

8146/5051-STW25A+STB25A Art. No. 269562



- 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.

### Safety temperature monitor:

If the temperature of the sensor exceeds the set value, the monitor switches off.

If the temperature falls below the set value, the monitor switches back on automatically.

### Safety temperature limiter:

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) IECEX United Kingdom
Application range (zones)	1 2 21 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), China (NEPSI), IECEX (PTB), India (PESO)
Declaration of Conformity	ATEX (EUK), China (CCC)

### Electrical Data

Rated operational voltage AC	230 V
Rated operational current	25 A (T6)

# Control and signalling devices

## Safety temperature monitor And safety temperature limiter



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### Electrical Data

Type/temperature control device 1	Safety temperature limiter
Measuring range	0 to 190 °C
Type/temperature control device 2	Safety temperature monitor
Measuring range 2	0 to 120 °C

### Output

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

Ambient temperature	-60 °C ... +40 °C
Min. sensor temperature range	-60 °C
Max. sensor temperature range	+220 °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	1.44 kg
Weight	3.17 lb

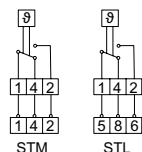
### Mounting / Installation

Connection type	Spring clamp terminal
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### Components

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

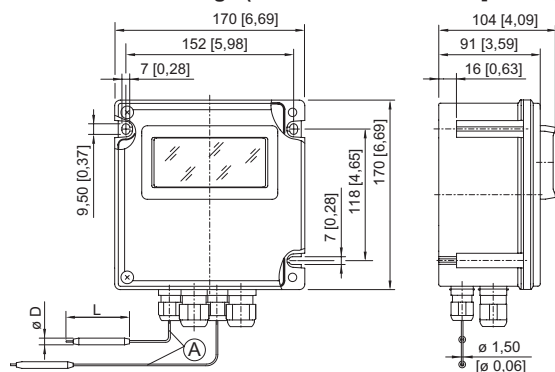
### Technical Drawings – Subject to Alterations



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

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



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

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.