |
| 100A / 4 / 0,03A                   |           | <b>BC000103</b> |

## RCCB Residual Current Circuit Breaker series BCF0, 10kA, type AC, 100mA



BC004110

| DESCRIPTION                       | AVAILABLE | ORDER NO.       |
|-----------------------------------|-----------|-----------------|
| <b>2-pole</b>                     |           |                 |
| 25A / 2 / 0,1A                    |           | <b>BC002210</b> |
| 40A / 2 / 0,1A                    |           | <b>BC004210</b> |
| <b>4-pole</b>                     |           |                 |
| 25A / 4 / 0,1A                    |           | <b>BC002110</b> |
| 40A / 4 / 0,1A                    |           | <b>BC004110</b> |
| 40A / 4 / 0,1A back-up fuse proof |           | <b>BC004410</b> |
| 63A / 4 / 0,1A                    |           | <b>BC006110</b> |
| 63A / 4 / 0,1A back-up fuse proof |           | <b>BC006610</b> |
| 80A / 4 / 0,1A                    |           | <b>BC008110</b> |
| 100A / 4 / 0,1A                   |           | <b>BC000110</b> |



**Order no. blue:** on stock, usually ready for delivery on the day of order

## RCCB Residual Current Circuit Breaker series BCF0, 10kA, type AC, 300mA



BC000130

| DESCRIPTION     | AVAILABLE | ORDER NO.       |
|-----------------|-----------|-----------------|
| <b>2-pole</b>   |           |                 |
| 25A / 2 / 0,3A  |           | <b>BC002230</b> |
| 40A / 2 / 0,3A  |           | <b>BC004230</b> |
| 63A / 2 / 0,3A  |           | <b>BC006230</b> |
| <b>4-pole</b>   |           |                 |
| 25A / 4 / 0,3A  |           | <b>BC002130</b> |
| 40A / 4 / 0,3A  |           | <b>BC004130</b> |
| 63A / 4 / 0,3A  |           | <b>BC006130</b> |
| 80A / 4 / 0,3A  |           | <b>BC008130</b> |
| 100A / 4 / 0,3A |           | <b>BC000130</b> |

