

multisio

2D2-1TI2RO



Temperature module



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1 Function description temperature module multisiso 2D2-1TI2RO

The hardware of the multisiso 2D2-1TI2RO supports 1 temperature input for PT1000, 2 floating relay outputs, 5 LEDs and a 8-way DIP switch.

The module evaluates the measurement values of the temperature probe connected to the terminals 50 and 51 and switches the relays according to the limits transferred by the master device.

The relay outputs are used for fan control or as error message relays.

Example:

Switching threshold of fan = 28°C / hysteresis = 5°C

Fan relay switches on at 28°C and off at 23°C

Switching threshold of alarm = 50°C / hysteresis = 5°C

Alarm relay switches on at 50°C and off at 45°C

The module can be accessed by a master device (multisiso xD6 (from5D6-ESBS-5DI6RO1DO) with module bus, multicom with module bus or via computer with VE via Multigate ES/BS) using the module bus interface. The master device has to configure the module and read out the data acquired by the module for further processing.

The operating voltage is supplied via the module bus interface. The module cannot be used on its own.

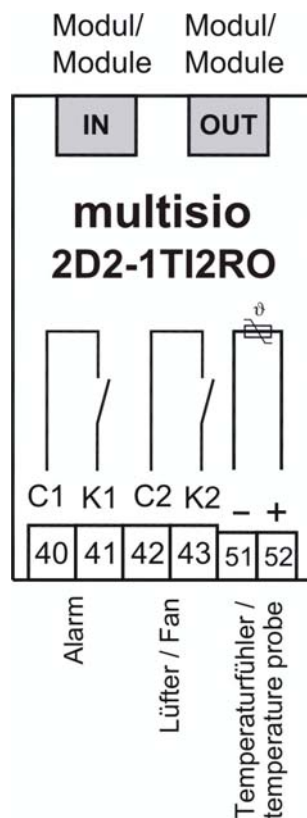
2 Temperature module - connection chart

Terminal assignment

Terminal 40: Relay input	Alarm
Terminal 41: Relay output	Alarm
Terminal 42: Relay input	Fan
Terminal 43: Relay output	Fan

Terminal 51: Temperature input - PT1000
Terminal 52: Temperature input + PT1000

IN / OUT: Module bus / supply voltage





Note

The relay outputs of the module are floating relay outputs.

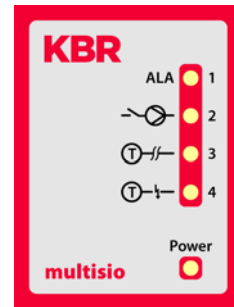
3 Temperature module - LED display

In KBR eBUS scanning mode, all 4 input LEDs are flashing.
 In the module detection mode, the input LEDs generate a running light.

Assignment:

LED1 on:	Alarm relay	switched (contact open)
LED2 on:	Fan relay	closed
LED3 on:	Temperature probe	interrupted
LED4 on:	Temperature probe	short circuit

Power LED: Operating voltage



4 Function of scan button

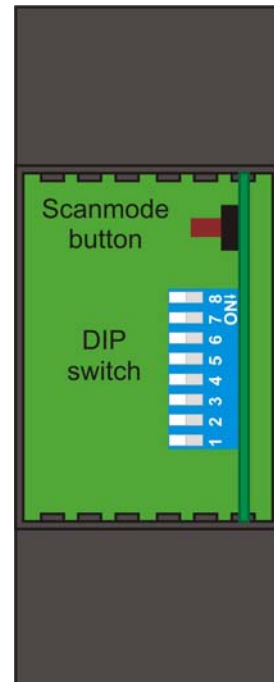


Note

If the scan button is pressed briefly (until all LEDs light up for a short time), the module enters the scanning mode.

Switch setting illustrated:

OFF	= white
ON	= gray



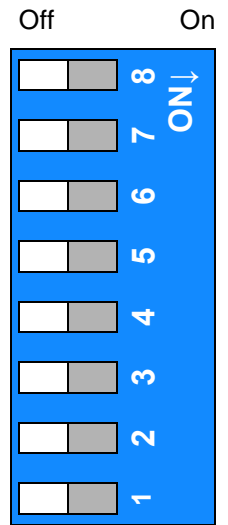
5 Function of the DIP switches

When switch is set to off:

- S8 = no function
- S7 = no function
- S6 = fan relay automatic
- S5 = alarm relay automatic
- S4 = no function
- S3 = no function
- S2 = fan relay off (if S6 manually)
- S1 = alarm relay off (if S5 manually)

When switch is set to on:

- S8 = no function
- S7 = no function
- S6 = fan relay manually
- S5 = alarm relay manually
- S4 = no function
- S3 = no function
- S2 = fan relay on (if S6 manually)
- S1 = alarm relay on (if S5 manually)



6 Technical data

Power supply:	Via module bus	24VDC / ca. 1.3W
	Connection	Modular connector RJ12:6P6C
Hardware inputs:		
Temperature input	Measuring range	-20°C to +100°C +/- 2°C
	Plug terminal 2-pole	for PT1000 sensor
Hardware outputs:		
2 relay outputs	Plug terminal 4-pole	floating
	Contact capacity	500VA, 2A, 250V 50/60Hz each
	Overvoltage category	CAT II
Module bus interface:	Serial port	RS485
	Module bus connection	RJ12 for ready-made KBR system cable, max. length 30 m when placed accordingly
	Transfer rate	38400 Bps
	Bus protocol	KBR module bus
Display:	LED	4x messages 1x operation display
Control unit	DIP switch	1x 8-way, for manual operation
	Button	Scan button (module bus)
Mechanical data:		
Top hat rail device	Housing dimensions	90 x 36 x 61 mm (H x W x D)
	Mounting type	Wall mounting on DIN rail, 7.5 mm deep, in accordance with DIN EN 50022.
	Weight	approx. 100g
Standards and miscellaneous:		
Environmental conditions	Standards	DIN EN 60721-3-3/A2: 1997-07; 3K5+3Z11; (IEC721-3-3; 3K5+3Z11)
	Operating temperature	-5°C ... +55°C;
	Humidity	5% ... 95%, non-condensing
	Storage temperature	-25°C ... +70°C;
Electrical safety	Standards	DIN EN 61010-1/A2: 2001 + B1: 2002-11 + B2: 2004-1; (IEC1010-1/A2)
	Protection type	IP20 in accordance with DIN EN 40050 part 9:1993-05
	Electromagnetic compatibility	DIN EN 61000-6-3: 2001 + A11: 2004; (IEC61000-6-3) DIN EN 61000-6-2: 2001 (IEC61000-6-2)

