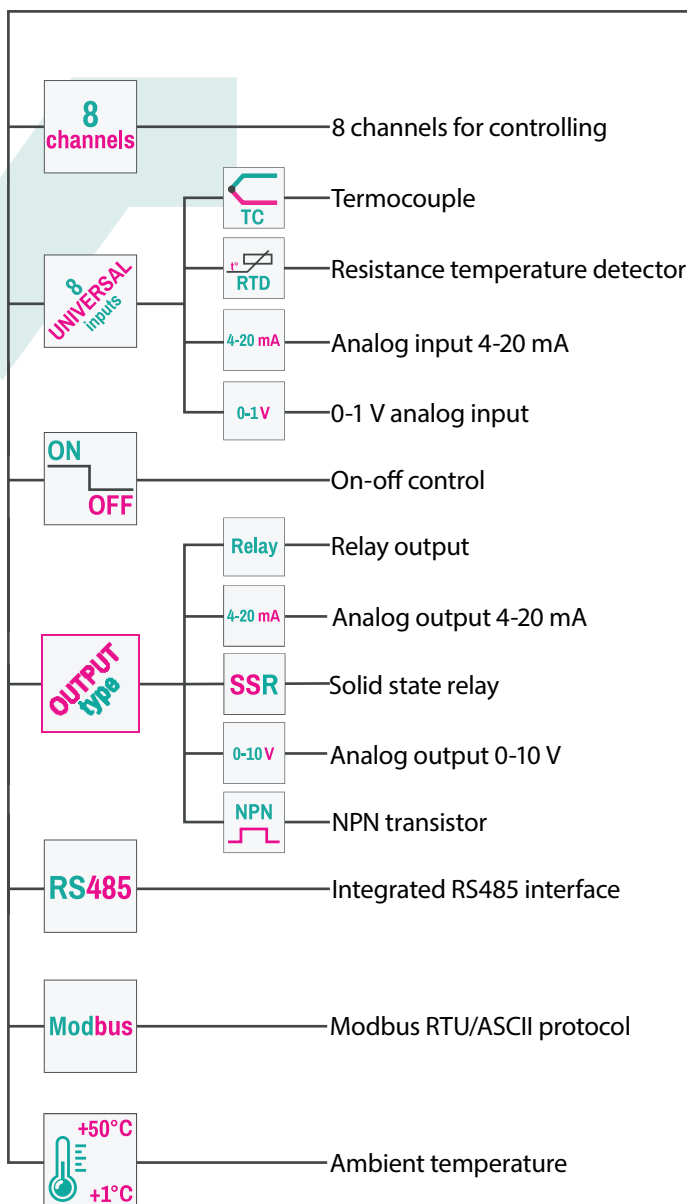


TRM138

8 channel on-off controller

The 8 channel on-off controller TRM138 can measure, display and control different physical process values such as temperature, pressure etc. It controls up to eight channels and enables the forwarding of measured data for recording and further processing.



Functions and features:

- 8 analog inputs for different signal types
- Measuring and control of different physical values such as temperature, humidity, pressure etc.
- Measured value processing and signal analysis:
 - averages
 - differences
 - rate of change
- 8 channels for controlling or forwarding of measured or calculated values:
 - on-off control
 - forwarding to analog output as a 4-20 mA
- 8 outputs e.g. relays, 4-20 mA or SSR (0/5 V, 50 mA)
- Alarm function for sensor errors
- Output manual control
- Configuration using the front panel keys
- Integrated RS485 interface with Modbus RTU/ASCII protocol

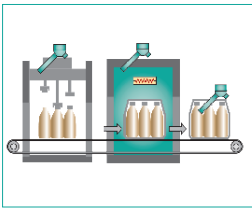


Output type on request

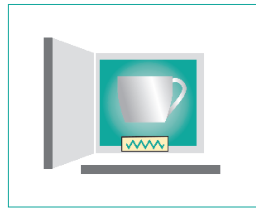
TRM138

Areas of application:

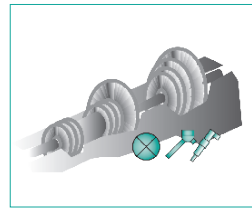
The TRM138 is used in various fields of industry as e.g. multi-zone oven temperature control, protective and monitoring systems.



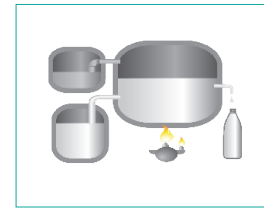
Temperature control in brewing plants



Glass manufacturing



Ball bearing and steam temperature control for steam turbine unit



Distilleries

Technical Data:

Power supply			230 (90...264) V AC; 50 (47...63) Hz
Power consumption, max.			18 VA
Inputs			8 analog
Outputs			8 (selectable)
Sampling time / input			≤ 0.6 s
Service voltage source			24 ± 3 V DC, 150 mA
Interface			RS485
Protocols			Modbus-RTU / ASCII, akYtec
Baud rate			2.4...115.2 kBit/s
IP Code			front IP54, enclosure IP20
Ambient temperature			+1...+55 °C
Dimensions			169 x 138 x 50 mm
Weight			approx. 450 g
Input signal	RTD	IEC	Pt50, Pt100
		GOST	50P, 100P, 50M, 100M, Cu50, Cu100
	TC	IEC	J, N, K, S, R, A
		GOST	L
	Standard signals		0-5 mA, 0-20 mA, 4-20 mA, -50...+50 mV, 0-1 V
Outputs	R		4 A / 250 V AC, 4 A / 30 V DC
	T		400 mA, 60 V DC
	S		50 mA, 4...6 V DC
	I		4-20 mA
	U		0-10 V

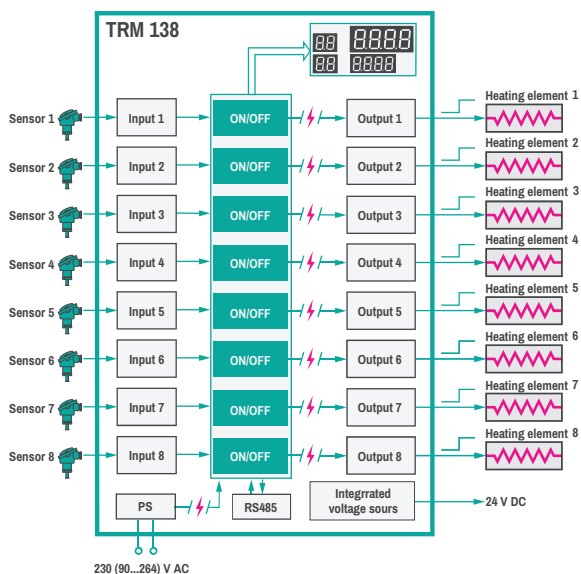
Ordering code:

TRM138.H7— X

Output type		
Relay (4 A, 230 V AC / 24 V DC)		R
Analog output 4-20 mA		I
Solid state relay (50 mA, 4...6 V DC)		S
NPN transistor (400 mA, 60 V DC)		T
Analog output 0-10 V (outputs 5...8 only)		U

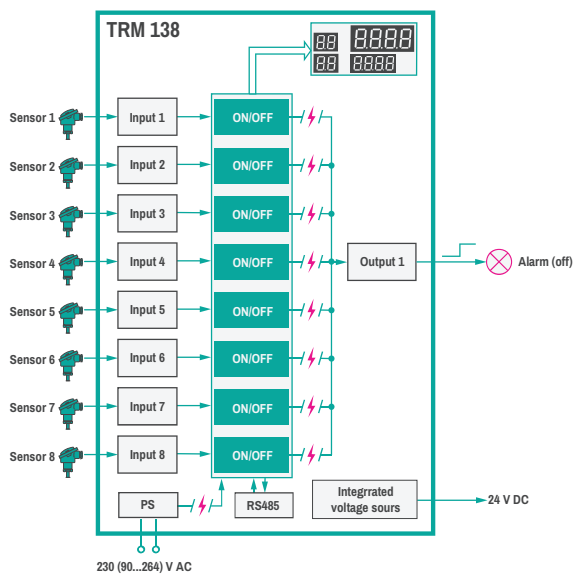
Standard modifications:	Description:
TRM138.H7.R	8 Relay outputs (4 A)
TRM138.H7.I	8 Analog outputs (4-20 mA)
TRM138.H7.IIIIRRRR	4 Analog outputs (4-20 mA), 4 Relay outputs (4 A)

TRM138 Typical application cases



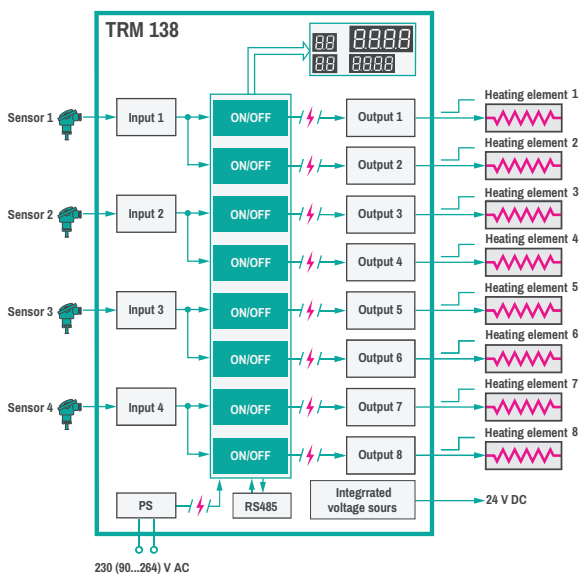
8-channel 2 position control

8-channel temperature controller can be used for bread production, in multiband tunnel type furnaces, and other process equipment.



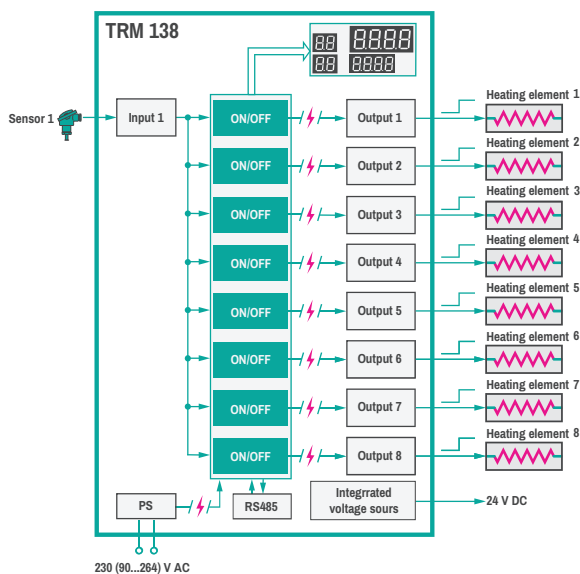
Alarm switch (8 inputs)

Alarm switch can be used in the multi-zone ovens for food, metallurgical and other industries.



4-channel 3 position control

Temperature control and two-stage heating control in technological equipment with up to four heating areas and rapid heat-up: baking ovens, injection molding machines, extruders, etc.



1-channel 2 position control

Temperature on/off control with one sensor and eight independent settings.