

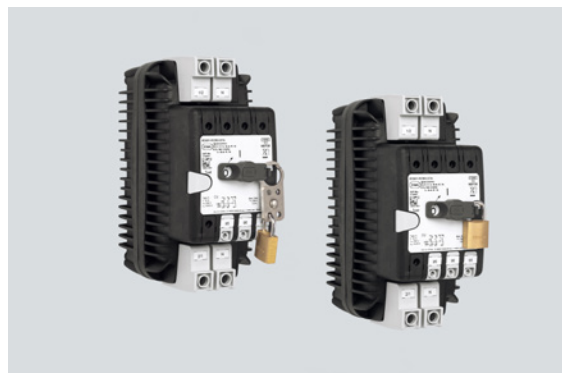
# Components for system solutions

## RCD/MCB Residual current circuit breaker

### With integrated overcurrent protection



8530/1-RCBO-STAA101N-300-C16-300-3 Art. No. 299451



- Residual current monitoring and tripping in the event of over-voltage and short circuit
- Combination of residual current circuit breaker and miniature circuit breaker: Saves space, reduces installation requirements
- Reliable functional test using the integrated test button
- International approvals for worldwide use
- Simple replacement or expansion of your system thanks to a modular circuit breaker design
- Simple installation – it snaps onto the mounting rail of Ex e enclosures
- Padlocks provide protection against being switched on again during maintenance work
- Ergonomically shaped operating lever guarantees that the system can be switched on and off safely

MY R. STAHL 8530C



The Series 8530 RCCD/MCB from R. STAHL is a residual current circuit breaker and miniature circuit breaker in one:

It monitors residual currents and triggers in the event of excessive residual currents. In addition, it protects against overvoltage, switches off short circuits up to 10 kA and therefore protects the conductors in your systems in the event of an earth fault, overload or short circuit. Its excellent current limiting feature reduces the load on the conductor in the event of a short circuit. 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	Ex II 2 G Ex db eb IIC Gb
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	16 A
Frequency	50/60 Hz
Rated switching capacity	10 kA
Electrical service life	2 x 10 <sup>4</sup>
Mechanical service life	2 x 10 <sup>4</sup>
Rated residual current	0.3 A
1st auxiliary function	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	-

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## Electrical Data

2nd auxiliary function voltage max. DC	-
Release type	Sensitive to alternating/pulse current
Tripping characteristic	C
No. of poles	1-pole + N

## Ambient Conditions

Ambient temperature	-25 °C ... 55 °C
Ambient temperature	-13°F ... +131°F
Ambient temperature note	Different ambient temperatures are possible on request based on the current certificates

## Mechanical Data

Degree of protection (IP) (IEC 60529)	IP2X
Enclosure material	Thermoplast
Connection cross section min.	1.5 mm <sup>2</sup>
Connection cross-section max.	25 mm <sup>2</sup>
Connection cross-section AWG min.	16 AWG
Connection cross-section AWG max.	4 AWG
Connection cross-section 2 min.	1.5 mm <sup>2</sup>
Connection cross-section 2 max.	10 mm <sup>2</sup>
Connection cross-section 2 AWG min.	16 AWG
Connection cross-section 2 AWG max.	8 AWG
Connection cross-section of auxiliary contact min.	0.5 mm <sup>2</sup>
Connection cross-section of auxiliary contact max.	4 mm <sup>2</sup>
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	<b>2-conductor connection (top and bottom chambers at the same time):</b> - Top and bottom chambers max. 16/10 mm <sup>2</sup> (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, inches	6.5 in
Depth of cut-out	138.3 mm
Mounting depth, inches	5.44 in
Weight	1.3 kg
Weight	2.867 lb

## Mounting / Installation

Tightening torque	2 – 3 Nm
Tightening torque lbf in	17.7 to 26.6 lbf-in

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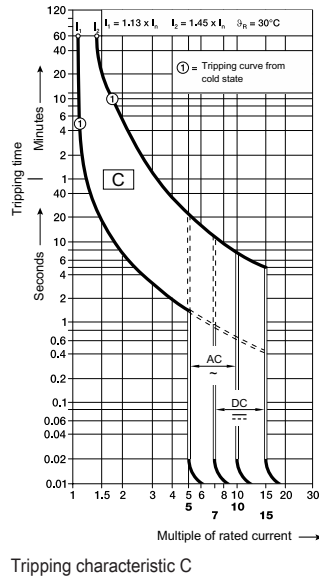
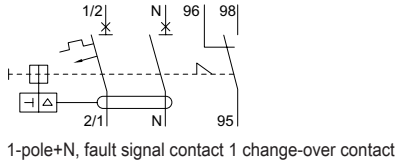
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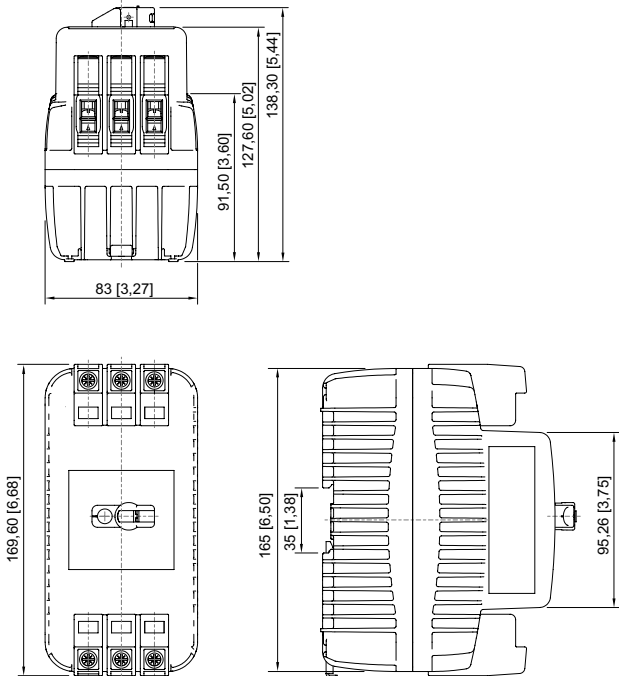
### Mounting / Installation

Tightening torque auxiliary contact	0.4 – 0.6 Nm
Tightening torque auxiliary contact lbf in	3.5 to 5.3 lbf in

### Technical Drawings – Subject to Alterations



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



### Accessories

4-way locking device

Art. No.




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	A lock-out/tag-out hasp for individually locking the component using up to four cylinder locks.	227232
<b>Cylinder lock</b>		<b>Art. No.</b>
	for closing (bracket Ø 3)	107115
<b>Fastening set</b>		<b>Art. No.</b>
	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.