

8146/5041-STB25A/+50- +300°C Art. No. 136030



- These disconnect if the temperature exceeds or falls below a user-defined temperature, switching capacity up to 25 A
- They prevent reconnection if the fluid-filled measuring system is leaking
- Standardised versions in an Ex e enclosure Series 8146 available. Customised solutions available on request.

MY R. STAHL 8146K



R. STAHL temperature controllers and limiters perform various tasks: They disconnect the system after an adjustable limiting value is exceeded, whereby limiters remain disconnected, while monitors switch back on again when the permissible temperature is reached. They both prevent reconnection if the system is leaking. The set value can be seen from the outside through the sight glass.

If the temperature of the sensor exceeds the set value, the limiter prevents reconnection. Once the temperature has dropped, the safety temperature limiter can be unlocked manually.

## Technical Data

### Explosion Protection

|                                 |   |
|---------------------------------|---|
| Scope of validity               | European Union (ATEX)<br>IECEX  |
| Application range (zones)       | 1<br>2<br>21<br>22  |
| IECEX gas certificate           | IECEX PTB 06.0090   |
| IECEX gas explosion protection  | Ex db eb IIC T6 Gb  |
| IECEX dust certificate          | IECEX PTB 06.0090   |
| IECEX dust explosion protection | Ex tb IIIC T80 °C Db  |
| ATEX gas certificate            | PTB 01 ATEX 1024  |
| ATEX gas explosion protection   | ⊕ II 2 G Ex db eb IIC T6 Gb   |
| ATEX dust certificate           | PTB 01 ATEX 1024  |
| ATEX dust explosion protection  | ⊕ II 2 D Ex tb IIIC T80 °C Db   |
| Certificates                    | ATEX (PTB), Brazil (ULB), Canada (FM), China (NEPSI), IECEX (PTB), India (PESO), Korea (KGS), Taiwan (ITRI), USA (FM) |
| Declaration of Conformity       | ATEX (EUK), China (CCC)   |

### Electrical Data

|                                   |                            |
|-----------------------------------|----------------------------|
| Rated operational voltage AC      | 400 V                      |
| Rated operational current         | 16 A (T6)                  |
| Type/temperature control device 1 | Safety temperature limiter |
| Measuring range                   | 50 to 300 °C               |

### Output

|                               |   |
|-------------------------------|---|
| Max. output AC load condition | 1 to 4 400 V AC1 / 6.3 A<br>1 to 2 400 V AC1 / 16 A |
|-------------------------------|---|

# Control and signalling devices

## Safety temperature limiter



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### Ambient Conditions

|                               |                   |                  |                              |                          |                   |
|-------------------------------|-------------------|------------------|------------------------------|--------------------------|-------------------|
| Ambient temperature           | -40 °C ... +40 °C |                  |                              |                          |                   |
| Min. sensor temperature range | -60 °C            |                  |                              |                          |                   |
| Max. sensor temperature range | +345 °C           |                  |                              |                          |                   |
| Ambient temperature           |                   | max. fuse rating | Heat resistance of conductor | max. ambient temperature | Temperature class |
|                               | -60 to            | 16 A             | -                            | +50 °C                   | T5/95 °C          |
|                               |                   |                  | ≥ +90 °C                     | +75 °C                   | T5/95 °C          |
|                               |                   | 25 A             | -                            | +40 °C                   | T6/80 °C          |
|                               |                   |                  | ≥ +70 °C                     | +50 °C                   | T5/95 °C          |
|                               |                   |                  | ≥ +106 °C                    | +75 °C                   | T4/130 °C         |

### Mechanical Data

|                           |   |
|---------------------------|---|
| Degree of protection (IP) | IP66                                    |
| Enclosure material        | Polyester resin, Glass fibre reinforced |
| Sealing material          | Silicone                                |
| Contacts                  | 1 change-over contact                   |
| Capillary tube diameter   | 1.5 mm                                  |
| Capillary tube length     | 1 m                                     |
| Weight                    | 1.1 kg                                  |
| Weight                    | 2.43 lb                                 |

### Mounting / Installation

|                 |                       |
|-----------------|-----------------------|
| Connection type | Spring clamp terminal |
|-----------------|-----------------------|

### Components

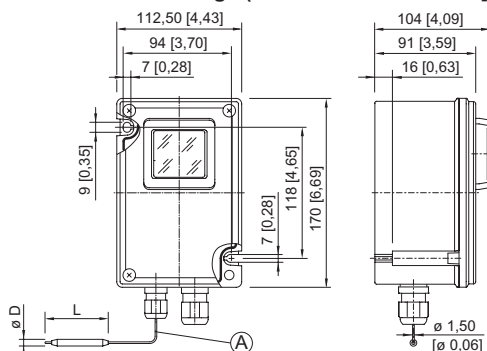
|                          |   |
|--------------------------|---|
| Drilled holes            | 1 x M20   |
| Cable glands and entries | 1 x M20 Ø 4 ... 13 mm   |
| Material cable gland     | Polyamide, black  |
| Type of terminals PE 1   | 1 x WAGO 264<br>2-conductor, 2.5 mm <sup>2</sup> , green-yellow |

### Technical Drawings – Subject to Alterations



8146/5041-...

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



8146/5041-...  
Safety temperature monitor and limiter  
Single device

# Control and signalling devices

## Safety temperature limiter



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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.