

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



BC064110

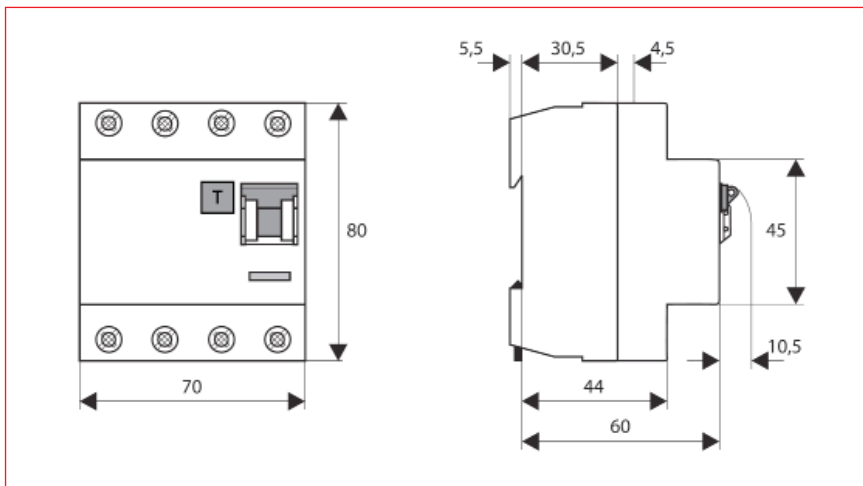
### Schrack-Info

- Sensitivity: pulse current sensitive (type A)
- Type S, selective, delayed at least 40ms
- Tripping independent of line voltage
- Contact position color indicator (red/green)
- Most common accessories: auxiliary contact 1 NO / 1 NC BD900002

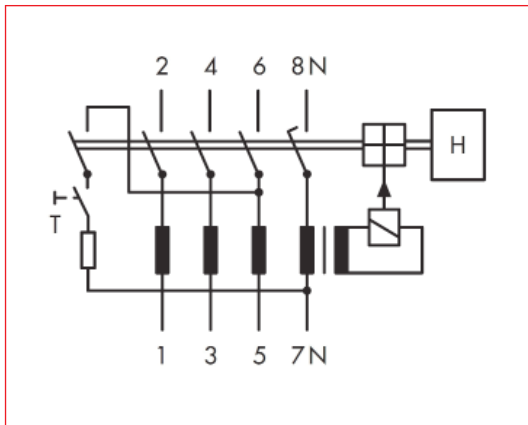
|                                                                          |                                                                                           |                       |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------|
| Standards:                                                               | IEC/EN 61008                                                                              |                       |
| Pole                                                                     | 4-polig                                                                                   |                       |
| Rated voltage $U_s$ :                                                    | 230/400 and 240/415V-AC                                                                   |                       |
| 4-pole                                                                   |                                                                                           |                       |
| Rated frequency:                                                         | 50/60Hz                                                                                   |                       |
| Rated current $I_n$ :                                                    | 40A, 63A, 80A, 100A                                                                       |                       |
| Tripping-type:                                                           | A (pulse current sensitive)                                                               |                       |
| Rated current $I_{\Delta n}$ :                                           | 100mA, 300mA                                                                              |                       |
| Delay-type:                                                              | S (IEC/EN 61008), selective                                                               |                       |
| Surge current proof:                                                     | >5kA (8/20 $\mu$ s) Type S                                                                |                       |
| Tripping:                                                                | line voltage-independent                                                                  |                       |
| Rated insulation voltage $U_i$ :                                         | 440V                                                                                      |                       |
| Rated impulse withstand voltage $U_{imp}$ :                              | 4kV (1.2/50 $\mu$ s)                                                                      |                       |
| Rated breaking capacity $I_m$ and rated residual making $I_{\Delta m}$ : |                                                                                           |                       |
| $I_n = 40A$                                                              | 500A                                                                                      |                       |
| $I_n = 63A$                                                              | 630A                                                                                      |                       |
| $I_n = 80A$                                                              | 800A                                                                                      |                       |
| $I_n = 100A$                                                             | 1000A                                                                                     |                       |
| Rated short-circuit capacity $I_{cn}$ :                                  | 10kA according EN 61008                                                                   |                       |
| Max. back up fuse:                                                       | overload (OPCD):                                                                          | short circuit (SCPD): |
| $I_n = 40A$                                                              | 25A gG/gL                                                                                 | 63A gG/gL             |
| $I_n = 63A$                                                              | 40A gG/gL                                                                                 | 63A gG/gL             |
| $I_n = 80A$                                                              | 50A gG/gL                                                                                 | 80A gG/gL             |
| $I_n = 100A$                                                             | 63A gG/gL                                                                                 | 100A gG/gL            |
| back up fuse proof $I_n = 40A$ vsf.                                      | 40A gG/gL                                                                                 | 80A gG/gL             |
| back up fuse proof $I_n = 63A$ 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:                                                           | max. 20 electronic ballasts per phase, max. 60 per RCCB (typical, commercially available) |                       |
| Contact position indicator:                                              | red / green                                                                               |                       |
| Rated tripping temperature:                                              | -25°C up to +40°C                                                                         |                       |
| Max. ambient temperature:                                                | -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.                                           |                       |

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

■ Dimensions

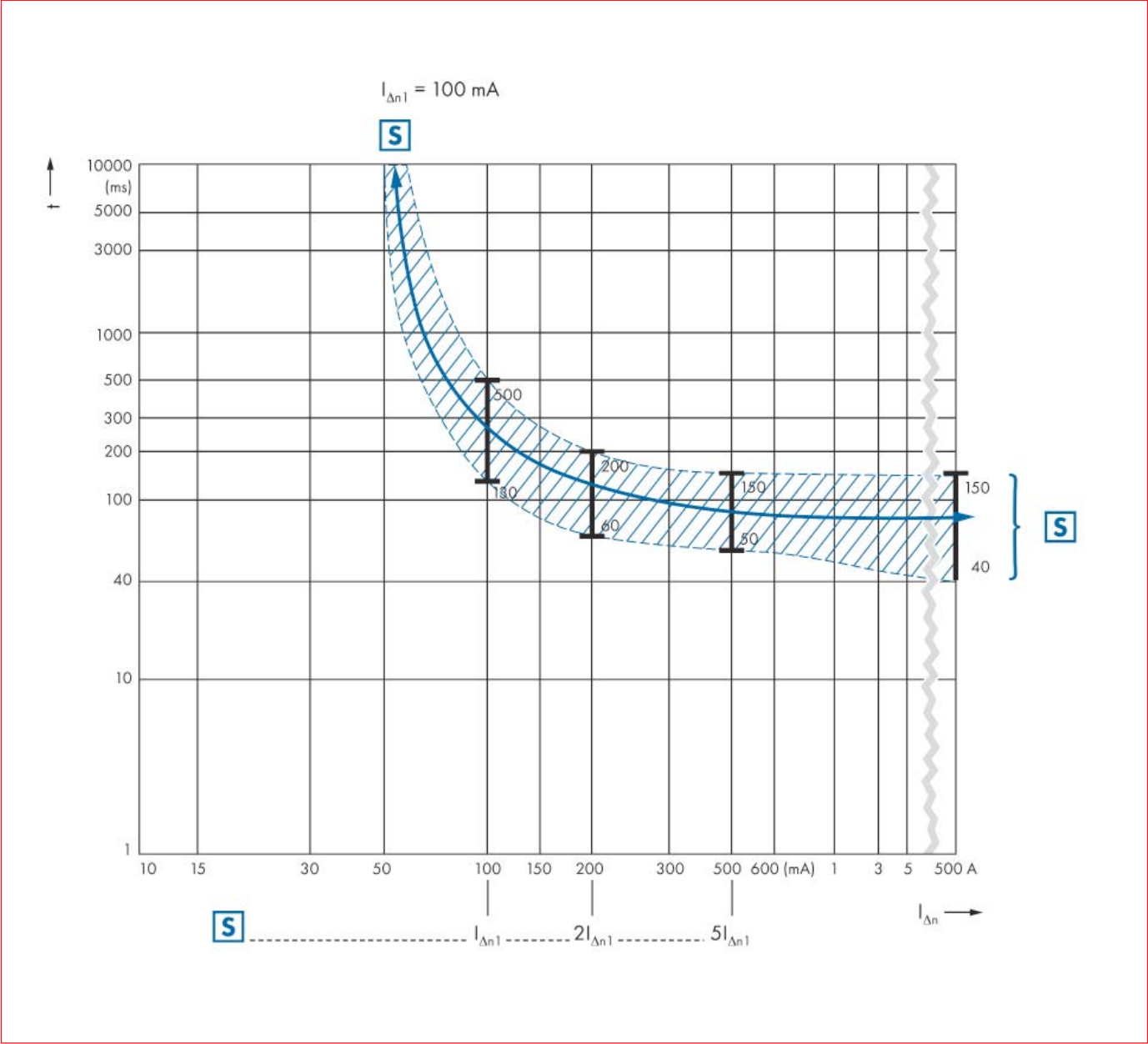


■ Wiring diagram



RCCB Residual Current Circuit Breaker series BCF0, 10kA, type A, S

Tripping characteristic selective (S)



| 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             |

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| 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                                                                                                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1,5                                           | +                                                                                                     | - | - | - | - | - | - | - | - |
| 2,5                                           | +                                                                                                     | + | - | - | - | + | - | - | - |
| 4                                             | -                                                                                                     | + | + | - | - | - | + | - | - |
| 6                                             | -                                                                                                     | - | + | + | - | + | - | + | - |
| 10                                            | -                                                                                                     | - | - | + | + | - | + | - | + |
| 16                                            | -                                                                                                     | - | - | - | + | - | - | + | - |
| 25                                            | -                                                                                                     | - | - | - | - | - | - | - | + |
| 35                                            | -                                                                                                     | - | - | - | - | - | - | - | - |

**RCCB Residual Current Circuit Breaker 10kA, type A, S, 100mA**



BC064110

| DESCRIPTION                       | AVAILABLE | ORDER NO.       |
|-----------------------------------|-----------|-----------------|
| <b>4-pole</b>                     |           |                 |
| 40A / 4 / 0,1A                    |           | <b>BC064110</b> |
| 40A / 4 / 0,1A back-up fuse proof |           | <b>BC064410</b> |
| 63A / 4 / 0,1A                    |           | <b>BC066110</b> |
| 63A / 4 / 0,1A back-up fuse proof |           | <b>BC066610</b> |

**RCCB Residual Current Circuit Breaker 10kA, type A, S, 300mA**



BC064130

| DESCRIPTION                       | AVAILABLE | ORDER NO.       |
|-----------------------------------|-----------|-----------------|
| <b>4-pole</b>                     |           |                 |
| 40A / 4 / 0,3A                    |           | <b>BC064130</b> |
| 63A / 4 / 0,3A                    |           | <b>BC066130</b> |
| 63A / 4 / 0,3A back-up fuse proof |           | <b>BC066630</b> |
| 80A / 4 / 0,3A                    |           | <b>BC068130</b> |
| 100A / 4 / 0,3A                   |           | <b>BC060130</b> |