- Temperature is shown on a three digit display
- Wide range of power voltage
- High accuracy of measurement
- Temperature correction can be set
- Modbus RTU or ARION communication over RS485 line

The thermometers and controllers AMD Series are intended to sense and eventually correct the interior room temperature. The device measures, displays, and by means of push buttons ▲ and ▼ sets the temperature correction. The controller has a three digit LCD
display. The measured temperature and correction value are evaluated by the processor which communicates with the
supervisory system. The controllers, with their adjustable functions, can be used primarily in applications for individual room temperature control. With their low power consumption and high accuracy they are designed for use in systems for an extended number of controlled areas.
The temperature sensor is located in the metal housing on the front device cover.
The communication with superior system is led in the line RS485 by the protocol Modbus RTU and the device always operates in the "slave" mode. The common chemically non-aggressive environment suits working conditions under which the sensors require no maintenance or service.

Technical data

Supply voltage	12 to 30 VDC	Nap. úroveň výstupu OUT	Hi ≈ Ucc - 0,8V, Lo ≈ 0V
Current consumption	max. 20 mA	Communication	RS485, ModBus RTU
Resolution	0,1°C (-9,9 ÷ 40 °C) ; 1°C(-30 ÷ -10 °C)	Attenuation mode	Button switch without locking
Accuracy	± 0,5 °C	Indication of attenuation mode	green LED
Time needed for equalization	30 min.	Galvanic separation of PWM Output	no
Meassuring range	-30 ÷ 40 °C	Galvanic separation of RS485	no
Ambient temperature	-30 ÷ 70 °C	Galvanic separation of terminal OKNO	no
Relative humidity	< 80 %	Protection type	IP40
Output OUT	active, max. 100mA	Terminals	screw terminal (wire max. 1mm²)

x
Function:
1: temperature measurement and correction, attenuation push button, LED indicator
2: temperature measurement, attenuation push button, LED indicator
3: temperature measurement, and correction, LED indicator
4: temperature measurement, LED indicator

Type	AMD1, AMD3	AMD21, AMD23
Correction temperature range	± 5°C	10 ÷ 30 °C

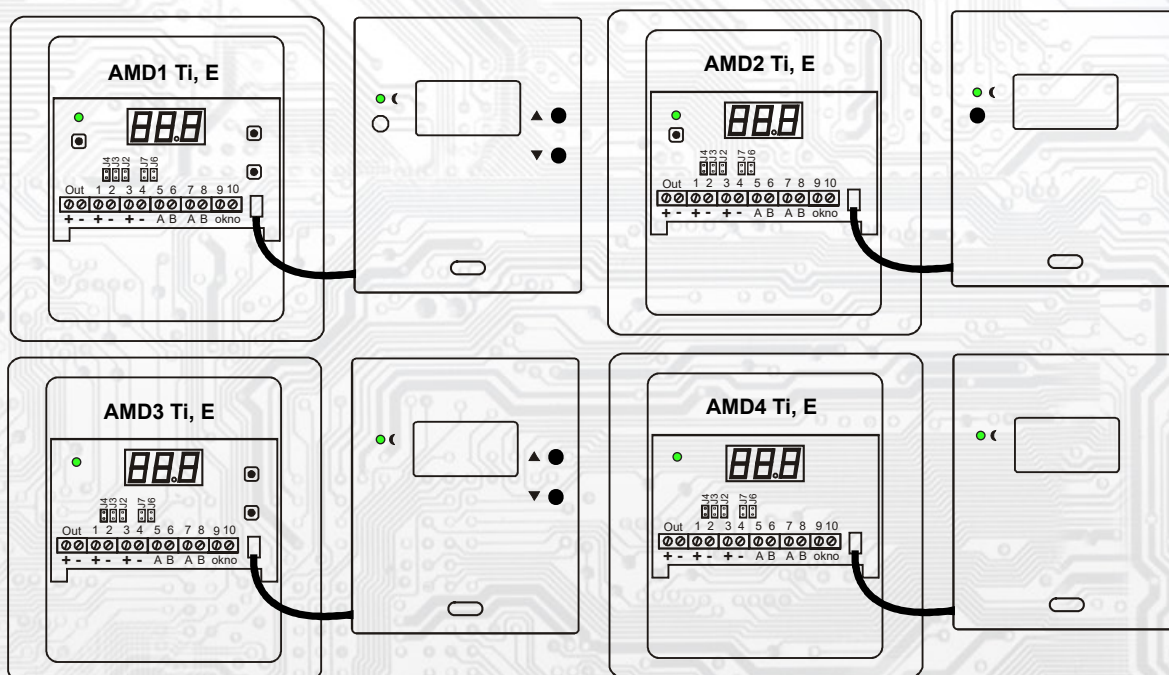| Type	AMDxT, AMDxA
Communication	RS485 protokol ModBus
Baud rate	1200 - 19200
Configuration	Sw: Regmet MBSet

Example of wiring the controllers in the system
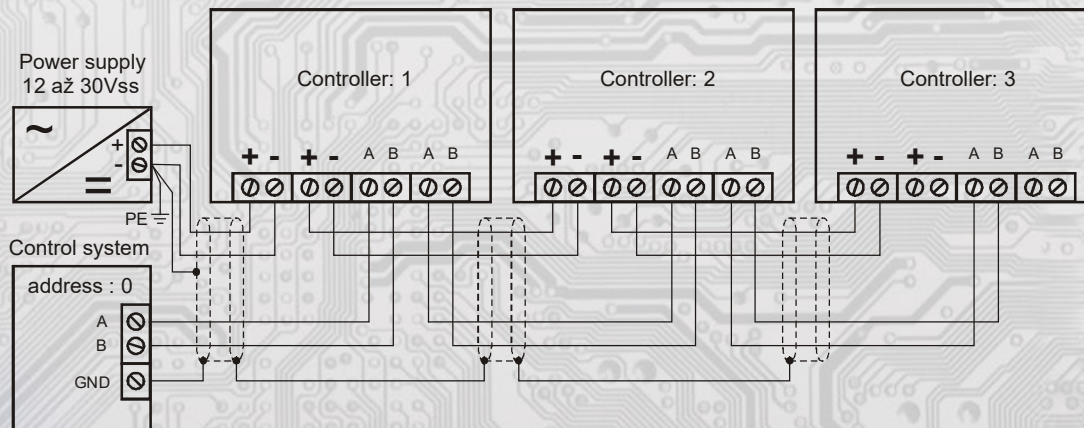
Function description and controllers settings are on separate sheets:
Description of function and setting of AMD controllers - ModBus RTU protocol

Arrangement of jumpers and connectors (fig.1)

Jumper:
J2… definition of idle status (conductor A)
J3… definition of idle status (conductor B)
J4… termination resistor 120R
J6… jumper "service"
J7.....jumper "service" (setting a fixed address 255 and setup communication speed of 19200 baud)

Terminal:
1,3 - Power source positive terminal
2,4 - Power source ground
OUT - Output of switching transistor
OKNO (WINDOW) --- input of window contact
5,6,7,8 - A, B... RS485 communication line

Terminals 1,3 and positive terminal OUT (+)are galvanically connected.
Terminals 2,4 and terminal 10 - OKNO (Window) are galvanically connected