# **Components for system solutions**

MCB Miniature circuit breaker

# 8530/1-MCB-STA103N-C20-100-4 Art. No. 293877



#### Isolation function in accordance with EN60947-2

- Energy limitation class 3
- Simple replacement or expansion of your system thanks to a modular circuit breaker design
- Simple installation it snaps onto the mounting rail in Ex e enclosures
- · Non-adjustable thermal and magnetic releases
- Ergonomically shaped operating lever guarantees that the system can be switched on and off safely
- Padlocks (Accessories) provide protection against being switched on again during maintenance work

#### MY R. STAHL 8530A



R. STAHL 8530 series miniature circuit breakers are overcurrent devices that also provide good current limiting for short circuits and a high switching capacity of 10, 15 or 25 kA. This results in a low load on cables and a high selectivity for upstream fuses. The components have a modular design and are therefore available in 1- to 4-pole versions and for rated currents of 0.5-63 A. The maximum installation capacity is 4.5 subunits.

### **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 certificate	IECEx FMG 19.0029U
IECEx gas explosion protection	Ex db eb IIC Gb
ATEX gas certificate	FM19ATEX0191U
ATEX gas certificate	FM19ATEX0191U
ATEX gas explosion protection	🐼 II 2 G Ex db eb IIC Gb
Certificates	ATEX (FM), Brazil (ULB), China (CQST), IECEx (FM)
Declaration of conformity	Certificate of conformity (ATEX)
Electrical Data	·
Rated operational voltage AC	230/400 V
Rated operational current	20 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>
1st auxiliary function	Auxiliary contact 1 change-over contact
1st auxiliary function for AC rated voltage	230 V
1st auxiliary function for rated current	2 A
max.	
2nd auxiliary function	without
2nd auxiliary function voltage max. DC	-
Tripping characteristic	C
No. of poles	3-pole + N



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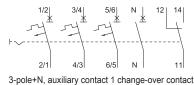
Ambient	Conditions

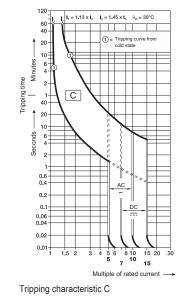
Ambient Conditions	
Ambient temperature	-25 °C 55 °C
Ambient temperature	-13°F +131°F
Ambient temperature note	Deviating ambient temperatures based on current certificates available on request
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP2X
Enclosure material	Thermoplast
Connection cross section min.	1.5 mm <sup>2</sup>
Connection cross-section max.	25 mm <sup>2</sup>
Connection cross-section AWG min.	16 AWG
ACROSS	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>
Max. aux. cont. conn. crsec.	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	<ul> <li>2-conductor connection (upper and lower chamber at the same time):         <ul> <li>upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.)</li> </ul> </li> <li>The permitted combinations of connection cross-sections can be found in the operating instructions.</li> </ul>
Width	110 mm
Width, inches	4.33 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	1.8 kg
Weight	3.969 lb
	1
Mounting / Installation	
Tightening torque	2 – 3 Nm
	2 – 3 Nm 17.7 to 26.6 lbf-in
Tightening torque	

STAHL

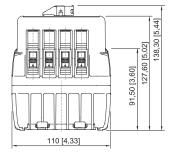
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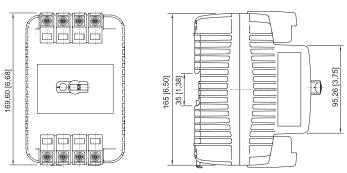
#### Technical Drawings – Subject to Alterations





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





8530/1; 4 horizontal pitches

### Accessories

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

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### 8530/1-MCB-STA103N-C20-100-4 Art. No. 293877

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.