

- 1 Digital display of set value
- 2 Pushbuttons for adjusting the set values
recessed and sealable
- 3 Internal reset pushbutton
- 4 LEDs for operating and error displays
- 5 Function check button

DIN assembly tests:

STB 1146 S ref. DIN EN 14597

SIL2 ref. IEC 61508

CE 0045 ref. rule 97/23/EG,
modul B and D

1
2



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General:

Two-channel self-monitoring safety temperature limiter, constructed to meet the requirements for increased safety (DIN EN 14597, SIL 2).

The electrical safety circuit is switched off, i.e. opened, if the set value is exceeded or if there is a fault at the measurement input or in the device. A fault signal is also provided at the terminals. The limiter can only be unlatched manually after the fault has been rectified.

The Pt100 measurement input is of the 3-conductor type, so that compensation is automatically provided for cable resistances and intermediate explosion arresters.

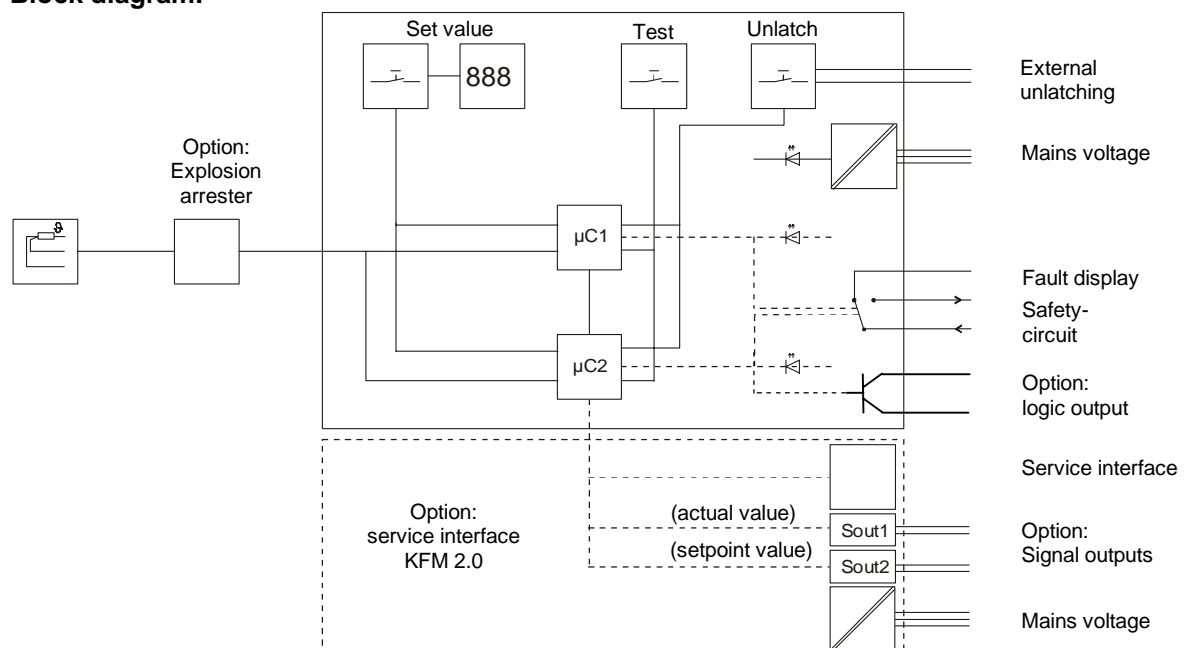
The device includes test buttons with which the specified annual function checks can be carried out very conveniently, without having to disturb the connected cables.

Actual- and setpoint value as well as the status of the relays can be transmitted by using the optional service interface (extra module), actual- and setpoint value can additionally be transmitted by optional signal outputs. In conjunction with external adapters also with Profibus, Modbus, Ethernet etc.

Models:

845 210	Model without display
845 220	Model with display
845 2 1	Model with additional logic output
845 2....-849s	Model with service interface, protocol KFM 2.0
845 2....-849og2	Model with 2 signal outputs 4..20mA
845 2....-849sog2	Model with service interface and 2 signal outputs 4..20mA
Suffix (also extra module)	without: 230V AC, 01 = 115V AC, 02 = 24V AC, 08 = 24V DC

Block diagram:



Acceptable sensors:

All temperature sensors demonstrably according to DIN EN 14597 are acceptable. Please observe the specifications about type, application range, installation conditions and time constant in the VDTÜV datasheet.

Type	Operating medium	Maximum switching point	Protection tube
713 4..	Liquids	400 °C	Without immersion sleeve
713 5..	Air and exhaust fumes	400 °C	Without immersion sleeve
715..	Liquids	400 °C	Only use protection tube supplied

Characteristic values:

Input / Measuring range:

Set value adjustable range:

1 x Pt 100 DIN / -200 ... + 600 °C, others optional

Note: Observe the sensor's switching point!

Type 845 210: -200 °C (+10K) ... 600 °C (-10K)

Type 845 220: -99 ... 600 °C

Adjusting the set values:

Output:

Using recessed, sealable push-button

2 relays, max. 250 V 2 A*,

Option: 1xLogic (open coll. max 24VDC/100mA) status display ch. 1

Option: 2 cont. outputs 4...20mA (Load<=500Ω) for actual-/ setpoint value

8 K +/- 1K, other values available on request (expressed as appendix to type identifier in plain text, e.g. 845 220 4K)

Switching hysteresis:

10 seconds

Process safety time (PST):

Housing:

For fastening to 35 mm mounting rail, or for screw fastening

Mains connection:

230VAC + 10 % / - 15 %, 48...62Hz, alt. 115 VAC, 24 VAC, 24VDC

Power consumption:

Approx. 4 VA

Fusing:

Secondary side, T 250 mA

Type of protection acc. EN 60529:

IP 20, for mounting within a housing offering at least IP 40

Permissible ambient temperature:

0...60°C, Nominal temperature: 20°C

Storage and transport temperature:

-20 ... +80 °C

Climatic resistance:

Relative humidity <= 75 % annual average without condensation

Electromagnetic compatibility:

In accordance with EN 61326, industrial requirements

Installation orientation:

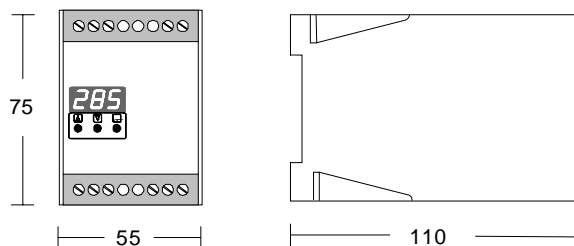
optional

Data transfer rate:

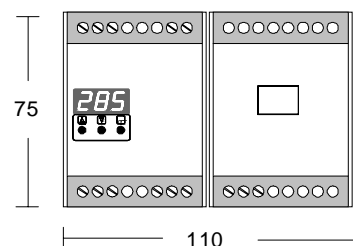
9600Bit/s

Installation dimensions:

Only safety temperature limiter:



Safety temperature limiter incl. service interface / signal outputs



Connection diagram:

