Control modules

UNIcon temperature control module (2nd edition)

The CTG temperature control module can be combined with various temperature sensors.

The actual value measured on the sensor is compared with the setpoint. That produces the 0-10 V output signal. This is used to trigger EC fans, frequency inverters or other devices.

The control module is supplied with 10-24 V DC from the fan or frequency inverter it is triggering. No additional power supply necessary.
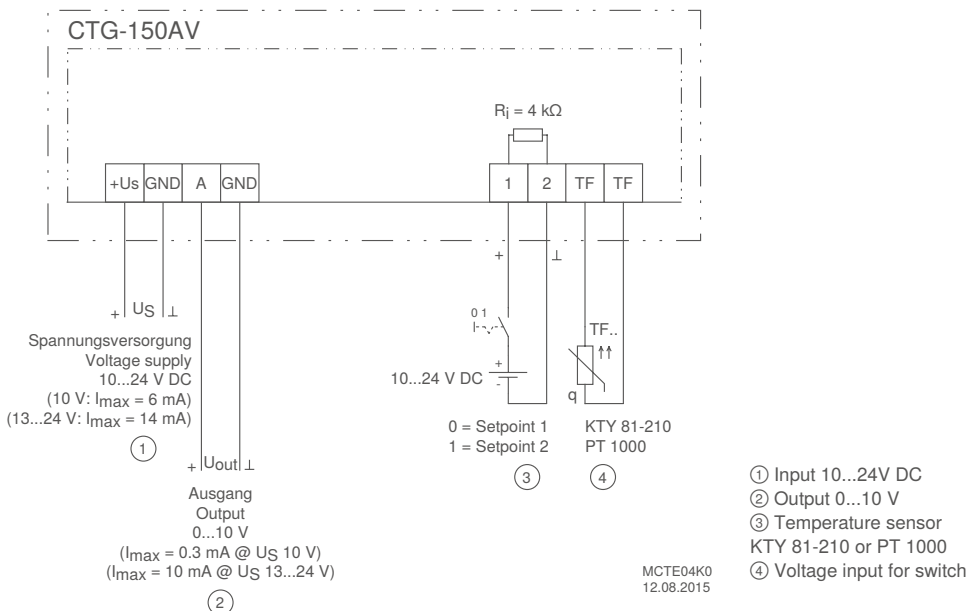
Optionally, the module can also be used as a temperature display. The 0-10 V output signal is then proportional to the set measurement range.

Input for sensors or speed settings through

Connection of temperature sensors,
e.g. Type TF.. sensors, device measurement range -50...+150°C

Connection diagram

CTG-150AV

$R_i = 4\ k\Omega$

| +Us | GND | A | GND | | 1 | 2 | TF | TF |

+ U_S ⊥

Spannungsversorgung
Voltage supply
10...24 V DC
(10 V: I_{max} = 6 mA)
(13...24 V: I_{max} = 14 mA)

①

+ U_{out} ⊥

Ausgang
Output
0...10 V
(I_{max} = 0.3 mA @ U_S 10 V)
(I_{max} = 10 mA @ U_S 13...24 V)

②

+ ⊥

0 1

10...24 V DC

+

0 = Setpoint 1
1 = Setpoint 2

③

TF..

q

KTY 81-210
PT 1000

④

① Input 10...24V DC
② Output 0...10 V
③ Temperature sensor
   KTY 81-210 or PT 1000
④ Voltage input for switch

MCTE04K0
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Standard conformity

Interference emission according to EN 61000-6-3 (domestic)
Interference immunity according to EN 61000-6-1 (domestic)

Equipment/Characteristics

Integrated display:
For temperature display and for programming

Simple commissioning of the operating modes:
Operation as temperature sensor or temperature controller

Easy to program using 3 buttons:
Select measurement range, enter setpoint (1/2), control range,
Minimum or maximum output signal

Adjustable measurement range when using as temperature sensor:
-50 °C...+150 °C

Voltage input for switch over
Setpoint 1 or 2

1 analogue output:
To control EC fans, frequency inverters, other devices

UNIcon temperature control module

Type	Article no.	Minimum ambient temperature	Maximum ambient temperature	Protection class	Weight	Dimensions (W x H x D)
		°C	°C		kg	mm
CTG-150AV	320073	-10	60	IP54	0.21	106.3 x 137 x 56
CTG-150AV	320081	-10	60	IP54	0.21	106.3 x 114 x 56

Dimensions with cable gland

Article no. 320081 without visible cable entry. This is done at the rear flush mounted.

Information

Motor protection

Fcontrol, Icontrol

UNIcon

Acontrol, Ucontrol, Dcontrol

Transformer

System components

Appendix