

Safety temperature monitor and limiter

Series 8146/5

STAHL



- 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.

E4

MY R. STAHL 8146K



R. STAHL safety temperature monitors 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.

	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	Sensor diameter	Sensor length	Product Type	Art. No.	Weight
Safety temperature limiter: 0 to 120 °C	6 mm	58 mm	8146/5041-STB25A/0...+120°C	136011	1 kg
Product description		Safety temperature monitor			
Cable glands and entries		1 x M20 Ø 4 ... 13 mm			
Measuring range	Sensor diameter	Sensor length	Product Type	Art. No.	Weight
Safety temperature monitor: -20 to 50 °C	6 mm	81 mm	8146/5041-STW25A/-20- +50°C	136043	1 kg
Safety temperature monitor: 0 to 190 °C	6 mm	44 mm	8146/5041-STW25A/0- +190°C	136081	1 kg
Product description		Safety temperature monitor And safety temperature limiter			
Cable glands and entries		2 x M20 Ø 4 ... 13 mm			
Measuring range	Sensor diameter	Sensor length	Product Type	Art. No.	Weight
Safety temperature limiter: 0 to 190 °C Safety temperature monitor: 0 to 120 °C	6 mm	44 mm	8146/5051-STW25A+STB25A	269562	1.44 kg

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), IECEx (PTB), India (PESO)

Technical Data

Explosion Protection

Declaration of conformity ATEX (EUK), China (CCC)

Electrical Data

Rated operational voltage AC 230 V

Rated operational current 25 A (T6)

Notes Change-over contact specifically for safety temperature monitors and limiters in accordance with EN 14597:
 - The power can be switched via contact path 1 to 2
 - Contact path 1 to 4 is used for signaling

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

Sensor diameter 6 mm

Contacts 1 change-over contact

Components

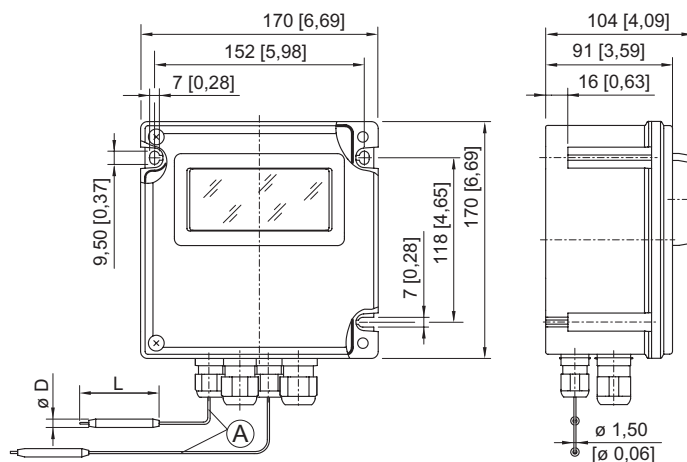
Cable entry material Polyamide, black

Technical Drawings – Subject to Alterations

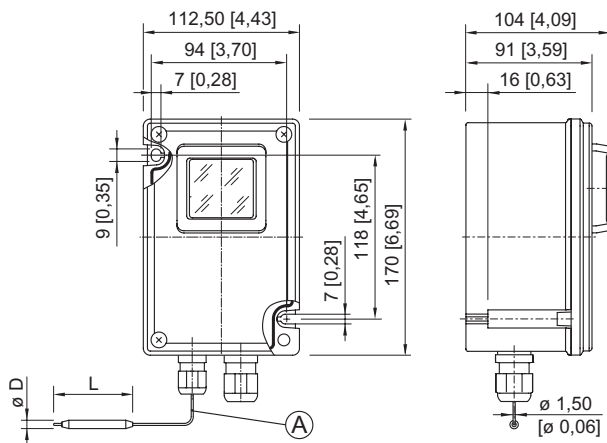


STM = Safety temperature monitor
 STL = Safety temperature limiter
 8146/5051-...

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



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



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