

8530/1-MCB-DCA102-C16-500-3 Art. No. 301431



- 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 explosion protection | Ex db eb IIC Gb  |
| 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), China (CCC)              |

#### Electrical Data

|   |  |
|---|--|
| AC rated operational voltage                  | 400 V  |
| DC rated operational voltage                  | 220 V  |
| DC rated operational voltage                  | 125 V  |
| Frequency                                     | 50/60 Hz   |
| Rated operational current                     | 16 A   |
| Rated switching capacity                      | 10 kA  |
| Electrical service life                       | 2 x 10 <sup>4</sup>  |
| Mechanical service life                       | 2 x 10 <sup>4</sup>  |
| No. of poles                                  | 2-pole   |
| 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 max. DC        | -  |
| Tripping characteristic                       | C  |

#### Ambient Conditions

|                     |                   |
|---------------------|-------------------|
| Ambient temperature | -40 °C ... 70 °C  |
| Ambient temperature | -40 °F ... 158 °F |

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### Ambient Conditions

|                          |   |
|--------------------------|---|
| Ambient temperature note | Deviating ambient temperatures based on current certificates available on request |
|--------------------------|---|

### Mechanical Data

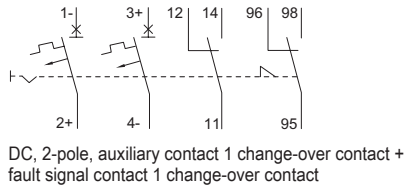
|  |  |
|--|--|
| Degree of protection (IP) (IEC 60529)                  | IP2X   |
| Enclosure material                                     | Thermoplast  |
| Connection cross section min.                          | 1.5 mm <sup>2</sup>  |
| Connection cross-section max.                          | 25 mm <sup>2</sup>   |
| Connection cross-section AWG min.                      | 16 AWG   |
| 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  |
| Min. aux. cont. con. cr.-sect.                         | 0.5 mm <sup>2</sup>  |
| Max. aux. cont. conn. cr.-sec.                         | 4 mm <sup>2</sup>  |
| Min. aux. co. con. cr.-se. AWG                         | 18 (unece.unit.AWG)  |
| Connection cross-section of auxiliary contact AWG max. | 14 (unece.unit.AWG)  |
| Min. tightening torque                                 | 2 N · m  |
| Max. tightening torque                                 | 3 N · m  |
| Connection cross-section note                          | <p><b>2-conductor connection (upper and lower chamber at the same time):</b><br/>                     - upper and lower chamber max. 16 / 10 mm<sup>2</sup> (A maximum difference of one cross section may be clamped between the upper and lower chamber.)</p> <p>The permitted combinations of connection cross-sections can be found in the operating instructions.</p> |
| Width  | 83 mm  |
| Width, inches  | 3.27 in  |
| Length   | 165 mm   |
| Length in inches                                       | 6.5 in   |
| Mounting depth   | 138.3 mm   |
| Mounting depth in inches                               | 5.44 in  |
| Weight   | 1.3 kg   |
| Weight   | 0 lb   |

### Mounting / Installation

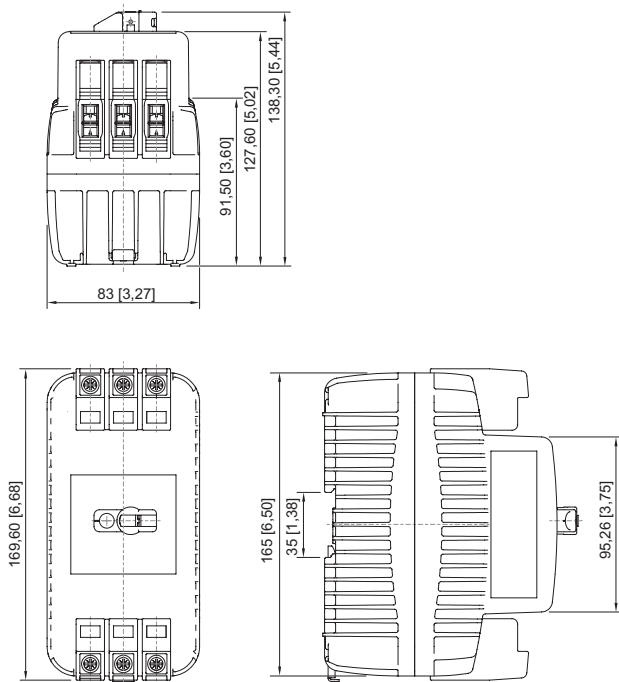
|  |                     |
|--|---------------------|
| Tightening torque                          | 2 – 3 N · m         |
| Tightening torque lbf in                   | 17.7 to 26.6 lbf-in |
| Tightening torque auxiliary contact        | 0.4 – 0.6 N · m     |
| Tightening torque auxiliary contact lbf in | 3.5 to 5.3 lbf in   |

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Technical Drawings – Subject to Alterations



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



Accessories

Cylinder lock



for closing (bracket Ø 3)

Art. No.

107115

8530/1-MCB-DCA102-C16-500-3 Art. No. 301431

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**Fastening set**



A fastening set for fastening the component on the mounting plate without a DIN rail

**Art. No.**

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.