RCD residual current circuit breaker



8530/1-RCCB-STAA1N-300-40-500-3 Art. No. 269649



- · Modular component for residual current monitoring
- Can be used for pulsating direct currents and alternating currents
- Fault protection, protection of persons and protection against electrical fires caused by residual currents to earth

MY R. STAHL 8530B



The R. STAHL Series 8530 residual current circuit breaker is a component for residual current monitoring and switches off systems in the event of residual currents – for reliable protection of persons, even in hazardous areas. It is suitable for pulsating direct currents and alternating currents and is designed for rated operational currents of 16, 25, 40, or 63 A and rated residual currents of 10, 30, 100, 300 and 500 mA. The residual current tripping variants A, AS, AP-R, B, BS, B+ and F, as well as an A110 V version, are available.

Technical Data

| Explosion Protection | |
|---|--|
| Application range (zones) | 1, 2 |
| Application range (Zone) note | For use in Zone 21/22 when protected by Ex tb/tc enclosure |
| IECEx gas certificate | IECEx FMG 19.0029U |
| IECEx gas explosion protection | Ex db eb IIC Gb |
| ATEX gas certificate | FM19ATEX0191U |
| ATEX gas explosion protection | |
| Certificates | ATEX (FM), Brazil (ULB), China (CQST), IECEx (FM) |
| Declaration of Conformity | Certificate of conformity (ATEX), China (CCC) |
| Electrical Data | |
| Rated operational voltage AC | 230 V |
| Rated operational current | 40 A |
| Frequency | 50/60 Hz |
| Rated breaking capacity max | 1 kA |
| Rated short-circuit current | 10 kA |
| Electrical service life | 10⁴ |
| Mechanical service life | 2 x 10 ⁴ |
| Rated residual current | 0.3 A |
| 1st auxiliary function | Auxiliary contact 1 change-over contact + fault signal contact 1 change-over contact |
| 1st auxiliary function for AC rated voltage | 230 V |
| 1st auxiliary function for rated current max. | 2 A |
| 2nd auxiliary function | without |
| 2nd auxiliary function voltage AC | - |
| 2nd auxiliary function voltage max. DC | - |
| Release type | Sensitive to alternating/pulse current |

RCD residual current circuit breaker



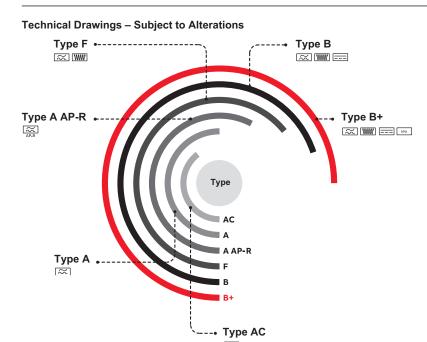
8530/1-RCCB-STAA1N-300-40-500-3 Art. No. 269649

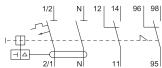
| No. of poles | 1-pole + N |
|--|--|
| Back-up fuse | max. 100 A gG |
| Ambient Conditions | max. 100 A gO |
| Ambient temperature | -25 °C 55 °C |
| Ambient temperature Ambient temperature | -13°F +131°F |
| Ambient temperature note | Different ambient temperatures are possible on request based on the current certificates |
| Mechanical Data | Different ambient temperatures are possible of request based of the current certificates |
| Degree of protection (IP) (IEC 60529) | IP2X |
| Enclosure material | Thermoplast |
| Connection cross section min. | 1.5 mm ² |
| Connection cross-section max. | 25 mm ² |
| Connection cross-section AWG min. | 16 AWG |
| ACROSS | 4 AWG |
| Connection cross-section 2 min. | 1.5 mm ² |
| Connection cross-section 2 min. Connection cross-section 2 max. | 1.5 mm² |
| Connection cross-section 2 AWG min. | 16 AWG |
| Connection cross-section 2 AWG max. | 8 AWG |
| Connection cross-section of auxiliary | 0.5 mm ² |
| contact min. | |
| Max. aux. cont. conn. crsec. | 4 mm² |
| Connection cross-section of auxiliary contact AWG min. | 18 |
| Connection cross-section of auxiliary contact AWG max. | 14 |
| Min. tightening torque | 2 Nm |
| Max. tightening torque | 3 Nm |
| Connection cross-section note | 2-conductor connection (top and bottom chambers at the same time): - Top and bottom chambers max. 16/10 mm² (the maximum difference that can be clamped between the top and bottom chambers is equal to the cross-section.) Refer to the operating instructions for the approved combination possibilities of the connection cross-sections. |
| Width | 83 mm |
| Width, inches | 3.27 in |
| Length | 165 mm |
| Length in inches | 6.5 in |
| Depth of cut-out | 138.3 mm |
| Mounting depth in inches | 5.44 in |
| Weight | 1.2 kg |
| Weight | 2.646 lb |
| Mounting / Installation | |
| Tightening torque | 2 – 3 Nm |
| Tightening torque lbf in | 17.7 to 26.6 lbf-in |
| Tightening torque auxiliary contact | 0.4 – 0.6 Nm |
| Tightening torque auxiliary contact lbf in | 3.5 to 5.3 lbf in |

RCD residual current circuit breaker



8530/1-RCCB-STAA1N-300-40-500-3 Art. No. 269649

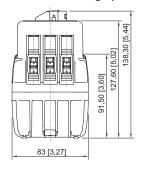


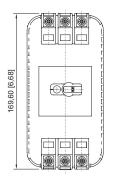


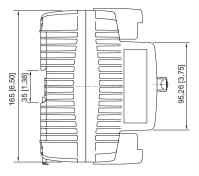
1-pole+N, auxiliary contact 1 change-over contact + fault signal contact 1 change-over contact

Release type (see type code)

Dimensional Drawings (All Dimensions in mm [inches]) - Subject to Alterations







8530/1; 3 horizontal pitches

Accessories

| 4-way locking device | e e | Art. No. |
|----------------------|---|----------|
| | A lock-out/tag-out hasp for individually locking the component using up to four cylinder locks. | 227232 |

RCD residual current circuit breaker



8530/1-RCCB-STAA1N-300-40-500-3 Art. No. 269649

| Cylinder lock | | Art. No. |
|---------------|--|----------|
| | for closing (bracket Ø 3) | 107115 |
| Fastening set | | Art. No. |
| | A fastening set for fastening the component on the mounting plate without a DIN rail | 276618 |

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.