# **Components for system solutions**

MCB Miniature circuit breaker

## 8530/1-MCB-STA103N-B50-000-4 Art. No. 293851



## 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	50 A
Frequency	50/60 Hz
Rated switching capacity	10 kA
Electrical service life	104
Mechanical service life	2 x 10 <sup>4</sup>
1st auxiliary function	without
1st auxiliary function for AC rated voltage	-
1st auxiliary function for rated current	-
max.	
2nd auxiliary function	without
2nd auxiliary function voltage max. DC	-
Tripping characteristic	В
No. of poles	3-pole + N



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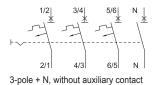
Ambient	Conditions

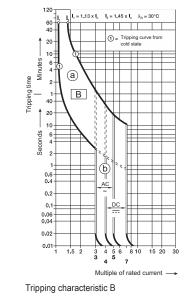
Amplent Conditions	
Ambient temperature	-25 °C 55 °C
Ambient temperature	-13°F +131°F
Ambient temperature note	Deviating ambient temperatures based on current certificates available on request
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP2X
Enclosure material	Thermoplast
Connection cross 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
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):</li> <li>- upper and lower chamber max. 16 / 10 mm<sup>2</sup> (A maximum difference of one cross section</li> </ul>
	may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions.
Width	The permitted combinations of connection cross-sections can be found in the operating
Width Width, inches	The permitted combinations of connection cross-sections can be found in the operating instructions.
	The permitted combinations of connection cross-sections can be found in the operating instructions. 110 mm
Width, inches	The permitted combinations of connection cross-sections can be found in the operating instructions. 110 mm 4.33 in
Width, inches Length	The permitted combinations of connection cross-sections can be found in the operating instructions. 110 mm 4.33 in 165 mm
Width, inches Length Length in inches	The permitted combinations of connection cross-sections can be found in the operating instructions. 110 mm 4.33 in 165 mm 6.5 in
Width, inches Length Length in inches Depth of cut-out	The permitted combinations of connection cross-sections can be found in the operating instructions. 110 mm 4.33 in 165 mm 6.5 in 138.3 mm
Width, inches Length Length in inches Depth of cut-out Mounting depth in inches	The permitted combinations of connection cross-sections can be found in the operating instructions. 110 mm 4.33 in 165 mm 6.5 in 138.3 mm 5.44 in
Width, inches Length Length in inches Depth of cut-out Mounting depth in inches Weight	The permitted combinations of connection cross-sections can be found in the operating instructions.  110 mm 4.33 in 165 mm 6.5 in 138.3 mm 5.44 in 1.8 kg
Width, inches Length Length in inches Depth of cut-out Mounting depth in inches Weight Weight	The permitted combinations of connection cross-sections can be found in the operating instructions.  110 mm 4.33 in 165 mm 6.5 in 138.3 mm 5.44 in 1.8 kg
Width, inches Length Length in inches Depth of cut-out Mounting depth in inches Weight Weight Mounting / Installation	The permitted combinations of connection cross-sections can be found in the operating instructions.  110 mm 4.33 in 165 mm 6.5 in 138.3 mm 5.44 in 1.8 kg 3.969 lb
Width, inches Length Length in inches Depth of cut-out Mounting depth in inches Weight Weight Mounting / Installation Tightening torque	The permitted combinations of connection cross-sections can be found in the operating instructions. 110 mm 4.33 in 165 mm 6.5 in 138.3 mm 5.44 in 1.8 kg 3.969 lb 2 – 3 Nm

STAHL

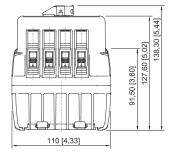
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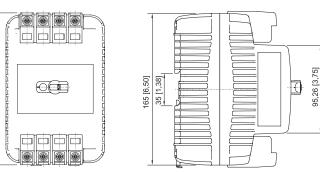
#### Technical Drawings – Subject to Alterations





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





8530/1; 4 horizontal pitches

169,60 [6,68]

#### Accessories

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

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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.