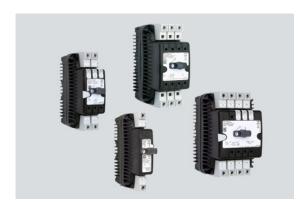
MCB Miniature circuit breaker



8530/1-MCB-STA101-C3-500-2 Art. No. 293992



- · 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 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)
Electrical Data	
Rated operational voltage AC	230 V
Rated operational current	3 A
Frequency	50/60 Hz
Rated switching capacity	10 kA
Electrical service life	2 x 10 ⁴
Mechanical service life	2 x 10 ⁴
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
Tripping characteristic	С
No. of poles	1-pole
Ambient Conditions	
Ambient temperature	-25 °C 55 °C
Ambient temperature	-13°F +131°F

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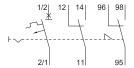
Degree of protection (IP) (IEC 60529) IP2X Thermoplast Connection cross section min. 1.5 mm² Connection cross-section max. 25 mm² Connection cross-section min. AWG Connection cross-section min. AWG Connection cross-section min. AWG Connection cross-section min. AWG Connection cross-section 2 min. 1.5 mm² Connection cross-section 2 min. AWG Connection cross-section 2 min. AWG Connection cross-section 2 min. AWG Connection cross-section 6 mixiliary Connection cross-section of auxiliary Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact min. Connecti	Ambient Conditions	
Degree of protection (IP) (IEC 60529) Enclosure material Thermoplast Connection cross-section min. 1.5 mm² Connection cross-section max. 25 mm² Connection cross-section max. 25 mm² Connection cross-section AWG max. 4 AWG Connection cross-section 2 mm. 1.5 mm² Connection cross-section 2 mm. 1.6 MWG Connection cross-section 2 mm. 1.7 mm² Connection cross-section 2 mm. 1.8 mm² Connection cross-section 6 auxiliary contact min. Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note Connection cross-section note width 1.5 mm² 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length, inches 6.5 in Depth of out-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 1 kg Weight 1.7.7 to 26.6 lbf-in Tightening torque auxiliary contact 0.4 – 0.6 Nm	Ambient temperature note	Deviating ambient temperatures based on current certificates available on request
Enclosure material Thermoplast Connection cross-section min. 1.5 mm² Connection cross-section max. 25 mm² Connection cross-section max. 26 mm² Connection cross-section AWG max. 4 AWG Connection cross-section 2 min. 1.5 mm² Connection cross-section 2 min. 1.5 mm² Connection cross-section 2 max. 10 mm² Connection cross-section 2 max. 10 mm² Connection cross-section 2 max. 10 mm² Connection cross-section 3 max. 10 mm² Connection cross-section 4 max. 10.5 mm² Connection cross-section 5 max. 10 mm² Connection cross-section 6 auxiliary contact min. 10 mm² Connection cross-section of auxiliary contact MVG min. 12 connection cross-section of auxiliary contact AWG min. 13 mm² Connection cross-section of auxiliary contact AWG min. 14 mm² Connection cross-section of auxiliary contact AWG min. 15 mm² 16 mm² 20 mm² Connection cross-section of auxiliary contact AWG min. 16 mm² Connection cross-section note 20 mm² 20 m	Mechanical Data	
Connection cross-section min. Connection cross-section max. 25 mm² Connection cross-section min. AWG Connection cross-section AWG max. 4 AWG Connection cross-section 2 min. 1.5 mm² Connection cross-section 2 min. 1.5 mm² Connection cross-section 2 min. 10 mm² Connection cross-section 2 min. AWG Connection cross-section 2 min. AWG Connection cross-section 2 min. AWG Connection cross-section 0 min. AWG Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact MWG min. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width Width, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 1 kg Weight 17.7 to 26.6 lbf-in Tightening torque blf in 17.7 to 26.6 lbf-in Tightening torque auxiliary contact 0.4 – 0.6 Nm	Degree of protection (IP) (IEC 60529)	IP2X
Connection cross-section max. 25 mm² Connection cross-section min. AWG 16 AWG Connection cross-section 2 min. 4WG Connection cross-section 2 min. 5 mm² Connection cross-section 2 min. 4WG Connection cross-section 3 min. 4WG Connection cross-section of auxiliary contact min. 0.5 mm² Connection cross-section of auxiliary contact min. 26 Connection cross-section of auxiliary contact MWG min. 27 Connection cross-section of auxiliary contact AWG min. 27 Connection cross-section of auxiliary contact AWG min. 3 Nm Max. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note 20 Conductor connection (upper and lower chamber at the same time):	Enclosure material	Thermoplast
Connection cross-section min. AWG Connection cross-section AWG max. 4 AWG Connection cross-section 2 min. 1.5 mm² Connection cross-section 2 min. Connection cross-section 2 min. Connection cross-section 2 min. AWG Connection cross-section of auxiliary Contact min. Connection cross-section of auxiliary Contact min. Connection cross-section of auxiliary Contact min. Connection cross-section of auxiliary Contact AWG min. Connection cross-section of auxiliary Contact MWG mi	Connection cross section min.	1.5 mm²
Connection cross-section AWG max. 4 AWG Connection cross-section 2 min. 1.5 mm² Connection cross-section 2 max. 10 mm² Connection cross-section 2 max. 4 MWG Connection cross-section 2 max. 4 AWG Connection cross-section 2 max. AWG 8 AWG Connection cross-section of auxiliary contact min. 4 mm² Connection cross-section of auxiliary contact min. 5 mm² Connection cross-section of auxiliary contact mix. 5 mm² Connection cross-section of auxiliary contact mix. 6 mm² Connection cross-section of auxiliary contact AWG min. 5 mm² Connection cross-section of auxiliary contact AWG min. 5 mm² Connection cross-section of auxiliary contact AWG min. 5 mm² Connection cross-section note 7 mm² Connection cross-section note 8 mm² Connection cross-section note 9 mm² Connection cross-section note 1 mm² Connection cross-section note 1 mm² Connection cross-section note 1 mm² Connection cross-section note 2 mm² Connection cross-section note 2 mm² Connection cross-section note 3 mm² Connection cross-section note 3 mm² Connection cross-section note 4 mm² Connection cross-section note 5 mm² Connection cross-section note 6 mm² Connection cross-section note 6 mm² Connection cross-section note 7 mm² Connection cross-section note 8 mm² Connection cross-section note 9 mm² Connection cross-section note 1 mm² Connection cross-section note	Connection cross-section max.	25 mm²
Connection cross-section 2 min. Connection cross-section 2 min. AWG Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 1 kg Weight 1 type can be lot-in 17. to 26.6 lbf-in Tightening torque lbf in 17. to 26.6 lbf-in Tightening torque auxiliary contact	Connection cross-section min. AWG	16 AWG
Connection cross-section 2 max. 10 mm² Connection cross-section 2 min. AWG 8 AWG Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact max. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length 165 mm Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 2.205 lb Mounting / Installation Tightening torque 15 in 17.7 to 26.6 lbf-in Tightening torque 17, to 26.6 lbf-in Tightening torque auxiliary contact 0.4 – 0.6 Nm	Connection cross-section AWG max.	4 AWG
Connection cross-section 2 min. AWG Connection cross-section 2 max. AWG Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact max. Connection cross-section of auxiliary contact max. Connection cross-section of auxiliary contact max. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG min. In tightening torque Z Nm Max. tightening torque Z Nm Max. tightening torque Connection cross-section note Connection cross-section note Connection cross-section note The permitted combinations of connection cross-sections can be found in the operating instructions. Width S mm Width, inches Length Length, inches Length, inches Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 1 rghtening torque 2 – 3 Nm Tightening torque 17.7 to 26.6 lbf-in Tightening torque but in 17.7 to 26.6 lbf-in Tightening torque auxiliary contact 0.4 – 0.6 Nm	Connection cross-section 2 min.	1.5 mm ²
Connection cross-section 2 max. AWG Connection cross-section of auxillary contact min. Connection cross-section of auxillary contact max. Connection cross-section of auxillary contact max. Connection cross-section of auxillary contact AWG min. Connection cross-section of auxillary contact AWG min. Connection cross-section of auxillary contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 2 - 3 Nm Tightening torque 17.7 to 26.6 lbf-in Tightening torque auxiliary contact 0.4 - 0.6 Nm	Connection cross-section 2 max.	10 mm²
Connection cross-section of auxiliary contact min. Connection cross-section of auxiliary contact max. Connection cross-section of auxiliary contact MWG min. Connection cross-section of auxiliary contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 1 kg Weight 7 (2 – 3 Nm Tightening torque 1 – 3 Nm Tightening torque bl in 17.7 to 26.6 lbf-in Tightening torque auxiliary contact 0.4 – 0.6 Nm	Connection cross-section 2 min. AWG	16 AWG
contact min. Connection cross-section of auxiliary contact max. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 1 kg Weight 1 kg Weight 1 kg Weight Mounting / Installation Tightening torque 2 – 3 Nm Tightening torque auxiliary contact 0.4 – 0.6 Nm	Connection cross-section 2 max. AWG	8 AWG
contact max. Connection cross-section of auxiliary contact AWG min. Connection cross-section of auxiliary contact AWG min. In tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 4 kg Weight 5.205 lb Mounting / Installation Tightening torque 2 – 3 Nm Tightening torque auxiliary contact 0.4 – 0.6 Nm	Connection cross-section of auxiliary contact min.	0.5 mm ²
contact AWG min. Connection cross-section of auxiliary contact AWG max. Min. tightening torque Ax. tightening torque Connection cross-section note Connection cross-section may be clamped between the upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length Length Length Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 lb Mounting / Installation Tightening torque 2 – 3 Nm Tightening torque auxiliary contact 0.4 – 0.6 Nm	Connection cross-section of auxiliary contact max.	4 mm²
contact AWG max. Min. tightening torque 2 Nm Max. tightening torque 3 Nm Connection cross-section note Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Tightening torque 2 – 3 Nm Tightening torque 17.7 to 26.6 lbf-in Tightening torque auxiliary contact 0.4 – 0.6 Nm	Connection cross-section of auxiliary contact AWG min.	26
Max. tightening torque Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 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	Connection cross-section of auxiliary contact AWG max.	12
Connection cross-section note 2-conductor connection (upper and lower chamber at the same time): - upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 lb Mounting / Installation Tightening torque 2 - 3 Nm Tightening torque auxiliary contact 0.4 - 0.6 Nm	Min. tightening torque	2 Nm
- upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating instructions. Width 65 mm Width, inches 2.56 in Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 lb Mounting / Installation Tightening torque 2 – 3 Nm Tightening torque auxiliary contact 0.4 – 0.6 Nm	Max. tightening torque	3 Nm
Width, inches 2.56 in Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 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	Connection cross-section note	 upper and lower chamber max. 16 / 10 mm² (A maximum difference of one cross section may be clamped between the upper and lower chamber.) The permitted combinations of connection cross-sections can be found in the operating
Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 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	Width	65 mm
Length 165 mm Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 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	Width, inches	2.56 in
Length, inches 6.5 in Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 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	Length	165 mm
Depth of cut-out 138.3 mm Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 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	Length, inches	6.5 in
Mounting depth, inches 5.44 in Weight 1 kg Weight 2.205 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	Depth of cut-out	
Weight 1 kg Weight 2.205 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	Mounting depth, inches	5.44 in
Weight 2.205 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	Weight	1 kg
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	Weight	
Tightening torque auxiliary contact 17.7 to 26.6 lbf-in 0.4 – 0.6 Nm	Mounting / Installation	•
Tightening torque auxiliary contact 0.4 – 0.6 Nm	Tightening torque	2 – 3 Nm
Tightening torque auxiliary contact 0.4 – 0.6 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

MCB Miniature circuit breaker

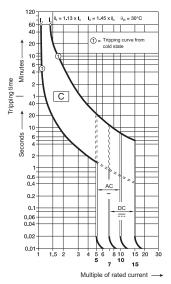


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Technical Drawings – Subject to Alterations

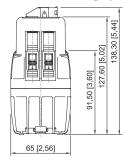


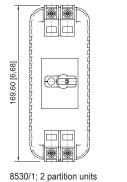
1-pole, auxiliary contact 1 change-over contact + fault signal contact 1 change-over contact

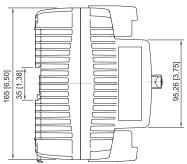


Tripping characteristic C

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







Accessories

Cylinder lock		Art. No.
	for closing (bracket Ø 3)	107115

MCB Miniature circuit breaker



8530/1-MCB-STA101-C3-500-2 Art. No. 293992

Fastening set		Art. No.
	A fastening set for attaching the component to the mounting plate without a DIN rail.	276618
ocking device qua	druple	Art. No.
Res Control of the Co	A lock-out / tag-out scissor for individual locking of the component using up to 4 cylinder locks.	227232

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.