

# Safety Temperature Monitor and Limiter

## Series 8146/5

STAHL



- Disconnection in the event that a user-defined temperature is exceeded or fallen below, switching capacity up to 25 A
- Permanent disconnection in the event of leak in the liquid-filled measuring system
- Standardised versions available in Series 8146 Ex e enclosure. Customised solutions available on request.

E4

WebCode **8146K**



R. STAHL safety temperature monitor and limiters perform various tasks: They disconnect the system after an adjustable limit value is exceeded, whereby limiters remain disconnected, while controllers switch back on again when the permissible temperature is reached. Both switch off in the event of leak in the system. The set value can be seen from the outside through the inspection window.

	IECEX / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•		•	•

Selection Table				
Product Description	Safety temperature limiter			
Cable glands and entries	1 x M20 Ø 4 ... 13 mm			
Measuring range	Product Type		Art. No.	Weight kg
Safety temperature limiter: 0 to 120 °C	8146/5041-STB25A/-20...+120 °C		136011 ■	1.000
Product Description	Safety temperature monitor			
Cable glands and entries	1 x M20 Ø 4 ... 13 mm			
Measuring range	Product Type		Art. No.	Weight kg
Safety temperature monitor: -20 to 50 °C	8146/5041-STW25A/-20- +50 °C		136043 ■	1.000
Safety temperature monitor: 0 to 190 °C	8146/5041-STW25A/0- +190 °C		136081 ■	1.000
Product Description	Safety temperature monitor And safety temperature limiter			
Cable glands and entries	2 x M20 Ø 4 to 13 mm			
Measuring range	Product Type		Art. No.	Weight kg
Safety temperature limiter: 0 to 190 °C	8146/5051-STW25A+STB25A		269562 ■	1.440
Safety temperature monitor: 0 to 120 °C				

Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex db eb IIC T6 Gb
ATEX gas explosion protection	Ⓔ II 2 G Ex db eb IIC T6 Gb
IECEX dust explosion protection	Ex tb IIIC T80 °C Db
ATEX dust explosion protection	Ⓔ II 2 D Ex tb IIIC T80 °C Db
Certificates	ATEX (PTB), China (NEPSI), EAC (ENDCE), IECEx (PTB), India (PESO)

## Technical Data

### Electrical Data

Rated operational voltage AC 230 V

Rated operational current 25 A (T6)

Notes Change-over contact, specific to safety temperature monitors and limiters in acc. with EN 14597:  
- the power can be switched via contact path 1-2  
- the contact path 1-4 is used for signalling purposes

### Output

Max. output AC load condition 1 to 2 230 V AC1 / 25 A  
1 to 4 230 V AC1 / 2 A

### Ambient Conditions

Ambient temperature -60 °C ... +40 °C

### Mechanical Data

Degree of protection (IP) IP66

Enclosure material Polyester resin, Glass fibre reinforced

Capillary tube length 1 m

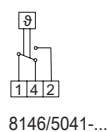
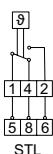
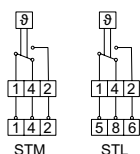
Capillary tube diameter 1.5 mm

Contacts 1 change-over contact

### Components

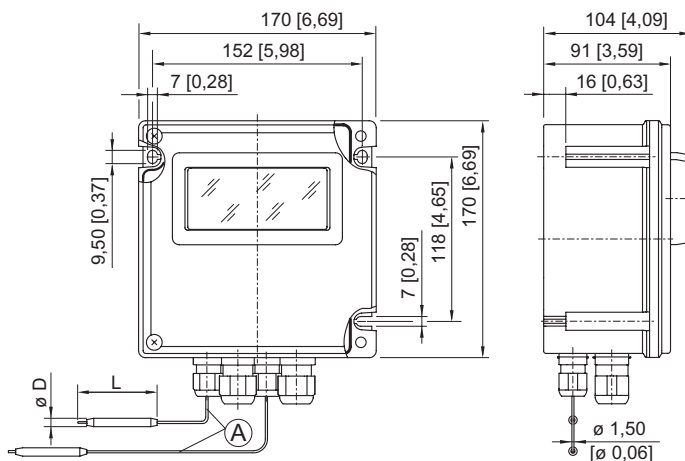
Cable entry material Polyamide, black

## Technical Drawings – Subject to Alterations

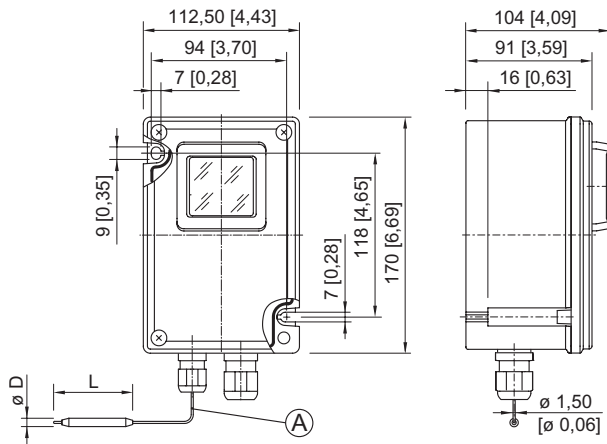


STM = Safety temperature monitor  
STL = Safety temperature limiter  
8146/5051-...

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



8146/5051-STW+STB  
Safety temperature monitor and limiter  
Combination device



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