

# Components for system solutions

## Compact molded case circuit breaker

30 A

8550/1-MCCB-GLS3-TM-030-10-AS1-FS1-0000 Art. No. 313490



- Non-adjustable thermal and magnetic releases
- Isolating function in accordance with EN 60947-2
- International approvals for worldwide use
- Simple replacement or expansion of your system thanks to a modular circuit breaker design
- 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
- Large cable dia. range of the main terminals

MY R. STAHL 8550A



R. STAHL Series 8550 molded case circuit breakers boast a broad range of rated operating currents from 15 to 125 A, as well as excellent current limiting for short circuits and a high switching capacity of up to 10 kA, depending on the switched voltage. The short-circuit release threshold is ten times the nominal current. DC currents can also be switched at voltages up to 250 V DC. The components are designed to be modular and are therefore ideal for combining with the contactor, also available in this series, and overload relay to form a motor starter. Other applications are in power distribution boards.

### 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 22.0005U   |
| IECEX gas explosion protection | Ex db eb IIC Gb  |
| ATEX gas certificate           | FM 22 ATEX 0017 U  |
| ATEX gas explosion protection  | Ex II 2 G Ex db eb IIC Gb  |
| FMus certificate               | FM22US0011U  |
| cFM certificate                | FM22CA0006U  |
| Marking FMus                   | Class I, Div. 2, Groups A,B,C,D;<br>Class I, Zone 1, AEx db eb IIC Gb; |
| Marking cFM                    | Class I, Zone 1, Ex db eb IIC Gb;<br>Class I, Div. 2, Groups A,B,C,D;  |
| Certificates                   | ATEX (FM), Brazil (ULB), Canada (FM), IECEX (FM), USA (FM)             |

#### Electrical Data

|   |   |
|---|---|
| Rated operational voltage AC                | 12 ... 690 V                            |
| AC rated operat. voltage (NEC)              | 12 ... 600Y/347 V                       |
| Rated operational voltage DC                | 12 ... 250 V                            |
| Rated operational voltage DC (NEC)          | 12 ... 250 V                            |
| Rated operational current                   | 30 A                                    |
| Electrical service life                     | 8000                                    |
| Mechanical service life                     | 10 <sup>4</sup>                         |
| Rated impulse voltage Uimp                  | 8 kV                                    |
| Main contacts                               | 3-pole (3 NO)                           |
| 1st auxiliary function                      | Auxiliary contact 1 change-over contact |
| 1st auxiliary function for AC rated voltage | 240 V                                   |

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|   |  |
|---|--|
| 1st auxiliary function voltage max. DC        | 250 V                                      |
| 1st auxiliary function for rated current max. | 6 A  |
| 2nd auxiliary function                        | Fault signal contact 1 change-over contact |
| 2nd auxiliary function voltage AC             | 240 V                                      |
| 2nd auxiliary function voltage max. DC        | 250 V                                      |
| 2nd auxiliary function for rated current max. | 6 A  |
| 3rd auxiliary function                        | without                                    |
| Tripping time                                 | 0 – 10 ms                                  |
| Frequency range                               | 50 – 60 Hz                                 |

### Ambient Conditions

|                        |                    |
|------------------------|--------------------|
| Ambient temperature °C | -25 °C ... +70 °C  |
| Ambient temperature °F | -13 °F ... +158 °F |

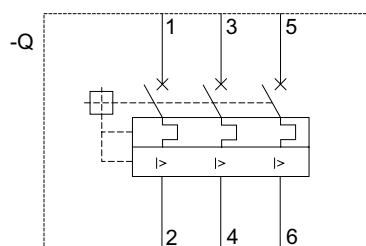
### Mechanical Data

|  |                              |
|--|------------------------------|
| Degree of protection (IP)                      | IP20                         |
| Enclosure material                             | Thermoplast                  |
| Connection cross-section                       | 2.5 – 10 mm <sup>2</sup>     |
| Connection cross-section AWG                   | 14 ... 8 AWG                 |
| Auxiliary contact connection cross section     | 0.75 ... 2.5 mm <sup>2</sup> |
| Auxiliary contact connection cross section AWG | 18 ... 14 AWG                |
| Width  | 150 mm                       |
| Width, inches                                  | 5.91 in                      |
| Height   | 196 mm                       |
| Height in inches                               | 7.72 in                      |
| Depth  | 336.6 mm                     |
| Depth in inches                                | 13.25 in                     |
| Weight   | 4.3 kg                       |
| Weight   | 9.48 lb                      |

### Mounting / Installation

|  |                      |
|--|----------------------|
| Tightening torque                          | 1.5 – 1.8 Nm         |
| Tightening torque lbf in                   | 13.2 ... 15.9 lbf-in |
| Tightening torque auxiliary contact        | 0.4 – 0.6 Nm         |
| Tightening torque auxiliary contact lbf in | 3.54 ... 5.31 lbf-in |

### Technical Drawings – Subject to Alterations



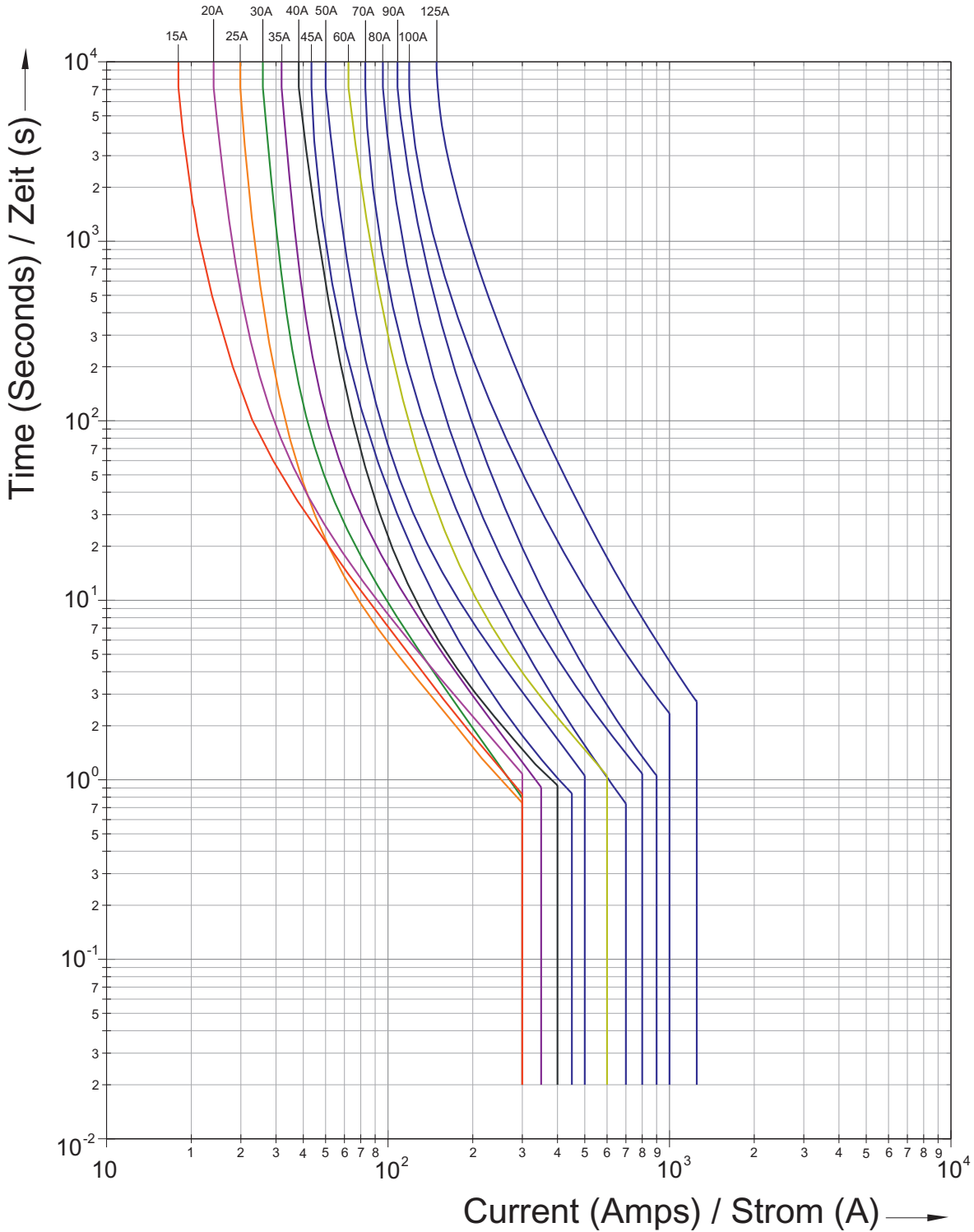
Circuit diagram of the device

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Tripping characteristic curves

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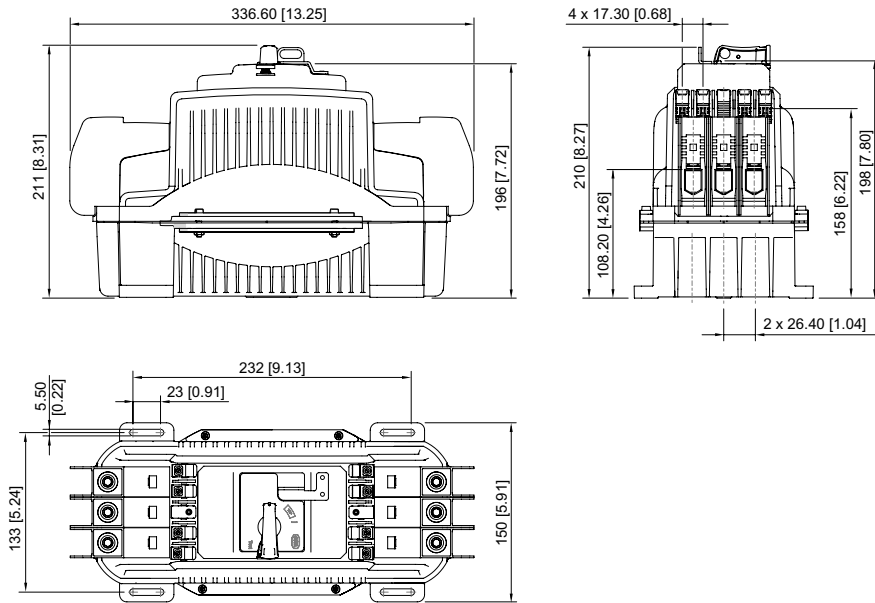
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### Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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.